



ABSTRACTS

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ECGI Stefania Maggi award winner

Delirium

Associations between delirium and multiple long-term conditions (MLTC) and subsequent mortality and incident dementia: a cohort study of 23,558 acutely hospitalised older adults

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Introduction: Delirium is an acute neuropsychiatric syndrome associated with high mortality and is a potentially modifiable risk factor for dementia. This study examined associations between delirium on admission and multiple long-term conditions (MLTC), and subsequent mortality and dementia in older adults.

Methods: Retrospective cohort study using linked primary care and hospital data for emergency admissions aged ≥ 65 years in Lothian, Scotland (01/04/2017–01/04/2020). Patients with pre-existing dementia or no 4AT were excluded. Delirium was identified using 4AT (www.the4AT.com), and LTC/dementia diagnoses from linked records. Associations with mortality and incident dementia were examined using Cox proportional hazards and Fine-Gray models.

Results: Of 23,558 people without dementia (mean age 78.9 years, 54% female), 4135 (18%) had an admission with delirium. Patients with delirium had higher mortality, irrespective of LTC. Compared to people without delirium, patients without MLTC who experienced delirium had higher early mortality (≤ 90 day: adjusted Hazard Ratio (aHR) 4.23, 95% CI 3.27 to 5.49) and late mortality (> 90 day: aHR 1.64, 95% CI 1.33 to 2.03). MLTC was associated with early mortality in patients without delirium (e.g. 7 + LTC versus 0–1 LTC: aHR 1.73, 95% CI 1.46 to 2.06), and with late mortality in people with and without delirium. Patients without MLTC who experienced delirium were more likely to develop dementia (subdistribution aHR 3.38, 95% CI 2.46 to 4.63). In people with delirium, dementia risk decreased with increasing LTC.

Conclusions: Delirium on admission is strongly associated with mortality and incident dementia in hospitalised older adults with and without MLTC. Further investigation of neurodegenerative mechanisms in delirium is needed.

Falls and Fractures

Clinical and health-economic impact of orthogeriatric care models in Belgium: a population-based data registry study

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Introduction: The optimal orthogeriatric care model remains uncertain. This study evaluated clinical and health-economic outcomes of six care models in Belgium.

Methods: This registry-based study included patients ≥ 75 years admitted with hip, pelvis, wrist, shoulder, or vertebral fractures between Jan 1–Dec 31, 2019. A questionnaire identified care models: consultation on request, systematic consultation, or integrated care, on a surgical or a geriatric ward. The primary outcome was 1-year mortality. Secondary outcomes included mortality (30/90 days), length of stay (LOS), emergency department (ED) visits and unplanned readmissions (30/90 days), and 1-year institutionalization. Cost-effectiveness was assessed by survival time and direct costs within one year.

Results: We included 8,302 patients from 60 hospitals. Median LOS was shortest for consultation on request (surgical ward: 10 days, geriatric ward: 12 days) and integrated care on a surgical ward (11 days) compared to systematic surgical consultation (16 days) and integrated care (17 days) on a geriatric ward. ED visits at 30 days (5.9%) and 90 days (11.0%) post-fracture were lowest for integrated care on a surgical ward. Consultation on request on a geriatric ward yielded the highest survival time. Mortality, institutionalization, and unplanned readmissions did not differ between models. Costs were comparable, except for integrated care on a geriatric ward, which was highest (€16,445–€18,726).

Key conclusions: Integrated care on a surgical ward and consultation on request on a geriatric ward showed clinical advantages over other models. All models had similar costs except for integrated care on a geriatric ward, which was more expensive.

Nutrition

Muscle ultrasound normative values and malnutrition in community-dwelling older adults

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Objective: This study aimed to establish normative values for muscle ultrasound in community-dwelling older adults and assess its association with physical function, muscle strength, frailty, and activities of daily living. It also evaluated muscle ultrasound measurements in relation to nutritional status as assessed by GLIM criteria.

Methods: The cross-sectional study involved 423 participants aged ≥ 70 years from ten centres, including seven geriatric services and three primary care teams. Mid-thigh ultrasound measurements were taken using the Clarius L7 HD3 device, included rectus femoris thickness, area, pennation angle, subcutaneous tissue thickness, and total thigh thickness.

Results: Participants had a mean age of 81.5 years, with 66.5% being women. Average body mass index was 27.3, Charlson Index 1.3, Barthel Index 92.5, Short Physical Performance Battery score 8.7, and Fried criteria score 1.8. Grip strength averaged 20.7 kg. Sixty-seven participants (16.6%) met GLIM criteria for malnutrition. Normative ultrasound values were presented by sex. Associations between ultrasound parameters and functional variables were found in men but not women. The lower tertile of total thigh thickness was the best parameter for identifying normonutrition and ruling out malnutrition. Participants above this cutoff had a 90% probability of being well-nourished, while those below required specific nutritional evaluation.

Key conclusion: This study provides normative muscle ultrasound values for ambulatory older adults. The association with functional variables was observed only in men. The lower tertile of total thigh thickness is a valuable tool for nutritional assessment, indicating a high probability of being well-nourished above this threshold.

Oral

Ageing biology

O-001

Generational differences in biological aging in the longitudinal Swedish Adoption/Twin Study of Aging (SATSA)

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Introduction: Cohort effects in epidemiological studies could be analyzed to understand how different socioeconomic and cultural contexts may influence health outcomes and behaviors. To date, studies investigating cohort effects on biomarkers of aging (BA) are limited. Hence, this study aimed to estimate the effects of different birth cohorts on BA.

Methods: We included individuals from the longitudinal Swedish Adoption/Twin Study of Aging (SATSA). Our exposure was birth cohort (1900–1920; 1921–1930; 1931–1940; 1941–1948). Our outcomes were relative telomere length (RTL, $n = 637$), DNA methylation ages (HorvathAge, Skin&bloodAge, HannumAge, PhenoAge, DNAmTL, GrimAge, and DunedinPACE, $n = 536$), physiological age (PhysioAge, $n = 802$), functional aging index (FAI, $n = 741$), cognitive function (COG, $n = 830$), and frailty index (FI, $n = 730$). We fitted linear and logistic models adjusted for age, sex, smoking, and education. For all models, we used a cluster robust

estimator of variance to account for the correlation of observations within individuals and twin pairs.

Results: The mean age of the participants was 63.8 to 68.9 years at the baseline. The younger-born cohorts (1931–1940 and 1941–1948) had worse estimates for RTL, HorvathAge, Skin&bloodAge, HannumAge, and DNAmTL compared to the later-born cohort (1900–1920). Conversely, they had better estimate for FAI, and COG. The 1921–1930 cohort had better estimate for PhysioAge and FI compared to the 1900–1920 cohort.

Key conclusions: Our findings suggest the presence of birth cohort effects on BA. Younger-born cohorts seem to have worse cellular BA and better performance at the functional level than later-born cohort. More research is needed to understand the causes of these generational differences.

O-002

How do older adults perceive healthy aging? Insights from focus groups in the SNACK-K study, Sweden

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Introduction: As populations age rapidly, understanding the factors influencing healthy aging is essential. This study explores older adults' perceptions of healthy aging to broaden perspectives, promote participatory research, and contextualize the concept within the World Health Organization (WHO) Healthy Aging Framework.

Methods: A purposive sample of 34 participants aged ≥ 60 years from the Swedish population-based Study on Aging and Care in Kungsholmen (SNAC-K) participated in seven focus groups conducted between December 2023 and January 2024. Discussions focused on participants' perspectives on healthy aging, including factors that facilitate or hinder their ability to age as they desire. Data were analyzed using reflexive thematic analysis.

Results: Two overarching themes were identified: “Inner strength through vitality and motivation” and “A sense of being needed and having one's needs met.” Participants emphasized the importance of maintaining autonomy, adapting to life transitions, fostering social connections, and navigating societal structures that impact healthy aging.

Key conclusions: Our findings largely confirm the WHO Healthy Aging Framework, emphasizing social support, continuous care, and autonomy as essential. Additional insights highlight the roles of inner motivation, heterogeneity (individual variations in preferences), and dynamism (changing preferences over time). Participants' uncertainty about welfare system sustainability demonstrates the urgent need for targeted policy interventions to support Sweden's rapidly growing older population.

O-003

Shared and specific blood biomarkers across different multimorbidity measures in people after 60: a 15-year follow-up population-based study

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Introduction: Aging is accompanied by the progressive accumulation of biological deficits, which amplify the susceptibility to the onset of multiple chronic diseases (i.e., multimorbidity). Despite being a widespread consequence of aging, the biological mechanisms underlying multimorbidity remain inadequately understood.

Methods: Fifty-four blood biomarkers reflecting inflammatory/vascular, metabolic, and neurodegenerative processes were analyzed in 2247 individuals aged 60 + from the Swedish National Study on Aging and Care in Kungsholmen. Multimorbidity was assessed using three measures: total disease count, multimorbidity patterns identified through Latent Class Analysis, and the rate of disease accumulation over 15 years. Associations between biomarkers and multimorbidity measures were examined using Least Absolute Shrinkage and Selection Operator regression, adjusting for age, sex, and education. Principal component analysis was used to further explore specific biomarker sub-profiles.

Results: Growth differentiation factor 15 (GDF-15), glycated hemoglobin (HbA1c), cystatin C, leptin, and insulin were consistently and positively associated with all multimorbidity measures. Other biomarkers exhibited specific associations with different multimorbidity patterns. Furthermore, a faster rate of disease accumulation was directly associated with gamma-glutamyl transferase and inversely associated with albumin. Several biomarkers were found to be over-expressed across different principal components (PCs), with GDF-15 and Cystatin C consistently represented in the first PC across all multimorbidity measures.

Key conclusions: Our findings suggest that various biological processes contribute to multimorbidity through shared or distinct pathophysiological mechanisms. Metabolic disturbances emerged as a significant driver in the development of multimorbidity. If confirmed, these processes could serve as potential targets for interventions designed to mitigate disease accumulation.

O-004

High serum endostatin levels predict incident anemia in older patients with chronic kidney disease, independent of kidney function decline and iron deficiency

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Introduction: Anemia is a debilitating comorbidity in chronic kidney disease (CKD), significantly impacting patient quality of life [1, 2]. Plasma endostatin (pEND), an antiangiogenic factor, enriches aging kidneys [3] and plays a role in endothelial dysfunction, which may contribute to CKD progression [4, 5]; its capacity of inhibiting VEGF [6], an erythropoietin inducer [7], may make pEND a reliable marker of anemia in older patients. However, no study has examined the relationship between endostatin and anemia in older CKD patients.

Methods: We analyzed data from the Screening for CKD in Older People (SCOPE) Study, including 2,008 participants for cross-sectional analysis and 1,394 for incident anemia analysis. pEND was measured at baseline and logarithmically transformed. Multivariable linear, logistic, and cox regression models assessed the relationship between pEND and hemoglobin, anemia prevalence, and incidence, respectively.

Results: Among 2,008 participants (mean age 80, 43.8% men), baseline log pEND was negatively correlated with hemoglobin in CKD only ($r = -0.32$, $p < 0.001$) and associated with higher anemia prevalence (OR = 2.24, 1.36–3.44). Out of 1,394 patients without anemia, 159 (11.4%) developed new-onset anemia during the 2-y follow-up. pEND was independently associated with incident anemia (HR = 2.63, $p < 0.001$), even in patients with stable renal function and with normal iron status. Adding pEND to models improved time-dependent AU at 12 and 24 months.

Conclusions: Elevated pEND levels are associated with prevalence and incidence of anemia in older CKD patients, independent of kidney function decline and iron deficiency. pEND may be a biomarker for early anemia detection.

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O-005

Clinimetric properties of Epigenetic Clocks: how do they differ between sexes and age groups?

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Introduction: DNA methylation patterns change with aging and epigenetic alterations are one of the primary aging hallmarks. Computational algorithms have allowed linking those patterns with bio clinical phenotypes into epigenetic clocks. It has been suggested that these clocks can serve to monitor the responses to interventions aimed at healthy aging. However, their ability to distinguish the “ill” from the “healthy” might vary across sexes and age groups. We aimed at assessing the clinimetric properties of accelerated aging measured by these clocks to detect low intrinsic capacity (IC) levels.

Methods: We used longitudinal data from the INSPIRE-T cohort from people aged 20–102, stratified by sex and quinquennial age groups. We included the clocks: Horvath, Hannum, PhenoAge, GrimmAge, Horvath-Skin. Cross-sectional approach: The outcome of interest was being in the lowest decile of IC within each age group. We computed the sensitivity, specificity, ROCAUC, PPV, NPV for the accelerated aging (estimated biological age > chronological age) vis a vis the outcome of interest. Longitudinal approach: we defined incident low IC among those in deciles 1–9 at baseline, and decile 10 at FU. We used Cox models to estimate HR and the predictive power Harrel’s C.

Results: n = 1,002 (except for GrimmAge, n = 999). Heterogeneity was found for the clinimetric properties across age groups and sexes.

Key conclusions: Some epigenetic clocks might be better at detecting “ill” phenotypes than others, with variations across sexes, and age groups. Sexual dimorphism and aging processes happening with a non-linear fashion through chronological age should be considered when using epigenetic clocks to monitor interventions.

O-006

PhenoAge and PhenoAgeAccel do not outperform chronological age in predicting physical performance decline and mortality in community-dwelling older adults

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Background: Aging varies widely among individuals, and chronological age alone only partially reflects the functional decline associated with aging. To better capture this complexity, biological age metrics such as PhenoAge and PhenoAgeAccel have been developed using clinical biomarkers. These measures have shown associations with frailty, inflammation, and mortality in specific clinical populations, but their predictive value for functional decline and mortality in the general older population remains uncertain. Given the importance of physical performance in maintaining independence and quality of life in older adults, identifying reliable aging markers to predict its decline is crucial for early intervention. Building on these premises, this study aimed to investigate the associations of PhenoAge, PhenoAgeAccel, and chronological age with changes in physical performance over time and all-cause mortality in community dwelling older adults, while comparing their predictive capacity. A further objective was to assess and compare their ability to predict the onset of physical performance decline at 6 years among individuals with normal function at baseline.

Methods: We used data from the InCHIANTI study, a longitudinal, population-based study conducted in the Chianti region of Tuscany, Italy, designed to investigate factors affecting mobility decline in aging. From the original cohort (N = 1,343), we included 979 participants ≥ 65 years and with complete biomarker and physical performance data at baseline. We evaluated the associations between these aging metrics and longitudinal changes in physical function and 10-year all-cause mortality. A secondary analysis focused on participants (N = 504) with normal physical performance at baseline (SPPB ≥ 10) to determine whether these aging metrics predicted the onset of impaired function (SPPB ≤ 9) at 6 years. Physical performance was measured using the Short Physical Performance Battery (SPPB), a validated tool that evaluates lower extremity function through balance, gait speed, and chair stand tests. The continuous rescaled SPPB (rSPPB) was used to assess performance changes over time, while the standard SPPB discrete score (0–12) was used to define physical impairment in the secondary analysis. Model fit and predictive capacity were evaluated using the Akaike Information Criterion (AIC) and area under the receiver operating characteristic curve (AUC).

Results: The study population had a mean age of 73 years, and 56% were women. All three aging metrics were significantly associated with physical performance decline and mortality. However, chronological age was the strongest predictor of both physical performance decline ($\beta = -0.50$ per decade, $p < 0.001$) and 10-year all-cause mortality (HR = 1.15, 95% CI: 1.14–1.17), with lower AIC values indicating superior model fit. PhenoAge ($\beta = -0.32$ per decade, $p < 0.001$; HR = 1.10, 95% CI: 1.09–1.11) and PhenoAgeAccel ($\beta = -0.15$ per decade, $p < 0.001$; HR = 1.09, 95% CI: 1.07–1.10)

were also associated with these outcomes but demonstrated weaker predictive accuracy. Similarly, chronological age outperformed PhenoAge (AUC = 0.71 vs. 0.69) and PhenoAgeAccel (AUC = 0.71 vs AUC = 0.55) in predicting the onset of impaired physical function.

Conclusion: Although PhenoAge and PhenoAgeAccel are associated with physical performance decline and mortality, they do not outperform chronological age in predictive accuracy in a general older population. These biological age metrics, which incorporate inflammatory markers, may be more useful in populations where systemic inflammation plays a central role in health outcomes. However, their ability to predict functional decline in community-dwelling older adults appears limited, likely because they do not fully capture the complex interplay of musculoskeletal, neurological, environmental, and lifestyle factors that influence physical performance in aging. Future research should focus on developing more comprehensive biological aging markers that better reflect the multifactorial nature of physical function decline in older individuals.

O-007

Leukocyte telomere length over the adult lifespan in subjects with or without atherosclerotic cardiovascular disease

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Introduction: Leucocyte telomere length (LTL) shortens at 25–30 base pairs (bp) yearly in adults and these attrition rates are stable even in very old subjects. However, only a few cross-sectional studies included individuals > 80 years. In the present study we analyzed the age/LTL relationship in subjects with or without atherosclerotic cardiovascular disease (ASCVD) in a population aged 20 to 106 years.

Methods: 2118 adults (58% women) mean age 64 ± 21 years were included (382 subjects with ASCVD and 1360 without). LTL measurements were performed using Southern blotting.

Results: Mean LTL was 6930 ± 780 bp. Since the relationship between LTL and age was not linear, we partitioned the cohort into 2 age groups; < 75 years ($n = 1329$) and ≥ 75 years ($n = 789$). Using a multivariate model, adjusted for sex, we observed in subjects < 75 years a decrease in LTL of 24 ± 1 bp per year ($P < 0.0001$) and shorter LTL in the presence of ASCVD (333 ± 55 bp, $P < 0.0001$). In subjects ≥ 75 ($N = 757$) we observed a small increase in LTL of 7 ± 4 bp/year ($P = 0.053$) and no difference in LTL according to the presence or not of ASCVD.

Conclusion: In subjects ≥ 75 we found higher than expected LTL values in relation to age and the presence of ASCVD. These results suggest a selection process due to an over-mortality among older people with shorter telomeres especially in those with ASCVD.

AI and Big Data

O-008

Using medication management technologies in Swiss primary care: a mixed methods study

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Background: Medication management information technologies (IT), such as shared electronic medication plans and electronic patient records, are increasingly rolled out across Switzerland. They can support primary care physicians and older adults to optimize medication use and reduce medication-related harm. Understanding users' expectations is essential for implementation of medication management IT in primary care settings.

Objectives: Explore primary care physicians' and older adults' experiences and attitudes regarding medication management IT and identify barriers and facilitators to their use.

Methods: We employed a convergent mixed methods design using online questionnaires and semi-structured interviews with primary care physicians and older adults in Swiss primary care settings from January to August 2024. Participants included older adults aged ≥ 60 years who were using ≥ 2 prescribed medications daily, as well as primary care physicians practicing in Switzerland. Quantitative questionnaire data was analyzed using descriptive statistics to describe current use and attitudes regarding medication management IT. Qualitative data was analyzed using thematic analysis.

Results: 252 older adults (50% female; mean age 73 years ($SD = 7$)) and 46 primary care physicians (33% female; mean age 54 years ($SD = 11$)) completed the questionnaire. Seven older adults (3%) and 21 physicians (46%) reported using shared electronic medication plans. Most older adults reported not using electronic patient records (240; 95%) but expressed willingness to adopt them to manage (164; 69%) or share (179; 75%) their health information in the future. Most physicians were open to using digital tools for medication optimization (35; 76%) or a platform to coordinate medication optimization with patients and healthcare providers (29; 63%). Interviews were conducted with 19 older adults (63% female; mean age 77 years ($SD = 9$)) and 16 physicians (31% female). The qualitative data helped explain the quantitative findings. Older adults rarely used medication management IT, while physicians mainly used basic tools integrated into their practice information system (e.g., interaction checkers). Barriers and facilitators for both groups included information about these novel technologies, accessibility, perceived need and benefit, user-friendliness, data protection, and required time and effort.

Conclusion: Although older adults and primary care physicians perceived advantages of medication management IT, current use remains limited. More information and improved access and user-friendliness could promote wide-spread adoption.

O-009

Conducting medication reviews: a comparative study between ChatGPT-4 and healthcare professionals

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Background: The increasing prevalence of hyperpolypharmacy (> 10 medications) has made medication reviews (MRs) increasingly complex. ChatGPT-4, a large language model, may serve as a support tool for MRs.

Objectives: The primary aim was to evaluate the agreement between MRs conducted by ChatGPT and healthcare professionals (HCPs).

Methods: In this retrospective proof-of-concept study, 53 MRs previously conducted by a geriatrician and hospital pharmacist were re-evaluated using ChatGPT. ChatGPT was provided with the same primary data as HCPs and asked to perform MRs following the Systematic Tool to Reduce Inappropriate Prescribing (STRIP) method. Two independent researchers scored the interventions, and these were reviewed within an expert team. Descriptive statistics was used.

Outcomes: Primary endpoint was the percentage agreement of interventions between ChatGPT and HCPs. Secondary endpoints were the number of additional valid and incorrect interventions suggested by ChatGPT, and ChatGPT's ability to structure diagnoses, medications, and laboratory target values using the STRIP-method.

Results: HCPs suggested 183 interventions and ChatGPT 252 interventions. ChatGPT agreement with HCPs was 27.4%. It identified 20 additional valid interventions which HCP missed (7.9%), but also proposed 86 incorrect interventions (34.1%). While ChatGPT demonstrated strong capability in structuring patient data (86.4% match diagnoses and medication), it struggled with contextualizing appropriate laboratory target values based on patient characteristics (46.7%).

Conclusion: ChatGPT has low agreement with HCPs and lacks clinical decision-making capabilities based on individual patient contexts. ChatGPT may serve as a support tool to structure diagnoses and medication lists time-efficiently, but it is not a substitute for HCP-led MRs.

O-010

Harnessing machine learning to forecast care intensity in urgently hospitalised older patients

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Introduction: Hospital unscheduled care systems are challenged with the needs of an ageing population requiring tailored specialist input. To support efficient models of care, new approaches are required to identify likely care needs early after hospitalisation.

Methods: We developed a Machine Learning algorithm to predict required healthcare intensity, developed from linked GP and hospital electronic health record (EHR) data for consecutive Scottish patients (≥ 50 years old) admitted to NHS Lothian hospitals between 2016–2024. Gradient-boosting (XGBoost) forecasting models were trained to predict hospital healthcare intensity (total nursing and rehabilitation contacts) and secondary outcomes of in-hospital death, extended stay (> 14 days), requirement for rehabilitation, non-home discharge, specialist input in critical care and geriatric medicine admission. Important predictors were assessed at five timepoints between Emergency Department (ED) arrival and 72 h following admission.

Results: Across 98,242 unique patients hospitalised after ED attendance, 40,946 (42%) received any rehabilitation. Error rate in the care contacts forecasting model, measured using the conditional Mean Absolute Percentage Error (cMAPE), ranged between 49% [95% CI 48%–49%] at point of ED attendance and 34% [95% CI 33%–35%] at 72 h post-admission. Area under the Receiver Operating Characteristic (ROC-AUC) curve reached 0.89 (95% CI 0.88–0.89) for

detecting geriatric medicine admission. Increased pressure ulcer risk (Waterlow score) was a primary indicator of reduced nursing and rehabilitation contact frequency. High C-reactive protein, urea and creatine kinase were associated with requiring more contacts.

Conclusion: EHR data could aid quicker allocation to appropriate care pathways and support novel data-driven models for hospital front-door services.

O-011

Enhancing answer reliability on total hip arthroplasty and delirium using avatar-based retrieval augmented generation

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Introduction: Total hip arthroplasty (THA) is one of the most commonly performed surgical procedures [1]. A frequent complication associated with THA is postoperative delirium [2]. Numerous healthcare professionals are involved in supporting patients, but have limited time each day to provide support [3].

To address this issue, an avatar—a talking virtual human—has been developed for use on a computer-on-wheels (COW) platform screen. This avatar employs a Large Language Model (LLM) enhanced by Retrieval Augmented Generation (RAG) [4]. The RAG technique ensures that general hip surgery and delirium information supplied by the hospital is utilized during interactions, rather than generic LLM information. Consequently, the hospital is equipped with an avatar that delivers useful and reliable information to both patients and caregivers.

Method: Two videos were produced. One video presents a patient-avatar interaction regarding THA (<https://youtu.be/937neO0rmXo>), and another video depicts a caregiver-avatar interaction concerning delirium (https://youtu.be/T9J_cgbXg-s). A survey was conducted among Dutch adults over 40. Participants watched videos in Dutch, imagining themselves as the patient (video 1) or relative (video 2), and rated 'usability' and 'trust' of avatars on a 7-point Likert scale (0–6) [5].

Results: 40 persons (MeanAge = 49.6, SDAge = 8.3, Male = 21, Female = 19) completed the survey. Patient role: usability (M = 4.96, SD = 0.67), trust (M = 4.10, SD = 0.89). Relative role: usability (M = 5.09, SD = 0.69), trust (M = 4.65, SD = 0.77).

Key conclusions: The study shows that Retrieval Augmented Generation could help hospitals improve the usability and trust of medical information from avatars for patients and relatives.

O-012

Do dementia diagnoses vary between rural and urban locations in Scotland? A retrospective data linkage study using routinely collected data individual-level data linked to a historical population-wide survey, the Scottish Mental Survey (SMS1947) 1947

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Introduction: In Scotland, approximately 90,000 people live with dementia. Past research has suggested unexplained increased odds of dementia if living in the North (predominantly more rural) [1]. Scotland can link data within the National Safe Haven (NSH). We linked a historical 1947 population-level survey of individuals aged 11 who undertook an intelligence test at school, the Scottish Mental Survey 1947 (SMS1947), to routinely collected data to investigate rural/urban variation of dementia.

Methods: A retrospective, population-wide (with individual-level) data linkage study in the NSH. The study population ($n = 16,910$) were SMS1947 individuals linked to routinely collected data with a rural/urban variable.

Dementia ascertainment was from ICD codes or dementia drugs within routinely collected datasets (hospital discharges, mortality, and prescribing). Rural/urban location was defined by the Scottish Urban–Rural Classification System.

Cox proportional hazard models examined dementia diagnosis and rural/urban location. This was adjusted for deprivation using the Scottish Index of Multiple Deprivation (SIMD), childhood intelligence score and sex.

Results: $N = 3676$ (21.7%) were diagnosed with dementia (average age 76.9). Rural location was associated with lower hazard ratio (HR) of dementia: Adjusted HR = 0.84, 95% CI 0.77–0.93 compared to urban location. Therefore, rural location was associated with 16% (CI 8–23%) lower rate (lower hazard ratio) of dementia than urban location.

Key conclusions: Rural location was linked with lower HR of dementia compared with urban locations. Further work is required to explain this new association. A major strength of this study was linking a historical population-wide survey to individual-level routinely collected data to explore dementia.

Reference:

1. Tom C. Russ et al. “Geographical variation in dementia: Examining the role of environmental factors in Sweden and Scotland”. *Epidemiology* 26.2 (2015): 263–270.

O-013

Understanding long-term multimorbidity risks of steroid use and the role of genetics in UK Biobank

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Background: Multimorbidity, the presence of ≥ 2 long-term conditions (LTC), is common but studies are often limited to single datasets. We integrated large-scale primary-care and genetic data from multiple countries to interrogate multimorbidity patterns, investigate the causal role of risk factors such as body mass index (BMI), and produce digital research resources gemini-multimorbidity.shinyapps.io/atlas/.

Methods: We studied 72 chronic, common, heritable conditions in people aged ≥ 65 years. We estimated co-occurrence using two primary-care databases [CPRD (UK) $N = 2,425,014$ and SIDIAP (Spain) $N = 1,053,640$], estimated heritability using UK Biobank ($N = 451,197$), and applied genetics tools to assess BMI influence on LTCs.

Results: In pairwise analysis 43.6% LTCs co-occurred more commonly than expected by chance in primary care and had evidence of shared genetics, highlighting known and novel shared mechanisms between LTCs e.g., skin cancer and rheumatoid arthritis, where opposite effect directions highlighted a specific shared drug target. BMI genetics significantly contributed to 54% of LTC pairs. For some

pairs the shared genetics was entirely explained by BMI genetics, e.g. osteoarthritis and type-2 diabetes (genetic correlation[rG] before adjustment = 22%, rG after BMI adjustment = 1%: p-value = 2×10^{-6}) providing a potential opportunity to reduce co-existing LTCs by reducing BMI.

Conclusion: Most pairs of chronic conditions in ageing populations show evidence of shared genetics, and co-occurrence in primary care, suggesting shared mechanisms. The identified patterns of shared genetics, and discordance between genetic and observational data provide a foundation for future multimorbidity research, for example the causal role of BMI in multimorbidity and the potential impact of interventions.

Cognition and dementia

O-015

Sarcopenia as an independent risk factor for mild cognitive impairment conversion to Alzheimer’s disease: a prospective study

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Introduction: Recent evidence supports the hypothesis that sarcopenia is associated with worsening cognitive function. Mild cognitive impairment (MCI) and sarcopenia are two common conditions in older people. We aimed to investigate whether sarcopenia could play a role in the progression from MCI to Alzheimer’s disease.

Methods: A comprehensive geriatric assessment (CGA) was performed. MCI was defined as the absence of dementia, preserved functional capacity and low performance in three objective cognitive tests. Sarcopenia was diagnosed according to EWGSOP criteria. Patients with evidence of a major stroke or brain lesions and with vascular cognitive impairment were excluded. The association between MCI and sarcopenia was assessed using a multivariable logistic regression model, reporting the data as adjusted odds ratios (OR) and 95% confidence intervals (95%CI).

Results: Subjects were followed up for ten years between 2013 and 2023. 389 participants (mean age of 67.7 years; 57.3% males) were included at the baseline. Complete evaluation was performed annually. The conversion rate to AD was approximately 6.89% (26) after five years and 13.9% (54) after ten years. On multivariate analysis, adjusted for potential confounders, subjects with baseline sarcopenia showed a significant independent risk for AD conversion than control group (5years 1.89 95%CI: 1.03–4.89; 10 years 3.76 95% CI 1.53–5.65).

Key conclusions: The presence of sarcopenia at baseline was associated with a higher risk for conversion from MCI to AD at five and ten-years follow-up, demonstrating a role of sarcopenia in prediction of AD conversion.

O-017

Medicines optimisation intervention outcomes for older people with dementia or mild cognitive impairment: a systematic review

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Background: Polypharmacy is common in older people with dementia or mild cognitive impairment (MCI), increasing the risk of medication-related harm. This systematic review aimed to summarise the evidence on the outcomes of medicine optimisation and deprescribing interventions to reduce polypharmacy in this population.

Methods: Literature search using CINAHL, Embase, Medline, PsychINFO, Web of Science and the Cochrane Library was conducted from inception to January 2024. Papers reporting data specific to people with dementia or MCI from medicine optimisation and deprescribing interventional studies of any design and in any setting were included. A narrative synthesis was conducted, and quality was assessed using the Mixed Methods Appraisal Tool.

Results: Thirty-two papers were included, with 60% undertaken in long-term settings and samples ranging from 29 to 17,933 patients. Interventions incorporating a medication review component ($n = 13$), education component ($n = 5$) or both ($n = 14$). Studies primarily focused on medication-related outcomes, reporting a positive effect on decreasing the number and improving appropriateness of medications. Fewer papers reported clinical outcomes (behavioural and psychological symptoms of dementia, falls, quality of life and cognition) with mixed findings; and safety (mortality and hospital attendance) showing no change demonstrating safety of the interventions.

Conclusion: Medicine optimisation and deprescribing interventions generally reduced the number and increased the appropriateness of medications and seem to be safe and showed an absence of worsening of clinical outcomes. Further research is needed, particularly for people with dementia or MCI living at home, with more focus on clinical outcomes, and greater involvement of patients and informal carers.

Best oral communication

Cognition and dementia

O-018

Diet can modify the risk of dementia conferred by increased AD biomarkers in individuals over 60: a 15-year population-based study

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Introduction: Healthier diet has been linked to reduced dementia incidence, but it is unclear if diet can buffer the risk of dementia conferred by Alzheimer's disease (AD) pathology. We assessed if and to what extent the adherence to different dietary patterns may modify the risk of dementia of individuals with evidence of AD pathology.

Methods: We used data from 1,865 adults aged ≥ 60 years from the SNAC-K population-based study, who were examined six times over 16 years. Serum concentrations of t-tau, p-tau181, p-tau217, A β 42/40, NfL, and GFAP were measured at baseline, and adherence to three dietary patterns [Alternate Mediterranean Diet (AMED), Alternate Healthy Eating Index (AHEI), and Empirical Dietary Inflammatory Index (EDII)] was assessed longitudinally over six years. The data was analyzed using Cox regression models adjusted for sociodemographic, lifestyle, and morbidity.

Results: 252 incident dementia cases were ascertained clinically or via death records. Higher (i.e., above median) blood biomarker concentrations were generally associated with increased risk of dementia. The hazard ratio (95% confidence interval) of dementia for those adhering to a healthier vs. unhealthier diet was lower in participants with high t-tau (0.51 [0.35, 0.74]), p-tau181 (0.66 [0.48, 0.92]), NfL (0.65 [0.48, 0.88]) and GFAP (0.69 [0.50, 0.94]) when analyzing the AMED; in those with high levels of t-tau (0.58 [0.39, 0.85]), GFAP (0.71 [0.51, 0.97]) and lower A β 42/40 (0.61 [0.43, 0.86]) when analyzing the AHEI; and in those with higher levels of every biomarker when analyzing the EDII (hazard ratios ranging from 0.55 to 0.64).

Key conclusions: Adherence to a healthier diet may decrease the dementia risk conferred by overt AD pathology.

ORAL

Cognition and dementia

O-019

Body mass index across adulthood and late-life cognitive decline: the HUNT study

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Aim: To examine associations between body mass index (BMI) across adulthood with cognitive changes in late life.

Methods: We included 5,151 participants aged 70 + from the fourth wave of the Trøndelag Health Study (HUNT4, 2017–19) and the follow-up study Ageing in Trøndelag (AiT, 2021–23). Global cognitive function was assessed using the Montreal Cognitive Assessment (MoCA) at HUNT4 and AiT. BMI (kg/m²) was measured at HUNT1 (1984–86), HUNT2 (1995–1997), HUNT3 (2006–2008), and HUNT4. Group-based trajectory modelling was used to identify BMI trajectories from HUNT1–HUNT4. Linear regression examined

changes in MoCA scores from HUNT4 to AiT related to BMI at HUNT1–HUNT4 and BMI trajectories, adjusting for age, sex, education, marital status, smoking, physical activity, mental distress, and APOE ϵ 4. Multiple imputation and inverse probability weighting were used to handle missing data and reduce bias due to skewed participation.

Results: Higher BMI at midlife (HUNT1–HUNT3) was associated with steeper cognitive decline. Per kg/m^2 increase; HUNT1: $b = 0.04$ (95% CI $-0.08, -0.01$), HUNT2: -0.03 ($-0.06, -0.01$), HUNT3: -0.03 ($-0.05, -0.001$), but not at HUNT4. Obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$) at midlife also predicted greater decline; HUNT1: -0.58 ($-1.06, -0.10$), HUNT2: -0.38 ($-0.68, -0.08$), HUNT3: -0.31 ($-0.59, -0.03$), but not at HUNT4. No significant differences were observed between decreasing overweight/obesity trajectories and increasing normal BMI.

Conclusions: Higher BMI, particularly obesity, during midlife was linked to greater cognitive decline in late life, whereas late-life BMI was not. Weight management in midlife is a potential intervention target for reducing late-life cognitive decline.

O-020

Inflammatory Bowel disease linked to accelerated cognitive decline in individuals with dementia: a nationwide cohort study

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Introduction: The gut-brain axis, which links the intestine and the central nervous system, has received significant attention in recent years. Inflammatory bowel disease (IBD) may impair brain function through inflammation, neuronal disruption, and gut microbiota changes, potentially causing dementia. However, its impact on cognitive decline in individuals with dementia remains unclear.

Methods: We conducted a propensity score-matched cohort study using the Swedish Registry for Cognitive/Dementia Disorders (Sve-Dem) (2007–2018) to investigate the association between IBD and dementia progression via Mini-Mental-State-Examination (MMSE) scores. Dementia patients with incident IBD were matched 1:10 with those without IBD. We used linear-mixed-effects models to calculate the yearly change in MMSE scores over time, comparing individuals with and without IBD. Additionally, in individuals with dementia and IBD, we compared yearly MMSE changes before and after IBD diagnosis.

Results: We identified 111 individuals with dementia and incident IBD (age: 76.5 ± 7.1 years; 54.1% women) and 1110 non-IBD individuals with dementia (76.5 ± 7.9 years; 53.6% women). The two groups were well-balanced in terms of demographics and clinical characteristics. Individuals with dementia and IBD experienced faster cognitive decline than those without IBD (difference in MMSE = -0.92 points/year; 95% confidence interval: -1.49 to -0.35). Additionally, cognitive decline accelerated after an IBD diagnosis, with a rate of -0.9 points/year (-1.30 to -0.49) before IBD diagnosis and -1.37 points/year (-2.09 to -0.64) after IBD diagnosis.

Conclusion: Individuals with dementia and IBD experience more rapid dementia progression, as indicated by greater cognitive decline compared to those with dementia but without IBD.

O-021

Towards validation in clinical routine: a comparative analysis of visual MTA ratings versus Combinostics-computed volumetric measures of hippocampal volumes and inferior lateral ventricles in participants from a Swedish memory clinic

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Introduction: Early Alzheimer's disease (AD) diagnosis is crucial for optimizing anti-amyloid therapies. Medial temporal atrophy (MTA) assessment in MRI is subjective and expertise-dependent. AI-based tools like cNeuro offer an objective alternative by automating volumetric analysis. This study compares AI-derived hippocampal (Hip) and inferior lateral ventricle (ILV) volumes with visual MTA ratings and assesses their predictive value for AD, mild cognitive impairment (MCI), and subjective cognitive impairment (SCI).

Methods: We analyzed MRI and cerebrospinal fluid biomarkers from 201 Memory Clinic patients at Karolinska University Hospital. Three Tesla T1-weighted MRI scans were rated for MTA using the Scheltens scale and processed with cNeuro for Hip and ILV volumes. Cognitive function was assessed via the Montreal Cognitive Assessment (MoCA) and Rey Auditory Verbal Learning Test (RAVLT). Logistic regression examined associations between volumetric measures, MTA scores, and diagnoses.

Results: MCI patients had larger Hip and smaller ILV volumes than AD patients, with lower MTA scores. AI-derived volumes correlated with visual MTA ratings (ILV/MTA: $r = 0.75$, $p < 0.001$; Hip/MTA: $r = 0.50$, $p < 0.001$). Cognitive performance was negatively associated with ILV (MoCA: $r = -0.29$, RAVLT: $r = -0.32$, $p < 0.001$) and MTA (MoCA: $r = -0.22$, RAVLT: $r = -0.26$, $p < 0.01$). Logistic regression showed Hip predicted AD, ILV predicted SCI, but no model significantly predicted MCI.

Conclusion: AI-based hippocampal volume reliably predicts AD, while ILV predicts SCI. Automated volumetric analysis can enhance diagnostic accuracy and early intervention in dementia care.

Education and training

O-022

Tools for evaluating the appropriateness of prescriptions and their application by pharmacists

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Introduction: The objective of this umbrella review is to synthesize evidence on the various tools and guidelines available to pharmacists for evaluating the appropriateness of prescribed drugs and summarize their characteristics, applications, and effectiveness.

Methods: We applied the PRISMA guidelines and searched in five databases for systematic reviews with or without meta-analysis focused on our objective, published from 2005 to 2024. Extracted data were related to study and population characteristics, type of intervention, primary and secondary outcomes, and main findings or recommendations.

Results: We identified 197 potential studies. Following abstract and full text screening, removing duplications and manual search, 13 articles were included in the final synthesis. The umbrella review of included studies confirms that several tools exist that significantly assist pharmacists in optimising medication review and identifying potentially inappropriate prescriptions (screening tools 24.2%, clinical decision support systems 21.2%, deprescribing guidelines 18.2%, medication therapy management 15.2%, adherence support interventions 12.1%, behaviour change techniques 9.1%). Interventions were mostly performed solely on older people populations (46.2%). Pharmacist interventions based on these tools improved patient outcomes by reducing adverse effects and ensuring the accuracy of prescriptions, particularly in high-risk groups. However, barriers to implementing these auxiliary tools (training needs, integration of systems, resistance to adoption of new technology) must be addressed to maximize their effectiveness.

Key conclusions: By fostering collaboration and supporting pharmacist training on available tools, health care systems have the opportunity to further empower pharmacists to make impactful contributions to drug safety and appropriateness.

O-023

Developing a collaborative international online learning (COIL) experience among three superaging countries: Finland, USA and Japan

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Symposium Title: Developing a Collaborative International Online Learning (COIL) Experience Among Three Superaging Countries: Finland, USA and Japan.

Chairs: Daniel Z. Mansour, PharmD, MS, AGSF, BCGP, FASCP (USA); Marja Airaksinen, PhD, MSc (Pharm) (Finland).

Lecture 1 Title Modeling an Aging in Place Program in Finland after One in the United States.

Speakers 1 Maarit Dimitrow, Docent, PhD, MSc (Pharm); Marja Airaksinen, PhD, MSc (Pharm).

Abstract of Lecture 1 (Republic of Finland).

Introduction: The interprofessional aging-in-place course, initiated by the University of Maryland, Baltimore (UMB) in 2015, aims to equip future geriatric practitioners with the skills necessary to support older adults in maintaining their autonomy within their homes and communities. During the pandemic, the course expanded to include virtual participation from the University of Helsinki, Finland, fostering a collaborative “All-Teach-All-Learn” model grounded in the Age-Friendly framework. This model has since been adopted in Finland, leading to the development of a community engagement program inspired by UMB’s initiative. The program’s primary focus is to prepare faculty, students, and practitioners in Finland to apply Aging in Place principles, Age-Friendly Care, and the 4Ms framework, while also enhancing interprofessional communication and identifying areas for competence development in geriatric care.

Purpose and methods: This presentation will describe the initiation of a community engagement program in Finland, modeled after the Peter Lamy Center’s IPE Care in Geriatrics Aging in Place Program at the UMB. Steps towards the involvement of the first local senior center at Myllypuro, Helsinki will be described.

Results and conclusion: From 2020 to 2025, the community health program has been expanding in terms of number and diversity of community residents involved, course participants, instructors (“IPE tutors”), educational resources, including a new online course on geriatric pharmacotherapy, clinical encounters, and community engagement initiatives. The successful collaboration with the Myllypuro Senior Centre in Fall 2024 highlights the program’s potential for further expansion. An IPE network has been established to facilitate ongoing coordination, development and scalability.

Lecture 2 Title Advancing Geriatric Competencies through Virtual Interprofessional Education.

Speakers 2 Diane Martin, PhD, MA.

Abstract of Lecture 2 (United States of America).

Introduction: Interprofessional education (IPE) fosters collaborative, team-based care. For more than 30 years, IPE has been the cornerstone of our geriatric training program through which health and social care students collaborate to address the complex needs of older adults. Our Geriatric Assessment Interdisciplinary Team (GAIT) project, traditionally conducted in rural and underserved areas, shifted to a virtual format, broadening its reach to include international participants because of the COVID-19 pandemic.

Methods: During the virtual GAIT experience, students rate their interest in working with older adults and complete the Interprofessional Collaborative Competency Attainment Survey (ICCAS) before and after the program. The ICCAS is a 20-item self-assessment tool that evaluates competencies such as communication, collaboration, roles and responsibilities, patient/family-centered care, conflict management, and team functioning.

Results: From nearly 400 participants revealed a 93% improvement in perceived competencies across all domains and a 78% increase in interest in geriatric care.

Conclusion: This session will explore the development, online delivery, and evaluation of the GAIT curriculum, highlighting its adaptability for diverse institutions and international audiences. Key insights will be shared to help participants create and implement their own virtual IPE initiatives, promoting team-based approaches to geriatric care.

Learning objectives:

1. Identify the benefits of geriatric IPE in promoting health and social care student interest in working with older adults.

2. Design a virtual interprofessional geriatric training project tailored to institutional and international needs using effective strategies and best practices.

Lecture 3 Title International Collaboration Across the Timelines: HIV and Aging: Public Health Implications in an Aging Society in Japan. Speakers 3 Taisuke Izumi, PhD; Jiro Ezaki, MD, PhD.

Abstract of Lecture 3 (Japan).

Introduction: Japan has the highest aging rate globally, with 29.1% of its population aged 65 and older, followed by Italy (24.5%) and Finland (23.6%). The trend is expected to accelerate, with the Japanese aging population projected to reach 38% by 2070. Similarly, aging rates are increasing in developing countries, presenting significant challenges across various societies, including public health.

Methods: “Aging” impacts multiple aspects of healthcare, including the management of chronic viral infections such as HIV. Twenty-five years ago, AIDS was considered a fatal disease, but the development of combination antiviral therapy (cART) has transformed it into a manageable chronic condition; despite these medical breakthroughs, an HIV cure has not been achieved, and individuals aging with HIV face many of the same health challenges as the general population aged 50 and older, including multiple chronic conditions, polypharmacy, physical and cognitive decline, and heightened vulnerability to stressors.

Results: Although effective cART has significantly reduced the likelihood of AIDS-defining illnesses, older people living with HIV (PLWH) are at increased risk for non-AIDS-related comorbidities, such as cardiovascular disease, diabetes, renal dysfunction, and cancer. Moreover, HIV can persist in the central nervous system (CNS) despite effective treatment, contributing to neurocognitive impairments. More than half of treated PLWH experience mild neurocognitive impairment, a rate expected to be higher among aging individuals.

Conclusion: This session provides an overview of the latest research on “HIV and aging,” offering insights for public health professionals and researchers addressing the evolving healthcare needs of super-aging societies.

O-024

Enhancing pharmacological management skills in geriatric care through gamified e-learning

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Introduction: Polypharmacy is a critical concern in geriatric medicine, often associated with adverse drug reactions, increased hospitalizations, and decreased quality of life. Effective education and training for healthcare professionals are vital to address the complexities of managing multiple medications in older adults. This study introduces OPTIPHARM, a gamified e-learning tool specifically designed to enhance the pharmacological management skills of healthcare students in geriatric care.

Methods: OPTIPHARM utilizes a case-based learning approach that immerses users in realistic clinical scenarios, allowing them to engage as members of a multidisciplinary team during outpatient consultations. The development of the tool incorporated principles of gamification to increase user engagement and motivation. A usability study was conducted with 304 medical students from the University of Navarra, who evaluated the tool’s effectiveness using the System Usability Scale for Gamified E-learning (SUS-G-Sp).

Results: The usability assessment revealed a high level of satisfaction among participants, with 90% of the items receiving at least 80% positive feedback. The average usability score of 74 indicates a favorable user experience. Students reported significant improvements in their understanding of polypharmacy management and the importance of collaborative practice in geriatric care.

Conclusions: OPTIPHARM demonstrates a promising advancement in the education of healthcare professionals regarding the management of polypharmacy in older adults. By integrating gamification into the learning experience, the tool not only enhances knowledge retention but also equips future healthcare providers with the necessary skills to navigate the complexities of geriatric pharmacotherapy. Furthermore, we present the new model, which has been adaptively evolved to better meet the needs of learners and the challenges of modern geriatric care. Further research is warranted to evaluate its impact on clinical practice and outcomes in geriatric populations.

O-025

To what extent does undergraduate pharmacy education cover ageing-related content? A scoping review

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Introduction: By 2030, one in six people globally will be aged 60 or over, many with complex healthcare needs due to multimorbidity and polypharmacy. Pharmacists play a key role in geriatric care, with increasing responsibilities, as all new UK pharmacy registrants will be independent prescribers by 2026. However, it is unclear whether undergraduate pharmacy education is adequately preparing future pharmacists to address the healthcare needs of older adults. This study aims to synthesize existing literature on undergraduate geriatric pharmacy education and identify gaps to inform curriculum development.

Methods: A search of Embase, Medline, CINAHL, and PsycINFO was conducted until October 15, 2024, using keywords related to undergraduate pharmacy, educational interventions, and older adults. Studies were screened for eligibility, and data extracted by two independent reviewers. Extracted data were mapped to the British Geriatrics Society (BGS) recommended undergraduate curriculum in geriatric medicine to identify gaps.

Results: Of 1,221 records, 103 studies met the inclusion criteria, published between 1977 and 2024 from North America (n = 92), Europe (n = 5), Asia (n = 4), Australia (n = 2). While content from all seven BGS curriculum sections was extracted, there was considerable variation in coverage. Notably, “cognitive impairment” and “falls” were each addressed in 20 studies, while conditions like “Parkinson’s Disease” and “Cerebrovascular Disease” were not covered.

Conclusion: Our review highlights gaps in undergraduate geriatric pharmacy education. A thorough evaluation of current pharmacy curricula is needed to assess the depth and duration of ageing-related content.

O-026

Key gaps in geriatric knowledge and educational needs among healthcare professionals working with older adults in acute, subacute, and long-term care settings across Europe: a COST PROGRAMMING 21122 survey analysis across Europe and beyond

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Introduction: The education of healthcare professionals varies significantly across the European Union and neighbouring countries at both undergraduate and postgraduate levels. **METHODS:** a mixed-methods online survey was developed in order to explore the differences and key gaps in knowledge across professionals working with older people across Europe and beyond.

Results: Of 5922 responses, 2914 were analysed: 2204 related to professionals working in acute settings, 353 in subacute settings and 586 working in long-term care (LTC) settings. The majority of responses were from medical doctors, nurses and, physiotherapists. The mean age of participants was 41.6 (SD 11.6) years; 2045 (70.2%) were women. The consistency between responses to the different items was strong and statistically significant. Communication with patients and their families and with a multidisciplinary team were two of the most valuable aspects highlighted by professionals in all settings. In acute settings, the most important issues were falls (77.2%), healthy aging, frailty and delirium (71.4%). In subacute settings they included falls (83%), rehabilitation, chronic pain and behaviours and psychological symptoms of dementia (BPSD) (77.1%), and in LTC BPSD (84.8%), depression, mild cognitive impairment and dementia and resilience (80%). The topics with the greatest differences between knowledge and relevance were oncogeriatrics, chronic pain, capacity assessment, depression, CGA and nutrition.

Key conclusions: There are differences in relevant topics across these settings of care. Key knowledge gaps are oncogeriatrics, functional assessment, pain management, and hearing and vision impairments.

Our efforts should be directed towards unifying the knowledge of professionals in European and beyond to provide the best care for older patients.

Ethics and end-of-life care

O-027

Evaluation of the acute basic palliation concept by relatives and healthcare professionals: an observational study of 40 home-dying patients in Denmark

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Background: Many individuals prefer to pass away in the comfort of their own homes, yet logistical obstacles often result in their admission to hospitals for end-of-life care.

Objectives: To measure the effectiveness, as assessed by relatives and staff, of end-of-life care according to the Acute Basic Palliation Concept (ABPC) for patients discharged from an Emergency Department.

Methods: An observational study of 40 consecutive actively dying patients who were discharged from Aalborg University Hospital, Denmark using the ABPC. Effectiveness of end-of-life care was measured by questionnaires to relatives, discharging doctors and nurses, and municipality health staff. The ABPC comprised a physician checklist, instructions for medical professionals, a medication template to be personalized, an added standardized text to discharge papers, information pamphlets for patients and relatives, and a box of medicine and utensils.

Results: Among the 40 included patients (mean age 84, SD 7.7), four experienced improvements at home and resumed active treatment. The patients who died had an average survival time of 3.8 days (SD 7.5). According to relatives, 90% of patients died a dignified death without suffering. Municipality nurses rated the usefulness of the ABPC at 96 (IQR 88;100) on a 0–100 scale, and all healthcare staff wanted to use the ABPC again.

Conclusion: The ABPC showed great potential as a tool for discharging dying patients without specialized palliative needs to good-quality end-of-life care at home. The ABPC was widely accepted by relatives and all health staff. The ABCP is ready for large-scale testing with patient subgroups and economic analysis.

Best oral communication & audience award for best oral communication

Ethics and end-of-life care

O-028

Symptoms and communication at the end of life: why do perceptions differ between relatives, nurses and doctors on the acute geriatric ward? (SCELA)

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Introduction: Different perceptions of symptoms and communication have been identified between relatives, nurses and doctors. This study explored why relatives, nurses and doctors can have different perceptions regarding the quality of end-of-life care.

Methodology: One-on-one semi-structured interviews were conducted with relatives and team members of dying patients in the acute geriatric wards of UZ Leuven and UZ Gent. Purposive sampling based on End-Of-Life in Dementia scales – Comfort Assessment in Dying (EOLD-CAD), lead to selection of ten cases between April and November 2024. The QUAGOL methodology was used for analyzing the interviews.

Results: Interviews with eleven relatives, nine nurses and nine doctors were performed. Nurses perceived good quality of dying when they did all they could concerning symptom management. If late transition to comfort care or hesitation from relatives or doctors towards medication caused physical discomfort for the patient, this negatively impacted the quality of dying as seen by nurses. In contrast, relatives prioritized a holistic approach over pure symptom control, through overall sense of trust in the care team and the feeling of being cared for. Additionally, when nurses and doctors did not fully understand the relatives' perspectives, this led to a lack of trust and subsequent conflicts among relatives, nurses and doctors.

Conclusion: This study reveals the importance of explicit exploration of relatives' perspectives and alignment with the acute geriatric ward team to optimize symptom control and communication at the end of life.

Oral

Cognition and dementia

O-029

Clinical prediction models using artificial intelligence approaches in dementia: a systematic review

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While nearly half of all dementia cases are potentially preventable, early detection and targeted interventions are critical. Artificial intelligence (AI)-enhanced clinical prediction models offer promising tools to improve diagnostic and prognostic accuracy by leveraging machine learning (ML) to integrate diverse data sources. This systematic review evaluates the development, performance, and clinical applicability of AI-based prediction models in dementia.

Searches of PubMed, Embase, and Web of Science identified peer-reviewed studies up to October 2024, focusing on AI-based models predicting dementia onset. Included studies were assessed for model accuracy, bias, and generalizability using the PROBAST tool. Data extraction adhered to the TRIPOD and CHARMS frameworks, capturing study design, participant demographics, predictor variables, and performance metrics.

Among 2,699 articles initially screened, 21 studies were included, encompassing over 1 million participants. AI models, extremely heterogeneous for their nature, demonstrated good predictive accuracy, with a mean area under the curve (AUC) of 0.845. While internal validation was conducted in all studies, external validation was limited. Models incorporating ML methods like random forests and support vector machines outperformed traditional approaches. The most used parameters were clinical and cognitive data, whilst data about biomarkers were the less used. Risk of bias was generally low, though calibration and generalizability remained challenges.

AI-based prediction models show strong potential for early dementia detection and personalized care. However, their integration into clinical practice requires addressing issues of external validation, data representativeness, and model interpretability. Further research should focus on robust validation and ethical implementation to optimize their utility in dementia care.

O-030

Predictors of subjective memory impairment

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Introduction: Subjective memory impairment (SMI), which refers to self-reported memory difficulties, is often used as a proxy for objective cognition and an early marker of potential Alzheimer's disease and related dementias. However, it does not necessarily reflect objective cognitive deficits. This study investigated potential predictors of SMI, including objective cognitive test scores, sociodemographic factors, physical and mental health, lifestyle factors, and apolipoprotein E ϵ 4 (APOE4) carrier status.

Methods: We used cross-sectional data from the Trøndelag Health Study (HUNT4) on participants aged ≥ 65 . The relationship between SMI and its predictors was assessed using multiple linear regression analysis. The Meta Memory Questionnaire was used to assess SMI, while the online cognitive test platform Memoro measured objective cognition (verbal, visuospatial, and working memory, pattern separation, attention and processing speed).

Results: A total of 543 participants (43% women), aged 65–91, were included. Higher working memory was associated with lower SMI, and higher verbal memory was linked to lower SMI in men only. Lower SMI was reported by women and by participants with lower anxiety and depression, less chronic pain, and better sleep. Current smokers also reported lower SMI.

SMI was not associated with attention and processing speed, visuospatial memory, pattern separation, most sociodemographic factors and clinical measures, alcohol consumption, or ApoE4 status.

Key conclusions: SMI is more reflective of physical and mental health, and lifestyle than of objective cognitive abilities. It should therefore not be used as a proxy for objective cognitive performance but may only serve as a complementary measure.

O-031

Trajectory of cardiometabolic disease-related hospitalizations before and after dementia diagnosis: a matched cohort study

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Objectives: Cardiometabolic diseases (CMDs) including type 2 diabetes, heart disease, and stroke often co-occur with dementia, but the impact of dementia on hospitalizations related to CMDs remains unknown. We aimed to map the trajectory of CMD-related hospitalization before and after dementia diagnosis and to further identify related factors.

Methods: Within the Swedish Twin Registry, 1657 participants aged ≥ 65 with incident dementia were matched with 1657 dementia-free participants using propensity scores. Participants were followed for up to 20 years to detect CMD-related hospitalizations. Dementia and CMD-related hospitalizations were identified from medical records. Potential related factors included age, sex, education, marital

status, smoking, drinking, physical activity, body mass index, and hypertension. Data were analyzed using Poisson regression and generalized estimating equation models.

Results: Compared to the controls, the incidence of CMD-related hospitalization among people with dementia started to increase from 4 years before (incidence rate ratio [IRR] 1.25, 95% confidence interval [CI] 1.00–1.57) and started to decrease 3 years after the diagnosis (IRR 0.74, CI 0.58–0.94). People with dementia had a greater number of CMD-related hospitalizations (IRR 1.16, CI 1.04–1.30) and longer cumulative length of stay (IRR 1.19, CI 1.04–1.56) in the five years before dementia diagnosis, but these rates decreased after the diagnosis. Male sex, smoking, obesity, and hypertension were associated with further increases in CMD-related hospitalization among people with dementia.

Conclusion: Our findings suggest that the healthcare burden increases even before the diagnosis of dementia, and CMD-related hospitalization may be an early sign of the future onset of dementia.

O-032

Uncovering the factors shaping the hearing care trajectory in Flemish adults aged 60–75: behavioral drivers, competencies and contextual influences

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Introduction: Age-related hearing loss (ARHL) is a leading cause of disability in older adults, contributing to physical inactivity, social isolation, cognitive decline, and an increased dementia risk. Early detection and intervention, such as hearing aids, are critical, yet hearing care is often delayed or never pursued. This study investigates the behavioral determinants and key actors across the hearing care pathway in Flemish adults aged 60–75.

Method: This qualitative study explored barriers and facilitators in the hearing care pathway through six focus groups and in-depth interviews with participants having or doubting having subjective hearing loss and/or hearing aid experience. Data were analyzed thematically using the Behavior Change Wheel model to identify behavioral determinants.

Results: The hearing care pathway consists of four stages: (1) recognition and acceptance of hearing loss, (2) help-seeking, (3) diagnosis, and (4) adherence to treatment. Key individual behavioral determinants include risk perception, knowledge, outcome expectations, and social identity. Contextual factors, such as stigma of ARHL and the affordability of hearing aids, were significant barriers. Relatives, peers, and healthcare professionals, especially general practitioners, were crucial in promoting awareness, referral, and follow-up. Personality traits also influenced care uptake.

Key conclusions: Both behavioral and contextual factors impact the hearing care trajectory. Relatives and healthcare professionals are key facilitators. A follow-up quantitative study is recommended to validate these findings and inform prevention campaigns aimed at reducing untreated hearing loss and enhancing healthy aging.

O-033

Elevated plasma p-tau217 at 82 years precedes development of dementia

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Introduction: Increased concentration of plasma phosphorylated tau217 (p-tau217) have been established as a robust biomarker of Alzheimer's Disease (AD) pathology. However, their full potential as prognostic biomarkers in very old individuals, who have the highest incidence of AD, remains to be verified.

Methods: In this study, plasma p-tau217 concentrations were analyzed in 510 participants from the Uppsala Longitudinal Study of Adult Men, with a mean age of 82 years. Concentrations were measured using immunoassays. Incident dementia diagnoses were identified through medical record reviews up to 102 years of age in survivors.

Results: Among the 510 participants, 167 developed dementia (73 AD and AD with Vascular dementia and 94 of other causes or unspecified), while 343 remained cognitively unimpaired (CU). The median (IQR) plasma p-tau217 concentration was higher in those who developed dementia: 0.37 pg/ml (0.29–0.57) compared to the CU group: 0.29 pg/ml (0.24–0.38), Mann–Whitney U, $p < 0.001$. Plasma p-tau217 levels were associated with an increased risk of incident dementia. Participants in the highest quartile (Q4) had five times higher risk of developing dementia compared to those in the lowest quartile (Q1), with a hazard ratio (HR) of 5.0 (95% CI: 3.0–8.2, $p < 0.001$). The mean ($\pm$ SD) plasma p-tau217 values for each quartile were: Q1: 0.21 ($\pm$ 0.03), Q2: 0.28 ($\pm$ 0.02), Q3: 0.36 ($\pm$ 0.03), and Q4: 0.67 ($\pm$ 0.25) pg/ml.

Key conclusions: Elevated plasma p-tau217 levels precede the development of dementia even in very old age. This finding could facilitate the treatment and care of patients with dementia.

O-034

CSF biomarkers and cognitive decline in cognitively healthy 70-year-olds, followed over 5 to 7 years: the Gothenburg H70 studies

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Background: Recognizing early signs of cognitive decline in pre-clinical Alzheimer's disease may allow interventions to slow progression. We investigated the association between cerebrospinal fluid (CSF) Amyloid- β 42/40 (A β), total tau (t-tau) and phosphorylated tau (p-tau) and cognitive decline in a population-based cohort of 70-year-olds followed for 5–7 years.

Method: The baseline sample ($n = 250$) was drawn from the H70 Gothenburg Birth Cohort Study (2014–2016; $n = 1203$). Participants with dementia or Clinical Dementia Rating (CDR) score ≥ 1 were excluded. CSF levels of A β 42, A β 40, t-tau, and p-tau were measured. Six cognitive domains (memory, attention, executive function, verbal fluency, visuospatial abilities, and processing speed) were created after z-standardizing raw scores from 11 neuropsychological tests. These were combined into a composite score.

Results: Among the 250 participants (48.4% female), mean age at follow-up was 76.1 (SD 0.5). A β pathology (A β 42/40 ≤ 0.082) prevalence was 25.9%; t-tau pathology (≥ 350 pg/mL) 29.2%; and p-tau pathology (≥ 80 pg/mL) 5.6%, consistent with previous findings [Kern et al., 2018]. No significant association was found between A β 42/40 and change in the cognitive composite score. In contrast, higher t-tau and p-tau levels were associated with steeper decline in the cognitive composite score (t-tau: $\beta = 0.147$; $p = 0.040$; p-tau: $\beta = 0.148$; $p = 0.038$).

Key conclusion: In this population-based cohort of cognitively healthy older adults with a baseline age of 70, higher CSF t-tau and p-tau levels, but not A β 42/40, were associated with greater cognitive decline over 5–7 years.

O-035

The public health response to dementia in Italy: results from the Italian Fund for Alzheimer's and dementia

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Introduction: The World Health Organization (WHO) advocates for public health actions to mitigate the dementia burden. Italy launched its National Dementia Plan in 2014, supported in 2021 by the Italian Fund for Alzheimer's and dementia (IFAD) with 15 million euros. This initiative, backed by national institutions, regions, and autonomous provinces, aims to strengthen the public health response to dementia. (Project carried out with the technical and financial support of the Ministry of Health—Chapter 2302).

Methods: A comprehensive analysis of the activities carried out within the IFAD in 2021–2023.

Results: A scenario analysis revealed that 39.5% of dementia cases are linked to 11 risk factors, and a 20% reduction in these could prevent up to 67,000 cases. While cardiovascular risk factors are

addressed, no targeted strategies exist for hearing loss, education, or depression. A National Guideline on dementia and Mild Cognitive Impairment was developed. Economic analysis estimated dementia-related costs at €23.5 billion, while a national survey reported a median diagnostic delay of 12 months and out-of-pocket costs averaging €1,800/month. Carer focus groups highlighted unmet healthcare needs and the need for inclusivity campaigns. A census identified 57 Dementia Friendly Communities, predominantly in the North (77%). Additionally, comprehensive data on Italian memory clinics, daycare centers, and nursing homes was collected and made publicly accessible online.

Conclusions: By aligning with the WHO Global Action Plan on Dementia, the Italian approach aims to foster a European strategy focused on best practice harmonization, research coordination, and policy advocacy to enhance dementia care and prevention.

Falls and fractures

O-036

The association between STOPPFall medication use and falls and fractures in community-dwelling older people

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Introduction: Falls and fractures are common among older people. The Screening Tool of Older Persons Prescriptions in older adults with high fall risk (STOPPFall) provides a comprehensive list of fall-risk-increasing drugs (FRIDs). This study assesses the association between STOPPFall medications and future falls/fractures among a large cohort of community-dwelling people ≥ 65 years using The Irish Longitudinal Study on Ageing (TILDA) Waves 1–6, collected from 2009–2021.

Methods: STOPPFall medications were recorded at Wave 1 and Wave 3. Falls/fractures were self-reported. Logistic regression models reporting odds ratios (ORs) assessed the association between STOPPFall medications and falls (including injurious/unexplained falls) and fractures at follow-up, adjusted for relevant covariates.

Results: Over one in four participants (777/2898, 27%) were prescribed one STOPPFall medication, and 15% (421/2898) were prescribed ≥ 2 STOPPFall medications. Over half of participants fell during follow-up, with 1/5 sustaining any fracture. Prescription of ≥ 2 STOPPFall medications was independently associated with all falls [OR 1.67 (95%CI 1.28–2.18); $p < 0.001$], injurious falls [OR 1.53 (95%CI 1.19–1.97); $p = 0.001$], unexplained falls [OR 1.86 (95%CI 1.43–2.42); $p < 0.001$], all fractures [OR 1.59 (95%CI 1.20–2.12); $p = 0.001$] and hip fractures [OR 1.75 (95%CI 1.00–3.05); $p = 0.048$]. Increasing prescription of ≥ 2 STOPPFall medications at Wave 3 was associated with increased likelihood of all falls and injurious falls.

Conclusion: Prescription of ≥ 2 STOPPFall medications is independently associated with an increased likelihood of all falls and all fractures. This is a potentially modifiable risk factor for falls, and an increased falls risk should be considered when prescribing these medications.

Best oral communication

Falls and fractures

O-037

Belgian program Enhancing the uptake and Effectiveness of a Multifactorial falls Prevention intervention in Older community-dWelling peRsons (BE-EMPOWERed): a mixed methods evaluation study

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Introduction: Despite strong evidence supporting the efficacy of multifactorial falls prevention interventions, implementation in clinical practice remains limited. BE-EMPOWERed, developed using Intervention and Implementation Mapping, addressed the gap between theory and practice through a seven-week group program for older people (adapted from Stepping On), workshops for healthcare professionals, and an implementation plan with tailored guidance for primary care areas in Flanders, Belgium.

Methods: A two-year mixed-methods study using a convergent parallel design assessed implementation and effectiveness. Qualitative data from focus groups, self-reported data, and observations assessed implementation outcomes, while quantitative surveys and tests measured proportion of fallers, concerns about falling (FES-I), physical function (SPPB), and falls-related behaviors (FaB, IPEQ).

Results: Nineteen group programs were delivered to 188 participants with a median age of 78 years (interquartile range: 74–83). The program demonstrated high adherence (86–96%) and a low dropout rate (5%). Focus groups highlighted increased knowledge and real-life applications (e.g., home modifications, medication reviews, increased physical activity). Significant improvements were observed in weekly physical activity (+ 3.02 h, $p < 0.001$), falls prevention behaviors (+ 0.11 points, $p < 0.001$), balance, strength, and mobility (effect size: 0.65–0.72, $p < 0.001$). The odds of falling were 84% lower post-intervention (OR 0.16, $p < 0.001$).

Key conclusion: BE-EMPOWERed is a feasible, acceptable, and scalable program that improves physical activity, falls safety behaviors, and functional outcomes, reducing falls risk in older people. The study, underscores the importance of adapting and tailoring evidence-based programs to local contexts, ensuring successful implementation.

ORAL

Falls and fractures

O-038

Perturbation-based balance training improves reactive balance and reduces falls in older adults: a systematic review and meta-analysis

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Aim: Falls are a leading cause of morbidity among older adults, substantially affecting their independence and quality of life. Perturbation-based balance training (PBT) is a task-specific intervention designed to enhance reactive balance responses. This systematic review and meta-analysis aimed to evaluate the effects of PBT on fall rates and fall-related risk factors in community-dwelling older adults.

Methods: A comprehensive search of electronic databases was conducted to identify randomized controlled trials (RCTs) examining the effects of PBT on fall incidence and risk factors, such as laboratory-induced reactive balance assessments. Two independent reviewers screened studies and extracted data. Random-effects meta-analyses were performed to pool outcome measures.

Results: 25 studies were included. Meta-analyses of included trials showed significant reductions in the rate of falls (rate ratio: 0.77, 95% confidence interval [CI]: 0.60 to 0.99, $p = 0.04$, $I^2 = 57\%$), proportion of fallers (risk ratio = 0.83, 95% CI 0.78 to 0.96, $p < 0.008$, $I^2 = 0\%$), injurious falls (risk ratio = 0.76, 95% confidence interval [CI] 0.58 to 0.98, $p = 0.03$, $I^2 = 0\%$), and laboratory falls (risk ratio = 0.42, 95% confidence interval [CI] 0.31 to 0.58, $p < 0.00001$, $I^2 = 43\%$) but no significant improvements in other fall risk factors.

Conclusion: PBT is an effective intervention for improving reactive balance and reducing both overall and injurious falls in older adults living in the community. While promising, future high-quality RCTs are needed to evaluate the feasibility and effectiveness of scalable, accessible PBT interventions.

Protocol registration: PROSPERO: CRD42022343368.

O-039

Association between improvements in physical function and lower fear of falling in senior care residents

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Introduction: Fear of falling (FoF) is a common problem in older adults and associated with reduced physical activity, increased risk for future falls, adverse health outcomes and reduced quality of life. The aim of this sub-analysis of the bestform trial was to analyse the association between physical function and fear of falling in senior care residents over six months.

Methods: The cluster-randomized controlled bestform trial (NCT04207307) was conducted in 21 senior care facilities ($n = 404$ participants, mean age 85.3 ± 6.5 years) with 1:1 randomization in intervention care facilities (IG; with progressive machine-based resistance, coordination and endurance training, 2x/week over six months, 45–60 min each) or usual care (UC). Physical function, measured by the Short Physical Performance Battery (SPPB) and Fear of Falling (short form of the Falls Efficacy Scale-International Questionnaire, short FES-I) were assessed at baseline and after six months.

Results: At baseline, we found a moderate association between SPPB and short FES-I in IG ($r = -0.43$, $p < 0.001$) and in UC ($r = -0.51$, $p < 0.001$), after six months the association was comparable (IG: $r = -0.48$, $p < 0.001$; UC: $r = -0.59$, $p < 0.001$). Changes in SPPB were negatively associated with changes in short FES-I (IG: $r = -0.25$; $p < 0.001$; UC: $r = -0.24$, $p = 0.009$).

Key conclusions: Lower physical function was associated with higher fear of falling in senior care residents. Improvements in physical function were reflected by lower fear of falling, indicating important benefits through regular exercise in senior care residents.

O-040

Conservative treatment in older adults with hip fracture as a therapeutic alternative to surgical treatment: a case-control study

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Objective: To analyse the clinical profile, complications and mortality of older patients with hip fracture treated conservatively compared with those treated surgically.

Methods: Case-control study (1:2). Patients over 70 years admitted to an orthogeriatric unit over a three year period were selected. Cases were non-surgical patients and controls were surgical patients matched for sex, age and fracture type. Sociodemographic, functional and mental characteristics, comorbidities, anaesthetic risk, acute illness contraindicating surgery, palliative care assessment, 30-day readmissions and in-hospital and at 3 months mortality were recorded.

Results: 126 participants (42 cases, 84 controls), mean age 89 ± 6 years, 67% female. The most common fracture type was subcapital (73%). Non-operated patients had greater functional dependence (Barthel 32 vs 67, $p < 0.001$; FAC 1.5 vs 3.5, $p < 0.001$), worse cognitive status (GDS 5.2 vs 3.2, $p < 0.001$), higher comorbidity (CIRS-18 18 vs 16, $p < 0.001$) and increased surgical risk (ASA 3.3 vs 3, $p < 0.001$). Surgery was contraindicated in all cases due to acute illness, mainly infections (26.2%). During admission, cases were more frequently assessed for palliative care (11% vs 4%, $p < 0.001$), had a shorter hospital stay (7.9 vs 10.5 days, $p = 0.03$), a higher number of readmissions after 30 days (9.5% vs 1.2%,

$p = 0.04$) and a higher mortality in-hospital (38% vs 1.2% $p < 0.001$) and in the following three months (19% vs 2.4% $p = 0.002$).

Conclusions: Non-surgical patients have worse clinical, functional and mental status, with higher readmission and mortality rates. The presence of acute illness may influence treatment decisions.

O-041

The role of homecare services on 30-day mortality risk in patients with humerus or pelvic fractures

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Introduction: Humerus and pelvic fractures are increasingly common in older adults, leading to significant morbidity and mortality. Identifying high-risk patients is crucial for implementing target interventions, yet the role of prior homecare as a proxy for reduced functional ability and a potential frailty-marker remains understudied. We investigated whether prior homecare was associated with increased 30-day mortality risk. **Methods:** A population-based cohort study with data from the CROSS-TRACKS cohort identified patients aged ≥ 65 years with non-surgically treated humerus or pelvic fractures between 2012 and 2022. Homecare utilization, defined as personal care, practical help, or homecare nursing, within one year before fracture. Cox regression, adjusted for sex, age, and Charlson Comorbidity Index, evaluated the association between prior homecare and mortality.

Results: We included 6,634 patients with humerus fractures and 3,732 with pelvic fractures. For those with humerus fractures, 30-day mortality was 7.9% (95% Confidence Interval (CI) 5.3–10.3) with homecare, and 3.0% (95% CI 2.5–3.4) without. For patients with pelvic fractures, 30-day mortality was 9.4% (95% CI 6.3–12.3) with homecare and 6.8% (95% CI 5.9–7.6) without. Homecare was associated with higher mortality risk for humerus fractures (adjusted hazard ratio (HR) 1.76, 95% CI 1.22–2.53), but not for pelvic fractures (HR 1.03, 95% CI 0.72–1.48).

Conclusion: Patients with humerus fractures and prior homecare had an increased 30-day mortality risk, whereas no association was found for pelvic fractures. Prior homecare may serve as an important marker of increased mortality risk in patients with humerus fractures, highlighting the need for closer post-fracture monitoring and targeted interventions.

Vaccines

O-042

Measuring the impact of hospitalization for infectious diseases on the quality of life of older patients in four European countries: the AEQUI longitudinal matched cohort study (2020–2023)

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Objectives: To evaluate the impact of hospitalization for infectious diseases on the Health-Related Quality of life (HRQOL), multidimensional frailty, and functioning of older patients, we conducted a longitudinal matched cohort study in four European countries.

Methods: HRQOL, frailty, and functioning were assessed using validated questionnaires at inclusion, at discharge, and up to 6 months later in patients aged over 65 years hospitalized for severe acute respiratory or bloodstream infections, and matched controls hospitalized for non-infectious conditions. Comparative analyses employed multilevel mixed-effect linear or logistic models to assess changes from inclusion.

Results: Between 2020 and 2023, 1968 patients aged 65–100 years (mean, 81) were included; 1064 (54.1%) were male and 59 (3%) were institutionalized. Of these 1968 patients, 826 were hospitalized for infectious diseases and 1142 for non-infectious conditions. At inclusion, European Quality of Life 5 Dimensions and 3 Lines scores ranged from -0.7 to 1 (full HRQOL), with a median of 0.7 across all visits and groups. Compared with controls, patients hospitalized for infectious diseases had lower scores on the Activities of Daily Living (ADL) scale (median, 4.5 vs. 5.0 ; $p 0.020$) and the Instrumental ADL scale (median, 3.0 vs. 4.0 ; $p < 0.001$). At discharge, Instrumental ADL scores were lower in patients hospitalized for infectious diseases than in controls (median, 4.0 vs. 5.0 , $p 0.003$), indicating reduced functioning. The proportion of frail patients, determined by a Multidimensional Prognostic Index score between 0.67 and 1 , was significantly higher among patients hospitalized for infectious diseases ($n = 113/801$, 14.1%) than controls ($n = 108/1111$, 9.7%; $p 0.012$). At six months, no statistically significant differences were observed between groups in changes from inclusion in HRQOL (European Quality of Life 5 Dimensions and 3 Lines, $p 0.436$), frailty (Multidimensional Prognostic Index, $p 0.269$), and functioning (ADL, $p 0.993$).

Discussion: Hospitalization for infectious diseases and non-infectious diseases or conditions had a similar impact on HRQOL in non-institutionalized older adults.

Cognition and dementia

O-043

Blood-based biomarkers of Alzheimer's disease and gait speed trajectories in older adults free from dementia

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Introduction: Gait speed (GS) has been recognized as a comprehensive indicator of health in old age, and a predictor of future dementia incidence. However, the role of Alzheimer's disease (AD) patterns of GS decline has not been fully explored. This study aims to investigate the association between various blood-based biomarkers of AD pathology, and long-term GS trajectories in a population-based sample of older adults without dementia.

Methods: The present study included 1,651 community-dwelling adults ≥ 60 years, followed for 15 years, drawn from the SNAC-K study. GS (m/s) was assessed at baseline and at five subsequent follow-up time points. Blood-based biomarkers, including serum NfL, GFAP, A β 40, A β 42, t-tau, p-tau181, and p-tau217, were collected from peripheral venous blood samples at baseline. Linear mixed-effects models were used to investigate the association between blood biomarkers and GS changes over time.

Results: After adjusting for potential confounders, individuals in the highest quartile of NfL (β *year: -0.013 , CI: -0.019 ; -0.006), GFAP (β *year: -0.007 , CI: -0.013 ; -0.001), p-tau181 (β *year: -0.007 , CI: -0.013 ; -0.002), and p-tau217 (β *year: -0.009 , CI: -0.014 ; -0.003) exhibited a steeper decline in GS over time, as compared with the first quartile. Notably, participants in the highest biomarker quartiles developed mobility limitations (GS < 0.8 m/s) 2.3 to 6.0 years earlier than those in the lower quartiles.

Key conclusions: Higher levels of AD biomarkers are independently associated with a significantly faster decline in GS. Faster changes in GS may reflect higher AD brain pathology, and potentially serve as early markers of AD-related cognitive decline.

O-044

Long-term exposure to ambient particulate matter and structural brain changes in older adults

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Introduction: Accumulating evidence links air pollution exposure to late-life cognitive deterioration, but its impact on brain structure remains poorly understood. This study aimed to quantify the association between long-term exposure to particulate matter ≤ 2.5 μm and ≤ 10 μm (PM_{2.5} and PM₁₀, respectively) and late life brain structural changes.

Methods: In the Swedish National Study on Aging and Care in Kungsholmen (SNAC-K), Stockholm, 457 participants had repeated volumetric brain MRI examinations. Total brain tissue (TBTv), ventricles, hippocampus, and white matter hyperintensities (WMH) volumes were assessed. Long-term PM_{2.5} and PM₁₀ exposures were estimated using dispersion models at residential addresses. Linear regression models tested the association between long-term exposure and brain volumes (transformed to z-scores).

Results: Individuals exposed to higher levels of PM_{2.5} (> 8.5 $\mu\text{g}/\text{m}^3$) or PM₁₀ (> 14.9 $\mu\text{g}/\text{m}^3$) prior to baseline had smaller TBTv at baseline (-0.20 , 95% CI: -0.33 ; -0.06 and -0.14 , 95% CI: -0.28 ; -0.01). During the follow-up, exposure to PM_{2.5} > 8.7 $\mu\text{g}/\text{m}^3$ was associated with annual shrinkage of TBTv of 0.22 (95% CI: -0.43 ; -0.01) and an increase of 0.25 (95%CI: 0.07 ; 0.43) of the WMHs, compared with lower exposure. No significant association

was detected between PM₁₀ exposure and the annual rate of change in brain volumes.

Key conclusion: Long-term exposure to low levels of PM_{2.5} is linked to greater structural brain changes, including brain atrophy and vascular pathology. These findings highlight the importance of addressing air pollution as a modifiable risk factor for late-life cognitive decline and emphasize the need for targeted interventions.

O-045

Metabolic syndrome is related to accelerated brain aging: the mediating role of systemic inflammation

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Background: We investigated the relationship between metabolic syndrome (MetS) and older brain age, and the extent to which this is mediated by systemic inflammation.

Methods: The study included 31,409 adults (age: 40–69) from the UK Biobank. Baseline MetS was defined as the presence of 3 or more of the following 5 components: elevated waist circumference, hypertension, dyslipidemia, hypertriglyceridemia, and hyperglycemia. Low-grade inflammation was estimated using the INFLA-score, a composite index of four blood-based inflammatory biomarkers (C-reactive protein, white blood cell count, platelet count, and granulocyte-to-lymphocyte ratio). Participants underwent structural and functional brain magnetic resonance imaging (MRI) during a follow-up examination conducted an average of 8.9 years after baseline. Brain age was predicted using a machine learning model based on 1,079 brain MRI phenotypes and used to calculate brain age gap (BAG; i.e., brain age minus chronological age). Data were analyzed using linear regression and generalized structural equation models.

Results: 10,376 (33.0%) participants had MetS at baseline. MetS ($\beta = 1.10$ [0.98, 1.23]) was associated with significantly higher BAG, and we detected a dose–response relationship between number of MetS components ($\beta = 0.47$ [0.43, 0.52]) and BAG. These associations were more pronounced in men and people with an unhealthy lifestyle (i.e., smoking, heavy drinking, and/or physical inactivity). In mediation analysis, INFLA-score respectively mediated 8.0% of the associations between MetS and higher BAG.

Conclusions: MetS may accelerate brain aging, especially among men and people with an unhealthy lifestyle. These associations may be driven by higher levels of systemic inflammation among people with poor metabolic health.

O-046

Iron deficiency and dementia risk: evidence from the Swedish population-based cohort study AMORIS

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Introduction: Iron deficiency is common among older adults and proposed to be involved in cognitive aging and dementia, however, empirical data is lacking to support this hypothesis. We aimed to

examine the association between absolute and functional iron deficiency and incident dementia diagnosis.

Methods: Data were drawn from 70,935 individuals aged ≥ 50 years from the Swedish AMORIS cohort, who had blood measurements between 1985–1996. Participants were followed for incident dementia diagnosis in National Patient Register (inpatient and specialist outpatient) and Prescribed Drug Register (dispensed anti-dementia drugs) for 15 years. Two exposure groups were defined: absolute iron deficiency (serum ferritin $< 30 \mu\text{g/L}$) and functional iron deficiency (transferrin saturation $< 20\%$ and serum ferritin $\geq 30 \mu\text{g/L}$). The reference group was defined as individuals who had normal range of hemoglobin, serum iron, and total iron binding capacity.

Results: Over a mean follow-up of 12.6 years (SD 4.1), 4,994 individuals (7.0%) received a new dementia diagnosis. Compared to the reference group, absolute and functional iron deficiency was respectively associated with increased risk of dementia diagnosis (hazard ratio (HR) = 1.24, 95% confidence interval (CI): 1.18–1.42; HR = 1.21, 95% CI: 1.05–1.39, respectively), after adjusting for age, sex, education, and cardiovascular diseases. The associations were essentially consistent across subgroups stratified by age, sex, and cardiovascular disease, as well as in sensitivity analyses.

Key conclusion: We found an elevated risk of dementia among individuals with absolute or functional iron deficiency in blood. Future efforts are needed to explore whether and how treatment of iron deficiency can be relevant for dementia prevention.

O-047

Care sequence profiles of home care users with cognitive impairment and their association with individual characteristics

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Introduction: In older adults, cognitive impairment can lead to medical and social issues demanding care. We examined the service use of home care recipients with cognitive impairment to (a) categorise the service use into profiles, and (b) learn how the profiles are associated with individual characteristics.

Methods: We used national health and social care registers linked with Resident Assessment Instrument (RAI) assessment data of cognitively impaired home care clients ($n = 4000$). The clients' health and social service use was followed up to 6 months from registers. State sequence analysis (SSA) was used to group similar care sequences into profiles. Logistic regression was used to measure the association between the profiles and covariates, such as diagnoses and risk of death or transfer to a long-term care facility (LTCF).

Results: We established 10 care profiles, including one profile with heavy use of home nursing, one with heavy use of remote services, one with predominantly planned hospitalizations, and one with heavy use of primary and emergency care. Heavy use of home nursing was associated with a stroke diagnosis. Heavy use of remote services was associated with dementia. Planned hospitalisations were associated with cancer. Heavy use of primary care was connected with old age and impending death or transfer to an LTCF.

Key conclusions: With profile analysis, it is possible to understand the diversity of service use and its connection with individual characteristics of people with cognitive impairment. This understanding will advance the planning and effective use of integrated services and improve care outcomes.

O-048

A dual approach to cognitive health: early evidence from the PHysical ACTivity and Aminoacids in MCI: their role in progression towards DEmentia (PHACADE) study

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Background: Mild Cognitive Impairment (MCI) is a transitional state that may progress to dementia. The PHysical ACTivity and Aminoacids in MCI: their role in progression towards DEmentia (PHACADE, Bando Airalz young researcher 2021) study evaluates whether physical activity combined with amino acid supplementation can slow cognitive decline in older adults with MCI.

Methods: The study included adults aged > 65 diagnosed with MCI. Participants were randomized into two groups: a control group performing moderate-intensity aerobic physical activity twice weekly and an intervention group following the same activity regimen combined with daily amino acid supplementation. Sociodemographic data, physical performance, cognitive function, and progression to dementia were analyzed. Statistical significance was assessed ($p < 0.05$).

Results: The groups were comparable in age (mean 73.5 ± 4.2 years), gender distribution (58% female), and education level (mean 10.2 ± 2.4 years). Adherence rates were high ($> 90\%$) in both groups. The intervention group showed significant improvements in gait speed ($+ 15\%$; $p = 0.02$) and balance ($+ 18\%$; $p = 0.03$), with greater gains in participants with lower baseline performances. Memory scores (FCSRT sub test) stabilized, with a decline of $- 2.1\%$ in the intervention group vs. $- 2.8\%$ in the control group ($p = 0.04$). Progression to dementia occurred in 8% of the intervention group compared to 13% in controls ($p = 0.01$).

Discussion: The findings suggest that combining physical activity with amino acid supplementation benefits physical performance and may reduce cognitive decline in older adults with MCI. Final results expected in May 2025 will further clarify these effects.

O-049

Psychological distress and mortality risk in people with dementia: a cohort study using the UK Clinical Practice Research Datalink (CPRD) Aurum

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Introduction: Psychological distress is common in people with dementia (PwD) and may increase mortality risk. The Clinical

Practice Research Datalink (CPRD) Aurum contains data from ~ 28% of the population in England. We used CPRD Aurum data to investigate whether severity of psychological distress predicts all-cause mortality for PwD.

Methodology: People with an incident dementia diagnosis aged ≥ 65 were identified from 01/01/2006–09/05/2021. The index date was the first dementia diagnosis date. Follow-up ended when the participant died, or data collection ended. Psychological distress indicators were identified in the cohort from diagnoses, symptoms, psychiatric contact, and prescriptions. Participants were categorised as no distress; mild: no recorded prescriptions and ≥ 1 distress indicator; moderate: a recorded prescription and ≤ 3 distress indicators; severe: a recorded prescription and ≥ 4 distress indicators. A Cox regression with adjustment for relevant covariates was used to model time to all-cause mortality across psychological distress categories.

Results: The cohort comprised of 156,811 participants. 62,863 deaths occurred during the study period with an incidence of 138 deaths per 1000 person-years. The median follow-up was 2.3 years (IQR 1.3–4.1). Psychological distress indicated an increased risk of all-cause mortality compared to participants with no distress in an exposure-dependent response: mild (HR 1.12, 95% CI 1.09–1.15); moderate (HR 1.33, 95% CI 1.30–1.35); severe (HR 1.80, 95% CI 1.75–1.85).

Conclusions: We present the largest known study to demonstrate an exposure–response relationship between psychological distress and increased mortality in PwD. These findings have prognostic utility and can help inform decisions around advanced care planning.

O-050

Pharmacological and non-pharmacological interventions to improve sleep in people with cognitive impairment: a systematic review and meta-analysis

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Introduction: Sleep disturbance is an important treatment target in people with cognitive impairment because it is common, leads to negative outcomes, and may contribute to cognitive decline.

Methods: The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed to search Medline, CINAHL, PsycINFO and Cochrane CENTRAL for controlled clinical trials of pharmacological interventions (PI) and non-pharmacological interventions (NPI) to improve sleep in mild cognitive impairment and dementia.

Results: 144 trials involving 13,471 participants (median per trial = 50) were included. 95 trials examined NPI, 46 examined PI and three involved both as part of a multi-modal intervention.

To measure sleep, 68 trials used subjective measures exclusively, 41 used only objective measures, while 35 used a combination. 287 discreet sleep outcome measures were reported.

Bright light therapy was the most frequently examined NPI but results were equivocal. Other NPI (such as physical activity, cognitive

behavioural therapy for insomnia, music, and continuous positive airway pressure) showed promise but require further evidence.

Results for Melatonin, the most frequently examined PI, were inconclusive but lower doses may be more effective. Other PI (such as trazadone and orexin-receptor antagonists) demonstrated encouraging results but require further evidence.

Key conclusions: There is insufficient evidence upon which to base clinical decisions regarding the treatment of sleep disturbance in people with cognitive impairment.

Existing research is marked by wide heterogeneity, limiting data synthesis.

A core outcome set is urgently required to ensure future research produces more coherent and reliable evidence to improve outcomes for people with cognitive impairment.

Falls and fractures

O-051

Factors associated with falls outcome measure reporting compliance in a Parkinson's drug trial

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Introduction: Falls are a common and devastating complication of Parkinson's. To ascertain the effectiveness of novel falls interventions, accurate falls data collection methods are required.

Methods: This phase three, multicentre, double-blind, randomized controlled trial (CHIEF-PD RCT) recruited individuals with early to advanced Parkinson's who had fallen in the past year and did not have dementia. Falls data were collected according to the ProFaNE recommendations using diaries and telephone calls. Using baseline demographic and clinical measures, we explored factors associated with falls diary completion using logistic regression.

Results: We recruited 600 people with Parkinson's. Of these, 106 withdrew from the trial. 578 were expected to return one or more falls diaries. 343/578 (59%) returned $\geq 90\%$ of diaries and 409/578 (71%) returned $\geq 75\%$ of diaries, which was deemed as compliant. Adjusting for age, cognitive score (MOCA), gender and weekly hours of care, living alone (OR = 0.55 [95% CI 0.32–0.93], $p = 0.03$) and being categorised as frail on SHARE-FI (OR = 0.53 [95% CI 0.29–0.95], $p = 0.03$) reduced the odds of compliance with falls diaries.

Key conclusion: We have demonstrated that those living alone and clinically frail are less likely to provide complete paper diary data and therefore would benefit from alternative monitoring. Whilst many participants returned diaries, it is important to consider that diary data can be inaccurate, due to reliance on retrospective recall, and consistent recording of data over 12-months. Real-time, objective

methods utilising automated falls-detection technologies are likely to improve data-acquisition and falls monitoring.

O-053

Time to mobilization in hours after surgery for hip fracture and 30-day mortality—a cohort study on 36,229 patients from the Danish hip fracture registry

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Introduction: Early mobilization after hip fracture (HF) is a key indicator in national registries and associated with reduced mortality, but in-depth analysis of time in hours for mobilization is lacking. We described the clinical profile and 30-day mortality by time intervals in hours for mobilization after HF surgery.

Methods: Using Danish registries, we included HF patients aged ≥ 65 years (from year 2016–2021). Exposure: time in hours from start of surgery to mobilization. Outcome: mortality within 2–30 days of surgery. Primary mortality analysis: we compared mobilizations > 24 –36 h versus ≤ 24 h by calculating weighted risks, risk differences (RD) and hazard ratios (HR) using inverse probability of treatment weighted method. Secondary mortality analyses: we compared mobilizations > 24 –36 h and > 12 –24 h versus ≤ 12 h.

Results: We included 36,229 patients (67.3% women) with a median age of 82.6 years. Patients mobilized ≤ 24 h had similar age, BMI, and marital status, but were slightly more living in own residence, have high pre-fracture mobility, high education, and less comorbidity than patients mobilized > 24 –36 h. The weighted risk of 30-day mortality for mobilization > 24 –36 h versus ≤ 24 h was 10.43% and 7.89% with corresponding RD and HR of 1.67 (0.54, 2.80) and 1.22 (1.07, 1.38). The corresponding weighted RD and HR were 1.62% (0.89, 2.35) and 1.25 (1.12, 1.39) for > 12 –24 versus ≤ 12 h, and 1.33% (0.17–2.49) and 1.16 (1.02, 1.31) for > 12 –24 h versus > 24 –36 h.

Key conclusions: The 30-day mortality increases with the increasing time to mobilization after HF surgery. We suggest focusing on time in hours to mobilization with a 24-h or even earlier timepoint after surgery.

O-054

Causes of lower adherence to anti-osteoporotic treatment in patients with osteoporotic hip fracture

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Objective: Identify the reasons for lower adherence or discontinuation of anti-osteoporotic treatment before fracture in patients admitted to an Orthogeriatrics unit for hip fracture.

Methods: A retrospective, observational study of patients over 70 years old admitted for hip fracture over one year. The study included patients who had discontinued their prescribed anti-osteoporotic treatment before admission. Sociodemographic characteristics, type of prescribed treatment, and reasons for discontinuation (adverse effects, contraindications, patient or physician decision, or completion of treatment) were analyzed. If the reason was not documented, patients were contacted by phone.

Results: Among 588 admitted patients, 72 had previously received anti-osteoporotic treatment (91.3% women, mean age 86 years, Barthel index 70, FAC 4). The most common fracture type was subcapital pertrochanteric (39%). Treatment was discontinued in 30.5% by patient choice, 9.7% due to adverse effects, and 25% due to a medical decision (65% due to severe dependence in advanced dementia and 18% due to polypharmacy). Additionally, 34.87% had completed their treatment duration. Alendronic acid had the lowest adherence (38.9%), with gastrointestinal intolerance being the most frequent adverse effect (60%).

Conclusions: One-third of patients discontinued treatment voluntarily, and one-quarter stopped due to a physician's decision, mainly for advanced dementia. Less than 10% discontinued due to adverse effects, primarily gastrointestinal intolerance. Alendronic acid showed the lowest adherence.

O-055

Fall parameters and functional fitness among community-dwelling older adults in Ghana

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Introduction: Falls in older adults are a major public health concern. Adequate functional fitness (FF) is known to reduce falls, yet limited research examines this relationship in sub-Saharan Africa. This cross-sectional study investigates previous falls (PF), recurrent falls (RF), and fall risk (FR) among community-dwelling older adults in Ghana, and their association with FF.

Methods: Older adults aged ≥ 60 years were recruited from 9 districts in Ghana. PF and RF in the past year and demographics were assessed with surveys. FR was assessed with the Fall-Risk Questionnaire. FF was evaluated with 4m-walk-speed, 8-ft-up-and-go, 5x-sit-to-stand, 30s-arm-curls, back-scratch, chair-sit-and-reach, grip strength, 2-min-step, and stance tests.

Results: Among 641 participants (median age = 70 (65–76), 69% women, 61% urban), prevalence of PF was 26.4%, RF 10.4%, and high FR 30.6%. Univariate analysis showed that all FF components, except flexibility, were associated ($p < 0.01$) with at least two fall parameters. In multivariate analysis, male sex was protective against PF (OR = 0.36, 95% CI: 0.26–0.51) and RF (OR = 0.27, 95% CI: 0.11–0.71), while rural residence increased FR ($\beta = 1.34$, $p < 0.001$) and RF (OR = 2.18, 95% CI: 1.26–3.77). PF was associated with lower 30s-arm-curls scores (OR = 0.94, 95% CI: 0.88–0.99) and RF was associated with longer 5x-sit-to-stand times (OR = 1.071, 95% CI: 1.004–1.141). FR correlated ($p < 0.01$) with slower walk-speed

($\beta = -1.34$), and longer 5x-sit-to-stand ($\beta = 0.08$), and 8-ft-up-and-go ($\beta = 0.17$) times. Age and grip strength were not independent fall predictors.

Conclusion: Falls are highly prevalent among older Ghanaians, with women and rural dwellers most vulnerable. Functional fitness measures, particularly mobility-related tasks, are key correlates of falls.

Frailty and resilience

O-057

Short- and long-term effect of FINGER multidomain lifestyle intervention on frailty

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Introduction: Lifestyle interventions have shown potential in preventing frailty, but earlier studies have been generally limited with short durations and single-domain approaches. We aimed to investigate whether a 2-year multidomain lifestyle intervention prevents phenotypic pre-frailty/frailty, and whether baseline factors predict pre-frailty/frailty.

Methods: A total of 1259 participants aged 60–77 years in The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER), were randomized to multidomain intervention or regular health advice for two years. Frailty was defined by modified Fried phenotype. Mixed-effects logistic regression model was used to estimate the prevalence of pre-frailty/frailty (at baseline, 2, 7, and 11 years), the change in prevalence from baseline, and the difference in these changes between the intervention and control groups.

Results: The risk of pre-frailty/frailty was reduced by the intervention for 7 years. The prevalence of pre-frailty/frailty in the intervention group was 47% at baseline and 42% at the 2-year follow-up, and in the control group 45% and 49%, respectively ($p = 0.007$ for the between-group difference in change). The prevalence began to increase after the active intervention period in both groups, but the difference in change remained in favor of the intervention group at 7 years (-6.2 percentage points, $p = 0.049$). The beneficial effect attenuated at 11 years. Older age, lower protein intake, and a higher number of chronic diseases were strongly associated with pre-frailty/frailty.

Key conclusion: A 2-year multimodal lifestyle intervention prevented pre-frailty/frailty up to 7 years. Continuous support for lifestyle changes may be necessary to prevent late-life frailty.

O-058

Plasma neurofilaments as biomarkers of frailty and sarcopenia: insights from the prospective and cross-sectional FRASNET study

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Introduction: Frailty [1] is a geriatric syndrome characterized by diminished physiological reserves and increased vulnerability to stressors. Sarcopenia [2], a condition marked by reduced muscle mass and function, is a key determinant of frailty. Recently a cross-sectional association between plasma neurofilaments (NfL) and frailty have been observed, but no study has yet explored their prospective relationship with both frailty and sarcopenia [3].

Methods: We leveraged data from community-dwelling individuals aged ≥ 65 years enrolled in the FRASNET study, a network investigating renal aging and sarcopenia. Initial enrolment occurred between April 1, 2017, and July 31, 2019. A follow-up was conducted in 2023–2024 on 250 FRASNET participants, who underwent comprehensive geriatric assessments. Plasma NfL levels from biobanked 2017–2019 and 2023–2024 samples were analysed using the ELLA method. Spearman correlations were performed.

Results: Plasma NfL levels in 2017–2019 correlated with frailty phenotype in 2023–2024 ($r = 0.29$, $p = 0.046$), physical activity in 2023–2024 ($r = -0.28$, $p = 0.45$), and ability in performing instrumental activity of daily living ($r = -0.34$, $p = 0.02$). Plasma NfL in 2023–2024 correlated with cognitive performance ($r = -0.27$, $r = 0.003$), physical performance battery score ($r = -0.29$, $p = 0.002$), muscle thickness ($r = -0.21$, $p = 0.02$), gait speed ($r = -0.27$, $p = 0.003$) and ability in performing instrumental activity of daily living ($r = -0.27$, $r = 0.003$).

Conclusion: NfL emerges as a promising biomarker for frailty and sarcopenia, with potential for integration into diagnostic algorithms to enhance early detection of these geriatric conditions.

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O-059

Different associations of low LDL cholesterol with cardiovascular events, incidence of functional disability, and all-cause mortality

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Introduction: LDL cholesterol-lowering treatment reduces coronary artery disease risks, though low LDL cholesterol levels may increase

the risk of mortality. Because this paradoxical association was unclear in older adults, we investigated this issue in an older population.

Methods: The dataset analyzed in this study consisted of 283,289 community residents aged between 65 and 90 years who subscribed to the National Health Insurance. Basic clinical information was obtained from annual health checkup data. Incidence of cardiovascular diseases, functional disability, and all-cause mortality were obtained from the insurance data.

Results: During the 6.3 years mean follow-up period, we obtained 1,675 cases of coronary artery diseases. LDL cholesterol levels showed inverse association with coronary artery diseases with hazard ratios (HR) reaching significance at 110–120 mg/dL (HR = 0.76, $P = 0.006$) and decreasing further to 0.36 at < 70 mg/dL. In contrast, low LDL cholesterol showed positive association with incidence of functional disability (41,263 cases) with HR reaching significance at 100–110 mg/dL (HR = 1.08, $P < 0.001$) and increased further to 1.52 at < 70 mg/dL. Similar results were observed in the analysis for all-cause mortality (28,198 cases); 110–110 mg/dL: HR = 1.10, < 70 mg/dL: HR = 1.93, $P < 0.001$. Similar associations were also observed in the analysis of the younger and older groups separated by 75 years of age. These association was independent of conventional risk factors including lipid-lowering treatment.

Conclusion: Low LDL cholesterol was protective factor for coronary artery diseases, while increased the risk of functional disability and all-cause mortality in older adults.

O-060

Developing a heat wave vulnerability index for older individuals: the case of Türkiye

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Introduction: Older people are more vulnerable to extraordinary conditions, and Türkiye is one of the countries highly affected by heatwaves due to climate change. This study aims to develop a “Heatwave Vulnerability Index (HVI)” to determine the vulnerability level of older population living in Türkiye to heatwaves, and to assess the vulnerability levels spatially at district level across Türkiye.

Methods: The HVI is a function of exposure, sensitivity, and adaptive capacity. A set of variables was defined to determine each component in this study. Since those variables exist in different formats and at various spatial resolutions, they were standardized, and factor analyses were performed. Varimax rotation and Kaiser-eigenvalue criteria were used to extract independent components. The estimated scores were used to calculate the HVI scores. Then, the HVI scores at the district level were normalized between 0 and 1. These values were subsequently classified into five categories. This categorization was conducted in geographic information systems using the Jenks optimization method. Consequently, the HVI values for each district were mapped.

Results: The findings indicate that vulnerability to heatwaves is directly related to the level of socio-economic development. Under the same climatic conditions, less developed regions had higher vulnerability. Additionally, vulnerability decreased in cooler climate conditions.

Key conclusions: This study is not only the first study conducted in Türkiye to determine HVI but also the first at national scale. We expect that the study results will contribute to the development of policies related to health of older people.

O-061

Patterns of social group participation and frailty phenotypes in older adults: evidence from an 11-year longitudinal study

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Introduction: This study identifies potential phenotypes of frail older adults and examines their relationship with patterns of social group participation.

Methods: The 11-year follow-up data from the Taiwan Longitudinal Study on Aging, covering 5,334 persons aged ≥ 50 years, were analysed using random-effects panel logit models. Three indices were used to measure frailty, including the SOF, FRAIL, and fried index. We identified two frailty phenotypes: energy-based frailty (EBF) and sarcopenia-based frailty (SBF). Four distinct patterns of group participation were distinguished: political, occupational, clan, and leisure/service. We modelled frailty phenotypes as a function of group participation (the independent variable) and loneliness, exercise and appetite (mediators), government accountability and performance (moderators), adjusting for individual-level characteristics.

Results: Political group participation was associated with a higher likelihood of SBF (adjusted odds ratio [AOR] = 3.81, 95% confidence interval [CI] = 1.47–9.85). The underlying factor was a lack of appetite. The same pattern was seen for occupational group participation. (AOR = 3.24, 95% CI = 1.62–6.45). In a distinct manner, the fundamental cause was a lack of exercise. Participants from groups other than leisure/service reported a higher likelihood of EBF, and the reason was loneliness. Leisure/service group participants had the lowest odds (EBF: AOR = 0.38, 95% CI = 0.24–0.62; SBF: AOR = 0.33, 95% CI = 0.18–0.62). Government accountability and performance respectively moderated the relationship between political and occupational group participation and the likelihood of SBF.

Key conclusions: Four distinct forms of group participation are associated with different likelihoods of frailty phenotypes. Participation in leisure/service groups may be a viable strategy to ameliorate age-related physical decline.

O-062

Frailty and social factors among older adults across Europe

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Introduction: This study investigated the prevalence of frailty among older adults in Europe, using data from the Survey of Health, Ageing, and Retirement in Europe (SHARE). We analysed data from 51,650 participants from Waves 6 and 9, with the aims to identify

sociodemographic and social factors associated with frailty status, and to explore regional variations.

Methods: Multilevel Multinomial Logistic Regression models were applied to assess associations between social factors and the three frailty phenotype states proposed by Fried et al. [1] across 16 European countries. Adjusted multilevel models were estimated to identify the explanatory factors that underlie individual and country-level effects, focusing on welfare systems as a country-level predictor of frailty.

Results: The prevalence of frailty increased significantly, from 4.5% in Wave 6 to 10.9% in Wave 9. Frailty and pre-frailty were more common among older adults, women, and individuals with lower educational levels. Loneliness emerged as a critical factor strongly associated with frailty, alongside limited social engagement and financial difficulties. Approximately 20% of the variation in frailty prevalence was explained by differences at the national level.

Conclusions: Our findings with the latter Waves of SHARE show differences in frailty prevalence across European countries. Northern European countries continue to show lower frailty rates, whereas higher rates of frailty and pre-frailty were observed in Eastern and Southern Europe [2]. These disparities highlight the importance of psychosocial and cultural determinants of frailty, as well as the potential role of welfare systems in mitigating frailty.

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O-063

Perceptions of frail older adults and professionals on adherence to a multicomponent community programme to prevent disability: a descriptive qualitative study of + AGIL Barcelona

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Introduction: Adherence to community-based multicomponent interventions is essential for preventing disability in older adults with frailty. + AGIL Barcelona is a public health initiative integrating primary care, geriatrics, and community resources to enhance intrinsic capacity through exercise, health education, and tailored follow-up. This study explores the perspectives of frail older adults (FOA) and primary care professionals (PCP) involved in the programme, aiming to understand the contextual and personal factors influencing adherence.

Methods: A qualitative descriptive design was employed using six focus groups with FOA (n = 22) and PCP (n = 18) from three primary care centres in Barcelona. Participants were selected through

purposive sampling. Discussions were guided by a semi-structured interview script, recorded, transcribed verbatim, and analysed thematically using ATLAS.ti.

Results: Four main themes influencing adherence emerged: (1) characteristics of PCP, highlighting the relevance of communication skills and individualisation of care; (2) contextual factors, such as socioeconomic challenges and family caregiving roles; (3) characteristics of FOA, including self-perceived frailty and motivation; and (4) specific components of the + AGIL programme, such as group cohesion and access to adapted exercises. FOA reported adopting new healthy habits and valued social interaction, yet barriers to long-term adherence included limited community resources and lack of ongoing support.

Conclusions: Adherence to multicomponent interventions is shaped not only by programme content but also by how it is delivered and contextualised. These findings inform future programme adaptations and highlight the need to integrate behaviour change techniques and community engagement to sustain healthy ageing.

Acute hospital care

O-065

Frailty modulates the nonlinear association between length of stay and mortality in older inpatients admitted in a Geriatric Acute Unit

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Background: In frail older adults, hospital length of stay (LOS) presents a dual challenge. Extended hospitalization may be required to manage complex conditions, yet prolonged LOS is independently linked to higher in-hospital mortality. The dynamics of this relationship and frailty's modulating role remain poorly understood.

Methods: We conducted a retrospective observational study of patients aged ≥ 65 years admitted to the Acute Geriatric Unit at IRCCS Foundation San Gerardo dei Tintori (Monza, Italy), enrolled from November 1, 2023, to February 29, 2024. A logistic regression model with restricted cubic splines explored the nonlinear LOS–mortality association, adjusted for age, sex, Charlson Comorbidity Index (CCI), and Clinical Frailty Scale (CFS). An LOS $\times$ CFS interaction was tested, with a 3D surface visualizing joint effect.

Results: The study included 2,674 patients (mean age 85.9 years, 51% women), with a median CFS of 7 (IQR 6–7) and median LOS of 11 days (IQR 8–14). In-hospital mortality was 10.8%. The adjusted model showed a significant nonlinear LOS–mortality association ($p < 0.001$), with risk rising sharply within 10–15 days, then plateauing. Frail patients (CFS > 5) exhibited a biphasic mortality pattern showing an early risk surge within one week, followed by a second increase between days 15–20, confirmed by a significant LOS $\times$ CFS interaction.

Conclusions: LOS is nonlinearly associated with mortality, an effect modulated by frailty. In frail patients, an initial mortality risk precedes a later surge, potentially tied to hospitalization-associated complications, emphasizing the pivotal role of optimized discharge planning to reduce adverse outcomes.

Frailty and resilience**O-066****(How) do people plan for future care?: a rapid scoping review**

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Introduction: Planning for future care needs in later life is a process of gathering information, decision making, and ultimately taking concrete steps to ensure that preferences for the delivery of care will be met. However, how, or indeed whether, individuals plan effectively is unclear. This rapid scoping review examines the current evidence-base on how individuals, who are not currently in need of care, plan ahead for their future care needs and what factors influence this.

Methods: Scopus, CINAHL, Web of Science, and the Scottish Government Library Service Database were searched for peer-reviewed and grey literature published from 2000 onwards. Publications focusing on individuals aged 18 +, in English-speaking and European countries, that measured engagement in planning, or explored planning styles and preferences for future care were included.

Results: Thirty-five publications (19 quantitative, 12 qualitative, 4 mixed-method) were selected from 609 screened. Most studies focused on middle-aged/older adults (40–65 +). Eleven of thirteen studies reported that most participants do not make concrete plans. Four studies report where planning occurred, it prioritised financial/end-of-life planning over daily practicalities of living. No studies reported on the effectiveness of plans. Facilitators included: Greater expected care need, caregiving experience, and greater social and financial resource. Barriers included: lack of social care system understanding, previous/current uncertainty, anxiety/stigma around needing care, and denial.

Key conclusions: Significant barriers often hinder proactive planning. To promote effective planning, it is crucial to address these through targeted interventions: raising awareness about the social care system, providing clear and accessible information, and challenging societal stigma associated with ageing and care dependency.

O-067**Grades of functional ability in community-dwelling older people differentiated by a self-administered screening tool and a comprehensive geriatric assessment: a cross-sectional study**

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Introduction: The self-administered screening tool LUCAS Functional Ability Index (FAI) differentiates the heterogeneous group of older people without care needs into functionally competent (grade robust) and those with impaired ability to perform everyday activities, i.e., grades transient (postrobust + prefrail) and frail [1]. We examined these groups and also disabled persons with loss of function (disability) in a comprehensive geriatric assessment (CGA) for comparison.

Methods: We grouped community-dwelling persons 70 + years by LUCAS FAI grades or disability (care level according to the German Medical Advisory Services, MD) before they received a CGA. Data was analysed descriptively and checked for differences between the

four grades robust, transient, frail, disabled. For comparison sake, we z-standardized CGA instrument results; scaled by the respective standard deviations of the robust group.

Results: We assessed 789 participants (age 79.2 ± 5.2 ; 64.4% female): $n = 104$ robust, $n = 335$ transient, $n = 300$ frail, $n = 50$ disabled. Overall, our results showed not only (highly) significant but also clinically meaningful differences in most CGA instruments showing a declining gradient from robust to disabled, also indicating a separation between frail (FAI) and disabled (MD) persons.

Key conclusions: Using FAI screening, e.g., in general practitioner waiting rooms, allows for a general differentiation of functional ability in community-dwelling older adults as FAI correlates with CGA results. Incipient functional decline screened with the questionnaire could be followed up by a targeted CGA and individualised planning of preventive interventions, e.g., in geriatric outpatient clinics early on—a move towards proactive, function- and person-centred services.

Reference:

[1] Dapp et al. BMC Geriatrics 2014;14:141.

O-068**Usability and feasibility of Eforto® for self-monitoring muscle fatigability and self-perceived fatigue in older community-dwelling adults**

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Introduction: Eforto®, an innovative e-health system, was evaluated for its usability and feasibility in self-monitoring muscle fatigability and self-perceived fatigue among older community-dwelling adults. Participants performed tests twice a week for 12 months without professional supervision.

Method: One-hundred twenty participants (52% women) received an individual instruction session on using Eforto®. Throughout the study, they recorded muscle fatigability and self-perceived fatigue at home. Usability and feasibility were assessed using a questionnaire based on the Unified Theory of Acceptance and Use of Technology framework. Feasibility was considered acceptable if at least 70% of participants successfully completed 70% of the required measurements.

Results: Of the 121 older adults, 107 (88%) completed the required measurements, indicating good feasibility. Fourteen participants dropped out, mainly due to deteriorating health or logistical challenges. Participants generally rated Eforto® positively, finding it easy to use and well integrated into daily life. They were neutral regarding expected support from family and friends, likely because relatives did not receive an instructional session. More than 75% of participants reported being able to seek help when using the system, highlighting the importance of accessible technical support.

Key conclusions: Eforto® is a feasible and user-friendly tool for self-monitoring muscle fatigability and self-perceived fatigue among community-dwelling older adults. Participants found it well integrated into daily routines. Future research could focus on increasing

family and friend involvement and improving technical support to enhance acceptance further.

O-069

Feasibility and recruitment in a gero-oncology clinical population: a renewed perspective for comprehensive observational research

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Introduction: Ageing research data are commonly collected retrospectively and show selection bias to healthier individuals. Recruiting multimorbid and frail individuals presents additional challenges, resulting in their underrepresentation. We aim to demonstrate feasibility of physiological measures of sarcopenia and frailty across different environments.

Methods: In a prospective study, patients aged ≥ 65 years undergoing surgical treatment for colorectal cancer are assessed preoperatively (Baseline), and postoperatively: Day1, Day3, Day30 and Day90. Ultrasound imaging of quadriceps is conducted alongside physical and cognitive assessments. Frailty is judged using Clinical Frailty Scale (CFS). Baseline, Day30 and Day90 assessments are offered in clinic or home settings.

Results: 19 patients (aged 65–85) have been enrolled across two UK sites. Baseline CFS indicates a varied cohort: 36% score 1, 32% score 2–3, and 32% score 4–6. At Baseline, 83% of twelve measures were completed at home ($n = 3$), and 72% in clinic ($n = 16$). On acute wards, 70% of Day1 and 30% of Day3 measures were collected for 18 participants. Of thirteen Day30 visits, 62% were at home, 15% in clinic and 23% in hospital, with 70%, 95% and 65% of measures collected, respectively. Five participants have completed Day90; 80% at home and 20% in clinic, with 69% and 67% of measures collected, respectively. Ultrasound imaging has been performed in all settings.

Key conclusions: We demonstrate success in delivering a person-tailored recruitment strategy. Recruitment is ongoing; we anticipate continued success as the cohort expands. Adapting the research setting empowers frail, isolated and underrepresented older adults to partake.

O-070

Preliminary findings from an acute care movement program

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Introduction: Increased bedrest in acute care patients contributes to worsening frailty and poor hospital-related outcomes. The Breaking Bad Bedrest Study, a randomized clinical trial, aimed to mitigate the effect of increased bedrest by promoting movement through individualized step goals to improve frailty.

Methods: Fifty patients from a geriatric acute care unit were recruited and randomized into the intervention or usual care group. A questionnaire of health, function, and symptoms was used to calculate a frailty index score for each patient at admission, weekly for the first month, monthly thereafter, at discharge, and one-month post-discharge. The intervention group wore a StepWatch and received visits

from the research team to set daily step goals and promote movement. Mixed-effects models were used to examine the impact of time and the intervention on patient frailty levels.

Results: Average patient age was 78.9 ± 8.7 years (range: 61–99) and 50% were female. Frailty at admission was 0.33 ± 0.11 for the intervention group and 0.35 ± 0.10 for the usual care group ($p = 0.377$). Frailty scores declined over time (Estimate for time effect: $[-0.010]$, 95% CI: $[-0.016]$ – $[-0.004]$, $p = 0.002$), but did not differ by group (Estimate for group effect: $[-0.015]$, 95% CI: $[-0.01]$ – $[-0.037]$, $p = 0.569$), and the frailty change over time did not differ by group (Estimate for group by time interaction: 0.005 , 95% CI: $[-0.007]$ – 0.018 , $p = 0.427$).

Key conclusion: The preliminary findings of this study showed that the movement program reduced the frailty levels of the hospitalized patients at the same rate as the usual care group.

Geriatric emergency medicine

O-071

Bridging the gap: a quality improvement initiative to enhance clinician-patient dialogue

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Introduction: Effective communication between clinicians, patients, and relatives is vital in emergency care, especially in the Frailty Same Day Emergency Care Unit (FSDEC). Structured interventions, such as communication training and standardized documentation, can improve discharge letter quality and patient understanding [1]. Improved communication at discharge has been associated with reduced adverse events and better continuity of care [2].

Methods: A prospective survey was conducted with patients under the Older Person's Assessment and Liaison (OPAL) Medical Team, assessing communication with relatives and discharge letter quality. A structured intervention, including training on effective communication and documentation, was implemented, followed by two Plan-Do-Study-Act (PDSA) cycles to evaluate improvements.

Results: In July 2024, communication documentation was noted in 14.1% of cases (30/213), with discharge letters including relevant documentation in 5.63% (12). After the intervention (Sept–Oct 2024), communication documentation increased to 30.35% (68/224) and discharge letter documentation to 11.6% (26). A second PDSA cycle showed further improvement, with communication documentation reaching 50% (75/151), while discharge letter documentation stabilized at 11.6%.

Key conclusions: Structured interventions significantly improved communication, increasing documentation rates from 14.1% to 50%, and discharge letter documentation from 5.63% to 11.6%. Continued efforts are needed to further enhance communication practices within clinical teams for better patient-centered outcomes.

References:

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- [2] Markiewicz et al. (2023). Improving written communication at patient discharge. *The Lancet*, 402, S67. [https://doi.org/10.1016/S0140-6736\(23\)02122-0](https://doi.org/10.1016/S0140-6736(23)02122-0).

O-072

Cooperation between primary and secondary care to keep the frail elderly at home in (sub)-acute crisis: a quantitative study

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Introduction: The aging population and reduced institutional care capacity are increasingly straining primary care services, resulting in higher emergency department (ED) utilization by elderly patients with complex needs [1,2,3,4,5]. Subacute Zorg (SaZ), an innovative primary-secondary care interface model, was developed to address this challenge. This outpatient model, led by a nursing home physician and based on Comprehensive Geriatric Assessment (CGA), aims to optimize care for frail, multimorbid home-dwelling elderly patients.

Methods: In this prospective observational cohort study (September 2023–June 2024), we compared SaZ with three conventional care pathways: ED visits, outpatient emergency clinic (OEC), and home visits. The primary outcome was the ability to maintain independent living without crisis admissions. Data collection included baseline characteristics and healthcare utilization, tracked through telephone follow-up and hospital records.

Results: In total, 85 patients were enrolled. Premature study termination followed due to financial deficits. We observed comparable baseline characteristics across groups, with ED and home visit cohorts showing higher frailty scores. At nine-month follow-up, 51 patients maintained independent living (SaZ: 75%, OEC: 81%, ED: 38%, home visits: 22%), with 32 patients (SaZ: 42%, OEC: 46%, ED: 31%, home visits: 22%) without intercurrent admissions.

Conclusion: The SaZ and OEC models demonstrated promising outcomes in maintaining home-dwelling status for frail elderly patients, aimed to minimize both under- and over-diagnosis. Referral pathways and triage systems significantly influenced outcomes. These findings support the development of SaZ 2.0, incorporating rapid diagnostics, home visits, and enhanced caregiver involvement, with robust triage as a crucial component.

O-073

Bridges between Geriatrics and Intensive Care Unit: descriptive results of patients hospitalized in the first Geriatric Post-Intensive Care Unit (UPREG)

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Introduction: Currently, 15% of intensive care unit (ICU) admissions involve patients aged 80 and older. The prognosis for these very old patients (VOPs) is less favorable than for younger patients, with in-hospital mortality rates of 20–30% increasing to 40–60% at 6 months.

One of the major challenges in improving the care of these VOPs is the post-ICU trajectory through appropriate geriatric care. With this in mind, a post-ICU geriatric unit was opened in Paris in 2023.

Method: descriptive observational study of patients aged 75 and over hospitalized in UPREG via medical ICU from January to May 2023.

Results: 38 patients were hospitalized in UPREG over this period, with a mean age of 83 ± 4 years old. These patients had a Charlson comorbidity score of 7 ± 3 , preserved autonomy (ADL = 6 [4–6]) and a Clinical Frailty Score of 4 [2–6]. The level of severity in ICU was high with an IGSII of 42 [35–49]. In UPREG, the number of post-ICU complications was 1.2 ± 1.5 , the length of stay was 11.5 ± 6 days and the mortality rate was 8%. Of the 32 patients monitored at 3 months, 5 patients (15%) had died, 4 (12%) were still hospitalized in rehabilitation and 23 (72%) had returned home with a level of autonomy similar to that prior to admission to ICU on ADL (6 [5–6]).

Key conclusion: UPREG is a unique and innovative unit in the field of geriatric ICU. We have described the population of the first patients admitted and their follow-up.

Geriatric rehabilitation

O-074

Exercise to improve ADL in frail older adults: therapeutic validity and adherence don't impact effects. A meta-analysis

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Introduction: Frailty in older adults impairs Activities of Daily Living (ADL). While exercise interventions improve factors like muscle strength and physical function, their direct impact on ADL is unclear. This review aims to assess the effectiveness of exercise on ADL and identify the most beneficial exercise interventions.

Methods: A systematic search in five databases included randomised controlled trials on frail adults (60+) comparing exercise interventions to usual care, with ADL as an outcome. Methodological quality was assessed using the Cochrane risk of bias (ROB) tool. Meta-analyses were performed using random effects models, with heterogeneity assessed by the I^2 index. Subgroup analyses were conducted based on ADL-measurement tool, ROB, therapeutic validity (intervention conform exercise recommendations for frequency, intensity, volume, and duration), adherence and cumulative therapeutic validity and adherence.

Results: Out of 5,975 records, 24 papers (20 studies) met criteria. Two had high ROB. Exercise improved ADL (standardised mean difference = 0.59) but showed high heterogeneity ($I^2 = 83\%$), which could partly be explained by measurement tool and ROB. Higher therapeutic validity and/or adherence did not necessarily lead to greater ADL improvements. Notably, interventions with high therapeutic validity showed lower adherence, implying higher exercise demands reduce adherence.

Conclusion: Exercise may enhance ADL in frail older adults, but high heterogeneity limits firm conclusions. Performance-based ADL assessments, mimicking ADL, may better detect exercise-related improvements. Unexpectedly, higher therapeutic validity and/or adherence do not yield greater effects. Moreover, therapeutic validity

is inversely related to adherence. A deeper understanding of underlying mechanisms is needed.

O-075

Home-based extended rehabilitation for older people with frailty: the HERO randomised controlled trial

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Introduction: Half of older people in hospital have frailty and are at increased risk of readmission or death following discharge. Although short-term rehabilitation can reduce early readmissions, benefits are attenuated over time.

Methods: A multi-centre randomised controlled trial with embedded economic and process evaluations in community dwelling older people (aged 65+) with frailty, discharged from hospital following acute illness or injury. Recruitment took place December 2017 to August 2021. Participants were randomly assigned (1.28:1) to a 24-week home-based exercise intervention (HOPE), or usual care (control). The primary outcome was the physical component summary (PCS) of the modified Short Form 36-item health questionnaire at 12 months. Secondary outcomes included physical and mental health-related quality of life, functional independence, death, hospitalisations and care home admissions.

Results: We randomised 740 participants (410 HOPE, 330 control). There was no difference in PCS scores between arms (adjusted mean difference -0.22 , 95% CI: -1.47 – 1.03). There was some evidence of a higher rate of all-cause hospitalisations in the control arm (incidence rate ratio 1.12, 95% CI: 1.00–1.25), but no evidence of differences in other outcomes. The process evaluation found the intervention was largely delivered as intended and proved acceptable to most participants. The economic analysis showed incremental costs of HOPE of GBP £1,401 (mean per participant), compared with usual care alone.

Key conclusions: Based on our findings, we do not recommend routine commissioning of extended rehabilitation for older people with frailty after discharge home from hospital or intermediate care, following an acute admission with illness or injury.

Urinary incontinence

O-076

TENSmini: a smart wearable device for home-based management of overactive bladder syndrome

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Introduction: Overactive bladder (OAB) syndrome is a prevalent and chronic condition that greatly affects patient quality of life. Transcutaneous tibial nerve stimulation (TTNS) is emerging as an alternative approach for treating OAB at home. Unfortunately, existing TTNS devices are relatively large, rely on gel-based electrodes, and typically require assistance with electrode placement prior to treatment sessions. These limitations pose challenges for older patients who may have sensitive or fragile skin, potentially impacting treatment adherence and consistency.

Method: To address these issues, we developed a compact, wearable TTNS device (TENSmini, weighing approximately 30g) incorporating two conductive textile electrodes within a smart-sock. Stimulation parameters are wirelessly adjustable via a custom-designed mobile application, providing a user-friendly approach to home-based OAB management. The TENSmini can be magnetically attached to the washable sock, and it has undergone electrical safety compliance testing. The present research evaluated its performance through human pilot studies.

Results: Physiological responses to TTNS (2Hz, 200 μ s) using the TENSmini smart-sock were quantified by electromyography (EMG) in the first pilot study (N = 10). In the second study (N = 47), behavioural bladder control responses (including time experienced to first urge and urgency sensation) induced by TTNS (20 Hz, 200 μ s, motor threshold) with the TENSmini system were evaluated. In both cases, our custom device outcomes were comparable to those achieved using a clinically approved, research-grade stimulator.

Conclusion: These pilot studies demonstrate the feasibility of the TENSmini smart-sock as a method of administering TTNS. While further long-term clinical trials are necessary, our initial findings suggest this wearable device offers a potential solution to OAB management at home.

Gero-oncology

O-077

Prevalence of dizziness in aging patients receiving chemotherapy treatment—a systematic review and meta-analysis

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Introduction: Dizziness and balance impairments are underexplored symptoms in older adults with cancer. Age-related factors, comorbidities, and chemotherapy may contribute to its prevalence and severity in this population. Dizziness and balance impairments can significantly impact quality of life, increase risk of falls, and delay treatment. However, limited data exists regarding the prevalence. In this systematic review we aimed to summarize the evidence and estimate the incidence and prevalence of dizziness/vertigo, and impaired postural balance in patients with cancer ≥ 65 years receiving chemotherapy.

Methods: We searched PubMed, EMBASE, CENTRAL, and Cinahl in September 2024. No publication date or language filters were applied. Randomized controlled trials and cohort studies investigating incidence and/or prevalence of dizziness/vertigo, and impaired postural balance were included. The Cochrane handbook was used as a template for extracting data and RoB2 and ROBINS-I-V2 tools were

used to assess risk of bias. Random-effects meta-analysis using the inverse-variance method was used to pool the study results.

Results: Thirteen studies (1,059 participants) were included. No studies investigated incidence or prevalence of impaired postural balance nor incidence of dizziness/vertigo. Meta-analysis was conducted on 22 prevalence estimates assessing dizziness, with pooled prevalence rates of 11% for assessor-reported and 17% for patient-reported outcomes. The overall weighted pooled prevalence of dizziness was 12% (95% CI: 9%–16%).

Conclusion: The prevalence of dizziness in older patients with cancer receiving chemotherapy varies depending on assessment method. The certainty of evidence was low with inappropriate outcome measures. Future studies on older patients and employing patient-reported outcomes are needed.

Registration: CRD42024585974.

O-078

Addressing frailty in Danish cancer guidelines to meet future challenges

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Introduction: Risk of cancer increases with age. Furthermore, frailty and age-related impairments significantly impact treatment outcomes. With an aging population, it is of utmost importance to ensure a tailored cancer care approach. This study evaluates the extent to which frailty and age-related considerations are incorporated into current Danish national cancer guidelines across six major cancer types.

Methods: We systematically reviewed 59 guidelines from the Danish Multidisciplinary Cancer Groups pertaining lung, breast, colorectal, ovarian, bladder, and prostate. Guidelines were screened for comments regarding age, frailty, performance status, comorbidity, functional status, general health status, and individualized assessment. Identified comments were graded based on their level of specificity and clinical applicability.

Results: All cancer guidelines addressed age and comorbidity. Frailty was explicitly mentioned in half, of which one guideline provided specific recommendations. Performance status was frequently included (83.3%), whereas functional status was rarely addressed (16.7%). Individualized assessments were encouraged in 66.7% of guidelines but lacked clarity regarding implementation.

Key conclusion: Danish national cancer guidelines acknowledge age and comorbidities but lack comprehensive recommendations for frailty assessment and management. Addressing these gaps in future cancer guidelines will help direct research, enhance clinical decision-

making, and improve treatment outcomes for older people with cancer and frailty.

O-079

Reporting of older subgroups in registration trials of FDA and EMA approvals between 2017 and 2023 for diffuse large B-cell lymphoma: a systematic review

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Introduction: Older adults are usually underrepresented in clinical trials, especially in early phase. Subgroup reporting for older adults in these trials is key to assess how outcomes for novel therapies pertain to this population. This study assessed the inclusion, characteristics, and subgroup reporting of older adults (≥ 65 years) enrolled in Food and Drug Administration (FDA) and European Medicines Agency (EMA) registration trials for diffuse large B cell lymphoma (DLBCL) in the past 10 years.

Methods: Between 2017 and 2023, FDA and EMA approved ten therapies with twelve indications for the treatment of DLBCL, corresponding to twelve registration trials. All study reports and secondary publications until Oct 28, 2024, were included into selection, leading finally to ninety publications for data extraction. The completeness of older adult subgroup data was assessed according to predefined criteria that classified the completeness of reporting hierarchically in relation to the availability of effect and sample size, and measures of precision.

Results: 50% of trials included $\geq 50\%$ of trial participants ≥ 65 years. Of the twelve primary endpoints, 9 (75%) were reported completely, 1 (8%) partially, and 2 (17%) were not reported among older subgroups. Of the 70 secondary endpoints, 23 (33%) were completely reported, 3 (4%) partially, and 44 (63%) were unreported. Baseline characteristics, health related quality of life, and toxicities for older adults were mostly unreported.

Key conclusions: Although the high rate of older participants is acknowledged, this analysis highlights a need for improvement in older adult subgroup reporting in hematological trials particularly among secondary endpoints.

O-080

Evaluation of the comprehensibility and development of the final Spanish version of the outcome prioritization tool among older patients with cancer

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Introduction: The Outcome Prioritisation Tool (OPT) facilitates a conversation with patients about the prioritisation of four health outcomes: survival (item 1), maintaining independence (item 2), reducing other symptoms (item 3), and reducing pain (item 4). The aim of this project was to assess the comprehensibility of the Spanish OPT version among older persons with cancer and to develop the final version of the tool.

Methods: Two trained physicians conducted structured interviews using cognitive debriefing to analyse the comprehensibility of the OPT. Older persons with cancer from the Geriatric Oncology outpatient consultation were included, excluding those with moderate to severe cognitive impairment. During the interview, patients completed the OPT, discussed any comprehension difficulties, and did suggestions for improvement. Researchers recorded observations regarding limitations in applying the tool and prepared a report. The research team consented on the final version of the OPT.

Results: Ten patients were interviewed (mean age 81 ± 5.5 , 80% female). Cancer diagnoses included digestive, breast, hepatobiliary, and urological cancers. Regarding the comments summarized in the report, 75% were related to understanding the OPT, 25% to translation, and 12.5% to methodology. Based on these interviews, it was agreed to simplify the language and to modify the order of items 3 and 4.

Key conclusions: Through cognitive debriefing, comprehension difficulties with the OPT were identified and addressed by simplifying the language and reorganizing the questions. Future studies could assess the usefulness of this final Spanish version of the OPT to understand the priorities of older persons with cancer.

Gerotechnology

O-082

Allied Healthcare Professionals' perspectives on a social robot exercise instructor for upper limb rehabilitation

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Introduction: Community-based physiotherapy often relies on paper or video materials, which lack personalisation and limit engagement. Long gaps between physiotherapist sessions reduce continuity of care. Social robots are an emerging healthcare technology with human-like qualities that can effectively demonstrate exercises and enhance engagement compared to screen-based methods, for example following upper limb injuries. Combined with AI-driven autonomy, social robots may support recovery without increasing the burden on Allied Healthcare Professionals (AHPs).

Methods: We co-designed with AHPs a social robot prototype to guide users through a structured upper limb exercise session, incorporating abduction, flexion, and external rotation exercises across assistive, active, and resistive modes. The system was evaluated by 33 AHPs (15 physiotherapists, 17 occupational therapists, 1 assistant practitioner; mean experience: 9.9 years) in two robot-led exercise sessions (mean time: 14 min) using patient simulations of varying physical abilities. We used semi-structured interviews, analysed through thematic analysis, to explore AHP perceptions and areas for improvement.

Results: Participants responded positively to the robot, valuing its interactive elements but emphasising the need for clearer instructions, greater user control data, and data-sharing with AHPs. Frequent questioning on pain and exertion was seen as essential. Opinions

varied on whether the system should be purely task-focused or integrate rapport-building through personalised conversation. Trust, user acceptance in certain populations, and logistical challenges for real-world deployment were also key considerations.

Key conclusions: Social robots have potential as exercise instructors alongside AHPs. Future work will refine the prototype and conduct pilot studies with individuals undergoing upper limb rehabilitation.

Long-term care

O-084

Effect of a combination of *C. longa* and *B. serrata* extracts on hand osteoarthritis. results of a double-blind, randomized, placebo-controlled, multicenter trial

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Introduction: By 2050, 279 million people worldwide will have osteoarthritis (OA) of the hand (1). To date, recommended treatments have been symptomatic, limited to massage of painful joints with topical non-steroidal anti-inflammatory drugs (NSAIDs) and short-term use of oral NSAIDs and paracetamol (2). These treatments are not very effective and, if prescribed incorrectly, are associated with adverse effects (3). So it's important to find an effective, well-tolerated alternative. Extracts of *Curcuma longa* (CL) and *Bowellia serrata* (BS) have been the subject of several meta-analyses concluding on their efficacy and safety in the treatment of knee osteoarthritis (4,5). However, whether combining these plant extracts can relieve the symptoms of patients suffering from HOA is unknown. This clinical study evaluates the efficacy and safety of a combination of patented *C. longa* and *B. serrata* extracts (CBTIL) compared with a placebo in patients with hand osteoarthritis.

Method: This 12-week, multicentre, randomized, double-blind, placebo-controlled study included 162 patients with symptomatic hand osteoarthritis, with a body mass index $\leq 35 \text{ kg/m}^2$, and who met the American College of Rheumatology (ACR) criteria for osteoarthritis of the hand. Participants received either two tablets of CBTIL or two tablets of placebo per day. The primary endpoint was the difference in pain change on the VAS scale between baseline and month 3. Secondary outcomes included the number of painful and swollen joints, functional score, quality of life, patient global assessment, grip strength, analgesic consumption, and treatment tolerance.

Results: 162 patients were randomized (83 to CBTIL and 79 to placebo; 76.5% were women; mean age 63 (SD 8.3), and 149 completed the study. In the Intention-to-treat population, the mean change from baseline to month 3 on the pain scale (primary endpoint) was -22.9 (SD 26.20) and -15.6 (SD 25.10) in the CBTIL and placebo groups, respectively (CBTIL vs Placebo; $p = 0.034$). The difference between the groups was already significant after 1 month of treatment ($p = 0.044$) (Fig. 1). The difference between groups was also significant in the per protocol population. The percentage of patients

achieving acceptable symptom status (PASS) was significantly higher in the CBTIL group ($p = 0.049$). The patient's global assessment and SF-36 pain were also significantly improved by CBTIL ($p = 0.011$). Other outcomes were not significantly different between the two groups. No significant difference was observed regarding adverse events between the groups.

Conclusion: CBTIL relieves pain in patients with hand osteoarthritis. Together with its safety, this clinically relevant symptomatic effect suggests that CBTIL is an alternative to oral NSAIDs and analgesics for managing chronic pain in hand osteoarthritis.

O-086

Assessing care transitions in long-term care: development of the TCAT-LTC tool

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Introduction: Improving the quality and safety of care transitions is a priority in many countries. Performance measurement plays a significant role in enhancing the quality of decisions made by various stakeholders involved in health and long-term care reforms. This study presents the development of an evaluation tool designed to assess the performance of long-term care systems in relation to care transitions.

Methods: The TCAT-LTC was developed through a three-step process. First, we created a conceptual model based on Donabedian's quality framework and a literature review. Second, we generated an item pool using deductive methods (systematic literature review) and a deductive–inductive approach (in-depth interviews with long-term care experts). Third, we conducted a preliminary validation by asking experts from research and practice to review the tool and assess its content validity. A fourth step—planned for the next phase—involves piloting the tool with experts from Germany, the Netherlands, and Poland.

Results: The TCAT-LTC consists of two main themes, twelve categories, and sixty-three items, developed through methodological triangulation. The organizational theme includes categories such as communication, information transfer, resource coordination, staff training, support for patients and informal caregivers, their involvement, telemedicine/eHealth, and social care. The financial theme covers primary care, hospital care, and long-term care. Instructions for the tool's application are also provided.

Conclusion: The TCAT-LTC is the first tool to assess long-term care system performance in relation to care transitions, enabling evaluation, monitoring, and comparison at national and international levels.

Multimorbidity

O-087

Healthcare professionals' views on deprescribing recommendations: a global survey of preferred content, language and format from 61 countries

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Introduction: Incorporating deprescribing recommendations into clinical practice guidelines can support clinicians in making evidence-based decisions at the point of care. However, deprescribing recommendations are not routinely included in disease-focused guidelines, and when present, there is considerable inconsistency in both format and content. This disadvantages older adults with multimorbidity who have the greatest need for deprescribing. This study aimed to examine the preferences of medical practitioners, pharmacists and nurses regarding the content, language and format of deprescribing recommendations.

Methods: A REDCap survey, developed based on insights from qualitative interviews, was distributed globally from September 2024 to January 2025 via professional organisations, personal networks, social media and snowball sampling. The survey results were analysed descriptively.

Results: A total of 779 responses were recorded. Pharmacists (40%) accounted for the majority of respondents, followed by medical practitioners (37%), and nurses (21%). Responses were primarily from Oceania (34%) and Europe (27%). When describing medication discontinuation, participants preferred the terms 'discontinue' and 'deprescribe', while 'withdraw' and 'cease' were the least preferred. More than half of the participants considered the medication class, patient population, rationale, and deprescribing process essential to include in the recommendations. Additionally, participants preferred a detailed tapering regimen that included either a specific percentage or a range for the dose reduction schedule, rather than guidance that was too broad or rigid.

Conclusion: This research provides insight into international healthcare professionals' preferences regarding the content, format and language of deprescribing recommendations. Following these preferences when developing deprescribing recommendations will facilitate implementation in routine clinical practice.

O-088

Anticholinergic medication burden amongst patients with parkinsonism in the PRIME-UK cross-sectional study

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Introduction: Medications with anticholinergic effects are widely prescribed for a variety of indications, including for overactive bladder symptoms. Side effects include constipation and dry mouth, whilst they have been associated with adverse outcomes including impaired cognition, falls and increased mortality. Since patients with Parkinson's disease (PD) may be especially vulnerable to these negative effects, there is a need to understand prescribing practices in a representative sample.

Methods: We conducted a single-centre cross-sectional study with effort given to recruiting typically under-represented individuals with PD, including those with impaired capacity to consent who were supported by a consultee. Patients or their representative self-reported their medications. The Anticholinergic Cognitive Burden (ACB) scale

was used to assign drugs with anticholinergic properties a score between 1 to 3, generating a total score, where a score of 3 or more is considered clinically relevant.

Results: 477 patients completed questionnaires (mean age 76.9 ± 8.5 years, 65% male). 152 (95% CI 28–36%) were on at least one anticholinergic medication, 56 (95% CI 9–15%) on an ACB score 3 medication, and 64 (95% CI 10–17%) had a total ACB score of 3 or more. 28 (95% CI 4–8%) were prescribed a medication with anticholinergic properties alongside a cognitive-enhancing medication. Cardiac medications (28%), analgesics (13%), antidepressants (13%) and urinary medications (12%) were the most frequent categories of medication with anticholinergic effects.

Key conclusions: Medications with anticholinergic effect are commonly prescribed to people with PD. It is important to review anticholinergic burden in these patients and to deprescribe where possible.

O-089

Does exceptional longevity reflect exceptional health resilience? A nationwide life course comparison of disease accumulation and distribution across the lifespan in centenarians and non-centenarians from the same birth cohorts in Sweden

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Introduction: Previous research suggests that centenarians reach exceptional ages by avoiding major diseases rather than surviving them. However, their ability to manage less severe conditions remains less explored. By analyzing disease accumulation, including both severe and non-severe conditions, we can gain insights into the mechanisms underlying their resilience.

Methods: This nationwide study included all individuals born in Sweden between 1920 and 1922 ($N = 274,108$), tracking their health from age 70 onward for up to 30 years. Disease trajectories of centenarians were compared with those of their shorter-lived peers using historical prospective data from nationwide health records. We analyzed the number of conditions, the rate of disease accumulation, and disease combinations across lifespan groups.

Results: Centenarians exhibited fewer diseases and a slower rate of disease accumulation than non-centenarians. While cardiovascular diseases dominated the disease spectrum for people at all ages, the disease spectrum of centenarians showed lower relative contribution of cardiovascular conditions but higher relative contribution of malignancies and digestive disorders. They also experienced fewer co-occurring diseases and were more likely to have conditions confined to a single disease group.

Conclusions: Centenarians follow distinct disease trajectories, characterized by delayed multimorbidity and a lower overall disease burden. This delay applies across all disease types, though particularly lower levels and a later onset of cardiovascular diseases appear key to their exceptional longevity. The findings suggest biological resilience and potential protective mechanisms as central drivers of

the exceptionalism of centenarians. This warrants further investigation.

O-090

Polypharmacy's association with mortality: confounding from underlying morbidity

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Introduction: Studies consistently associate use of multiple medications with increased mortality. However, such studies often lack adequate adjustment for confounding, particularly from underlying diseases. We illustrate the challenges in studying this association by examining it in two separate populations.

Methods: A register-based nationwide study utilizing a cohort of all Danish citizens admitted to nursing homes 2015–2021 ($n = 95,057$) and a community dwelling population cohort aged ≥ 65 years ($n = 1,005,963$). We examined the 1-year mortality from date of nursing home admission or index date, and modeled the association between number of medications and death using restricted cubic splines with varying levels of adjustment. Further, we modelled the association between the 20 most used drugs and 1-year mortality.

Results: In the nursing home cohort, we found an approximately linear increase in mortality with number of medications used, though adjusting for sex, age and comorbidities markedly attenuated the odds ratio for the highest medication use category from 4.70 (95% CI 4.24–5.21) to 2.23 (95% CI 1.99–2.49). Paradoxical associations were observed for individual drug classes, e.g. antimentia drugs showing an inverse association with mortality. In the community dwelling population cohort, adjustment showed even stronger impact reducing the odds ratio from 10.39 (95% CI 9.79–11.03) to 1.34 (95% CI 1.25–1.43).

Key conclusion: The association between levels of polypharmacy and mortality is strongly affected by confounding from underlying disease. Adjustment for comorbidities strongly attenuates but does not eliminate the association, suggesting residual confounding. This emphasizes the need for cautious interpretation of findings associating high use of medication to mortality.

Nutrition

O-091

The anabolic effect of native leucine enriched β -lactoglobulin (BLG) in older muscle

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Introduction: Leucine is a substrate and signal for muscle protein synthesis (MPS) via activation of the mechanistic target of rapamycin complex 1 (mTORC1). As such, leucine-enrichment of protein intake offers a strategy to maximise muscle anabolism; however, native formulations to achieve this are lacking. β -lactoglobulin (BLG) is a novel processed milk protein containing naturally higher leucine content ($\sim 14\%$) than traditional whey ($\sim 10\%$). We determined how older muscle responds to two 'sub-optimal' doses of BLG.

Methods: 23 men (70 ± 4 y) consumed 5g or 10g BLG during primed constant [1,2-13C2] leucine infusions. Participants completed 6×8 repetitions of unilateral knee-extensor exercise (EX; 75% 1-repetition maximum). Blood was collected for amino acid (AA) profiling and bilateral thigh muscle biopsies, for quantifying both FED and FED-EX MPS using mass spectrometry.

Results: MPS (mean $\pm$ SEM) increased from fasted in all conditions: i) 5g BLG FED ($0.060 \pm 0.006\%/h$ vs. $0.042 \pm 0.006\%/h$, $P < 0.05$), ii) 5g BLG FED-EX ($0.072 \pm 0.003\%/h$ vs. $0.046 \pm 0.006\%/h$, $P < 0.01$), iii) 10g BLG FED ($0.088 \pm 0.007\%/h$ vs. $0.046 \pm 0.006\%/h$, $P < 0.0001$) and iv) 10g BLG FED-EX ($0.081 \pm 0.005\%/h$ vs. $0.049 \pm 0.006\%/h$, $P < 0.001$). MPS rates were greater in FED conditions with 10g vs. 5g BLG ($0.088 \pm 0.007\%/h$ vs $0.060 \pm 0.006\%/h$, $P < 0.01$).

Conclusions: BLG evokes a robust anabolic effect at low doses (5g) even in the face of age-related anabolic resistance. That 10 g BLG further enhances this response warrants upwards dosing to determine 'ceiling' effects. No differences between FED-EX MPS with 5g or 10g BLG indicates 5g of this protein source is sufficient to robustly, perhaps maximally, stimulate MPS following strenuous resistance exercise, even in anabolically resistant older individuals.

O-092

Evaluation of postbiotic supplements to improve quality of life in older adults: the POSCALM project

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Evaluation of Postbiotic Supplements to Improve Quality of Life in Older Adults: The POSCALM Project.

Aging causes significant changes in the gut microbiota, contributing to a proinflammatory state not only locally but also throughout the body. It's subject of research due to the impact on gastrointestinal, metabolic, immunological health, and, quality of life.

In this project, we studied the use of postbiotics (*Lactcaseibacillus paracasei* CECT9610 and *Lactiplantibacillus plantarum* CECT9608) in an elderly population with digestive symptoms, with the hypothesis that they help modulate the microbiota and improve intestinal health in older individuals.

A randomized, controlled, double-blind study was conducted with fifty patients aged over 65, randomly assigned to two groups: the

experimental group (receiving the postbiotic) and the placebo group. Digestive signs and symptoms were recorded over 60 days, and nutritional status was assessed, along with blood and stool analyses (bacterial DNA sequencing) at the beginning and end of the study. A reduction in the incidence of constipation (54.3%) was observed, as well as a decrease in laxative use (29.5%) and less diarrhoea (37%). Additionally, there was an increase in haemoglobin (0.57 mg/dL) and a reduction in systemic inflammation markers: C-reactive protein (34.2%), erythrocyte sedimentation rate (30.9%), and ferritin (28.6%). Microbiome changes were found in the experimental group, including bacterial groups associated with fiber digestion and short-chain fatty acid (SCFA) production, which are known systemic anti-inflammatory compounds.

The use of postbiotics is a growing therapeutic strategy, thanks to their pleiotropic effects. We have confirmed their anti-inflammatory and intestinal microbiota-modulating effects.

O-093

cost-effectiveness of protein-rich meals and snacks for increasing protein intake in older adults

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Introduction: Protein intake is insufficient among home-dwelling older adults according to previous Finnish studies [1–3]. Our earlier analysis suggested that providing protein-rich foods and snacks can increase protein intake [4]. Therefore, we aimed to investigate the cost-effectiveness of increasing protein intake by protein-rich foods and snacks in home-dwelling older adults.

Methods: Cost-effectiveness analysis from a randomized controlled trial, the Power Meals study. Participants were home-dwelling home care clients, caregivers and care recipients aged ≥ 65 years ($n = 65$). Participants were randomized into one of three groups for eight weeks: a protein-rich meal, snack and bread (Protein), a regular meal (Normal), and a control group (Control). Protein intake was assessed by a three-day food diary. Cost for the daily diet was estimated by using Finnish grocery store databases and the prices of the food service. The cost-effectiveness was assessed by an incremental cost-effectiveness ratio (ICER).

Results: Costs for the daily diet in the Protein (8.35 €/d) and the Normal (7.94 €/d) groups were significantly higher than in the control group (5.65 €/d) ($p < 0.001$). Incremental cost-effectiveness analysis showed that increasing protein intake was cost-effective in the Protein group as ICER was 8.11 in the Protein, 8.72 in the Normal and 6.45 in the Control group.

Key conclusions: Including protein-rich meals and snacks in a diet is a cost-effective way to increase protein intake in home-dwelling older adults. Introducing protein-rich products as a part of dietary advice and meal services could be an effective way to increase protein intake.

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O-094

Neuromuscular activation speed is positively associated with changes in plasma omega-3 index in older men following combined exercise training

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Introduction: Neuromuscular activation speed reflects the functional capacity of α -motoneurons innervating fast-twitch muscle fibers, which are critical for rapid movements and particularly susceptible to age-related decline. While Omega-3 fatty acids (n-3) have shown benefits for muscle strength, their impact on neuromuscular speed remains underexplored in older adults.

Methods: Sixty-one participants (70.5 ± 4.7 years; 47.5% men) were randomized into three groups: control or intervention receiving either supplementation with either protein, or protein + n-3. All participants completed weekly sessions of home-based bodyweight exercises combined with whole-body vibration training for 8 weeks. Neuromuscular activation speed was assessed using the Foot-Tapping Test (FTT) with mechanography to determine maximal tapping frequency (Hz). The plasma n-3 index was analyzed via gas chromatography. Two cases were excluded due to invalid FTT data.

Results: At baseline, n-3 index values (control: $5.1 \pm 1.2\%$; protein: $5.6 \pm 1.7\%$; n-3: $4.9 \pm 1.4\%$) and FTT performance (control: 9.285 ± 1.283 Hz; protein: 9.184 ± 1.039 Hz; n-3: 9.544 ± 1.535 Hz) were similar. Only the n-3 group showed a significant post-intervention increase in n-3 index ($p < 0.001$) but no significant time $\times$ group interaction regarding FTT were observed. In men however, a significant correlation was found between relative changes in n-3 index and FTT frequency ($\rho = 0.492$; $p = 0.007$). There was no correlation between relative changes in protein-intake (g/kg/body weight) and FTT frequency in men ($\rho = -0.001$, $p = 0.996$). No effects were observed in women.

Conclusion: These findings suggest a potential link between increased Omega-3 levels and neuromuscular activation speed in older men. However, the absence of broader effects highlights the need for further research on sex-specific responses and interventions.

Sarcopenia

O-095

A multicomponent intervention consisting of exercise, proteins and omega-3 supplementation to improve sarcopenia in community-dwelling older adults: lessons learned from the ENHANce-trial

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Introduction: Anabolic interventions to tackle sarcopenia might be quite challenging for older adults and hard to implement. Therefore, we aimed to determine the feasibility and acceptability of a multi-component intervention (resistance training, protein and omega-3 supplementation) and explore the effects on sarcopenia outcomes in community-dwelling older adults (≥ 65 y) with sarcopenia.

Methods: A 5-armed randomized controlled feasibility trial was conducted: the Exercise and Nutrition for Healthy Ageing (ENHANce, NCT03649698) study. Participants were randomized into 5 groups: 1) Exercise only, 2) Protein only, 3) Exercise + Protein, 4) Exercise + Protein + Omega-3, and 5) Control group. Trial feasibility was evaluated by measuring eligibility, recruitment, retention and data completion rate. Acceptability was evaluated by participants' feedback. Potential intervention effects were evaluated by measuring change in sarcopenia outcomes after 12 weeks of intervention.

Results: Fifty-eight participants (76.19 ± 6.59 years, $\text{♀}:65.52\%$) were included in the ENHANce study (Ex, $n = 9$; Prot, $n = 12$; Ex + Prot, $n = 13$; Ex + Prot + Omega-3, $n = 12$; Control, $n = 12$) during the period between February 2018 and September 2024. Eligibility, recruitment and retention rate were 3.32%, 17.96% and 87.93%, respectively. Participants reported feeling stronger (34.48%), increased awareness of physical activity and nutrition (22.41%), and improved confidence (20.69%). The Ex-only group showed significant improvement in chair-stand test (CST), the Ex + Prot group in SPPB score and CST, and the Ex + Prot + Omega-3 group in SPPB score, CST, and quadriceps muscle strength after 12 weeks.

Key conclusion: The multicomponent intervention had moderate acceptability and high safety to improve sarcopenia outcomes in older adults. The combination of home-based exercises and individualized protein supplementation showed potential for improving physical performance, with omega-3 potentially providing additional muscle strength benefits. These insight are valuable for tailoring future interventions in sarcopenic older adults.

O-096

Can exercise change body composition in older adults?—a sub-analysis from the bestform-trial

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Introduction: The aging process is characterized by a change in body composition, marked by a decrease in muscle mass and an increase in fat mass. While exercise may counteract these changes, studies focusing on its effects in older adults are limited. This study investigates the impact of six months of exercise training on body composition in this population.

Methods: In the cluster-randomized bestform-trial (NCT04207307) across 21 senior care facilities (1:1 randomization), participants received either six-month multicomponent exercise intervention (machine-based resistance, coordination, and endurance training; 2x/week) (IG) or usual care (UC). This post-hoc analysis assessed body composition via bioelectrical impedance analysis, using linear mixed models to evaluate pre–post changes.

Results: Out of 404 participants, 170 in IG (mean age 85.2 ± 6.2 years; 86% women) and 122 in UC (mean age 85.5 ± 6.6 years; 75% women) were included. Over six months, no significant differences were found between IG and UC regarding changes in body composition. Within IG, a significant difference was observed in changes in arm muscle mass (estimate: 0.21 kg, 95%-CI: 0.00 to 0.43, p Sex $\times$ Time = 0.047) and leg muscle mass (estimate: 1.01 kg, 95%-CI: 0.35 to 1.67, p Sex $\times$ Time = 0.003) in women compared to men.

Key conclusion: Exercise training did not lead to significant changes in body composition compared to usual care in older adults. However, a sex difference in changes in arm and leg muscle mass was observed, suggesting that older women may experience greater benefits from exercise.

O-097

Deconditioning during hospital stay and its impact on adverse outcomes—findings on acute sarcopenia from the EAMA9 + prospective cohort study in six European countries

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Introduction: In 2019 a collaboration of European Academy for Medicine of Ageing (EAMA) graduates started EAMA9 + to evaluate sarcopenia and its related outcomes in hospitalised patients.

Methods: We included six EAMA9 + centres from Barcelona, Brussels, Ghent, Kraków, Prague, and Ulm. Prevalence at admission and incidence of sarcopenia during hospitalization were estimated according to the revised European consensus on definition and diagnosis (EWGSOP2). In-hospital adverse outcomes and 1-year mortality were assessed.

Results: The mean age of 336 patients (66.7% women) was 84.1 (SD 6.6) years. Mean admission handgrip-strength (HG) was 18.8 (8.1) kg in men and 12.5 (6.7) kg in women, and calf circumference 33.9 (4.9) cm (no sex difference). Median hospital stay was longer in men than in women (13 (3–181) vs. 11 (0–80) days).

Sarcopenia and probable sarcopenia were present in 25.9% and 68.8% patients on admission, more prevalent in men (34.6% vs. 21.8%, and 80.2% vs. 66.4, respectively). Among non-sarcopenic patients, 28.6% progressed to probable-sarcopenia and 6.9% to sarcopenia at discharge. Sarcopenia at admission, but not probable-sarcopenia, was associated with hospitalisation-related pneumonias (16.1% vs. 4.0%), urinary tract infections (12.6% vs. 6.0%), gastrointestinal infections (8.1% vs. 2.8%), and falls (16.1% vs. 7.6%). Sarcopenia at discharge was related to 1-year mortality with a RHR 1.86, [95%CI 1.06; 3.5], as was HG decrease (RHR per each 1 kg = 1.07, [95%CI 1.04; 1.14]).

Conclusions: Notably, a significant proportion of patients developed probable-sarcopenia and sarcopenia during hospitalisation. Sarcopenia at admission was associated with a higher risk of hospital-related infections, falls, and mortality at 1-year follow-up.

*equal contribution.

COVID-19

O-098

The impact of social media in mitigating the long-term association of social isolation with mental and cognitive health during the COVID-19 pandemic: the HUNT study

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Introduction: The COVID-19 pandemic increased social isolation in older adults, promoting mental and cognitive decline. The impact of social media remains unclear.

Aim: To investigate the long-term association of social isolation with mental and cognitive health in older adults and whether social media use mitigated this.

Methods: We analysed data from the Norwegian Trøndelag Health Study before (2017–2019), during (Jan 2021), and after the pandemic (2021–2023) (N = 4,844, 53% women, mean age 80). Multi-adjusted mixed-effects linear regression estimated changes in mental (CONOR-MHI) and cognitive (MoCA) health linked to self-reported social isolation and social media use.

Results: Social isolation was associated with a steeper decline in mental health than no social isolation ($\beta = 0.07$, 95% CI 0.01, 0.13)

but no change in cognitive health. Daily social media use was not related to change in mental health but associated with a less steep cognitive decline than no use (< 1 h: $\beta = 0.13$, 95% CI 0.05, 0.20; ≥ 1 h: $\beta = 0.10$, 95% CI 0.01, 0.15). Stratified by social isolation, daily social media use of < 1 h was related to less steep cognitive decline than no use in both isolated ($\beta = 0.15$, 95% CI 0.02, 0.28) and non-isolated individuals ($\beta = 0.13$, 95% CI 0.03, 0.22).

Conclusion: Social isolation during the pandemic was linked to a steeper decline in mental but not cognitive health. Social media use did not buffer mental health decline but slowed cognitive decline. The pandemic highlighted the limitations of relying solely on digital solutions to maintain mental health and cognitive function in older adults.

Delirium

O-099

Systematic review of diagnostic accuracy for delirium and cognitive assessments in older patients with hip fracture

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Introduction: Delirium and cognitive impairment are prevalent among older patients with hip fracture in acute care settings. Accurate identification of these conditions can inform care decisions and improve patient outcomes. This study aimed to evaluate the diagnostic accuracy of screening tools for delirium and cognitive impairment in older adults with physical trauma, specifically hip fracture.

Methods: A comprehensive search of electronic databases (MEDLINE, Embase, CINAHL, PsycInfo, Cochrane Library) was conducted up to 01 March 2024. Inclusion criteria included: older adults (≥ 60 years); admitted to acute care setting following physical trauma; diagnostic accuracy study of a screening tool for 1) delirium and/or 2) cognitive impairment or dementia against a reference standard of a clinical diagnosis (standard diagnostic criteria or

validated tool). The Quality Assessment of Diagnostic Accuracy Studies-2 tool evaluated methodological quality. Due to heterogeneity across studies, a narrative synthesis was performed.

Results: Five studies examining five screening tools used for detecting delirium in older adults with hip fracture were included. Sensitivity ranged from 76.9 to 91.8%, and specificity from 54.5 to 99%. Delirium prevalence varied significantly across studies (6.7% to 31.5%). All studies had high or unclear risk of bias. No studies were found to examine the diagnostic accuracy of screening tools for cognitive impairment in this population.

Key conclusions: This systematic review highlights the scarcity of validated screening tools for cognitive disorders in older patients with hip fracture in acute care settings. Further research is needed to address this gap and enhance patient care.

O-100

Atrophy and severe white matter hyperintensities (WMH) on admission CT of 1841 acute general medical patients age over 65 are associated with delirium

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Introduction: Structural neuroimaging studies in highly specific populations have found relationships between delirium, atrophy and white matter lesions. In this large study of older acute medical admission patients with prospectively assessed cognition, we recorded vascular and neurodegenerative markers on routine brain CTs to investigate their association with delirium.

Methods: All acute medical patients > 65 had cognitive assessment performed on admission by trained nurses: Confusion Assessment Method (CAM) and/or clinical impression of delirium; Abbreviated Mental Test. CT analyses (blinded) used visual rating scales for global and medial temporal lobe atrophy and white matter lesions (WML; Fazekas scale (FS)). All data were adjusted for age, sex and pre-admission dementia diagnosis, and analysed by univariate and multivariate regression analysis, expressed as odds ratio (OR), p significant < 0.05 .

Results: Mild (OR 1.98), moderate (OR 2.8) and severe (OR 5.6) atrophy were all significantly associated with delirium $P < 0.005$ in a univariate analysis and remained significant in the multivariate analysis in the presence of other imaging parameters. Mild FS 2–3 (OR 1.9), moderate FS 4–5 (OR 2.5) and severe FS 6 (OR 3.1) WML were also significantly associated with delirium in a univariate analysis but only severe WMH remained significant (OR 2.1) $p = 0.05$ in the multivariate analysis.

Conclusions: Atrophy and WMHs on admission brain CT are associated with delirium even after adjustment for age, sex and dementia diagnosis. Atrophy is more strongly associated with delirium risk than WMH. The potential use would be to identify those at risk of delirium when prior brain imaging is available.

Old age psychiatry

O-102

Purpose in mind: links between cognition, depression, and meaning in later life

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Introduction: Purpose in life (PIL) has emerged as a crucial psychological factor associated with healthy aging, cognition, and overall well-being. This study investigates the associations between PIL, cognitive performance, depressive symptoms, and socio-demographic characteristics in a community-based sample of older adults.

Methods: A total of 107 older adults (mean age = 61.9 years, 68.9% female) completed the Purpose in Life Scale (PILS), the Montreal Cognitive Assessment (MoCA), and the Geriatric Depression Scale (GDS-15). Additional data were collected on age, gender, education, employment status, psychiatric and cognitive diagnoses, and pet ownership. Independent samples t-tests and analysis of variance (ANOVA) were used to compare total PILS scores across groups. Pearson correlation and linear regression analyses were conducted to assess the relationship between PILS and cognitive or mood scores.

Results: Total PILS scores were significantly higher among women ($p = 0.042$), individuals without cognitive impairment ($p < 0.001$), without depression history ($p < 0.001$), and those who owned pets ($p = 0.014$). PILS was negatively correlated with GDS ($r = -0.63$) and age ($r = -0.30$), and positively with MoCA ($r = 0.41$). In the regression model, GDS score ($\beta = -0.93$, $p < 0.001$) and female gender ($\beta = 2.78$, $p = 0.023$) were significant independent predictors of PILS.

Conclusions: Higher purpose in life in older adults is associated with lower depressive symptoms, female gender, and better cognitive performance. These findings underscore the relevance of psychological well-being in aging populations and highlight modifiable factors that may support resilience and cognitive health in later life.

Pharmacology

O-103

Exploring the relationship between potentially clinically significant drug–drug interactions and health-related quality of life in hospitalised older adults with atrial fibrillation: insights from the SENATOR trial

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Introduction: Older adults with atrial fibrillation (AF) often report impaired health-related quality of life (HRQoL), which is commonly attributed to high symptom burden and multimorbidity. However, the relationship between potentially clinically significant drug–drug

interactions (DDIs) and HRQoL in this population remains underexplored.

Methods: We investigated the association between DDIs and HRQoL by cross-sectional analysis of a subgroup of 494 hospitalised older adults (≥ 65 years) with AF and multimorbidity (≥ 2 diseases) drawn from the SENATOR multinational clinical trial, which enrolled 1537 multimorbid hospitalised patients in 2016–2018. Each patient with AF was receiving ≥ 2 medications. HRQoL was assessed at baseline using EQ-5D 3L and EQ-VAS. DDIs ($n = 70$) were identified using an adapted validated explicit international consensus list. We examined associations between number of DDIs and EQ-5D-3L elements, i.e. total index score, VAS-scale and the 5 dimensions using linear and binary logistic regressions, adjusted for age, sex, polypharmacy (≥ 5 drugs) and Cumulative Illness Rating Scale Geriatric score.

Results: Median age was 81 years (interquartile range 75–85 years); 47.8% were female. Median number of medications was 10 [8–13], with a median of 1 DDI [0–2]; 68.9% had ≥ 1 DDI. Each additional DDI was associated with a significant decrease in EQ-5D-3L index ($\beta = -0.03$, 95% confidence interval (CI) [0.052, 0.009]) and EQ-VAS score ($\beta = -1.37$, 95%CI [−2.62, −0.12]). Only the anxiety/depression domain was significantly associated with increasing DDIs (Odds ratio = 1.18, 95%CI [1.04, 1.35]).

Conclusion: In older hospitalised multimorbid patients with AF, DDIs were highly prevalent and significantly associated with reduced HRQoL and greater anxiety/depression specifically.

Multimorbidity

O-104

Symptom-symptom correlations are stronger in older adults with multimorbidity than in those with no or one disease

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Introduction: In the context of multimorbidity, a single symptom can result from multiple diseases and symptoms may trigger new symptoms independently of underlying diseases. To better understand symptom-symptom dynamics, we tested the hypothesis that in older adults, as the number of diseases increases, symptom-symptom correlations are stronger and symptom-disease correlations are weaker.

Methods: Data were from 1190 participants (mean age 74 ± 5 , 49% female) in the Longitudinal Aging Study Amsterdam, a Dutch population-based cohort study. Spearman correlation matrices of self-reported presence of 11 symptoms and 7 chronic diseases were estimated for participants with no disease, one disease, two diseases, or more than two diseases. To test the hypothesis, structural equation modeling was used to compare the correlation matrices across the four groups.

Results: Symptom-symptom correlations were highest in participants with more than two diseases (mean p -value = 0.09, 7 correlations > 0.20) and lowest in those with no diseases (mean p -value = 0.06, 2 correlations > 0.20). The symptom-disease correlations were similar across the groups with one, two and more than two diseases (all p -values 0.00 to 0.01). The correlation matrices in the groups with one, two, and more than two diseases differed significantly from the group with no diseases (all p -values ≤ 0.02).

Key conclusions: The results partly support our hypothesis that symptom-symptom correlations are stronger in persons with a higher number of diseases. However, we found no evidence that the already low symptom-disease correlations become weaker. These findings

support a symptom-oriented approach in people with multimorbidity that looks beyond the disease-specific symptoms.

O-105

Multimorbidity patterns and hospitalizations due to lower respiratory tract infections in older adults: a 15-year population-based cohort study

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Introduction: Lower respiratory tract infections (LRTIs) are common in older people. They are associated to a higher utilization of healthcare, particularly for people living with multimorbidity, i.e., ≥ 2 chronic conditions. Multimorbidity is common in older people and presents different patterns, which are likely to have a different impact on the risk of LRTIs.

Methods: Using Swedish National Study of Aging and Care in Kungsholmen (SNAC-K) data, we identified multimorbidity patterns through latent class analysis (LCA) on participants with multimorbidity. Participant's diseases were characterizing a pattern with exclusivity $\geq 25\%$ or observed/expected (O/E) ratio ≥ 2 . Through Cox regression we estimated the hazard ratios (HRs) for different multimorbidity patterns and LRTI-associated hospitalizations and all-cause 30-day rehospitalizations.

Results: 434 (12.9%) participants were hospitalized for LRTIs and 152 were re-hospitalized within 30 days; 2931 (88.2%) presented with multimorbidity. Cardiometabolic pattern showed the highest hazards for hospitalizations (HR3.64, CI 2.31–5.74) and readmissions (HR6.40, CI 2.52–16.24), followed by the psychiatric/respiratory pattern (HR2.06, CI 1.33–3.20 and HR4.01, CI 1.64–9.83, respectively), as compared with those without multimorbidity. Sensory impairment/anaemia pattern was associated with increased readmission hazard (HR3.42, CI 1.38–8.50).

Key conclusions: Multimorbidity patterns are differently associated with increased risk of LRTI-associated hospitalizations and 30-day readmissions, with the cardiometabolic and psychiatric/respiratory patterns displaying the highest burden. The link between LRTIs and multimorbidity patterns is complex and lays in the burden of morbidity of each pattern, not simply in the sum of diseases.

O-106

Multimorbidity patterns and 15-year trajectories of physical performance: a population-based study

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Introduction: Chronic diseases can impact physical function, yet little is known about how specific disease combinations affect long-term physical performance trajectories. This population-based study explored the association between multimorbidity patterns and 15-year changes in physical function among older adults.

Methods: We analysed 15-year longitudinal data on 3112 dementia-free individuals aged 60 and older participating in the Swedish National Study on Aging and Care in Kungsholmen. Physical performance was assessed through walking speed and chair-stand tests, further combined into a z-standardized overall measure. Latent Class Analysis was used to identify groups of individuals with similar diseases patterns. Linear mixed models assessed the association between multimorbidity patterns and changes in physical performance scores over time. Inverse probability weighting was used to account for attrition over the follow-up.

Results: Four multimorbidity patterns were identified: 1) Psychiatric, respiratory, & musculoskeletal, 2) Anemia & sensory impairment, 3) Cardiometabolic & inflammatory, and 4) Unspecific. Compared to individuals without multimorbidity (≤ 1 disease), all patterns were associated with faster annual declines in physical performance, with the steepest decline observed in the cardiometabolic & inflammatory pattern ($\beta \times \text{time} = -0.078$, 95%CI: $-0.122, -0.034$), followed by the anemia & sensory impairment pattern ($\beta \times \text{time} = -0.033$, 95%CI: $-0.051, -0.016$). Results remained consistent after further adjusting for the number of chronic diseases.

Key conclusions: Multimorbidity patterns are differentially associated with accelerated decline in physical performance, with the cardiometabolic & inflammatory pattern presenting the fastest decline. Detecting multimorbidity patterns may help target strategies to preserve physical function in later life.

Late-breaking abstracts

O-107

Reduction of antihypertensive treatment in nursing home residents: results of the RETREAT-FRAIL multicenter randomized controlled trial

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Introduction: Among frail older adults, evidence on the benefits and risks of deprescribing antihypertensive drugs is limited.

Methods: RETREAT-FRAIL was a multicenter, randomized controlled trial conducted in nursing home residents ≥ 80 y.o., treated with > 1 antihypertensive drug and having a systolic BP (SBP) < 130 mmHg. Patients were randomized to either a step down of antihypertensive treatment or usual care. The primary outcome was all-cause mortality.

Results: 1048 patients (846 women), mean age 90 ± 5 yo were randomized and follow-up for 38.4 months. SBP increased in the step-down group by 4.1(1.9–5.7) mmHg. All-cause mortality occurred in 61.7% in the step-down group and in 60.2% in the usual care group [HR:1.02 (0.86–1.21), $p = 0.78$]. The step-down strategy tended to be more beneficial in the frailest patients (interaction step-down strategy/ frailty level, $p = 0.08$). Changes in functional capacities, quality of life, major cardiovascular events, non-cardiovascular mortality, falls, fractures and other serious adverse events were similar in the 2 groups throughout the follow-up period. Less COVID-related deaths were observed in the step-down strategy (1.1% vs 3.1%).

Conclusions: In this very old and frail population with SBP < 130 mmHg, a standardized gradual deprescription of antihypertensive treatment led to a moderate increase in SBP but did not reduce all-cause mortality. This strategy did not show adverse effects during the follow-up period of more than 3 years. RETREAT-FRAIL is the first clinical trial providing evidence that a well-conducted reduction in antihypertensive treatment could be considered in very old subjects with low blood pressure, especially in the frailest ones, in which polypharmacy is a major problem.

O-108

The feasibility of implementing a hospital deprescribing behaviour change intervention and undertaking trial processes: a mixed methods evaluation

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Introduction: The CompreHensive geriAtRician-led MEDication Review (CHARMER) intervention is designed to facilitate geriatricians and pharmacists to deprescribe. CHARMER comprises: (1) deprescribing action plan, (2) deprescribing briefings, (3) videos of deprescribing consultations, (4) deprescribing workshop, (5) deprescribing dashboard. This study aimed to evaluate the feasibility of a randomised controlled trial and inform primary outcome selection (90-day hospital readmission or quality of life (QoL)).

Methods: A two-arm purposive allocation feasibility study was undertaken in four hospitals in England (three intervention, one control). Intervention fidelity, outcome data completeness and quality were evaluated. A process evaluation explored these via interviews with staff and patients. Data were used to inform primary outcome selection.

Results: Eighteen geriatricians and pharmacists received the intervention and 318 patients admitted to study wards were enrolled. The mean (SD) number of medicines deprescribed per patient in intervention and control hospitals was 1.5 (1.9) and 0.4 (1.3) respectively. 90-day hospital readmission data were available for 290 (91.2%) patients. Sixty-six (20.8%) were approached for consent to complete QoL measures; 25 (37.9%) consented and 13 (52%) completed at baseline and 90-day follow up. All intervention components were implemented with acceptable fidelity; hospitals were unfamiliar with implementing action plans and dashboards.

Key conclusions: The CHARMER intervention is feasible to implement and there was a trend towards more deprescribing in the intervention versus control arms. Given the low patient consent rate, 90-day readmission rate is the most appropriate primary outcome. Refinements to guidance will facilitate hospitals to undertake activities for implementation that are unfamiliar.

O-109

Lifestyle intervention and benzodiazepine use: secondary analysis from the Sarcopenia and Physical Frailty IN older people: multi-component Treatment strategies (SPRINTT) trial

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Objective: Benzodiazepine use is prevalent among older adults despite recognized risks. Lifestyle interventions can mitigate disability. This study investigated whether benzodiazepine use diminishes the efficacy of lifestyle-based interventions on physical disability.

Methods: We conducted a secondary analysis of the SPRINTT trial, which enrolled participants aged ≥ 70 years with frailty and sarcopenia across 16 European centers. The multicomponent intervention encompassed physical exercise and nutritional counseling. Benzodiazepine use was assessed at baseline and longitudinally. Disability incidence was analyzed using Cox regression models, adjusting for intervention arm, sex, age, diabetes, cardiovascular disease, and baseline gait speed. A separate analysis was performed for participants with a SPPB score between 3 and 7.

Results: Among 1,506 participants (mean age 78.9 years; 71.5% female; 753 intervention, 753 control), benzodiazepine use was associated with a higher disability incidence in the intervention group (56.2% vs. 41.3% in non-users). A trend toward a reduced protective effect of lifestyle intervention was observed in benzodiazepine users with SPPB between 3 and 7 (HR 1.15, CI 0.78–1.71) compared with non-users (HR 0.83, CI 0.70–1.00; p for interaction = 0.037). Similar findings were observed in the longitudinal analysis (HR 1.22, CI 0.75–1.98) compared with non-users (HR 0.85, CI 0.71–1.01; p for interaction = 0.036).

Conclusions: In frail older adults, benzodiazepine use was associated with increased risk of disability and reduced efficacy of lifestyle interventions. These findings support a prudent approach to benzodiazepine prescription in frail older patients. Further confirmation and more specific studies are needed.

Poster

Acute hospital care

P-0001

Prevalence of iron deficiency in older patients with heart failure (HF) and the relationship with worse prognosis (delirium, mortality and 90-day readmission)

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Background: Iron deficiency (IDef) is a prevalent condition in patients with heart failure (HF). Evidence has shown that this deficit is associated with worse prognosis. The main objective of this study is to know if iron deficiency is associated with mortality, incidence of delirium and readmission in older patients with HF.

Methods: Observational, retrospective study which included patients admitted for HF in an acute geriatric Unit from 01/01/2021 to 31/12/2023, IDef was defined as ferritin levels < 100 ng/ml or ferritin levels 100–300 ng/ml with transferrin saturation < 20%. Baseline characteristics were recorded: age, sex, physical function [Barthel index (IB), ambulation scale (FAC)], cognition [Reisberg scale (GDS)], institutionalization and malnutrition screening (MNA-SF). The clinical event under study was the occurrence of death, delirium and 90-day readmission.

Results: 53 (60%) of 88 patients with HF had IDef. 81% were women, mean age was 90 (4.2) years, without significant differences in baseline characteristics. The global incidence of delirium in patients with HF was 44%, higher in IDef group 51% vs 34%, (NS). 8 (9%) patients with HF died during the hospitalization, 7 (88%) had IDef. 43 (49%) of patients were 90-day readmitted and 30 (70%) had IDef (NS).

Conclusion: Iron deficiency is high prevalent in older adults with HF, more than half of the older adults with diagnosis of HF had IDef. Despite mortality, delirium and 90-day readmission is higher in the presence of iron deficiency there is no statistical association, may be because small sample size.

P-0002

Effect of ferric carboxymaltose supplementation in older patients with heart failure and preserved ejection fraction

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Background: Iron deficiency (IDef) is a strategic target in cardiovascular medicine because of its association with adverse effects. Iron supplementation therapies benefit only certain patients with heart failure (HF). The objective of this study is to determine if the administration of ferric carboxymaltose (FC) in older adults with HF and preserved ejection fraction, has effect in readmissions.

Methods: Observational, retrospective study which included patients admitted for HF in acute geriatric Unit from 2021 to 2023. Two groups were defined according to the administration of 500 mg of FC or no administration during the hospitalization, both with IDef (ferritin < 100 ng/ml or ferritin 100–300 ng/ml with transferrin saturation < 20%). We analyze baseline characteristics of these patients. The clinical event under study was the influence of iron supplementation in 90-day readmission.

Results: 88 patients had HF, and 53 (60%) of patients with HF had IDef., 81% women, mean age 90 (4.2), IB 66 (25.5) FAC 3.5 (1.3). GDS 2.6, (2.6). 84% had malnutrition or at risk, (17%), no significant differences between groups.

There were 53 patients with IDef and HF, 30 of them (57%) received 500 mg of FC during hospitalization and 23 (43%) no. In the 90-day follow up, patients whom received FC (30) had less readmission 43% vs 57% (p 0.025).

Conclusions: In older adults with heart failure and preserved ejection fraction, Ferric carboxymaltose supplementation reduce the risk of 90-day readmission. Iron supplementation therapy may consider in older adults with heart failure.

P-0003

Optimizing pressure injury healing through specialized enteral nutrition support in HDU patients: a dietitian-led intervention study

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Abstract: Background: Pressure injuries in enterally-fed High Dependency Unit (HDU) patients present unique nutritional challenges. While standard enteral formulas provide basic nutrition, the role of specialized nutrient supplementation through enteral feeding requires further investigation.

Aim: To evaluate the effectiveness of a dietitian-led nutritional intervention incorporating specific amino acids and micronutrients via enteral feeding in pressure injury healing among HDU patients.

Methodology: A prospective study enrolled 40 adult HDU patients receiving enteral nutrition with Stage II-IV pressure injuries. The intervention group (n = 20) received specialized enteral formula enriched with arginine (7 g/L), glutamine (18 g/L), β -hydroxy- β -methylbutyrate (3 g/L), vitamin C (500 mg/L), zinc (20 mg/L), and standard multivitamins. The control group (n = 20) received standard enteral formula. Wound healing was monitored weekly for 4 weeks using the percent healing equation: [(Initial wound area—Current wound area)/Initial wound area $\times$ 100].

Results: The intervention group demonstrated significantly higher healing rates compared to controls (45% vs. 28% reduction in wound area at 4 weeks, p < 0.01). Mean time to 50% wound closure was 18 days in the intervention group versus 28 days in controls. Patients achieving optimal nutrient levels through supplemented enteral feeding showed 1.8 times faster healing rates compared to those receiving standard formula.

Conclusion: Dietitian-led specialized enteral nutrition support significantly improved pressure injury healing outcomes. The findings demonstrate the importance of targeted nutrient supplementation through enteral feeding in pressure injury management, establishing a clear role for dietitians in wound care teams.

P-0004

Optimizing enteral nutrition protocols to reduce aspiration pneumonia risk: a dietitian-led intervention study

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Aspiration pneumonia remains a significant complication in enterally fed patients, with incidence rates as high as 20–30% in some high-risk populations. Despite advances in enteral feeding techniques, the risk persists, highlighting the need for targeted interventions. Dietitians, as key members of the healthcare team, are uniquely positioned to implement and oversee strategies to mitigate this risk.

Aim: This study aimed to evaluate the effectiveness of a dietitian-led protocol in reducing the incidence of aspiration pneumonia among enterally fed patients in an acute care setting.

Methodology: A prospective interventional study was conducted over 12 months in a 300-bed tertiary care hospital. The intervention

consisted of a comprehensive enteral feeding protocol developed and implemented by dietitians, including:

1. Individualized feeding regimens based on patient risk factors.
2. Regular bedside swallowing assessments.
3. Standardized positioning guidelines during feeding.
4. Ongoing staff education on aspiration prevention.
5. Multidisciplinary team rounds for high-risk patients.

The primary outcome measure was the incidence of aspiration pneumonia. Secondary outcomes included length of stay and patient satisfaction.

Results: A total of 250 enterally fed patients were included in the study. Following the implementation of the dietitian-led protocol:

- Aspiration pneumonia incidence decreased from 18 to 7% ($p < 0.001$).
- Average length of stay reduced by 2.3 days ($p < 0.05$).
- Patient satisfaction scores improved by 15% ($p < 0.01$).

Dietitians' role was central in:

- Conducting risk assessments and tailoring feeding plans.
- Collaborating with speech therapists for dysphagia management.
- Providing ongoing education to patients, families, and staff.
- Monitoring compliance with the protocol and making real-time adjustments.

Conclusion: The implementation of a dietitian-led enteral feeding protocol significantly reduced the incidence of aspiration pneumonia in enterally fed patients. This study underscores the critical role of dietitians in preventing complications associated with enteral nutrition. Future research should focus on long-term outcomes and the cost-effectiveness of such interventions across diverse healthcare settings.

P-0005

Optimizing enteral nutrition protocols to reduce aspiration pneumonia risk: a dietitian-led intervention study

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Diarrhea is a common complication in enterally fed patients, particularly those with *C. difficile* infections and on antibiotic therapy. This quality improvement project aimed to evaluate the role of dietitians in managing diarrhea in this high-risk population using Bimuno, a prebiotic supplement.

Methodology: A six-month quality improvement initiative was implemented in the intensive care unit of a tertiary hospital. The project involved:

1. Baseline assessment of diarrhea incidence in enterally fed patients with *C. difficile* and on antibiotics.
2. Development of a standardized protocol for dietitian interventions, including Bimuno supplementation.
3. Implementation of targeted dietary strategies.
4. Staff education on enteral nutrition management and diarrhea prevention.
5. Continuous monitoring and evaluation of outcomes.

Results: The dietitian-led interventions yielded significant improvements:

1. Diarrhea incidence decreased by 35% in the target patient group.
2. Implementation of fiber-enriched formulas with Bimuno supplementation reduced diarrhea episodes and improved gut health.
3. Tailored use of Bimuno showed promising results in preventing antibiotic-associated diarrhea.
4. Enhanced staff knowledge led to improved enteral nutrition handling and reduced contamination-related diarrhea.
5. Malnutrition risk decreased due to better management of enteral nutrition despite diarrhea complications.

Conclusion: This quality improvement project demonstrated the crucial role of dietitians in managing diarrhea in enterally fed patients with *C. difficile* and on antibiotics. By implementing evidence-based strategies, including Bimuno supplementation, dietitians significantly reduced diarrhea incidence and improved overall patient outcomes. The project highlights the importance of dietitian involvement in multidisciplinary care for complex enterally fed patients and provides a framework for future quality improvement initiatives in enteral nutrition management.

P-0006

Dietitian-led interventions for sarcopenia management in cancer patients: a quality improvement initiative

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: The transition from total parenteral nutrition (TPN) to enteral nutrition (EN) is a critical process in the nutritional management of critically ill patients. Proper execution of this transition can significantly impact patient outcomes, reduce complications, and optimize resource utilization.

Aim: To implement and evaluate a standardized protocol for transitioning patients from TPN to EN, emphasizing the role of dietitians and focusing on improving nutritional outcomes without complications.

Methodology: This quality improvement project was conducted in a 20-bed intensive care unit over a 6-month period. A multidisciplinary team, led by dietitians, developed a standardized transition protocol. Key steps included:

1. Daily nutritional assessment by dietitians.
2. Gradual introduction of EN while tapering TPN.
3. Monitoring of gastrointestinal tolerance.
4. Adjustment of feeding rates based on patient response.
5. Complete transition to EN when 90% of nutritional goals were met enterally.

Data on transition time, nutritional adequacy, and complications were collected pre- and post-implementation.

Results: Post-implementation data showed:

- Reduction in average transition time from 2 weeks to 5 days.
- Increase in patients achieving 90% of nutritional goals from 30 to 90%.
- Decrease in TPN-related complications by 60%.
- No significant increase in EN-related complications.

The dietitian-led approach resulted in more frequent nutritional assessments (from 3 to 5 times/week) and timely adjustments to feeding plans.

Conclusion: The implementation of a standardized, dietitian-led protocol for TPN to EN transition significantly improved nutritional outcomes without increasing complications. This quality improvement initiative highlights the crucial role of dietitians in optimizing nutrition therapy and suggests that a structured approach to TPN-EN transition can enhance patient care in critical care settings.

P-0007**Dietitian-Led Interventions for Sarcopenia Management in Cancer Patients: A Quality Improvement Initiative**

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: The transition from total parenteral nutrition (TPN) to enteral nutrition (EN) is a critical process in the nutritional management of critically ill patients. Proper execution of this transition can significantly impact patient outcomes, reduce complications, and optimize resource utilization.

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P-0008**Optimizing the transition from total parenteral nutrition to enteral nutrition: a quality improvement initiative**

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: The transition from total parenteral nutrition (TPN) to enteral nutrition (EN) is a critical process in the nutritional management of critically ill patients. Proper execution of this transition can significantly impact patient outcomes, reduce complications, and optimize resource utilization.

Aim: To implement and evaluate a standardized protocol for transitioning patients from TPN to EN, emphasizing the role of dietitians and focusing on improving nutritional outcomes without complications.

Methodology: This quality improvement project was conducted in a 20-bed intensive care unit over a 6-month period. A multidisciplinary

team, led by dietitians, developed a standardized transition protocol. Key steps included:

1. Daily nutritional assessment by dietitians.
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The dietitian-led approach resulted in more frequent nutritional assessments (from 3 to 5 times/week) and timely adjustments to feeding plans.

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P-0009**Social complexity in geriatric patients at Hospital del Mar**

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(1) Hospital Social Worker, (2) Physician, (3) Geriatric Nurse, (4) Administrative

Hospital Geriatric Support Team(HGST) is in charge of assessing hospitalized patients and coordinating hospital discharge to Intermediate Care Hospitals(ICH). The role of the Hospital Social Worker (HSW) in the Comprehensive Geriatric Assessment is the backbone for detecting social risk situations.

Aim: Analyze the prevalence and characteristics of patients with social complexity assessed by the social worker from HGST in Hospital del Mar.

Methods: Observational retrospective study of a cohort of 1014 patients during 2024. Data collected: Gender, mean age, consulting department, destination at discharge, length of stay (from consulting to discharge), previous social support, dependency score(DS), social complexity patients and number of not indicated requests for assessment(RA).

Results: 1014 patients analysed, 54.8% male. Mean age 76 years. Main interconsultant departments: Orthopaedics-Traumatology(116N), Neurology(108N) and Internal Medicine(92N). Destination at discharge: ICH 64.6%: (Intermediate Care(IC) 50.8%; Long Term Care(LTC) 13.8%). Home 21.3%; acute hospital 1.9%; Geriatric DayHospital 1.8%; Nursing Home 1.6%; Palliative Care 2.1%; died 3.7%; others 3.1%.

Mean Length of stay: IC 8 days; LTC 29 days.

Patients had previous social support 45%. Level of dependency 33.7% (DS-I 16.9%; DS-II 12.7%; DS-III 4.1%); in process 8.5%.

Homeless patients RA 2.76%: not indicated 60.7%, discharged to ICH-LTC 28.6% with mean length of stay 46 days.

Conclusions:

-Regarding to social complexity patients, it took a long time to be discharged to ICH.

-Most of the homeless patients RA were not indicated.

-Patients with functional impairment, the need of medical monitoring and other healthcare techniques and DS-III, were indicated RA in 76.2%.

P-0010

Pulmonary artery angiosarcoma, a rare pathological entity

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(1) Si

Introduction: An 89-year-old male with type 2 diabetes, heart failure with preserved ejection fraction, and moderate Alzheimer's disease, who presents himself to the emergency department with recurrent syncopal episodes over the past month. Laboratory results show altered cardiac markers with no clinical correlation, raising suspicion of pulmonary thromboembolism. A pulmonary angiography CT is performed.

Methods: The pulmonary angiography CT reveals a possible left pulmonary artery angiosarcoma extending to the right, with pulmonary thromboembolism in the lobar and subsegmental branches of the right middle and lower lobes, as well as pulmonary hypertension.

Results: The patient reports functional decline, dyspnea, and unquantified weight loss. During hospitalization, he remains asymptomatic, without the need for supplemental oxygen. The diagnosis is directed towards probable pulmonary artery angiosarcoma associated with pulmonary thromboembolism. Anticoagulation therapy is initiated, and a tumor board evaluation is scheduled for clinical decision-making.

Key conclusions: Angiosarcoma is a rare malignant vascular tumor, representing 1–2% of all sarcomas.

Primary pulmonary involvement is uncommon, and metastatic causes should be considered, as it typically involves multiple organs.

The most common symptoms include hemoptysis, cough, chest pain, dyspnea, and pleural effusion, although up to 20% of cases are asymptomatic and found incidentally at autopsy.

Radiologically, over 70% of cases show bilateral pulmonary lesions. Treatment typically involves surgery, chemotherapy, and/or radiotherapy, with a median survival of 9 months, indicating a poor prognosis.

P-0011

Clinical and epidemiological characterization of tuberculosis in older adults

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Introduction: The incidence of tuberculosis (TB) has increased at all ages. The WHO anticipates that, by 2035, 80% of new cases will correspond to older adults. There are few studies of TB in Hispanic populations.

Objective: To identify sociodemographic and clinical characteristics in adults residing in the Municipality of Moreno, Province of Buenos Aires, Argentina, with a laboratory diagnosis of pulmonary and extrapulmonary TB made at the Hospital Zonal General de Agudos Mariano and Luciano de la Vega (Health Region VII) from January 2020 to December 2023.

Methods: Retrospective, observational, descriptive study. Excluded: < 18 years old; people deprived of liberty; institutionalized adults; cases without a laboratory diagnosis of TB and pregnant women. The data were extracted from the digital platform Argentine Integrated Health Information System (SISA) and the database of the TB Program of the municipality of Moreno. The analysis was performed with the nptrend command in STATA IC (Stata Corp LLC).

Results: N: 160. Pulmonary TB: 93.70%. Extrapulmonary TB: 6.25% with greater peritoneal and CNS involvement. The prevalence was 1.34 times higher in men. The 25–44 age group (58.1%) was the most affected and the one with the highest multi-resistance (6.25%). Older adults (prevalence: 4.3%) were the group with the highest association with comorbidities such as smoking and diabetes (9.3%). In young people, the main comorbidity was problematic drug use (10%).

Conclusions: TB in older adults was less frequent, although with more comorbidities. No cases of multidrug resistance were found in this group, which facilitated treatment.

P-0012

Predictors of long-time mortality in patients with dementia after hospital discharge

Marta Arellano-Perez (1), Julia Antonella Lopez-Cevallos (1), Marta Herrero-Torres (1), Isabel Arnau-Barres (1), Beatriz Ibarra-Rubio (1), Miguel Angel Marquez Lorente (1)

(1) Geriatrics Acute Care Unit. Hospital del Mar

Objective: To determine the usefulness of Comprehensive Geriatric Assessment as a predictor of 1-year mortality in patients with dementia discharged from an Acute Geriatric Unit (AGU).

Method: Patients with dementia discharged from AGU over an 8-month period were included. Geriatric variables determined: baseline functional status and at discharge, measured by the Barthel Index (BI) and Lawton Index (LI), cognitive status measured by Pfeiffer Test (PT), frailty measured using the VIG-Frail and CFS scales, and the presence of previous geriatric syndromes and those appeared during the acute illness and hospitalization. The relationship between these variables and 1-year mortality was studied.

Results: 183 patients were studied. One-year mortality: 39.9%. Parameters related to mortality: previous BI (30.6 vs 55.1; $p < 0.0001$), BI at discharge (20.2 vs 40; $p < 0.0001$), LI (0.2 vs 1; $p < 0.003$), PT (8 vs 6.5; $p < 0.0013$), VIG-Frail (0.45 vs 0.35; $p < 0.0001$) and CFS (6.5 vs 5.3; $p < 0.0001$). Geriatric syndromes associated with 1-year mortality: prior immobility (61.9% vs. 33.3%; $p < 0.0009$), prior pressure ulcers (75% vs. 37.4%; $p < 0.01$), malnutrition (48.3% vs. 31.5%; $p < 0.02$), and a history of delirium (58.3% vs. 35.4%; $p < 0.01$).

Conclusions: Poorer functional and cognitive status, as well as greater frailty, are predictors of 1-year mortality in patients with dementia discharged from an AGU. The presence of immobility, pressure ulcers, malnutrition, and delirium prior to hospital admission determine long-term mortality after discharge. Interventions aimed at improving frailty and functionality could decrease mortality in elderly patients with dementia.

P-0013

Comprehensive geriatric assessment as a predictor of long-term mortality

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(1) Geriatrics Acute Care Unit. Hospital del Mar

Objective: To determine the usefulness of Comprehensive Geriatric Assessment as a predictor of mortality at one year follow-up in elderly patients discharged from an Acute Geriatric Unit (AGU).

Method: Patients discharged from an AGU throughout an 8-month period (January to August 2023) were studied. Geriatric variables determined: baseline functional status and at discharge, measured by Barthel Index (BI) and Lawton Index (LI), cognitive status measured by Pfeiffer Test (PT), and the presence of geriatric syndromes prior to admission and those that appeared during the acute illness and hospitalization. The relationship between the studied variables and mortality 1-year after discharge was analyzed.

Results: 398 patients (61.31% women) were included, mean age: 87.41 years. Mortality rate at one year follow-up: 34.67%. Variables related to 1-year mortality: prior BI (46.91 vs 67.80; $p < 0.001$), BI at discharge (31.12 vs 55; $p < 0.001$), LI (1.13 vs 2.48; $p < 0.001$), PT (5.10 vs 3.80; $p < 0.0015$), prior immobility (62.75% vs 30.55%; $p < 0.001$), prior pressure ulcers (68.75% vs 31.25%), onset of immobility (50% vs 32.47%; $p < 0.015$), and the onset of pressure ulcers (61.41% vs 38.89%; $p < 0.01$).

Conclusions: Poorer functional and cognitive status is a predictor of 1-year mortality in patients admitted to an AGU. The presence of pressure ulcers prior to admission, as well as their appearance during hospitalization, is a predictor of one-year mortality in patients admitted to AGU. It would be advisable to develop mortality indexes for the elderly based on geriatric assessment.

P-0014

Impact of ICU hospitalization on clinical outcomes in older COVID-19 patients in Spain's first pandemic wave

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Introduction: During the first wave of COVID-19, healthcare systems faced extreme strain due to the high number of critically ill patients. In Catalonia, ICU occupancy exceeded 380% of pre-pandemic capacity. The effect of ICU admission on outcomes in older COVID-19 patients remains unclear. This study aimed to assess whether ICU admission influenced mortality and complications in this population during the early pandemic phase. The authors hypothesized that ICU care would improve clinical outcomes in elderly patients.

Methods: This was a retrospective, multicenter observational study involving COVID-19 patients over the age of 70, hospitalized during the first wave in the southern metropolitan area of Barcelona, Spain. The main outcome measured was in-hospital mortality among patients admitted to the ICU compared to matched patients treated in standard hospital wards. A secondary objective was to compare in-hospital complication rates between the two groups.

Results: The rate of mortality was 73.5% in ICU-admitted patients and 63.2% in their matched controls, whereas the corresponding rates of complications were 73.5% and 32.4%. ICU admission did not show a statistically significant impact on mortality (OR [95% CI] 2.56 [0.79–8.30]; $p = 0.117$). In contrast, complications were four times more likely in patients who were admitted to ICUs than in those admitted to general wards (OR [95% CI] 4.03 [1.64–9.91]; $p = 0.0024$).

Conclusions: Among patients over 70, ICU admission during the first COVID-19 wave did not improve survival and was linked to a greater incidence of complications. These findings highlight the need for further evaluation of ICU admission criteria for older adults.

P-0015

Prolonged hospitalisation and its association with healthcare-associated infections: a prospective observational study in a Singapore tertiary hospital

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Introduction: Healthcare-associated infections (HAIs) are a significant concern, contributing to prolonged hospital length of stay (LOS) and increased morbidity and mortality. This study aimed to investigate the association between prolonged LOS, healthcare-associated infections (HAIs), and 30-day readmissions in hospitalised patients.

Methods: A 3-month prospective observational study was conducted at a tertiary teaching hospital in Singapore, involving 476 hospitalised patients aged ≥ 60 years. Data on the length of hospitalisation, incidence of HAIs, and 30-day readmission rates were collected. HAIs were diagnosed using the European Centre for Disease Prevention and Control (ECDC) criteria. The association between LOS, HAIs, and 30-day readmission rates was analysed using chi-square tests of independence.

Results: The mean age of the participants was 83.8 ± 8.2 years, (58.4% female). The mean LOS was 13 ± 9.3 days, and the median LOS for patients with HAIs was 11 days. The 30-day readmission rate was 17% ($n = 81$), and the mortality rate was 4.8% ($n = 23$). A longer LOS (≥ 14 days) was significantly associated with a higher incidence of HAIs ($p = 0.0001$; odds ratio [OR]: 5.57; 95%CI: 3.23–9.6;

Cramer's V: 0.3). However, no significant association was found between LOS and 30-day readmission rates ($p = 0.7$).

Key conclusions: The incidence of HAIs was higher among patients with longer hospital stays (≥ 14 days). However, no significant association was observed between prolonged hospitalisation (≥ 14 days) and 30-day readmission rates. This study demonstrates a moderate association between LOS and HAIs. In conclusion, reducing the length of hospital stay may help lower the risk of HAIs.

P-0016

An unusual cause of functional decline: Guillain–Barré syndrome following dengue fever in an older adult

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Dengue fever is an endemic mosquito-borne disease in many tropical regions. Neurological complications of Dengue, particularly Guillain–Barré Syndrome (GBS), are rare. In older adults, GBS post-Dengue fever can have an atypical presentation, and can present with functional decline alone, mimicking the symptoms of the viral infection itself. Hence, this can lead to a delayed or missed diagnosis which can be detrimental to patients.

We report a case of an older adult who presented initially with functional decline following Dengue fever. She was diagnosed with GBS, as confirmed with a nerve conduction study and cerebrospinal fluid (CSF) albumin-cytologic dissociation. She received intravenous immunoglobulin and made full neurological and functional recovery. This case highlights the importance of maintaining a high index of suspicion for post-infectious neuropathies in older patients presenting with functional decline, as early diagnosis and treatment can improve outcomes. It emphasizes the need to be mindful of atypical presentations in the older adult. Further studies can be conducted to better understand neurological complications of Dengue fever and its impact on the geriatric population.

P-0017

Severe shoulder pain in a robust elderly patient: let's focus on the patient

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Introduction: Pain assessment in older adults is crucial but often underestimated due to multimorbidity and potential interactions with baseline treatments. Shoulder pain is a common complaint, often of multifactorial origin and sometimes associated with degenerative, traumatic, or infectious etiologies. Intense and unresponsive pain requires a broad differential diagnosis.

Clinical case: An 80-year-old physically and socially active male who hikes several days a week with a history of non-ischemic dilated cardiomyopathy and chronic kidney disease stage 2–3a was admitted for disabling left shoulder pain (VAS 10/10) after a fall in the mountains, resulting in marked functional decline, hyporexia and weight loss. Imaging studies revealed degenerative changes, tendinosis, and a known humeral bone infarction, none of which fully explained the severity of his pain. Improvement was achieved with multimodal analgesia and local infiltration.

Evolution: Annular skin lesions led to a dermatologic evaluation and a biopsy, suggesting granuloma annulare with sarcoid-like features. Serological tests revealed positive *Borrelia burgdorferi* IgG with indeterminate Western blot, raising suspicion of latent Lyme disease, while other differential diagnoses such as cutaneous tuberculosis and autoimmune diseases remained under consideration. Repeat serologies and further immunologic studies were scheduled to clarify aetiology and guide management.

Conclusions: This case highlights the importance of a comprehensive and multidisciplinary approach in older patients with unexplained pain. The main complaint should guide the evaluation, but a holistic assessment is essential to identify multifactorial contributors, ensuring accurate diagnosis and effective management.

P-0018

Retrospective comparison of pneumonia complications in older adults: acute hospital admission versus hospital at home

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Introduction: Older adults are vulnerable to hospital-associated harms such as delirium and acute kidney injury (AKI). Acute illnesses, such as infection, can be treated at home with intravenous (IV) antibiotics under Hospital at Home (HAH) services.

Method: We retrospectively compared data from patients in the community under HAH and in hospital on an acute frailty ward. During a six-month period, we identified older adults diagnosed with community-acquired pneumonia requiring IV antibiotics. HAH patients received daily IV ceftriaxone and hospital inpatients were prescribed IV antibiotics as per hospital guidelines.

We compared length of stay, development of delirium and AKI between the two groups.

Results: During the study period, 43 HAH patients had a mean age of 85 years with an average clinical frailty score of 6 and 28 hospital inpatients had a mean age of 82 years with an average frailty score of 5. Both groups had significant polypharmacy (HAH 84% and inpatients 86%).

The average length of stay was 4 days for patients treated under HAH versus 11 days in hospital. Only 2% of HAH patients compared to 25% of inpatients developed delirium. 11% of HAH patients developed an AKI compared to 21% in the hospital inpatient cohort.

Key conclusion: The average length of stay was 7 days shorter under HAH care. Patients treated in their own home developed significantly lower levels of delirium and AKI compared to inpatients on an acute frailty ward. This highlights the benefits in providing hospital-level care to selected patients in their home.

P-0019

EEG abnormalities in geriatric patients with neuropsychiatric symptoms

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Introduction: Neuropsychiatric symptoms in elderly patients often pose diagnostic challenges, particularly psychiatric disorders related to neurocognitive decline. This study explores the prevalence of electroencephalographic (EEG) abnormalities in hospitalized geriatric patients.

Methods: A retrospective analysis was conducted on 177 patients admitted to our acute geriatric unit between January and June 2024 for hallucinations ($n = 16$), confusion ($n = 20$), agitation ($n = 33$), or disorientation ($n = 108$). EEG findings were analyzed for seizure activity, irregular patterns, and disorganized activity. The relationship between EEG abnormalities, known neurocognitive disorders, and clinical outcomes was assessed.

Results: EEG was performed in 130 patients, abnormalities were detected in 78 cases. Seizure activity was observed in 18 cases, irregular patterns in 23, and disorganized activity in 37. Patients with disorientation and agitation had the highest rates of EEG abnormalities. Among patients with pre-existing neurocognitive disorders ($n = 53$), EEG disorganization was recorded in 18 cases. The average hospitalization duration varied across groups, with disorientation cases experiencing the shortest stays (5 days) and hallucinations the longest (15 days).

Conclusion: EEG abnormalities are prevalent in elderly patients with neuropsychiatric symptoms and may serve as markers of diagnosis. Their identification could be interesting in clinical management and prognostic assessment in acute geriatric care.

P-0020

Neuropsychiatric hospitalization motives and outcomes in elderly patients

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Introduction: Neuropsychiatric symptoms are common in elderly patients and can significantly impact hospitalization outcomes. Understanding how different neuropsychiatric manifestations influence discharge destinations and mortality is crucial for optimizing patient care in acute geriatric settings.

Methods: We conducted a retrospective study of elderly patients admitted to an acute geriatric unit between January and June 2024. Patients were categorized into three groups based on neuropsychiatric hospitalization motives: hallucinations, confusion/disorientation, and agitation/aggression. Hospitalization outcomes—home discharge, transfer to post-acute care, and death—were analyzed.

Results: Among 177 patients, 16 were hospitalized for hallucinations, 128 for confusion/disorientation, and 33 for agitation/aggression. In the hallucination group, 8 (50%) returned home, and 8 (50%) were transferred. Among confusion/disorientation patients, 52 (41%) returned home, 71 (55%) were transferred, and 5 (4%) died. In the agitation/aggression group, 13 (39%) returned home, 19 (58%) were transferred, and 1 (3%) died.

Conclusions: Neuropsychiatric hospitalization motives significantly influenced outcomes. Patients with confusion/disorientation had the lowest home discharge rate and highest mortality. These findings highlight the need for tailored management strategies to improve outcomes in this vulnerable population.

P-0021

Satisfaction of family members of patients admitted to a hospitalization unit at nursing homes

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Objective: To study the satisfaction levels of patients, and their families, after admission to the Hospital at Nursing Homes Unit (HaNH).

Material and methods: A retrospective observational study was conducted using validated satisfaction questionnaires to assess various aspects of the experience in the HaNH Unit during the first five months of its operation, starting from October 1, 2024. The hospital's computer system added a new inpatient ward where the patient's medical history, diagnostic tests, daily vital signs, physical exams, progress reports, and discharge reports can be accessed, just as in a conventional inpatient ward. Patients were evaluated by hospital staff (doctors and nurses) every morning as if they were in a conventional hospital unit. Upon discharge from the virtual hospitalization, family member was given the same satisfaction questionnaire used for patients admitted to conventional hospitalization.

Descriptive and inferential statistical analyses were performed to identify trends and key factors in satisfaction.

Results: During this period, 106 patients were admitted to the HaNH ward. Patients were admitted from the emergency department, from an inpatient ward, or 44% were admitted directly from their own residence, avoiding the need for transfer to the emergency department. The mean age of the patients was 88.7 years, and 82% were women. The mean length of stay was 7.05 days. Ninety-four satisfaction questionnaires were collected.

In terms of overall satisfaction and recommendation to a friend, 85% of respondents gave a score of 10 out of 10. One hundred percent of the medical and nursing professionals introduced themselves, and family members and/or patients did not feel that these professionals required any improvements. Ninety-eight percent of the surveys rated treatment and friendliness with a score of nine or ten. Of the 94 residents, 92 families felt safe or very confident with the care received. Sixty-five percent reported experiencing no pain at all during the hospitalization process.

Conclusions: The beginning of the HaNH unit has been very well received by patients and their families, demonstrating its potential as a viable alternative to traditional hospital care and highlighting the need for further development.

P-0022

Impact of a multicomponent physical exercise program and comprehensive management of geriatric syndromes in a newly opened acute geriatric unit at Infanta Sofía University Hospital

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Abstract: Objectives: To describe the implementation of a newly established geriatric unit focused on disability prevention and the application of standardized intervention protocols targeting major geriatric syndromes, as well as to report initial care outcomes.

Methods: A descriptive, observational study was conducted from June 2024 to March 2025, involving 507 patients admitted to the unit. Patients with preserved ambulation began a multicomponent physical exercise program within the first 24 h. The program included a 30–40-min group session each morning, led by physiotherapists,

focusing on strength training, balance, and gait exercises. In the afternoon, a 30–40-min cognitive stimulation session was supervised by occupational therapists. The multidisciplinary intervention was coordinated by geriatricians and specialized nursing staff. Upon discharge, patients received health education and a follow-up phone call 30 days later to assess their health status.

Results: Of the 799 patients admitted to the Geriatrics Department, 507 (63.5%) were treated in the new unit, and 343 (67.7%) participated in the exercise program. The median age was 90 years (IQR 7), with 63.7% women. Median hospital stay was 7.5 days (IQR 6.5). Dementia (GDS ≥ 4) was present in 81.1% of patients. At discharge, 6.7% were institutionalized, and 52% had been admitted from nursing homes. Common geriatric syndromes included dysphagia (33.1%), chronic pain (51.9%), and falls in the previous six months (39.2%). Polypharmacy affected 85.4%; 68.6% had visual impairment, and 58.7% had hearing loss. The Barthel Index remained stable at discharge (35, IQR 40).

Conclusions: A geriatric unit emphasizing preventive care and multicomponent interventions effectively preserved functional status in frail older adults, reducing the risk of hospital-associated complications.

P-0023

Clinical characteristics and outcomes of infectious spondylodiscitis in the elderly

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Introduction—objective: Infectious spondylodiscitis (IS) is a rare osteoarticular infection that is associated with an increased risk of mortality and morbidity. The aim of our study was to evaluate the differences in clinical and paraclinical characteristics and outcomes between older and younger patients with IS.

Methods: We conducted a retrospective study (2012–2024) including patients hospitalized for the management of IS in the department of internal medicine and rheumatology. The population was divided into G1 (patients aged < 65 years old) and G2 (aged 65 years or over). The clinical, biological and radiological characteristics and outcomes were compared between the two groups.

Results: Overall, 131 patients were enrolled and divided into G1 (81 patients, 61.8%) and G2 (50 patients, 38.2%). There was no significant difference in terms of gender ($p = 0.57$), the presence of comorbidities ($p = 0.48$), the length of the clinical course, the presence of rachialgia ($p = 0.58$), radiculalgia ($p = 0.12$) and neurological complications ($p = 0.11$). Fever ($p = 0.012$) and altered general condition ($p = 0.007$) were more frequent in the elderly group G2. The lumbar and dorsal vertebrae were the most common affected segments on both groups. Pyogenic spondylodiscitis was significantly more frequent in G2 ($p = 0.002$) and tuberculous spondylodiscitis was more frequent in G1 ($p = 0.040$). Sequelae and fatality rate were similar on both groups.

Conclusion: The clinical presentation and outcomes of infectious spondylodiscitis in the elderly doesn't differ so much from that found in the young population. An early diagnosis can reduce the complications and the mortality rate in such immunocompromised patients.

P-0024

Point prevalence study in a model 4 hospital regarding the use of lidded beakers for older adults

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Introduction: Lidded beakers are associated with harm for older adults as they promote a head tilt position which increases the risk of aspiration [1]. They also infantilise older adults.

Methods: The first phase of this project involved an audit on the chosen two wards collecting the patients age and whether they had a drink in a lidded beaker.

For the second phase, we organised a survey that was distributed to staff on two hospital wards. In this survey we asked three questions;

1. Do lidded beakers increase or decrease risk of aspiration?

2. Would you drink from one?

3. What is your profession?

Results: When auditing the two wards we found that 80.5% of patients over the age of 70 had a lidded beaker. The average age of a patient with a lidded beaker was 80. The average age of a patient without a lidded beaker was 56. We received sixty responses from the survey which included nurses and doctors. 52.46% of responders thought lidded beakers increase risk of aspiration with 47.54% thinking they decreased the risk. 68.85% of responders answered that they would not drink from a lidded beaker themselves.

Conclusions: Our study highlights ageism as lidded beakers are provided disproportionately to older adults.

We also concluded that 47.54% of surveyed healthcare workers working with older adults believed that lidded beakers reduced the risk of aspiration. There is a necessity for further education amongst all staff working with older adults.

P-0025

Does Wearing a 'Hello My Name Is (HMNI)' badge improve staff well-being at work?

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(1) SUH

Introduction: The HMNI initiative was launched by a United Kingdom Geriatrician trainee in 2017 to emphasize the value to patients of professionals introducing themselves as part of a campaign for more compassionate care [1]. There is some evidence that using HMNI badges enhances individual visibility and inclusion in a student teaching environment. We anecdotally observed that colleagues who wear a HMNI badge appear happier and enjoy greater visibility and engagement at work.

Methodology: We measured the impact that wearing a HMNI badge has on colleagues perceived happiness and visibility levels at work. Individuals working in patient-facing departments looking after frail older people at SUH were invited to participate. Perceived Happiness and Visibility scores were recorded and compared in those who were wearing HMNI badges versus those who did not wear one. Individuals not wearing a HMNI badge were subsequently offered a badge.

Results: 95 colleagues across all departments and all professional groups took part in the study. N = 28 were already wearing HMNI badges while n = 67 were not. All 67 non-badge wearers accepted a badge when offered one.

Both groups described relatively high visibility and happiness at work levels, but scores were significantly higher for badge wearers in both categories. $p = 0.003$.

Key conclusions: Wearing a HMNI badges at work is associated with higher levels of perceived visibility and happiness in the workplace. Further work is required to ascertain if this is an association or causation effect.

Reference:

1. Granger K & Granger C. Hellomynnameis.org.uk 2013

P-0026

Are consultants more optimistic than their registrars in DNAR decision-making?

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Introduction: Cardio-pulmonary Resuscitation can be an effective treatment in selected patients in the acute hospital setting. There is evidence that attempted CPR in frail older patients may be terminated earlier by Resuscitation teams compared to younger patients. We postulate that Medical Registrars who lead the cardiac arrest teams will be less optimistic than their consultants who largely own the Do Not Attempt Resuscitation (DNAR) decision in rating their patients suitability for attempted CPR in event of Cardio-Respiratory Arrest (CRA).

Methodology: Medical Consultants and Registrars were asked to independently and blindly rate all their in-patients on Integrated Medicine wards regarding their clinical suitability for attempted CPR in the event of Cardio-Respiratory arrest. All patients who already had a DNAR decision were excluded from the study. A scale of 0–100 was used with higher scores indicating higher suitability for attempted CPR. The Student T test was used to compare scores between Registrars and Consultants.

Results: 10 Consultants and 10 Registrars participated in the study. 57 patients met the inclusion criteria.

All Registrars gave overall lower scores than their consultants for the patients they were both looking after.

As a whole Consultants scored their patients suitability at 83.8 whilst Registrars scored the same patients at 61.1 $p < 0.01$.

Key conclusions: Medical Consultants are significantly more optimistic than their Registrars regarding their perception of their patients to be clinically good candidates for attempted CPR in the event of CRA. Consultants generally own the decision regarding attempted CPR/DNAR whilst Registrars generally own the Cardio-Respiratory Arrest Clinical scenarios. This may be a factor why attempted CPR is more likely to be terminated earlier in frail older people than younger patients.

P-0027

Do older patients have a shorter duration attempted cardio-pulmonary resuscitation when death is the outcome?

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Introduction: Cardio-Pulmonary Resuscitation (CPR) can be an effective treatment in clinically suitable patients in the acute hospital setting. Older patients may have shorter duration attempted CPR due to a perception that the attempt is less likely to be successful. We examined duration of attempted CPR in a rural acute hospital adult in-patient population where death was the primary outcome.

Methodology: Attempted Resuscitation Reports were examined over a 2 year period from 2023–2024. Patient Demographics including patient age and sex were collected. Patients who survived attempted CPR with a sustainable rhythm were excluded. All patients who did not survive attempted CPR were included. A Student T-test was used to compare duration of attempted CPR in patients under and over 85 years.

Results: There were 110 adult patients, 28 female, 82 male, who suffered cardiac arrest and had attempted CPR during the study period. 72 patients met the inclusion criteria, $n = 10 > 85$ years and $n = 62 < 85$ years.

The average duration of attempted CPR in the > 85 yrs group was 18.6 min. This compared to an average duration of 30.9 min in the < 85 yrs group, which was statistically significant. $p = 0.0257$.

Key conclusions: Duration of attempted CPR in older patients who die following attempted Resuscitation is shorter than with their younger counterparts. Resuscitation teams may be subject to a sub-conscious bias in perception of older patients suitability for attempted CPR, particularly for the very old. Further work is required to ascertain if this or other reasons may be factors in this finding.

P-0028

Improving decision-making and documentation on the acute medical consultant post-take ward round

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Introduction: Frail Older people have a substantial presence on the Acute Medical Take. They have a large conversion rate to hospital admission after the Consultant Post-Take Ward Round (CPTWR). The CPTWR is a particularly important part of the patient journey capturing senior decision-maker input around key clinical and patient flow parameters. A structured & standardized approach to CPTWR decision-making may improve outcomes across these respective areas [1].

Methods: A standardized CPTWR tool was introduced to replace freehand CPTWR case note entries.

Three cycles of audit were undertaken on all hospital wards before, during a pilot introductory phase and one year after the introduction of a Standardized CPTWR tool. Capture of Key CPTWR documentation and evidence of decisions made were identified. A Student T-test was used to compare outcomes before and after introducing the intervention tool.

Results: 138 patients documentation were assessed before the introduction of the CPTWR, 74 patients during the pilot phase and 88 patients at end of year 1. There was significant and sustained improvement measured across 13/16 domains including Thromboprophylaxis, Ceiling of care, Discharge Criteria and Predicted Date of Discharge decisions $p < 0.001$.

Key conclusions: A standardized tool significantly improves the capture of key documentation and decisions on the Acute Medical CPTWR. This may have significant implications for the care of older people clinically from both an individual and overall patient flow perspective.

Reference:

1. Modern Ward Rounds. Good practice for Multidisciplinary inpatient Reviews. RCP, RCN, RPS & CSP

P-0029**Not all pleural effusion is heart failure**

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(1) Consorci Sanitari Integral

Introduction: A 95-year-old man, independent in daily activities and without cognitive impairment, presented to the emergency department with worsening dyspnea and orthopnea for the past two weeks. He had no fever, infectious symptoms, or toxic syndrome. His medical history included chronic ischemic heart disease and heart failure with preserved ejection fraction.

Physical examination revealed 90% oxygen saturation and hypophony on respiratory auscultation in the right hemithorax. Lab results showed no acute phase reactants, Hb 81 g/L, GFR 38 ml/min, and NT-ProBNP 1830 pg/ml. Chest X-ray confirmed a right pleural effusion.

Thoracentesis revealed exudative pleural fluid with 460 cells (90% monocytes). Cytology and cultures were negative. Suspecting a lymphoproliferative disorder, an immunophenotype test of the pleural fluid showed 13% blasts and a clonal B cell population.

A bone marrow aspiration, evaluated by Hematology, showed mononuclear infiltration with myeloid morphology, consistent with acute myeloid leukemia (AML) with monocytic differentiation. Palliative care was decided, including drainage of pleural effusion if it recurs and transfusions if Hb drops below 8 g/L.

Conclusions: The incidence of AML increases with age, and most cases are diagnosed in those over 60. Clinical manifestations are related to bone marrow failure or constitutional symptoms. In elderly patients, treatment can range from targeted therapies to supportive care, and decisions should be individualized due to associated comorbidities.

P-0030**“Silent stroke: unmasking Percheron artery occlusion in an elderly patient”**

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Introduction: The artery of Percheron (AOP) is a normal variant of neurovascular supply to the thalami and midbrain. It is a small branch that comes from the posterior cerebral artery. This condition affects one-third of the population, and its occlusion is difficult to diagnose, as it can be mistaken for an “altered mental state”.

Methods and materials: Literature review of a case of a 91-year-old woman with mild dependence, mild cognitive impairment, hypertension, sinus dysfunction, and primary hyperparathyroidism. She was admitted to the acute geriatric unit for an episode of low consciousness. On arrival, her Glasgow Coma Scale (GCS) score was six, with no eye opening, sound emission, but with a flexor response to painful stimulus. Laboratory tests and ECG were normal, with a pacemaker rhythm at 85 bpm. The urine drug screen was negative. CT angiography was done, but it showed no evidence of acute stroke.

Results: After twelve hours, her GCS improved to eleven. Forty-eight hours later, the patient presented another episode of obtundation and drowsiness. The new brain CT scan revealed subacute bilateral ischemic thalamic infarction, consistent with AOP occlusion syndrome. Blood pressure control was optimized and antiplatelet therapy initiated. Twenty days after starting rehabilitation, the patient was

able to walk with the support of parallel bars and to take a few steps with a walker.

Conclusion: Decreased consciousness, amnesia, and vertical gaze palsy, in the absence of typical motor deficits of strokes, should prompt urgent head imaging to evaluate for AOP occlusion syndrome.

P-0031**Understanding bloodstream infections in nonagenarians: a clinical and microbiological perspective**

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Introduction: Bloodstream-infections (BSIs) are among the top causes of death ($\geq 50\%$ in ≥ 65 years old). Even BSIs are well-studied in older people, non-studies are published in nonagenarian. Aim: to describe the epidemiology, clinical characteristics and microbiological profiles of bacteraemia in nonagenarians.

Methods: Observational, retrospective study with patients ≥ 90 years old admitted with clinical signs of infection and ≥ 1 pathogenic microorganism isolated in ≥ 1 blood culture (1991–2020) grouped by 5-year spans.

Variables:

- Epidemiological: Age, gender, comorbidities, healthcare exposure.
- Clinical: Focus of infection, urinary catheterization, 30-days mortality.
- Microbiological: microorganism, antibiogram and resistance mechanisms.

Results: $n = 726$, median age 92(IQR:90–94), 37.2% males with Charlson Comorbidity Index (median = 6, IQR:5–7). 14.7% with cognitive impairment. 69.7% of BSI-episodes community-acquired(69.7%). Urinary (30.3%) and biliary (18.7%) were focus most common. 14% deaths caused by BSI-infection.

Microorganisms:

- Gram-negative-bacilli(GNB)($n = 482$): *E. coli* the most frequent($n = 299$, 41.2%) followed by *Klebsiella* spp. ($n = 71$, 8.0%) and *Pseudomonas* spp. ($n = 31$, 4.3%).
- Gram-positive-cocci(GPC)($n = 241$): *Enterococcus* spp. the most frequent($n = 58$, 8.0%), followed by *S. aureus*($n = 56$, 7.7%) *S. pneumoniae*($n = 53$, 7.3%) and Coagulase-negative-staphylococci($n = 42$, 5.8%).

Antibiotic resistance: 8% of *E. coli* were extended-spectrum-beta-lactamase (ESBL) and 1% carbapenem-resistant. 5 Methicillin-resistant *Staphylococcus aureus* isolated (8.9% of *S. aureus*).

Key conclusions:

- BSIs are common among nonagenarians, affecting 2.3% of the studied cohort.
- Despite the severity of BSIs, only 14% of deaths were directly attributed to the infection.
- Gram-negative bacilli (GNB), especially *Escherichia coli*, were the most frequently identified pathogens.
- Urinary and biliary tracts were the main infection sources, consistent with the predominance of *E. coli*.
- Multidrug-resistant organisms were rare, with ESBL-producing *E. coli* being the most frequent.

P-0032

Geriatric research insights: medical perspectives on framework conditions, trends, and challenges—results from the GERisearch-Survey

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Background: Despite a growing demand for geriatric care driven by demographic change, the field remains underrepresented in scientific research across Europe. This hinders the development of evidence-based care concepts. Our survey assessed the conditions, trends, and challenges in geriatric research in German-speaking countries, with the aim of informing policy strategies and strengthening scientific engagement.

Methods: We conducted a cross-sectional online survey to collect data on demographics, professional situation, scientific activities, career goals, research interests, and barriers faced by physicians in geriatrics.

Results:

- Demographics: The survey of 274 respondents revealed a predominance of women in younger age groups and men in older age groups.
- Research activity: 33% of respondents were actively engaged in research, while 37% reported unintentional inactivity, with significantly higher rates among women and those in non-university institutions.
- Research interests: Primary interests included delirium, dementia, cognition, and polypharmacy, with women showing significant interest in polypharmacy and nutritional medicine.
- Satisfaction levels: The highest satisfaction levels were found in university hospitals with dedicated geriatric chairs, whereas significant dissatisfaction was noted in non-university hospitals lacking such positions.

Barriers: 49% of the respondents identified balancing clinical duties with research as a major barrier.

Conclusion: To address the pressing needs of geriatric research, it is crucial to strengthen research infrastructure and enhance scientific participation, especially among women and professionals at non-university institutions. This should include establishing geriatric chairs at universities, allocating protected research time, and developing mentoring programs. Despite current structural challenges, there is a strong interest in scientific research among geriatric physicians.

P-0033

Effect of physical exercise on the functionality of malnourished hospitalized older patients with oral nutritional supplementation: a randomized clinical trial

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Introduction: Between 20–50% of hospitalized older patients are malnourished or at risk of malnutrition at the time of admission. Nutritional interventions have shown benefits in the nutritional status of this patient group. However, nutritional interventions alone may not be sufficient to counteract functional decline in hospitalized older patients, making it necessary to combine them with physical exercise. This study aims to evaluate the effectiveness of a combined intervention of oral nutritional supplementation along with a multicomponent physical exercise program.

Methods: This will be a randomized controlled trial. Inclusion criteria include: age ≥ 75 years, an expected hospital stay of ≥ 4 days, meeting criteria for malnutrition (GLIM criteria) or being at risk of malnutrition (MUST scale), a Barthel Index of ≥ 60 points, ability to ambulate (with or without support), and providing written informed consent. All participants will receive hospital physiotherapy if deemed appropriate, dietary modifications suited to their clinical condition, and prescribed oral nutritional supplementation to meet their recommended daily nutritional requirements. Patients in the intervention group will also receive a progressive, supervised multicomponent physical exercise program that includes aerobic endurance, strength, and balance training.

Results: The primary outcome of the study will be physical status measured through the Short Physical Performance Battery. Secondary outcomes include body composition measurements using electrical bioimpedance analysis, nutritional status biomarkers, frailty, cognitive and emotional status, and quality of life.

Conclusions: The results of this study are expected to provide a stronger scientific basis for integrating physical exercise routines into the standard management of hospitalized older patients.

P-0034**Deep dissecting hematoma, an often misdiagnosed lesion: case–control analysis of risk factors and wound-healing prognosis**

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Objectives: Deep dissecting hematomas (DDHs) represent severe acute wounds, predominantly affecting older patients. This study aimed to identify DDH risk factors and analyze factors associated with good wound healing prognosis.

Design: Retrospective, multicenter, case–control study from January 2016 to March 2022.

Setting and participants: 240 patients, 60 cases with DDH and 180 controls with venous or arterial ulcers.

Methods: Primary endpoint was analysis of demographic and clinical parameter differences between cases and controls to identify DDH risk factors. Secondary endpoint was analysis of DDH-wound healing to identify factors associated with good prognosis defined as $\geq 40\%$ healing of the initial wound 1 month after debridement.

Results: Cases were mainly female ($n = 47$, 78%), 63% misdiagnosed, median age: 87 years, and median Cumulative Illness Rating Scale (CIRS) score: 20/56. The low limb was the main DDH localization. Thirty-three (55%) patients had dermatoporosis, 53 (88%) were malnourished and 51 (85%) had peripheral vascular disease. DDH developed post-trauma in 42 (70%) patients, with 29 (48%) of them resulting from falls. Half of the patients experienced DDH complications: acute anemia ($n = 31$, 52%) and local infection requiring oral antibiotics ($n = 22$, 37%). Time to starting appropriate care was significantly longer when the first DDH consultation was outside our expert center. DDH was significantly associated (adjusted OR [95% CI]) with low-molecular-weight heparin (1.95 [5.12–92.1]; $p < 0.001$), dermatoporosis (3.75 [1.63–9.04]; $p = 0.002$), age (1.09 [1.02–1.17]; $p = 0.02$) and CIRS score (1.08 [1.01–1.17]; $p = 0.05$). Chemotherapy was significantly associated with delayed wound healing ($p = 0.03$), while age ($p = 0.04$) and skin grafting within 1 month ($p = 0.003$) were significantly associated with good wound healing.

Conclusions and implications: This analysis of DDH risk factors based on a case–control study of a large geriatric cohort identified novel results on prognostic factors for DDH healing. Larger prospective studies are needed to extend our findings.

P-0035**Polypharmacy in a comprehensive frailty clinic**

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Introduction: The Rapid Access Frailty Team (RAFT) in Midlands Regional Hospital Tullamore (MRHT) run daily frailty clinics. Comprehensive Geriatric Assessment (CGA) forms the cornerstone of these clinics. CGA has been shown to be effective in identifying and reducing polypharmacy by facilitating discontinuation of unnecessary medications and prioritising quality of life in our frail elderly population. Polypharmacy has increased due to increasing life-expectancy, multiple co-morbidities and implementation of evidence-based

medicine. Through our frailty CGA we set out to examine the level of polypharmacy in our frail population and how the CGA resulted in modulation of medication regimes.

Methods: All data pertaining to our frailty clinics are recorded on an excel database. We performed a retrospective review of this data to examine drug prescribing patterns in our frail population. Polypharmacy is defined as greater than 5 medications. Our data recorded the degree of polypharmacy. We examined how many CGA assessments resulted in a medication change.

Results: From 1st January 2023 to 30th December 2024, 1,132 patients attended frailty clinics in MRHT. A total of 964 patients (85%) met the criteria for polypharmacy. Of these, the degree of polypharmacy was categorised as follows: less than 5 medications (137), 5 to 10 medications (551), 11 to 15 medications (319) and greater than 15 medications (94). CGA assessment resulted in medication changes in 555 frail patients (58%).

Conclusion: CGA assessment identified a high degree of polypharmacy among our frail population. CGA resulted in adjustment in the drug prescribing in the majority of patients.

P-0036**Frailty and non-invasive ventilation prevalence in hospitalized older patients with acute heart failure**

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Introduction: There is currently a multidisciplinary debate regarding the care of older adults presenting to the emergency department for acute respiratory failure (ARF), with diagnostic studies and non-invasive therapeutic measures such as non-invasive mechanical ventilation (NIMV). Its usefulness in this age group is determined by the comorbidities, tolerance, and fragility of this patient profile. There are few publications on the benefits of NIMV in older patients admitted for acute heart failure (AHF) or decompensation of its chronic form. We aimed to register the NIMV use in older hospitalized patients with AHF.

Methods: A retrospective observational cohort study was performed in a secondary hospital for 13 months. Data Collected: > 80 years patients with acute heart failure (AHF) admitted in Acute Geriatric, Cardiology and Internal Medicine Wards. The following were recorded: Barthel Index (BI); Frailty Index-VIG (FI-VIG); MEESI-AHF score; HF decompensations in the last year (HFD/Y), Primary outcome: in-hospital and 30 days medical discharge mortalities.

Results: 457 patients were analysed, mean age 88.64 ± 4.3 years; women (64.3%). It was recorded: BI (72.71 ± 21.8), frailty prevalence 81.70% with a mean FI-VIG (0.31 ± 0.12), median MEESI-AHF 13.03% (7.08–30.45). in-Hospital and 30 days after medical discharge were 8.8% and 13% respectively. 1.25 ± 1.37 HFD/Y. 15.9% had required NIMV, the main indications were: normocapnic ARF (54.79%), hypercapnic ARF (30.13%). 0.2% required invasive

mechanical ventilation. The frailty is associated with in-hospital mortality [OR multivariant 0.842(0.73–0.96)] and 30 days after medical discharge [OR 0.81(0.70–0.93)].

Conclusions: The NIMV use in hospitalized older patients with AHF has a low prevalence. The frailty is related with in-hospital and 30 days medical discharge mortalities.

P-0037

Respiratory and urinary infectious causes on clinical outcomes in hospitalized older patients with acute heart failure

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Introduction: Several clinical conditions can precipitate episodes of acute heart failure (AHF), and influence the clinical outcome and prognosis of frail older patients. The aim is to determine the prevalence of respiratory and urinary infection precipitants of AHF that lead to hospitalization and their association with short-term prognosis.

Methods: A retrospective study was performed in a secondary hospital for 13 months. Inclusion criteria: > 80 years with AHF, informed consent signed, admitted in Acute Geriatric, Cardiology and Internal Medicine Wards. The Multiple Estimation of risk based on the Spanish Emergency Department Score In patients with ACHF(-MEESSI-AHF score), Frailty Index VIG[FI-VIG] and Barthel Index(BI) were measured at baseline, respiratory and urinary tract infection triggering factors for hospital admission was registered. The primary outcome was AHF in-hospital mortality.

Results: 220/457 patients were included with a mean age of 88.64 ± 4.3 years; women(65.2%), 7.04 ± 4.23 days hospital stay. Baseline measures: BI(72.71 ± 21.8), FI-VIG(0.31 ± 0.12) and the MEESSI-AHF score median was 13.03%(7.08–30.45). The precipitating factors reported for AHF hospitalization were: 26.5% respiratory tract infection (COVID-19 and Influenza A were the most prevalent microorganism detected), 21.7% urinary tract infection (Escherichia coli and Klebsiella pneumoniae were most commonly detected) and 9.09% had both tract infection. In-hospital mortality was 10.90%. There were no differences between infective triggering factors of AHF in the hospital mortality. Nevertheless, the frailty was associated to in-hospital mortality [OR multivariant 0.842(0.73–0.96) p < 0.001].

Conclusions: The respiratory tract infection was the most prevalent AHF trigger. The frailty influence on the short-term prognosis in the elderly patient regardless of the HF triggering factor involved.

P-0038

Improving fluid balance monitoring on geriatric medicine wards: an impossible challenge?

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Introduction: Fluid balance (FB) monitoring is a vital clinical metric, yet is often incomplete or inaccurate. Conditions that impact fluid

homeostasis or are affected by over/underhydration are common in frail older people in hospital. Inaccurate FB monitoring can negatively impact patient outcomes.

Methods: A trust-wide quality improvement project was implemented to improve the standard of FB monitoring on inpatient wards. Following sustained success in surgical wards, it was spread to the geriatric medicine department. Interventions included a ward round proforma with sections for FB review, a nursing education programme, and bright pink bands on beds as a visual reminder of patients requiring FB monitoring. Baseline and prospective data were collected for patients on the geriatric admissions unit and three geriatric wards.

Results: At baseline, FB charts were often incomplete and not reliably reviewed by medical teams. Data collected following the interventions showed massive variability across the wards. FB charts remained inconsistently completed. The run chart for one ward showed improvement in the proportion of FB charts reviewed by doctors from a baseline median of 35.5% to a new median of 87.5%. Other wards showed no change.

Key conclusions: Although FB monitoring is an established and essential part of inpatient care, the quality is poor. Medical teams do not consistently review FB charts, and improvements seen on surgical wards are not yet consistently replicated in geriatric medicine. Have we created a culture that has devalued the importance of such monitoring? Improvement efforts must be multifactorial and collaborative to effect meaningful change.

P-0039

Functional decline in hospitalized older patients with acute infections: preliminary results from the INFRAGEN study

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Introduction: Hospitalization in older adults often leads to a decline in functional independence, particularly in Basic Activities of Daily Living (BADL). This study investigated changes in BADL performance among older patients hospitalized with infectious diseases to better understand the functional impact of these events.

Methods: INFRAGEN is a prospective, multicenter study involving patients aged ≥ 70 years admitted to the Geriatric Units of University Hospitals in Ferrara, Padua, Monza, and Naples (Italy), with confirmed acute infections at admission or acquired during hospitalization. Patients with mild frailty (Clinical Frailty Scale < 6) were included. BADL dependency was assessed using the Katz scale, referring to functional status two weeks before admission and three months after discharge.

Results: To date, 162 patients have been enrolled (mean age 85.5 years; 53.5% female; 95% community-dwellers prior to admission) and 59 patients have been evaluated at follow-up. A linear mixed-effects model, adjusted for potential confounders, revealed a

mean decline of -1.19 BADL points (95% CI: -1.67 to -0.70 ; $p < 0.001$) three months post-discharge. A borderline interaction was observed between BADL decline and the number of infections during hospitalization ($p = 0.09$), indicating greater functional loss in patients who experienced two or more infections compared to those with one.

Key conclusions: Infectious events during hospitalization in older adults are associated with a significant decline in functional independence, highlighting the need for preventive and rehabilitative strategies in this vulnerable population.

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P-0040

The role of inflammatory indexes in predicting infection outcomes in older adults: do they really matter?

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Introduction: Traditional inflammatory markers indicate infection, while newer composite indexes reflect broader immune activation. This study evaluated their prognostic value in hospitalized geriatric patients with infections.

Methods: We prospectively studied older (≥ 65 years) hospitalized patients for infections and measured C-reactive protein (CRP), fibrinogen, neutrophil-to-lymphocyte ratio (NLR), systemic immune-inflammation (SII), and systemic inflammation-response index (SIRI) at admission and discharge. Charlson Comorbidity Index (CCI) and Clinical Frailty were recorded. Associations between biomarkers, hospitalization duration, 2-month mortality and readmission risk were assessed using regression models.

Results: In total, 102 patients (median age 80, 55% females) were included. Age, CCI, and frailty were similar across groups [hospitalization: < 7 , $7-14$, > 14 days], but significant differences were observed in inflammatory markers. Patients with longer hospital stays had notably elevated inflammatory markers at admission; CRP, fibrinogen, NLR, SII and SIRI (all $p \leq 0.027$). In the multivariate analysis, fibrinogen was the strongest predictor of hospitalization duration ($\beta = 0.58$, $p < 0.001$), followed by NLR ($\beta = 0.181$) and SIRI ($\beta = 0.159$). Notably, CRP showed a negligible effect ($\beta = 0.008$, $p = 0.956$).

Inflammatory markers measured at discharge were analyzed in relation to 2-month outcomes; patients who died had significantly higher CRP and NLR, whereas SII and SIRI values were elevated among those readmitted, independent of baseline characteristics (age, CCI, frailty).

Key conclusions: Composite indexes showed prognostic relevance but did not outperform traditional markers. However, as they easily derive from a routine blood count, they remain clinically useful due to their simplicity and availability.

P-0041

Autoimmune hemolytic anemia

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Introduction: Hemolytic anemia can be a rare but serious complication of Mycoplasma.

Methods: 92-year-old referred to emergency department for acute confusional syndrome associated with febrile syndrome and oxygen desaturation.

Pathologic history: Hypertensive. Dyslipidemic. Ischemic stroke (2017). Chronic atrial fibrillation. Mixed dementia (degenerative and vascular) GDS 4. Osteoporosis. Glaucoma. Hyperuricemia. Surgical history: osteosynthesis right hip, bilateral phacoemulsification, appendectomy, hysterectomy.

Geriatric evaluation:

- Functional: Barthel index 55 (help with showering, dressing, feeding, stairs, ambulates with walker, occasional urinary and fecal incontinence).

- Cognitive: Pfeiffer: 6 errors. 4-AT > 4 .

- Social: widowed. Institutionalized. No children.

- Nutritional: mini-MNA 7. EAT-10 < 4 .

Treatment: Alendronate. Calcidiol. Ramipril. Bisoprolol. Rosuvastatin. Edoxaban. Rivastigmine. Allopurinol.

Results: Physical examination: thin. Disoriented. Mucocutaneous pallor. Oral dryness. 37.8°C . Blood pressure: 84/56 mm Hg. Respiratory rate: 33 per minute. Oxygen saturation: 86%. Cardiopulmonary auscultation: 100 beats per minute. Bilateral rhonchi. Abdomen soft, depressible, peristalsis present, no masses, no megaliths. Lower extremities: bimalleolar edema, negative Homans.

AS: leukocytes $13,300/\text{mm}^3$ (N 11000, L 2300), Hb 7 g/dl, Hto 24%, rest correct.

Rx: increased hilarity. Patchy opacities.

Atypical pneumonia serology: positive Mycoplasma pneumoniae.

Treatment: oxygen therapy, serum therapy, levofloxacin 500 mg/7 days, furosemide/8h, transfusion of two red blood cell concentrates, quetiapine 25 mg. Precautions for drops.

Control AS: Hb 7.5 g/dl, Hto 25%, reticulocytes 7%, LDH 350 U/l, indirect bilirubin 1.5 mg/dl, Coombs testing +.

Transfusion of two red blood cell concentrates, associated with prednisone 30 mg/d descending pattern.

Key conclusion: To treat correctly we must consider the possible complications of Mycoplasma.

P-0042

Thrombocytopenia in older frail adults—case study

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Introduction: Thrombocytopenia ($\text{PLT} = 150 \times 10^3/\mu\text{L}$) increases the risk of bleeding, infections, and thrombosis. It results from decreased platelet production (e.g., malignancies, infections), increased destruction (immune-mediated, iatrogenic), consumption

(DIC), or sequestration (hypersplenism). Polypharmacy and comorbidities worsen outcomes; 3% of thrombocytopenic patients develop hematologic malignancies within a year, correlated with aging.

Methods: An 86-year-old male with hypertension, anticoagulated atrial fibrillation, gout, frailty syndrome, recurrent UTIs, and subdural hematoma surgery (five months prior), presented with gait instability, falls, and nocturnal agitation.

Clinical Examination: Pale, icteric mucosa, occipital ecchymosis, leg petechiae, gouty tophus, stage IV pressure ulcer, groin and sacral irritation, ragades, muscle hypotrophy, diminished right lung sounds, polyuria, and nocturia.

Results: Investigations: PLT = $77 \times 10^3/\mu\text{L}$, CKD 4 (eGFR = $28.05 \text{ ml/min/1.73m}^2$), azotemia (creatinine = 2.09 mg/dl), normocytic anemia (Hb = 10.4 g/dl), ESR = 43 mm/h , CRP = 3.35 mg/dL , CA 19-9 = 62.4 U/mL , lipase = 179 U/L , MDR *Klebsiella pneumoniae* in urine, pancreatic head cyst (1.4 cm).

Complex Geriatric Assessment: ADL = 2/6p, IADL = 1/8p, Downton = 4/11p, MMSE = 20/30p, GDS = 5/15p. Treatment: Dexamethasone (8 mg every 3 days) improved PLT to $194 \times 10^3/\mu\text{L}$. Possible diagnosis: Further investigations, including bone marrow biopsy, were recommended.

Key conclusions: Thrombocytopenia management in the elderly requires precise diagnosis based on history, physical examination, and a peripheral smear. Drug-induced causes must be ruled out, and further therapeutic interventions must be carefully selected. The benefits and safety of direct oral anticoagulation treatment should be considered in alignment with a comprehensive geriatric evaluation for active surveillance in chronic diseases.

P-0043

Unexpected finding in an apparently typical anemia case

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Introduction: Most thoracic aortic aneurysms (TAA) in patients over 65 years old are degenerative, with an incidence of approximately 10 cases per 100,000 inhabitants. In 70% of cases, TAA is associated with hypertension. Clinical presentation often occurs when the aneurysm reaches a significant size, carrying a high risk of rupture, which is linked to high morbidity and mortality rates. TAAs can rupture into the adjacent esophagus, leading to formation of an aorto-esophageal fistula.

Clinical case: 94-year-old autonomous patient with no cognitive impairment was admitted after a single episode of hematemesis, associated with moderate anemia, for which half a packed red blood cell transfusion was administered. During hospitalization, the patient developed melena, prompting an endoscopic study and thoracic CT scan, which revealed a contained rupture of a TAA, a mediastinal hematoma and an aorto-esophageal fistula. Given these findings, the Vascular Surgery Department evaluated the case and ruled out surgical treatment.

The patient remained hemodynamically stable and asymptomatic during hospitalization. Due to poor short-term prognosis and the expected fatal outcome, a decision was made to discharge the patient with a palliative care regime in place. Thus, comfort measures were prioritized until the patient's passing one week after hospital discharge.

Conclusions: Aorto-esophageal fistula, although rare, should be considered in the differential diagnosis of gastrointestinal bleeding due to

its high mortality, especially in geriatric patients with aortic pathology or prior interventions. Early recognition and prompt intervention are essential to improve patient outcomes and prevent hemorrhagic complications.

P-0044

Unmasking the uncommon: Merkel cell carcinoma mimicking benign upper lip swelling in an elderly patient

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(1) RH

Merkel cell carcinoma (MCC) is a rare neuroendocrine carcinoma with aggressive behavior that predominantly affects the sun-damaged skin of the head and neck region, extremities, and trunk of white older individuals. We present a unique case of MCC presenting as painless upper lip swelling, initially mistaken for a benign lesion. Histopathological examination revealed characteristic features of MCC. Early diagnosis and intervention led to improved outcomes. This case emphasizes the importance of considering MCC in the differential diagnosis of seemingly innocuous cutaneous lesions. To the best of our knowledge, 24 cases of MCC of the lips have been reported to date in the English language literature, and this case is probably the first to be reported from the Middle East region.

P-0045

Preventing readmissions: cross-sectoral follow-up after discharge from a geriatric department. A randomised controlled trial

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Introduction: Transitional care interventions have demonstrated conflicting results in reducing hospital readmissions. However, the efficacy of a coordinated home visit by geriatric and community nurses, incorporating bedside point-of-care testing (POCT) and virtual geriatrician consultations, has not yet been examined [1]. This study aims at evaluating whether such an integrated follow-up reduces 30-day readmissions.

Methods: Single-centre randomised controlled trial conducted at the Department of Geriatrics, Odense University Hospital, Odense, Denmark. Eligible were geriatric patients discharged to home with the support of municipal home care. Permuted block randomisation into intervention and control group was used on the day of discharge. Intervention: a joint home visit within 2–5 days post-discharge by a geriatric nurse and a community nurse, involving systematic assessments of bodily functions, well-being, and vital status. Supplementary POCT (C-reactive protein, electrolytes, haemoglobin, leukocytes), and virtual consultations with a geriatrician were carried out if necessary, by the nurse's estimation. Control: standard discharge procedures. Data is collected from electronic medical records, structured assessments, and questionnaires. Primary outcome: 30-day hospital readmission. Secondary outcomes: mortality (one and six months). Other endpoints: Use of POCT, user experience evaluations, feasibility and utility of POCT in clinical decision-making and health-economic analyses.

Results: Data collection and analysis are currently ongoing. Primary outcomes focus on 30-day acute hospital readmission rates.

Key conclusions: This trial explores a novel interdisciplinary and technologically enhanced transitional care approach, potentially informing best-practice guidelines and improving outcomes for vulnerable older adults.

Reference:

1.Fønss Rasmussen L, Grode LB, Lange J, Barat I, Gregersen M. Impact of transitional care interventions on hospital readmissions in older medical patients: a systematic review. *BMJ open*. 2021;11(1):e040057.

Short poster presentation

Acute hospital care

P-0046

Use of hypertonic saline solution combined with furosemide versus continuous infusion of furosemide for the management of decompensated heart failure

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(1) FPHAG

Introduction: Acute decompensated heart failure remains a leading cause of hospitalization. Even though loop diuretics are the cornerstone of treatment, a significant proportion of patients develop diuretic resistance and progressive cardiorenal dysfunction, complicating management and increasing mortality risk.

The objective of this study was to compare the efficacy and safety of high-dose furosemide in continuous infusion pump versus its combination with hypertonic saline solutions (HSS) in the treatment of acute decompensated heart failure (HF).

The primary objective was to assess diuretic response. Secondary outcomes included the evaluation of treatment safety by assessing renal impairment, hypotension and electrolyte disturbances.

Materials and methods: A prospective cohort study was conducted including patients over 75 years old admitted to an acute geriatric unit with decompensated HF.

Patients were divided into two groups:

Control group: High-dose furosemide administered via continuous infusion pump.

Intervention group: HSS combined with high-dose furosemide.

Sequential nephron blockade with a second or third diuretic was applied as needed, and HF treatment was optimized in both groups.

Results: Eighteen patients were included (8 control, 10 intervention). Mean age was 86 years. Diuretic response was achieved in 100% of the intervention group and 87% of the control group. Renal impairment was more frequent in the control group (6/8 vs. 3/10) with an odds ratio seven times higher ($p = 0.15$). Hypokalemia occurred in 16% of patients. No hypotension was reported.

Conclusions: HSS combined with high-dose furosemide improved diuretic response and showed a better renal safety profile compared to continuous infusion furosemide.

Poster

Acute hospital care

P-0047

Mediterranean spotted fever, a case report

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Mediterranean spotted fever (MSF), caused by *Rickettsia conorii*, is an infectious disease endemic to the Mediterranean region which is usually more prevalent in the rainy months. It presents with a variety of symptoms, including fever, rash, neurological signs, and occasionally organ dysfunction. The disease can have nonspecific symptoms, making diagnosis difficult, particularly in elderly patients with comorbidities.

We report the case of an 81-year-old man with good functional status without cognitive impairment and with a history of liver cirrhosis of unknown origin, who was admitted with confusion, tremors, dysarthria, and disorientation. Initial diagnoses included acute confusional state, hepatic encephalopathy, vascular disease, and rapidly progressive dementia, but none were conclusive.

During his hospital stay, he developed fever, likely related to a catheter insertion site, which appeared indurated, red, and necrotic. As his condition persisted, the possibility of a tick bite was considered, given his symptoms. Antibody tests confirmed Mediterranean spotted fever. He was treated with doxycycline and showed significant improvement.

This case emphasizes the importance of considering Mediterranean spotted fever in the differential diagnosis of elderly patients with nonspecific symptoms, especially in endemic areas. Early detection and treatment with doxycycline led to recovery, underscoring the need to recognize Rickettsial infections in complex clinical presentations.

P-0048

Implementation of the advance care planning in nursing home patients: role of the geriatric liaison team in continuity of care

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Introduction: Advance Care Planning (ACP) is a process through which patients express their values and preferences to enable clinical decision-making in advanced disease stages, particularly during crisis. Implementing ACP in patients from nursing homes can be complex, especially without effective coordination between different levels of care.

Objectives: To identify patients from nursing homes with ACP indication.

Quantify how many of them completed it during admission to the Acute Geriatric Unit (AGU) or within two months post-discharge to the nursing home by the Geriatric Liaison Team.

Materials and methods: A cross-sectional, observational, and retrospective study was conducted including patients from nursing homes admitted to AGU of Getafe University Hospital during January and February 2025. It was previously set that patients with moderate-to-severe dependency (Barthel Index ≤ 40) and severe dementia (GDS Stage ≥ 6) should benefit from ACP since their life expectancy is probably under 12 months. Patients with a previously completed ACP or admitted under end-of-life care were excluded.

Results: Among the 295 patients admitted, 13 came from nursing homes and met criteria for ACP. In 10 patients (77%), ACP was completed: 5 (50%) during hospitalization and 5 (50%) in nursing homes within two months post-discharge by the Geriatric Liaison Team. In 3 cases (23%), ACP was not performed.

Conclusion: The intervention of the Geriatric Liaison team is essential to ensuring continuity of care and promoting ACP in nursing home patients. Even when performed after discharge, ACP helps align care with patient values and improve end-of-life quality.

P-0049

Assessment of the implementation of the Advance Care Planning in patients in an Acute Geriatric Unit

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Introduction: Advance Care Planning (ACP) is a process through which individuals express their values and priorities to prepare end-of-life care that aligns with their personal preferences. This helps avoid decision-making during crises that may cause stress for the patient, family members and healthcare professionals.

Objective: To quantify the number of patients for whom ACP would be indicated and assess how many of them undergo the process during their admission to the Acute Geriatric Unit (AGU).

Materials and methods: An observational, cross-sectional, and retrospective study was conducted on patients admitted to AGU of the Geriatrics Department at Getafe University Hospital during January and February 2025. It was previously set that patients with moderate-to-severe dependency (Barthel Index ≤ 40) and severe dementia (GDS Stage ≥ 6) should benefit from ACP since their life expectancy is probably under 12 months. Patients who had already completed an ACP or those admitted under end of life care were excluded.

Results: A total of 295 patients were admitted to AGU over the two-month period. 40 patients met the criteria for ACP (13.5% of admissions). Among the patients for whom ACP was indicated, only 8 (20%) had an ACP in place.

Of the 32 patients who did not have ACP, 25 (78%) were discharged home, 7 (22%) to residential care, and 5 (15%) of them died.

Conclusion: Eighty percent of patients who should have an ACP do not have one, despite its benefits. More studies are needed to clarify reasons why ACP is not undertaken.

P-0050

Right care, right time: the role of advance care planning in avoiding unwanted hospitalizations

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Introduction: Advance Care Planning (ACP) is a structured process through which individuals define their values, preferences, and care goals to guide clinical decisions, particularly at the end of life. This proactive approach helps avoid crisis-driven decisions and reduces the emotional burden on patients, families, and healthcare teams.

Materials and methods: Literature review of a case: We report the case of an 85-year-old woman with chronic kidney disease (cardiorenal syndrome), severe aortic stenosis, moderate functional dependency (Barthel Index 40), and mild cognitive impairment. The patient was admitted to Getafe University Hospital on May 2, 2022, for decompensated heart failure—her sixth admission for the same reason within a year. Given the clinical trajectory and positive NECPAL criteria, ACP was initiated during hospitalization. The plan included discussions about preferred place of care, treatment limitations, and prioritization of comfort-focused interventions.

Results: Following the implementation of ACP, the patient required only one further hospital admission in the subsequent two years, due to a referral error. She ultimately passed away at home, in accordance with her expressed wishes and the established care plan.

Conclusion: This case illustrates how ACP can enhance person-centered care in older adults with advanced chronic conditions. ACP not only aligns treatment with patient values but also supports continuity of care and reduces potentially avoidable hospitalizations at the end of life.

P-0051

Strategic planning of number of geriatric acute care units (GACU) beds and geriatricians needed in Spain based on health resources. Projections 2023–2035

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Introduction: National Summary of Hospital Morbidity-2023 (Encuesta Nacional Morbilidad Hospitalaria-ENMH) was published April-2025. Based on utilization of health resources the aim of this study was to calculate the number of geriatricians needed to cover the 25% (frailty only) and 60% (transversal geriatric care) of GACU health resources needed regarding hospital beds and number of geriatricians in Spain.

Methods: Hospital discharges of people aged over 75 from 2012–2023 were registered in 17 Communities-Health-Systems and yearly projections were made until 2035. Average length of stay (A-LOS) was calculated multiplying A-LOS in each age group by number of admissions in each age group. Hospital GACU beds were calculated with Bridgman's formula under different assumptions. Considering 60% of acute care admissions to be candidates to admission in GACU and considering a minimum recommended by Spanish Geriatric Medicine Society (SEMEG) of 25% admissions of over 75 yr-old. Ratios of 10–8 beds per geriatrician have been considered.

Results: During 2023 ENMH publishes 1.521.777 hospital acute-care admissions in people over 75 yr with an 11.33 A-LOS. Depending on the standard considered, between 30.040 GACU-beds (3004–3755 geriatricians) and 12,517 GACU-beds (1251–1564 geriatricians) were needed considering 2023 admissions. When hospital admissions projections based on 2012–2023 data are considered until 2035, 1.753.640 admissions are projected with an A-LOS of 13,48 days.

Between 19,043 and 45,703 GACU-beds and ranges of 1904–2380 and 4570–5713 geriatricians will be needed.

Conclusions: Strategic planning of care needs may be useful to take actions to plan both health care resources, national bed planification and young geriatricians training needs.

P-0052

Suppressive antibiotic therapy in extra-articular abscesses of the native hip joint: case report

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Introduction: Suppressive antibiotic therapy (SAT) refers to the long-term or indefinite administration of antibiotics.

Methods: An 88 year-old male, Barthel Index 35/100, Functional Ambulation Classification 1, who maintained standing and perform transfers in a wheelchair, no cognitive impairment. History of hypertension, left hip fracture, Urinary tract infection (UTI), among others.

Results: The patient was admitted to an Acute Geriatric Unit with a UTI. Laboratory results showed elevated inflammatory markers, including leukocytes and C-reactive protein. Urine culture revealed ESBL-Klebsiella. After 9 days of antibiotic therapy, his general condition improved, but inflammatory markers remained elevated. Follow-up cultures were negative. UTI complications and rheumatological causes were ruled out. A thoracic-abdominopelvic CT scan revealed dislocation/destruction of the right hip joint with juxta-articular hypodense areas suggesting joint recesses/bursae/collections. Orthopedic consultation for drainage was considered, but surgery was dismissed. Interventional radiologists obtained samples from the superficial collection, isolating *E. faecalis*. The drainage of all collections was not possible. The patient completed one month of intravenous ampicillin, followed by oral amoxicillin. A subsequent CT scan showed no significant changes. He was discharged with recovery to baseline status.

After 15 months, a CT scan showed significant improvement in the right hip collection. The patient continued amoxicillin for an indefinite period and remained completely asymptomatic and stable 30 months after the diagnosis, he also improved his functionality, regaining the ability to walk using a walker.

Conclusion: SAT emerged as a viable option in cases where curative interventions were not feasible. The treatment was well-tolerated and safe in our patient.

P-0054

Impact of interdisciplinary care on readmissions and patient experience in frail elderly patients: a comparative study

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Introduction: Interdisciplinary care may improve patient outcomes in the treatment of frail elderly patients.

The aim of this study is to compare outcomes of two different models: Acute Geriatric Unit (AGU) as an interdisciplinary hospitalisation

unit vs Medical Hospitalisation Unit (MHU) as a conventional non-interdisciplinary unit, having both a similar clinical profile of patients.

Methods: Single-centre prospective, observational, descriptive and anonymized study of patients ≥ 80 years old was performed from January to December 2024.

AGU provides interdisciplinary care including daily meetings with doctors, nurses, nursing-assistants, social worker, pharmacist, nutritionist, where patient's therapeutic goal and social resources needs are discussed. A daily medication review is performed among doctors and pharmacist. MHU provides conventional medical care.

Variables collected: Socio-demographical, diagnostic weight (DW)(higher scores mean higher morbidity), reconsultation and readmission at 72 and 30 days, Net Promotor Score(NPS) as an indicator of satisfaction and patient reported experience of the service.

Comparative analysis was performed with SPSS statistical program, using χ^2 test.

Results: 1153 patients were included (68.1% female, mean age $89.5 \pm SD5.2$ years). Non statistically significant differences($p > 0.05$) were found in DW and composite socioeconomic indicators between AGU (N = 515) and MHU (N = 638), neither in readmission within 72h (2.3% AGU, 3.1% MHU) and 30 days(14.1% AGU, 16.8% MHU). A statistically non-significant trend was found in emergency department(ED) reconsultation within 72h (4.7% AGU, 7.2% MHU, $p = 0.075$).

Statistically significant differences($p < 0.05$) were found in ED reconsultation within 30 days(23.5% AGU, 32.9% MHU) and NPS(44.97 AGU, 31.97 MHU).

Conclusions: Interdisciplinary hospitalisation unit showed better outcomes in terms of healthcare utilisation and patient experience.

P-0055

A retrospective study regarding adequate sodium-glucose co-transporter 2 (SGLT-2) inhibitor prescription in older patients admitted with heart failure (HF)

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Introduction: SGLT-2 inhibitors have proven to be an efficient and safe treatment for older patients with HF both in preserved and reduced left ventricular ejection fraction. Despite being recommended by guidelines and having shown reduction in mortality and hospitalizations, they remain underutilized in clinical practice.

Methods: We carry out a retrospective descriptive study in patients admitted to Geriatric Wards at Getafe University Hospital from 01/10/2024 to 31/12/2025 under acute HF diagnosis. The main objective was to establish which proportion of these patients were receiving a SGLT-2 inhibitor when indicated.

Results: Seventy-four patients were included with a mean age of 89 ± 5 years. 71.4% were female and 80.3% were dwelling in the community. 34 patients had mild functional dependency (I.Barthel > 60), and 7 had total dependency (I.Barthel < 20). Regarding cognitive assessment, 11 (17%) had some level of dementia.

Ninety-one-point-eight percent were hospitalized for HF decompensation, with the remaining being first HF episodes. Between decompensated patients, 72.1% were not on prior SGLT2 inhibitor therapy. At discharge, SGLT2 inhibitor was only initiated in 15 cases, despite being indicated in 35 patients. The main reason for

contraindication was chronic kidney disease stage 4–5 (47.4%) and recurrent urinary tract infections (5.3%).

Key conclusions: Twenty patients didn't receive SGLT-2 inhibitors even though it was indicated. This study confirms that SGLT-2 inhibitors continue to be underprescribed in older patients, highlighting the need to improve prescribing practices for better outcomes and management of HF disease.

P-0056

Functional impairment in an old adult. Case report of ALS in Geriatric Department

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Introduction: Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disease of motor neurons, with variable and non-specific signs and symptoms. Its incidence increases with age, usually manifesting between the ages of 60 and 79 years, with a life expectancy of 2–4 years.

Methods: Our patient is an 85-year-old woman in good baseline condition, who is admitted to Geriatrics for gait instability and impairment for basic activities of daily living, with progressive worsening. During admission, after being assessed by Neurology and Neurosurgery and undergoing magnetic resonance imaging (MRI) and neurophysiological study (EMG), she was diagnosed with myelopathy due to vitamin B12 deficiency. She improved after supplementation and rehabilitation and was discharged. Subsequently, in consultation, she presented new changes in the physical examination with new worsening of the strength of both lower limbs, extensor plantar cutaneous reflex, vivid osteotendinous reflexes and the appearance of fasciculations. He went from walking with assistance to inability to stand upright, which required a new admission.

Results: The patient had symptoms indicative of motor neuron disease. A new imaging study was performed with no findings, although an EMG confirmed the presence of signs of multisegmental denervation compatible with second motor neuron disease and fulfilling ALS criteria.

Conclusions: ALS represents a challenge in Geriatrics, given that its incidence declines from the 80s onwards and can severely affect patients' quality of life. Early recognition and diagnosis is crucial for better planning and multidisciplinary support.

P-0057

Streptococcus salivarius and its multiple complications. A case report in a 76-year-old patient

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Introduction: *Streptococcus salivarius* is a commensal of the oral cavity. It is frequently regarded as opportunistic, and while it is generally considered a contaminant, it also has a pathogenic role that can cause serious infections at different levels of the body, such as endocarditis, nephrological, neuronal and digestive tract involvement.

Methods: We present the case of a 76-year-old patient without cognitive impairment admitted to the geriatric ward for fever without

associated symptoms and with the presence of blood cultures with the presence of *Streptococcus salivarius*.

Given the personal history of biological valve prosthesis, treatment was started with vancomycin and meropenem and an initial trans-esophageal echocardiogram was performed with no signs of endocarditis. After antibiotherapy of the microbiological cultures, antibiotic treatment was adjusted with Ceftriaxone. Despite treatment the patient persisted with worsening, presenting acute renal injury probably due to prerenal causes and postinfectious glomerulonephritis, which required prednisone and haemodialysis due to acute pulmonary oedema, thrombocytopenia and palpable purpura. Due to persistent fever, it was decided to perform a PET-CT scan (positron emission tomography/computed tomography) which revealed infection of the aortic biological valve prosthesis. Ceftriaxone was changed to dalbavancin because of suspected haemolytic anaemia. After haemodialysis, the patient suffered acute neurological deterioration with extensive subarachnoid haemorrhage, hydrocephalus and mycotic emboli, requiring admission to the ICU.

Results: The patient responded to the new antibiotic regimen but suffered a fatal neurological event.

Conclusion: This case highlights the need to know the pathogen and the complications that can arise despite correct treatment.

P-0058

Respiratory viral infections in older patients admitted to an acute geriatric unit

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Introduction: Viral infections represent a challenge in older adults due to age-related physiological changes that increase susceptibility. They are associated with serious complications, decompensation of chronic diseases, functional decline, reduced quality of life, and increased mortality.

Methods: Retrospective study from October 1 to December 31, 2024, including patients > 84 years admitted with respiratory viral infection (RVI). Data collected: sociodemographics, comorbidities, functional and cognitive status, laboratory parameters on admission, treatments, length of stay, 30-day readmission, and mortality.

Results: N = 101. Mean age: 91(± 4)years; women:67.32%. Barthel Index:53(± 34); SPPB:4.07(± 2.58); cognitive impairment:64.36%; institutionalized:48.51%. Comorbidities: hypertension 75%, diabetes 33.6%, cardiopathy 70%, FA 50.4%, COPD 13.86%, asthma or other pulmonary conditions 11.86%, CKD 41%. Symptoms: dyspnea 64.36%, cough 56.44%, fever 28.71%, rhinorrhea 14.85%. Laboratory findings: leukocytes 10,493(± 4,682), neutrophils 8,282(± 4,370), lymphocytes 1,268(± 903), RCP 8(± 7), procalcitonin 1(± 2), VSG 48(± 22), ferritin 301(± 434), D-dimer 2,041(± 1,346), fibrinogen 597(± 147). Antibiotic use:78.21%(penicillins 52%, cephalosporins 8%, quinolones 14%, macrolides 4%, carbapenems 2%); antivirals:2%. Vaccination: influenza 63.63%, COVID-19 54.54%, both 50.4%. Mean stay: 9-days(± 5); 30-day readmissions:23.76%; in-hospital mortality:14.85%; 30-day mortality:13.86%; total:28.7%.

Conclusions: Patients admitted with RVI were mostly women, mean age 91, moderate functional dependency, cognitive impairment, and high institutionalization. Most common comorbidities were hypertension and heart disease. Dyspnea and cough were the most frequent symptoms; most were afebrile. Although the infection is viral in origin, most received antibiotics and few antivirals. Vaccination

coverage was moderate for influenza and COVID-19. After one month, approximately two out of ten patients require readmission, and a third of them fail.

P-0059

Case report: Nitrofurantoin-induced pneumonitis

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Introduction: Drug-induced interstitial lung disease (DILD) is an uncommon but severe adverse reaction linked to various medications. Nitrofurantoin, frequently prescribed for urinary tract infections, has been associated with pulmonary toxicity in less than 1% of cases. Although rare, it remains a recognized cause of DILD. This report presents a suspected case of nitrofurantoin-induced pneumonitis and its clinical management.

Methods and materials: Literature review of a case: 91-year-old female patient, functionally mildly dependent and cognitively intact, with a history of osteoporosis, osteoarthritis, and mandibular osteonecrosis due to denosumab, was admitted to the Acute Geriatrics Unit at Getafe University Hospital. She presented with nausea, vomiting, dyspnea, and fever. Given her dysphagia and recent vomiting episodes, aspiration pneumonia was initially suspected. However, imaging revealed bilateral alveolo-interstitial infiltrates, raising suspicion of an alternative etiology. The recent use of nitrofurantoin for a urinary tract infection, along with minimal infectious symptoms, suggested drug-induced pneumonitis as the most probable diagnosis.

Results: The patient was initially treated with antibiotic therapy to cover the respiratory focus and osteonecrosis of the jaw, leading to significant clinical improvement. However, radiological findings remained unchanged. After excluding other potential causes, the interstitial involvement was attributed to an inflammatory or drug-induced reaction secondary to nitrofurantoin exposure.

Conclusions: Despite its low incidence, nitrofurantoin-induced pneumonitis should be suspected in patients presenting with new respiratory symptoms and interstitial infiltrates after drug exposure. Early recognition and withdrawal are essential for symptom resolution and to prevent further complications, particularly in older adults receiving long-term nitrofurantoin therapy.

P-0060

Case report: Pancreatic mass with uncertain diagnosis between cholangiocarcinoma and IgG4-related disease

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Introduction: The differential diagnosis between cholangiocarcinoma and IgG4-related disease is challenging due to overlapping clinical, radiological, and histopathological features. Accurate differentiation is essential, as the treatment strategies differ significantly.

Materials and methods: An 86-year-old male with mild functional dependence (Barthel Index: 95) and preserved cognitive status was evaluated following an episode of cholangitis. Abdominal CT revealed a pancreatic mass suspicious for cholangiocarcinoma. Two diagnostic attempts—ERCP with brush cytology and lymph node biopsy—showed no malignant cells, but rather inflammatory infiltrate and numerous plasma cells. Despite the absence of histological

confirmation, empirical treatment with six cycles of carboplatin and local radiotherapy was initiated. Six-month follow-up imaging showed stable pancreatic findings but revealed a new liver lesion suspicious for metastasis. A subsequent liver biopsy was again negative for malignancy.

Results: Given the diagnostic uncertainty, serum IgG4 levels were requested and found to be elevated. Histological reevaluation of the liver biopsy showed an IgG4/Ig ratio of 30%, below the 40% threshold required for a definitive diagnosis of IgG4-related disease. The patient remains clinically and functionally stable, with no significant decline observed.

Conclusion: This case highlights the diagnostic complexity between cholangiocarcinoma and IgG4-related disease in the setting of non-specific histology. As therapeutic implications are substantial, a comprehensive approach integrating clinical, serological, and pathological data is crucial. Continuous reassessment and multidisciplinary collaboration are key to reaching an accurate diagnosis and avoiding unnecessary or inappropriate treatments.

P-0061

Multidisciplinary assessment and organic screening in a patient with delirium and lithium intoxication

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Introduction: We present a 68-year-old male with schizoaffective disorder, on long-term treatment with lithium and aripiprazole, resident in a nursing home and under the care of Geriatrics. He was referred due to a two-week history of worsening attention, distal tremor, progressive difficulty in feeding, and reduced activity. He was admitted to the Acute Geriatric Unit.

Methods: The patient is a smoker with COPD, using CPAP and having recurrent admissions for global respiratory failure the previous year. He has chronic kidney disease due to lithium, an episode of acute gastroenteritis the previous week, and behavioral changes including refusal to use his CPAP device. He had lower limb edema and was started on furosemide without cardiology assessment. Barthel Index 100/100. Another geriatric syndromes: gait instability, falls, delirium, and malnutrition.

Results: The patient showed satisfactory clinical recovery following intravenous hydration and reduction of lithium dosage. No structural issues were found on imaging. He didn't develop hyperactive delirium, and no new psychotropic medications were required. His tremor improved, and he regained gait and intakes. He was euvolemic, with normal echocardiography results, and tolerated CPAP therapy. He cooperated in occupational therapy. Lithium was discontinued and valproic acid was started under the care of his psychiatrist.

Key conclusions: Psychotropic drugs, particularly lithium, are increasingly common in the geriatric population, highlighting the need for education in psychogeriatrics.

The atypical and heterogeneous presentation of organic disorders in this population necessitates a thorough comprehensive geriatric assessment.

An organic screening approach yields significant benefits in patients with multiple organ dysfunctions.

Short poster presentation

Acute hospital care

P-0062

15-year patterns of care transitions of Swedish older adults living in urban, semi-rural, and rural areas

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Introduction: To characterize the relationship between living in an urban, semi-rural, or rural area and transitions across living and care settings in Swedish older adults.

Methods: We used data from three cohorts of the Swedish National Study on Aging and Care (SNAC): Kungsholmen (urban), Blekinge (semi-rural), and Nordanstig (rural). Overall, 5,180 older adults were followed up for 15 years. Hazard ratios (HRs) estimated the transition likelihood across states after modelling transitions across homes, home care, nursing homes, and hospitals using multi-state models.

Results: Urban residents presented the highest hazard of receiving home care while living at home (HR 1.26; 95%CI:1.10–1.43), as opposed to rural residents (HR 0.52; 95%CI:0.41–0.66). Conversely, participants from rural areas presented a higher hazard of institutionalization (HR 1.61; 95%CI:1.07–2.40), while those living in a semi-rural area presented lower hazards (HR 0.57; 95%CI:0.38–0.86). Semi-rural residents had the highest hazard of being hospitalized (HR 1.08; 95%CI:1.04–1.12), as opposed to those living in rural areas (HR 0.81 95%CI:0.77–0.86). Residents in urban areas had the highest hazard of being discharged to their homes (HR 4.01; 95%CI:3.85–4.17), followed by semi-rural residents (HR 1.10; 95%CI:1.06–1.15). Urban residents had the highest likelihood of being discharged home with home care (HR 2.80; 95%CI:2.60–3.01). Rural residents had the highest hazard of being discharged to nursing homes (HR 2.74; 95%CI:2.17–3.46).

Key conclusion: These findings highlight the possible role of living in diversely urbanized areas in shaping healthcare trajectories, likely influenced by healthcare availability and accessibility. This underscores the need for region-specific equal care for aging populations.

Poster

Acute hospital care

P-0063

Fungal Endocarditis in Elderly Patients

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Endocarditis presents a clinical spectrum that has changed due to the characteristics of elderly patients. Fungal endocarditis is frequently observed in patients with prosthetic valves, pacemakers, prior antibiotic treatment, and immunosuppression. It accounts for a small percentage (1–3%) of cases, with a mortality rate ranging from 30 to

80%. In most elderly patients, surgical intervention is ruled out, leading to higher morbidity and mortality.

Case report: A 92-year-old institutionalized patient with total dependence for basic activities, hypoactive delirium, and prior antibiotic use for a urinary tract infection. Septic involvement of the oral cavity was observed, and a gingival exudate culture was collected. Due to a newly detected mitral murmur, blood cultures and a transesophageal echocardiogram were performed, revealing vegetation on the mitral valve. Laboratory tests showed leukocytosis and elevated C-reactive protein (CRP). Empirical antibiotic therapy with ampicillin and cefazolin was initiated. *Candida tropicalis* was isolated in both blood cultures and gingival exudate cultures, leading to a diagnosis of candidemia and endocarditis. The treatment was adjusted to chronic fluconazole therapy, with surgical intervention ruled out. The patient showed clinical improvement, and follow-up blood cultures were negative.

Discussion: Candida endocarditis is a rare cause of infectious endocarditis with a low index of diagnostic suspicion and a high mortality rate. The clinical presentation is often nonspecific, requiring a high degree of suspicion in patients with prosthetic valves, implanted devices, or other risk factors. Prognosis depends on early diagnosis. In patients for whom surgical intervention is not considered, chronic antifungal therapy is recommended.

P-0064

Geriatric emergency unit: profile of the population attended and patient discharge destination. Experience during 2024

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Introduction: Population ageing poses a growing challenge to Emergency Departments. This study aims to describe the profile and discharge outcomes of patients assessed by a Geriatric Emergency Unit (GEU) over a one-year period.

Methods: We conducted a retrospective, observational, and descriptive study. Data were collected from digital medical records of patients assessed by the GEU between January 1 and December 31, 2024. Variables included patient origin, Manchester triage level, number of visits, discharge destination, follow-up, and final diagnosis.

Results: A total of 1,554 assessments were recorded, corresponding to 1,192 individual patients. Of these, 79.1% had one assessment, 14% had two, 5.5% had three, and 1.3% had more than three visits. Most patients came from home (60.7%), followed by nursing homes (39.3%). Regarding discharge destination: 59.9% were discharged home, 36% admitted to inpatient wards, 2.8% received home hospitalization, and 1.4% virtual hospitalization. Follow-up was performed in 43.4% of cases (3.7% at 5 days, 1.6% at 7 days, and 38% at 15 days). The most frequent discharge diagnoses were respiratory diseases (27.5%), cardiovascular conditions (17.8%), urinary tract infections (12.5%), gastrointestinal disorders (12%), and mental health issues (4.9%).

Conclusions: In the context of an ageing society, integrating geriatrics into Emergency Services is essential for effective resource management and personalized care. The GEU handled a high volume of patients, provided alternatives to conventional hospitalization, and maintained a low rate of repeat emergency visits.

P-0065

Serum sodium and potassium variability in hospitalized elderly patients in Poland

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Introduction: Electrolyte imbalances are common in older adults, due to multimorbidity and polypharmacy. Alterations in sodium and potassium level and creatinine clearance may indicate inappropriate fluid therapy and fluid overload, which can lead to multi-organ consequences due to endothelial dysfunction, interstitial oedema, reduced renal perfusion pressure, and u acute kidney injury [1]. The aim of our study was to assess the prevalence of electrolyte disturbances in older adults.

Methods: A retrospective observational cohort study was conducted among patients hospitalized in the Internal Medicine and Geriatric Ward in Warmia and Masuria, Poland from May 2022–Mar 2025. The study cohort consisted of 305 patients (186 women and 119 men). The mean age was 77.9 years (61–96 years of age). The evaluation included serial measurements of serum sodium, potassium, creatinine and estimated glomerular filtration rate.

Results: At the time of hospital admission, hyponatremia was detected in 25.24% of patients, while hypokalemia was present in 9.51%. During hospitalization, at least one episode of hyponatremia occurred in 35.08% of patients, and hypokalemia in 26.89%. The mean variation in sodium levels among patients with at least two measurements was 6.08 mmol/L (with the highest detected variation of 43 mmol/L). The mean variation in creatinine levels was 0.455 mmol/L.

Key conclusions: The electrolyte imbalances are common during hospitalization. Hyponatremia and hypokalemia might be a result of inappropriate intravenous fluid administration. Therefore, a tailored approach to fluid therapy and routine electrolyte assessment are crucial to minimize the incidence of complications and shorten hospitalization periods.

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P-0066

Does the implementation of 24-hour in-person shifts in a palliative care unit increase home deaths and sedations?

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Objectives:

- Evaluate the number of annual deaths in palliative care and the impact of 24-h in-person shifts since 2022 on the increase in home deaths.
- Analyze the number of sedations performed annually, the drugs used, and the reasons justifying palliative sedation.

- Determine whether there has been an increase in the number of non-oncological patients over the years.

Method: A descriptive and retrospective study based on the analysis of data from the Palliative Care Unit of Lanzarote (2020–2022).

Results: A total of 710 deceased patients were analyzed, distributed as follows:

- 2020: 224 deaths, average age 74 years. Majority male (54%). 53.57% died in the hospital. 72.20% received sedation, with midazolam being the most used drug (70.40%). The most common reasons for sedation were: dyspnea (27.35%), delirium (14.8%), and both dyspnea and delirium (9.87%). 81.7% were oncological patients, and 18.30% were non-oncological.
- 2021: 245 deaths, average age 74 years. Majority male (57.55%). 53.47% died at home. 78.60% received sedation, with midazolam as the most used drug (72.43%). Sedation reasons included dyspnea (24.18%), delirium (24.59%), and spiritual suffering (8.2%). 84.36% were oncological, and 15.64% were non-oncological.
- 2022: 241 deaths, average age 76 years. Majority male (53.75%). 58.75% died at home. 80.08% received sedation, with midazolam as the most used drug (77.18%). The most common reasons for sedation were dyspnea (34.02%), delirium (14.53%), and both dyspnea and delirium (18.67%). 73.86% were oncological, and 26.14% were non-oncological.

Conclusion: The results of this descriptive study indicate an increase in palliative sedations and home deaths, coinciding with the implementation of 24-h in-person shifts, as well as an increase in the care of non-oncological patients. It is confirmed that the most frequent reasons for sedation continue to be dyspnea and delirium.

P-0067

Optimising active vitamin D prescribing: a two-cycle audit

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Introduction: Active vitamin D analogues like alfacalcidol are frequently prescribed in chronic kidney disease (CKD), but inappropriate use without proper biochemical monitoring may lead to adverse outcomes. KDIGO guidelines [1] recommend their use in CKD stages 3–5 with secondary hyperparathyroidism, after correcting vitamin D deficiency and calcium/phosphate levels. This audit assessed adherence to these recommendations in older adults.

Methods: A two-cycle retrospective audit was conducted at Karin Grech Rehabilitation Hospital. Cycle 1 (March 2023) and Cycle 2 (March 2024) included all patients on alfacalcidol (n = 22 and n = 9 respectively). Data collected included eGFR, parathyroid hormone (PTH) and vitamin D levels, calcium/phosphate status, use of cholecalciferol, and renal team follow-up. Between cycles, educational sessions were held for pharmacists and physicians, and a local guideline on vitamin D in musculoskeletal health was introduced. Ethical approval was obtained.

Results: In cycle 1 the mean age was 78.5 years; 77.3% (n = 17) had CKD stage 3–5. PTH was measured in 27.3% (n = 6), 62% (n = 13) were vitamin D deficient, 9% (n = 2) were on cholecalciferol, and 22.7% (n = 5) were under renal care. In cycle 2, the mean age was 75.5 years; 55.5% (n = 5) had CKD stage 3–5, PTH was measured in 11.1% (n = 1), 62.5% (n = 5) were vitamin D deficient, none were on cholecalciferol, and 66.6% (n = 6) were under renal care.

Key conclusions: Following targeted education and guideline introduction, renal team involvement improved and alfacalcidol prescribing became more selective. Further improvement is needed in routine PTH assessment and nutritional vitamin D use.

References:

[1] KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease–Mineral and Bone Disorder (CKD-MBD). *Kidney International Supplements*. 2017;7(1):1–59. Available from: <https://kdigo.org/guidelines/ckd-mbd/>.

P-0068

Prognostic factors for in-hospital mortality in acutely hospitalized older adults: a retrospective cohort study

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Background: Older adults admitted to acute geriatric units present with high levels of complexity and vulnerability. Understanding which clinical factors are associated with in-hospital mortality can help improve prognostic stratification and care planning.

Methods: We conducted a retrospective observational study of 121 patients admitted to acute geriatric hospital unit between January and December 2024. Patients with complete data were included. Variables analyzed included age, sex, functional status on admission (Barthel Index), instrumental autonomy (Lawton-Brody scale), presence of dysphagia, polypharmacy, length of stay, and discharge status (home or death). A multivariate logistic regression was performed to identify independent predictors of in-hospital mortality.

Results: The mean age was 88.5 years; 63.6% were female. In-hospital mortality was 14.0%. Although no variable reached statistical significance ($p < 0.05$), several showed notable trends. Higher age ($p = 0.14$), male sex ($p = 0.14$), and lower Barthel scores at admission ($p = 0.12$) were associated with increased odds of mortality. Dysphagia, polypharmacy, instrumental autonomy, and length of stay were not significantly associated with mortality in the adjusted model.

Conclusion: In this sample of hospitalized older adults, advanced age, male sex, and lower functional status at admission emerged as potential prognostic factors for in-hospital mortality. These findings underline the importance of early functional assessment in geriatric care. Larger studies are needed to confirm these associations and refine predictive models.

P-0069

Audit on fluid management in older adults with enteral feeding receiving IV fluid therapy in Qatar

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Introduction: Intravenous (IV) fluid therapy is essential for maintaining hydration, electrolyte balance, and drug administration. However, inappropriate prescribing can lead to fluid overload, electrolyte imbalances, and prolonged hospital stays. This audit evaluates IV fluid prescription and administration compliance with national and hospital guidelines.

Aim: The primary aim of this audit is to assess adherence to IV fluid prescribing guidelines, ensuring patient safety and optimal resource utilization. Secondary objectives include identifying areas for improvement and recommending strategies to enhance compliance.

Methodology: A retrospective review of patient records was conducted over a specific period, analyzing IV fluid type, prescription

accuracy, indication, and monitoring practices. Data were compared against established standards to determine compliance rates.

Results: The audit found that 62% of IV fluid prescriptions adhered to guidelines, while 38% deviated from best practices. 45% of prescriptions lacked proper documentation of the indication for IV fluids. Fluid selection was inappropriate in 27% of cases, and 31% of patients did not receive adequate monitoring. Additionally, 22% of IV fluid prescriptions did not match the patient's clinical needs, suggesting an overuse or misuse of specific fluids.

Discussion: The results highlight the need for improved prescribing practices, enhanced documentation, and better monitoring. Targeted clinician education and regular audits could improve compliance and patient safety. Further research is recommended to assess the impact of these interventions on clinical outcomes.

Short poster presentation

Acute hospital care

P-0070

Systematic assessment of physical function in an acute care hospital and 90-day mortality; a 1-year cohort study of 5039 adult patients

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Introduction: Reduced physical function (PF) is associated with adverse health outcomes, but rarely systematically assessed across wards and diagnoses at hospitals. We examined the association between in-hospital PF and 90-day mortality.

Methods: Adult patients referred for PF evaluation by physio- or occupational therapists in a University Hospital in Denmark were evaluated with the Cumulated Ambulation Score (CAS) for basic mobility, 30s-Sit-To-Stand-test (30s-STT) for strength and function in lower extremities, and handgrip strength (HGS) as a proxy for general strength [1]. Results were categorized as normal (mean $\pm$ 1SD) or reduced ($< -1SD$) according to Danish sex- and age-decade reference values. The day of CAS assessment was used as index for 90-day mortality in Cox regression analysis adjusted for age and sex (aHR).

Results: Total of 5039 (mean $\pm$ SD age 74.5 ± 13.9 y, 54% women, 88.2% from own home) patients were evaluated with the CAS in an acute ($n = 333$), surgical ($n = 1663$) or medical ($n = 3046$) ward, over 1 year. Further, the 30s-STs and HGS were assessed in 85.1% and 52.3% patients, respectively. Within 90-days of their first CAS assessment 10.4% of patients died. The aHR of 90-day mortality for reduced CAS-mobility (57%), reduced 30s-STs (93.5%), and reduced HGS (45.4%) was 2.99 (95%CI, 2.17–4.12), 3.96 (95%CI, 1.47–10.66), and 2.46 (95%CI, 1.48–4.09) respectively, versus those with a normal PF in respective tests.

Key conclusions: In adult patients 90-day mortality markedly increases with reduced PF identified by three simple and non-time-consuming tests. We suggest these tests be implemented and tested as a generic core test-battery of PF in hospitals and across sectors.

Reference:

1. Kristensen MT, Dall CH, Aadahl M, Suetta C. Systematic assessment of physical function in adult patients across diagnoses. *Ugeskr Laeger*. 2022 Oct 24;184(43):V02220134

POSTER

Acute hospital care

P-0071

Effectiveness and safety of deprescribing in older people admitted to acute medical wards: study protocol of a randomized clinical trial

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Introduction: Polypharmacy is associated with significant harms, mainly due to adverse drug reactions (ADR), particularly in the acute care setting: the complex interactions between chronic pathologies with superimposed acute illnesses and urgent medical therapies can lead to a suboptimal attention toward prescriptive appropriateness. Indeed, drugs prescribing quality is poor in complex polypharmacy regimens, and inappropriate prescribing is a major risk factor for negative health outcomes.

We will investigate the feasibility, efficacy and safety of a structured intervention for deprescribing (SID) compared to standard medical management (SMM) in older patients hospitalized in acute medical wards.

Methods: A multicenter cluster randomized cross-over trial will be conducted in the 3 operative units of the project, that will firstly apply SMM and, then, will cross over the application of SID. The SID will be based on dedicated educational campaigns directed to treating physician, by a careful review of literature on explicit list of inappropriate prescriptions in the older (STOPP/Beers/FORTA). Explored outcomes will comprise: drugs successfully withdrawn number, inappropriate prescriptions prevalence, in-hospital adverse reactions, physical/cognitive decline, and drug withdrawal adverse events.

Results: We will enroll 360 participants aged ≥ 65 years admitted to the study units acute medical wards, taking ≥ 5 medications at admission, with life expectancy > 6 months.

Key conclusions: Given the huge health and economic burden of polypharmacy and ADR in older people, this data may favour significant economic and health benefits for health service.

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P-0072

Call before convey—a collaboration between Bolton's Admission Avoidance Team and North West Ambulance Service to provide the right care, in the right place, by the right team for frail, older patients

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Introduction: Call Before Convey is a national improvement initiative with the aim to provide the right care, in the right place, by the most appropriate clinical team. This pilot project has been tailored to the Bolton locality to support our older patients in their primary residences with existing services and avoid unnecessary attendances to the ED. The North West Ambulance Service (NWAS) attended the call outs and worked collaboratively with the Admission Avoidance Team (AAT) to validate conveyance into the Emergency department (ED), facilitate direct admissions into hospital assessment areas or to explore alternative care options provided in the community.

Method: The pilot ran for 2 weeks in December 2024 and January 2025. The service hours were Monday to Friday from 9am–5pm. The first pilot focused on care home residents only. The 2nd phase of the pilot was extended to anyone above 75 years old. We excluded patients who fulfilled a specialist pathway such as major trauma, myocardial infarctions or strokes, sepsis, acute fractures, mental health crisis and cardiac arrests.

Results: 37 calls were received in December from care homes. 67% of these calls were deflected from ED. In January, the number of calls were 100 with 41% deflected. The rate of ambulance conveyances to ED from care homes per 100 occupied beds was reduced by 31.8% in December 2024 and by 24.2% in January 2025 compared to baseline.

Conclusion: Collaboration between NWAS and AAT provided effective, patient-centred care, considering safe and appropriate alternatives to an ED attendance.

P-0073

Management of abdominal pain in frail elderly people. About a case

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Introduction: The management of abdominal pain in elderly patients requires a careful approach due to the particularities of this population, which include a higher prevalence of comorbidities, an altered pain threshold, and the possible atypical presentation of diseases.

Methods: Analysis of the clinical case of a patient admitted for respiratory infection who presents with abdominal pain during her stay in the hospitalization floor.

Results: An 88-year-old female patient who, during her stay in the ward due to pneumococcal respiratory infection, presented an episode of intense abdominal pain with nausea and vomiting that did not

subside with medical treatment. An urgent analysis was requested, which showed worsening anemia. Given the findings described, urgent CT angiography was requested where active bleeding from a branch of the gastroduodenal artery was observed, commenting on the case of interventional radiology who performed bleeding embolization.

Upon returning to the hospitalization floor, the patient required nasogastric tube placement, which could later be removed without complications. The diet progressed with good tolerance, without new episodes of abdominal pain, with a regular bowel movement rhythm. After prolonged admission, the patient presented physical deconditioning, with progressive recovery, being able to walk with a rollator and supervision of a person upon discharge.

Conclusions: The management of abdominal pain in elderly patients requires a multidisciplinary and personalized approach to ensure comprehensive and effective care.

P-0074

Prevalence of dysphagia in an acute geriatric unit

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Objective: To describe the characteristics of patients admitted to an Acute Geriatric Unit (AGU) with dysphagia and the prevalence of dysphagia in this population.

Materials and methods: Descriptive observational study of patients admitted to an AGU between January 1 and April 30, 2023. Variables included: Clinical (Charlson Index), functional variables (Barthel Index), cognitive variables, (Global Deterioration Scale of Reisberg (GDS), nutritional status (MNA-sf), dysphagia (EAT-10, viscosity/volume test), and frailty (Frail-VIG Index). Patients with and without dysphagia were compared. Those in end-of-life situations were excluded.

Results: 111 patients (mean age: 88.9 ± 5.82 years, 55% women). Of these, 52.4% were over 90 years old, and 72.1% lived in the community. Main reason for admission was respiratory infections/pneumonia (45.9%). High comorbidity (Charlson Index ≥ 3 : 48.6%), functional impairment (Barthel Index < 60 : 54.9%), cognitive decline (GDS > 3 : 43.3%), and risk of malnutrition (MNA-sf < 12 : 78.3%) were observed. Delirium during admission was detected in 24%, and 73% were frail. Prevalence of dysphagia was high (27.9%: EAT-10, and 24.3%: viscosity/volume test). Dysphagia was associated with the use of neuroleptics (29% vs. 8.9%, $p = 0.023$), lower Barthel Index, dementia and ($p < 0.001$), pressure ulcers (6.5% vs. 0%, $p = 0.023$), greater severity of frailty (frail VIG. 0.46 vs. 0.32, $p < 0.001$), and malnutrition (6.83 vs. 9.67, $p < 0.001$).

Conclusion: The prevalent of dysphagia in this population and is associated with greater frailty, functional deterioration, and malnutrition.

P-0075

Impact of prior anticoagulant treatment on hip fracture patients outcome

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Introduction: Patients' with hip fracture (HF) often present comorbidities that require anticoagulant treatment, which may delay surgery and increase morbidity and mortality. This study compared the management and clinical outcomes of patients older than 65 years with HF treated with acenocumarol, direct oral anticoagulants (DOACs) or no anticoagulant therapy, admitted to an orthogeriatrics unit in 2024.

Methods: Data were collected from patients older than 65 years with HF in an orthogeriatric unit in 2024. Those taking acenocumarol, DOACs, and those not using anticoagulants were analyzed. Outcomes included 30-day mortality, transfusions, delirium and hospital stay.

Results: 187 patients were analyzed: 144 without anticoagulants, 17(9%) with acenocumarol and 26 (13.9%) with DOAC. The mean age was similar in the three groups. There was no difference in baseline characteristics. A high percentage of anticoagulated patients underwent surgery after 48 h (DOAC: 69.2%; acenocumarol: 29.5%) compared to the group without anticoagulants (16%). The mean delay to surgery was significantly different between groups: DOAC 91.52 h, acenocumarol 55.18 h vs 39.88 h ($p < 0.001$). Hospital stay was longer in the anticoagulated group (12.09 days with acenocumarol and 12.69 with DOAC, vs 10.29, $p < 0.002$). Mortality at 30 days was higher in the anticoagulated groups (acenocumarol: 5.8%; DOAC: 7.6%) vs. 1.3%. Higher transfusion rates were observed in the acenocumarol group. The incidence of delirium was 36.8%, 41.1% and 34.6% respectively.

Conclusion: Anticoagulated patients, especially with DOACs, presented greater surgical delay, hospital stay and mortality. DOACs have surpassed acenocumarol as the most frequent anticoagulant in this population.

P-0076

Nocardia disease in elderly patients: beyond a simple cellulitis

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Introduction: Nocardiosis is an opportunistic infection acquired by inhalation or direct inoculation, which mainly affects immunocompromised people. The most frequent clinical manifestation is pulmonary. Skin involvement is less common (5–8%), mostly (80%) caused by *Neisseria brasiliensis*. Although it's a rare disease, it reaches high mortality rates (14–40% in pulmonary cases, 60–100% in central nervous system implication).

Clinical case: An 80-year-old man, autonomous for activities of daily living and without cognitive impairment, with type 2 diabetes mellitus and chronic obstructive pulmonary disease (COPD), was admitted to the Acute Geriatric Unit due to general deterioration, fever (38 °C) and a torpid evolution of his left-hand injury after pruning the garden despite treatment with amoxicillin/clavulanic acid.

Evolution: Initially, samples of purulent exudate from his hand were collected, in which whitish colonies grew after 48–72 h. Later, a Ziehl-Neelsen stain revealed acid-fast coccobacilli. After sequencing the 16S rRNA region, *Nocardia Nova* was confirmed and treatment was modified to trimethoprim-sulfamethoxazole and amikacin. Likewise, a chest CT showed nodular consolidations compatible with pulmonary nocardiosis.

The infectious evolution was favorable but the patient had other complications like exacerbation of COPD, decompensation of heart

failure and delirium, which lead to multiple organ failure and subsequent death 10 days later.

Conclusions: Cutaneous nocardiosis represents a diagnostic challenge due to its low incidence and non-specific presentation. Given the increasing incidence of chronic diseases and immunosuppressed patients, an early identification of this rare but serious clinical entity is important in order to start a correct targeted antibiotic therapy and avoid fatal consequences.

P-0077

Differential diagnosis of syncope in the elderly patient, based on a clinical case

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Introduction: Differential diagnosis of syncope in older adults is a major challenge, especially if multimorbidity is associated. Its etiology includes neuromediated syncope associated with aging, cardiac pathologies, structural brain lesions and polypharmacy.

Clinical case: An 88-year-old man, autonomous for activities of daily living and without cognitive impairment, with severe aortic stenosis-type valvular disease, was admitted to Acute Geriatric Unit due to recurrent syncope.

Evolution: During admission, he had an episode of disconnection with vegetative symptoms. Some studies were performed: an electrocardiogram (showing atrial fibrillation with tendency to bradycardia), an electroencephalogram and cranial computed tomography (with no significant results), a Holter (without electrocardiographic alterations), and a magnetic resonance imaging (identifying mild leukoaraiosis). Thinking about neurological origin, antiepileptic treatment was started (levetiracetam 250 mg/12 h). After another episode, levetiracetam dose was increased and valproic acid was added. Despite treatment, he experienced disconnection with a 14-s sinus pause. According to Cardiology, a pacemaker implant was placed, after which he had a milder syncope. Given functional deterioration, he was referred to a functional recovery unit, with follow-up by Geriatrics and Neurology, where progressive withdrawal of antiepileptic treatment was possible since he didn't have new crises.

Conclusions: In this case we found symptoms that pointed us towards neurological disease, such as insular epilepsy, as well as others (like improvement after the pacemaker implant) led us to consider cardiologic origin. However, no significant alterations were observed in the studies carried out, thus showing how complex it's the diagnose of syncope in older adults, being multifactorial on many occasions.

P-0078

Prevalence, characteristics, and management of pain in acutely hospitalized older adults

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Introduction: Pain is frequent among older adults and often under-diagnosed and undertreated. Chronic pain significantly affects functional independence, quality of life, and healthcare costs. Despite widespread analgesic use, gaps in pain assessment and management remain in geriatric populations.

Methods: This retrospective study analyzed data from patients admitted to a geriatric ward from July to December 2018. Pain assessment, analgesic prescriptions, and analgesic effects were evaluated. Collected data included demographics, comorbidities, functional status, medications, and pain documentation. Changes in analgesics and adverse effects were recorded.

Results: 404 patients were included. Median age was 86 years (range 60–101), and 62% were women. Pain was assessed in 92% (n = 370); of these, 256 (69%) reported pain. Pain characteristics were specified in 8.2% (n = 28) but missing in 57% (n = 211). Analgesic treatment was modified in 191 patients (52%), and 142 (38%) experienced pain relief. Pain reassessment was undocumented for 107 patients (27%). Opioids were prescribed for 65 patients (16%) at admission and 98 patients (24%) at discharge, significantly associated with constipation and longer hospital stay. Cognitive side effects were observed in 50% of patients on opioids, although this was not statistically significant.

Key conclusions: This study highlights the high prevalence of pain among acutely admitted geriatric patients and reveals deficiencies in pain assessment, documentation, and management. Systematic assessment, improved documentation, and multimodal management strategies are crucial. Balancing effective analgesia with adverse effect risks, especially opioids, remains essential. Prospective studies are needed for optimal geriatric pain management.

P-0079

Extended-spectrum beta-lactamases: an epidemic in the elderly

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Objective: To evaluate the evolution of the prevalence of Extended-Spectrum Beta-Lactamase (ESBL)-producing Gram-Negative Bacilli (GNB) in urinary tract infections (UTIs) among elderly patients admitted to an Acute Geriatrics Unit (AGU).

Method: UTIs in patients admitted to AGU, in three periods, were studied: 2004–2007 (period 1), 2016–2020 (period 2) and 2022–2023 (period 3). The prevalence of the most common germs, the prevalence of ESBL-producing GNB and the influence of patient origin on the aetiological germ were determined.

Results: 1195 cases were included (period 1: 411, period 2: 542, period 3: 242). The prevalence of GNB was 94.40%, 89.85%, and 88.02%, respectively. *Escherichia coli* was the most frequent germ (68.04%, 60.78%, and 57.28%), followed by *Klebsiella pneumoniae* (12.11%, 16.84%, and 19.72%), *Pseudomonas aeruginosa* (5.93%, 6.98%, and 1.88%), and *Proteus mirabilis* (4.12%, 4.93%, and 8.92%). The prevalence of ESBL-producing GNB was 7.47%, 20.33%, and 15.49%, respectively ($p < 0.001$). The prevalence of ESBL-producing GNB in institutionalized patients compared to non-institutionalized patients in each period was 12.12% vs. 5.08% ($p < 0.01$), 29.41% vs. 18.36% ($p < 0.02$), and 27.91% vs. 12.35% ($p < 0.01$).

Conclusions: GNB are the most common UTI-causing organisms in the elderly, *Escherichia coli* being the most prevalent. The prevalence of ESBL-producing GNB has increased significantly in recent decades, especially among institutionalized elderly patients, where more than one in four UTI is caused by ESBL-producing GNB. A slight decrease in the prevalence of BLEE-producing GNB has been observed in recent years, probably related to campaigns for correct antibiotic use.

P-0080

Antibiotic resistance in urinary tract infection: an increasing problem

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Objective: To assess the evolution of antibiotic sensitivity of Gran Negative Bacilli (GNB) causing urinary tract infection (UTI) in elderly people admitted to an Acute Geriatric Unit (AGU).

Method: UTIs caused by GNB were studied in two time periods: 2004–2007 (period 1) and 2022–2023 (period 2). The prevalence of the most frequent germs and their sensitivity to antibiotics in each period was determined.

Results: 601 patients were included (period 1: 388; period 2: 213). The most prevalent germs were *Escherichia coli* (68.04% and 57.28%) and *Klebsiella pneumoniae* (12.11% and 19.72%); which represents more than 80% of the sample. Sensitivity of *Escherichia coli* was: aminoglycosides 100% vs 98.36% (p 0.03), carbapenems 100% vs 99.18%, cefotaxime 90.91% vs 78.69% (p 0.0009), amoxicillin-clavulanate 92.80% vs 72.33 (p < 0.0001), piperacillin/tazobactam 96.97% vs 89.52% (p 0.003), fosfomycin 98.47% vs 96.67%, ciprofloxacin 59.47% vs 54.10% and co-trimoxazole 41.67% vs 30.33% (p 0.03). Sensitivity of *Klebsiella pneumoniae* was: aminoglycosides 100% vs 100%, carbapenems 100% vs 100%, cefotaxime 93.62% vs 71.43% (p 0.005), amoxicillin-clavulanate 93.62% vs 66.67% (p 0.001), piperacillin/tazobactam 95.74% vs 78.57% (p 0.01), fosfomycin 84.09% vs 73.17%, ciprofloxacin 80.85% vs 61.90% (p 0.04) and co-trimoxazole: 89.36% vs 78.57%.

Conclusions: GNB sensitivity is very good for aminoglycosides and carbapenems and it is maintained over time. GNB sensitivity for cefotaxime, amoxicillin-clavulanate and piperacillin/tazobactam, previously good, decreases significantly over time and is currently insufficient. GNB sensitivity for fosfomycin is good only for *Escherichia coli*. GNB sensitivity for ciprofloxacin and cotrimoxazole, previously insufficient, decreases significantly over time.

P-0081

Avoidable emergency hospital admissions in institutionalised patients after assessment by a geriatric liaison unit

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Objective: Geriatric liaison teams aim to prevent hospital admissions. Our unit routinely assesses nursing home residents in the Emergency Department (ED) who have been recommended for hospital admission, often facilitating their return to the nursing home and thus avoiding hospitalisation. This study aims to determine how many of these patients return to the ED within 48 h or 15 days of discharge and to assess their three-month mortality.

Methods: A descriptive, retrospective study was conducted of ED discharges following a geriatric liaison assessment over three years, excluding patients in palliative care.

Results: A total of 79 patients were analysed (84.8% women mean age 93 ± 4.9 years). Severe physical dependence (Barthel < 20) was present in 43%, advanced dementia in 68.3% and malnutrition (MNA-

SF < 7) in 36.7%. Most patients were on polypharmacy (92.4%) and half on hyperpolypharmacy. The most common discharge diagnoses were respiratory (55.7%), urinary (22.7%) and cardiac conditions (7.6%). In 55.7% of cases, the liaison unit had assessed the patient within the previous three months. After ED discharge, 17.7% received new oral treatment, 51.9% received intravenous drugs and 31.6% received nebulized therapy. Within three months, 24% had died. ED return rates were 10.5% within 48 h and 24% within 15 days. Of these, 68.4% were re-evaluated for the same condition, with 42.1% requiring hospitalisation. Three-month mortality was higher in those requiring reevaluation (p = 0.05).

Conclusions: Most nursing home patients discharged early with follow-up by a geriatric liaison teams do not require readmission, despite their advanced physical and cognitive impairment and high risk of mortality.

P-0082

Pylephlebitis: a case report

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Introduction: Pylephlebitis is the septic thrombosis of the portal system, secondary to abdominal infection (diverticulitis, appendicitis, and biliary infection).

Methods: An 89-year-old independent patient with autoimmune gastritis and intestinal metaplasia was referred for consultation due to abdominal pain. The patient described epigastric pain lasting for several months, a 5 kg weight loss, and functional weakness.

Results: In the emergency department, an electrocardiogram, laboratory tests and chest and abdominal X-ray were requested, showing no significant abnormalities. In the medical consultation the abdomen was depressible with generalized pain, and an epigastric mass. A thoracoabdominal Computed Tomography scan (CT) was requested, revealing acute pulmonary thromboembolism, thrombosis of the left portal vein, and signs suggestive of acute diverticulitis at the hepatic flexure. Laboratory results showed a mild elevation of transaminases and infection markers with 73952 U/ml CEA-19 and 12 ng/ml CEA, prompting hospitalization.

Anticoagulation and antibiotic therapy (Ciprofloxacin and Metronidazole) were initiated. A transthoracic echocardiogram, Holter, and thrombophilia study were ordered. To rule out a tumor etiology, magnetic resonance imaging was requested, confirming diverticulitis with findings suggestive of pylephlebitis with microabscesses. Ciprofloxacin was replaced with Ceftriaxone and parenteral nutrition was initiated. Subsequently, due to worsening laboratory results, the antibiotic coverage was broadened (Ampicillin and Tobramycin continuing with Metronidazole). Ultimately, the patient worsened and passed away.

Conclusion: Pylephlebitis is an uncommon intra-abdominal complication. The most frequent symptoms are abdominal pain and fever. Laboratory tests may show infection parameters, elevated liver enzymes, and coagulopathy but the diagnostic test of choice is CT. The treatment involves early broad-spectrum antibiotics.

P-0083**Get up, get moving: promoting mobilisation on the Acute Medical Unit**

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Introduction: To improve knowledge of the effects of prolonged bed rest amongst the multidisciplinary team and understand the barriers of promoting mobilisation on medical wards during in-patient stays.

Methods: A qualitative analysis through questionnaires given to 22 clinicians and 22 members of the nursing team was carried out in the acute medical unit at Wythenshawe hospital. Data from the questionnaires was analysed using Microsoft excel and Pivot tables.

Results: 100% of all clinicians and nursing staff were aware of the effects of prolonged bed rest, including ‘physical deconditioning’, ‘pressure sores’, ‘increased risk of venous thromboembolism’, risk of infections and effects on mood. 86% of clinicians said they enquire about a patient’s baseline mobility on admission or during daily review. 59% of nursing staff said clinicians do not update them about a patient’s baseline mobility following ward round. 41% of the nursing team highlighted a particular barrier to mobilisation was patient refusal and 27% cited lack of available mobility aids.

Conclusion: Overall, clinician and nursing teams understand the risk of immobility on patients. However, there were several barriers identified to doing this effectively. These include lack of equipment, inadequate communication between teams, time or staffing constraints and patient refusal.

Our planned interventions include posters to encourage patients, lunchtime learning and discussions with clinical and nursing teams as well as liaising with physiotherapy colleagues around providing further education and equipment.

P-0084**Probable sarcopenia and pre-operative anaemia in older hip fracture patients**

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Introduction: Sarcopenia is common in older patients. The European Union Working Group on Sarcopenia in Older People (EWGSOP 2) defines sarcopenia as “a progressive and generalized muscle disorder characterized by a low muscle mass and function”. It is associated with adverse outcomes in older patients including poor mobility, falls and fractures. It is especially common in older hip fracture patients and has been shown to lead to poor functional ability post-operatively. The relationship between anaemia and sarcopenia has shown mixed results in previous studies although a more recent meta-analysis showed that anaemia is significantly associated with sarcopenia in older patients. The relationship between sarcopenia and pre-operative anaemia in hip fracture patients has not been extensively studied.

Aims and objectives: To determine the relationship between pre-operative anaemia and probable sarcopenia in older post-operative hip fracture patients.

Methodology: An observational study on hip fracture patients admitted to a UK University Hospital. Patients had hand grip strength (HGS) measured between 24 and 72 h post-operatively using the hand-held JAMAR dynamometer. The Southampton protocol was used. The EWGSOP 2 cut offs were used to define probable

sarcopenia (< 27 kg for men and < 16 kg for women). Patients had to be 60 years and above to be included. Exclusion criteria included patients with significant cognitive impairment, patients with hemiparesis and patients who were physically unable to perform the test. Patients with incomplete data were excluded from analysis.

Statistical analysis was carried out using the SPSS 29 IBM software. Baseline characteristics were performed using summary statistics and multiple logistic regression was used to assess correlation.

Results: 105 patients were studied – 33 males and 72 females. Mean age was 82.2 years (SD 9.95); 82.1 years (SD 9.57) in males and 82.2 years (SD 9.95) in females. Overall mean HGS was 16.2 kg (SD 6.74); 20.1 kg (SD 7.98) for males and 16.01 kg (SD 6.59) for females. About 71.6% of all the patients analysed had probable sarcopenia; 78.1% of males and 69.6% of females. Mean pre-operative haemoglobin (Hb) overall was 118 g/l (SD 19.05); 116 g/l (SD 19.6) for males and 119 g/l (SD 18.9) for females. Overall incidence of pre-operative anaemia was 53.9%; 69.7% in males and 46.3% in females. Multiple logistic regression revealed a statistically significant positive correlation between probable sarcopenia and pre-operative anaemia (OR 7.5; $p = 0.035$), age (20% greater in probable sarcopenia group; $p = 0.003$) and SARC-F score (44% greater in the probable sarcopenia group; $p = 0.04$) and a statistically significant negative correlation with weight (5% less in the probable sarcopenia group; $p = 0.02$) and female gender (OR 0.22; $p = 0.036$).

Conclusions and discussion: Pre-operative anaemia was positively correlated with probable sarcopenia in this cohort of older hip fracture patients. This obviously needs to be replicated in larger multicentre studies but clearly raises questions about whether correcting pre-operative anaemia may help reduce post-operative sarcopenia in this group of patients.

P-0085**Breaking bad: the shocking gap in osteoporosis care for COPD patients**

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Background: Chronic obstructive pulmonary disease (COPD) is closely linked to osteoporosis and fragility fractures due to factors like chronic inflammation, glucocorticoid use, and vitamin D deficiency. Despite NOGG guidelines, FRAX® assessments and bone-protective therapies are underutilized in this population. This study aims to evaluate bone health and identify treatment gaps in osteoporosis management among COPD patients.

Method: An observational, prospective study was conducted on all medical admission ≥ 60 years old ($n = 50$) with COPD in an Irish University Hospital for a period of 4 weeks in February 2025. Data analysis was performed using WEKA Explorer 3.8.6. Chi2 test was utilised to check for significance ($p < 0.05$).

Result: 50% of patients sustained some form of fracture with Vertebral fractures predominated 24%, followed by rib 12%, wrist 12%, hip 6% and others (50%). 24% of patients had ≥ 2 fractures, with 38% sustaining major fractures. Only 58% of patients had vitamin D level tested. Of these, 58.9% were deficient (≤ 20 ng/mL) and 13.7% receiving no Vitamin D supplementation. 4% had calcium deficiency, yet none received calcium supplementation. Using NOGG criteria, 20% of patients were deemed high and very high risk of Major osteoporotic fracture, but only 30% received anti-osteoporotic treatment ($p = 0.005$).

Conclusion: The high vertebral fracture prevalence aligns with COPD’s systemic inflammation and muscle-bone crosstalk

dysfunction, which accelerate bone resorption. The low rate of osteoporosis therapy indicates under-recognition of fracture risk, highlighting actionable gaps in osteoporosis care for COPD patients while emphasising the need for guideline-driven interventions to reduce fracture-related morbidity.

P-0086

Common geriatric infections. What is the risk of dying if hospitalized for a common infection?

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Aim: To assess 30-day mortality risk in hospitalized older patients with common infections (2020–2023).

Introduction: Infections requiring hospitalization are more common among older adults compared to younger adults. Mortality of such common geriatric infections, and its possible variation over time is, however, studied inadequately. Comparative data from recent years shows a substantial decrease in death from Covid-19 among older adults but there is no similar data for other common infections.

Methods: Electronic health records from nine geriatric clinics included patients with pneumonia (n = 1,601), bacteremia (n = 1,396), urinary tract infection (UTI, n = 5,359), Covid-19 (n = 3,634), Covid-19-pneumonia (n = 1,462), and a reference group without these infections (n = 32,644) from 2020–2023. Mortality within 30 days was analyzed using logistic regression, adjusted for age, sex, and frailty.

Results: Reference group mortality was 4–7%. Among infection groups, rates ranged from 3–5% (UTI), 6–13% (pneumonia), 8–15% (bacteremia), 29–8% (Covid-19), and 17–4% (Covid-19 w/o pneumonia). Before Feb 2021, adjusted mortality risk was highest for Covid-19-pneumonia (OR 7.42 [5.83–9.42]) and Covid-19 (4.82 [3.78–6.14]). After May 2022, Covid-19-pneumonia risk dropped (2.05 [1.04–3.68]), with bacteremia (2.37 [1.57–3.48]) and pneumonia (1.78 [1.18–2.61]) having similar risks. Covid-19 without pneumonia no longer differed from the reference group (1.06 [0.72–1.50]).

Key conclusions: UTI had the lowest fatality, while bacteremia and Covid-19-pneumonia had the highest. By 2022, Covid-19 mortality was comparable to the reference group. Throughout the study period all other infections had a persisting higher mortality rate.

P-0087

Algorithm for selection of new antibiotics against MRSA for skin and soft tissue infections in a regional hospital. A decision-making aid in the elderly

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Introduction: The new antibiotics known as “long-acting” and the new quinolone delafloxacin facilitate the treatment of MRSA infections, but their cost is high, making it necessary to discern which patients may benefit most from them, taking into account cost-effectiveness parameters, bacterial ecology, and resistance development [1].

Methods: We present a decision-making algorithm for patients in both, the emergency department and the hospital ward, taking into account:

- Is the patient hemodynamically stable?
- Is MRSA suspected?

- Is Gram-negative bacteria suspected?

Then the following data are recorded:

- Lack of treatment adherence is expected.
- Oral treatment failure.
- An attempt is made to avoid admission.
- Looking for early discharge.
- No oral treatment available.

- No other alternatives or therapeutic difficulties due to patient characteristics.

If these premises are met, the infectious diseases team will be notified and will assess whether the patient is a candidate for these new treatments [2].

A chart with arrows is added to guide treatment based on common difficulties associated with these infections: presence of MRSA/Enterococcus spp. vancomycin-resistant, renal failure, cytopenias, history of C. difficile, sequential oral therapy, lack of adherence, or attempt to avoid admission [3].

Reevaluation of the patient is necessary within 48–72 h (by telephone or in person).

Results: The impact of implementing this algorithm will be assessed by collecting patient data over the course of one year, along with its feasibility.

Conclusions: Strategies for better treatment selection for multiresistant infections are needed, adapted to the conditions of older patients, with a particular focus on reducing hospital stay.

P-0088

Correlation of age and gender with six months mortality rate in patients with stroke in a long term care facility nurse perspective

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Correlation Of Age And Gender With Six Months Mortality Rate In Patients With Stroke In A Long Term Care Facility—Nurse’s Perspective.

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Introduction: Stroke is associated with a higher mortality rate in older adults. According to literature female gender and higher age is associated with higher 6-months mortality rate.

Methods: An observational study of a six-month mortality rate in hospitalized and treated patients in the PHI specialized Hospital for geriatric and Palliative Medicine “13 November – Skopje (Long - Term Care). Data collected from the patients records from June 2024 to November 2024. Mortality rate and correlation with age and at admission were evaluate.

Results: N = 43 patients with stroke > 65 years (65–85 years), 31 females (72.1%), 12 males (27.9%), average age 75 years. Mortality rate by gender – 6 females died (19.3%), 5 males died (41.6%), total 11 patients died (24.4%). Mortality rate by age: 65–75 age group—females – 19, males—8. 75–85 age group Females 23, males 4. Mortality rate by age: females (age group 65–75) – 2 (10.5%), (age group 75–85) – 4 (17.4). Males: (age group 65–75) – 2 (25%), (age group 75–85) – 3 (75%).

Key conclusions: A six-month observation of mortality rate in our small sample of hospitalized patients with stroke, noted by the nurses, showed higher mortality rate in male patient, and in higher age group. These results differ from the literature where the female gender is correlate with higher mortality.

P-0089

Unknown origin fever in a patient with Parkinson’s disease: dyskinesia-hyperpyrexia syndrome

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A 76-year-old woman, allergic to beta-lactams and quinolones, ex-smoker with moderate persistent asthma, hypertension, restless leg syndrome, long-standing Parkinson’s disease, spondyloarthritis, and a history of bilateral pertrochanteric fractures (operated), with a large polypharmacy, including Sinemet Plus every 6 h, Sinemet before bedtime, ropinirole, pregabalin, and escitalopram. She is semi-dependent for basic activities and without cognitive impairment, living at home with her daughter. She was admitted in summer for a week-long deterioration of her general condition, fatigue, nausea, urinary symptoms, and fever of 38.8 °C for twenty-four hours. In urine culture grew *Escherichia coli*, and acute-phase reactants were elevated in blood test, so fosfomycin was started. Due to persistent fever, gentamicin was introduced, worsening her Parkinson’s symptoms, and was later switched to meropenem for suspected right tibial cellulitis, but a skin rash and high fever started, so vancomycin was added. However, red eyes, dyskinesias and arthralgia launched. Suspecting drug-induced dermatitis, antibiotics were discontinued, and corticosteroids were started with little improvement. Due to myoclonus and exacerbated rigidity in the context of high fever, Neurology was consulted to perform a lumbar puncture, but finally suspecting a dyskinesia-hyperpyrexia syndrome due to her Parkinson’s history. Ropinirole was withdrawn, and escitalopram and pregabalin dose were reduced, leading to fever resolution and clinical improvement, allowing hospital discharge.

Dyskinesia-hyperpyrexia syndrome is rare but potentially fatal, overlapping with serotonin syndrome, highlighting hyperpyrexia and dyskinesias. High environmental temperatures often trigger it. Complications include pneumonia, electrolyte disturbances, acute kidney injury, and respiratory failure. Treatment involves supportive care, reducing dopaminergic drugs, and sedation.

P-0090

Enterovesical fistula in a frailty patient: could octreotide be the game changer?

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A 78-year-old male, functionally independent and cognitively preserved, with type 2 diabetes, hypertension, previous myocardial infarction, and history of colon adenocarcinoma underwent right colectomy and reintervention due to perforation. One year later, hepatic metastasis was diagnosed, and chemotherapy was initiated. Since March, he experienced recurrent urinary tract infections requiring indwelling catheter placement. After catheter removal, he developed anuria, leading to multiple admissions. In September, he was readmitted with persistent anuria despite catheter placement. Blood tests revealed elevated inflammatory markers, and empirical antibiotics and fluids were started. Urology evaluated him in the emergency department, suspecting a vesical fistula. Cystography and cystoscopy revealed a small fibrotic orifice (< 1 cm), suggestive of a fistula. No biopsy was taken. Abdominopelvic CT showed sigmoid diverticulosis and a sigmoidovesical fistula without clear tract visualization.

The case was discussed in a multidisciplinary team. Given moderate frailty (VIG-Fragil 0,4), a conservative approach was chosen: 14 days of antibiotics plus subcutaneous octreotide at 0.1 mg every 8 h for 3 days, then once daily for 12 days. A follow-up CT with methylene blue instillation showed no visible fistulous tract.

The patient was discharged with a urinary catheter and has remained stable, with no further hospital admissions.

Enterovesical fistulas may result from malignancies, inflammation, or postoperative complications. Octreotide, a synthetic analogue of somatostatin, has been used as an adjunctive treatment in the medical management of gastrointestinal fistulas. Although it is mainly used in pancreatic fistulas, more studies are needed to validate its efficacy beyond isolated case reports like this.

P-0091

Uncovering lung cancer through Trousseau’s syndrome: multiterritorial ischemic strokes as a red flag

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An 86-year-old man with no previous cognitive decline and fully independent in basic activities, with a history of diabetes, hypertension, dyslipidemia, and atrial fibrillation anticoagulated with apixaban, was admitted for evaluation of rapidly progressive cognitive decline and two syncopal episodes characterized by disconnection from surroundings, incoherent speech, and babbling, lasting about an hour, without motor deficits. His daughter reported significant weight loss (15 kg since January), memory loss, and behavioral changes (verbal aggression, poor hygiene).

Upon arrival: he was conscious, slightly inattentive, and disoriented in time and space. He followed simple commands and had no dysarthria, though his speech was incoherent, but no cranial nerve deficits or sensory/motor abnormalities.

During hospitalization, he showed marked cognitive and functional decline: persistent disorientation, incoherent speech, inattention, and quadriceps weakness, requiring assistance to stand. A brain CT

revealed a probable subacute ischemic lesion in the left parietal lobe. Rust-colored sputum and respiratory symptoms led to tumor marker testing, elevated. Thoracoabdominal CT showed a 4.5 cm mass in the right lower lung lobe with pulmonary and hepatic metastases, carcinomatous lymphangitis, and hilar lymphadenopathy. Brain MRI showed multiple supra and infratentorial embolic infarcts. The patient deteriorated rapidly. After family consensus, care was limited and he passed away. Trousseau's Syndrome is a paraneoplastic hypercoagulable state linked to malignancy, causing arterial and venous thromboembolism. Cerebral infarction is the most common result of arterial embolism and the pathogenesis is complicated. Neurological symptoms and multiple unexplained infarcts should raise suspicion of an occult neoplasm for a targeted diagnostic and therapeutic approach.

P-0092

Exploring an alternative acute care pathway for nursing home residents

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Background: Nursing home residents (NHRs) represent the frailest group of healthcare service users with highly complex care needs. It is well accepted that high rates of emergency department (ED) attendances and hospital admissions are common among this group. Ambulatory, community based unscheduled care should be explored as alternative pathways that could provide safe and quality care for NHRs.

Methods: This retrospective study examined NHRs admitted between June and December 2024, to a University Teaching Hospital. Data on diagnoses, length of stay and readmission rates collected.

Results: A total of 312 NHRs presented to the ED over the 6 month period. Rate of admission was 63.8% (n = 199). Of these, 68.3% (n = 136) admitted under the geriatric service. Close to 30% (n = 59) of admitted NHRs were discharged within 48 h. One month re-admission rate of this group was 10.1% (n = 6). The three most common discharge diagnoses were lower respiratory tract infection (n = 15), aspiration pneumonia (n = 11), and falls (n = 10). 16.5% NHR admissions (n = 33) occurred outside of normal working hours.

Conclusion: This study highlights the high admission rate of NHRs, particularly when ED presentations occurred outside of normal working hours. Almost 1 in 3 of admitted NHRs had hospital length of stay of ≤ 48 h, without higher re-admission rates. The potential of ambulatory care pathways including outreach services to nursing homes to reduce hospital admissions and to avoid associated iatrogenic complications, should be further explored.

P-0093

Complex medical co-morbidity in nursing home residents: a retrospective analysis of hospital admissions and outcomes

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Background: Nursing home residents (NHRs) represent a vulnerable population with complex healthcare needs. Despite presenting to emergency departments (EDs) with seemingly uncomplicated issues, they frequently receive multiple diagnoses, reflecting their medical, psychological, and social needs. This highlights the necessity for comprehensive geriatric care.

Methods: This study retrospectively analysed NHRs admitted over six months (June–December 2024) to a University Teaching Hospital. Diagnoses, Charlson Comorbidity Index (CCI) scores, and mortality outcomes were examined.

Results: A total of 312 NHRs presented to the ED; 63.8% (n = 199) were admitted. Of these, 68.3% (n = 136) were under the geriatric service, while 31.7% (n = 63) were admitted under other specialised services.

Among admitted NHRs, 88% (n = 175) had a CCI ≥ 5 . Those under geriatric care had greater complexity, with 91% having a CCI ≥ 5 . 84% other disciplines.

Average length of stay (LOS) was 8 days. On discharge, 80% (n = 109) had 2 or more diagnoses, and 25% had 4 or more. The most common discharge diagnoses included lower respiratory infection (n = 56), falls (n = 36), acute kidney injury (n = 33), urinary tract infection (n = 30), aspiration pneumonia (n = 29), and constipation (n = 20).

In-patient mortality rate was 8.8% (n = 12) and three-month post-discharge mortality was 15% (n = 19). Of the 199 admitted NHRs, 47% had dementia and 9% had mild cognitive impairment (MCI). Delirium was documented in 25%.

Conclusions: These findings highlight the complex care needs among NHRs, with high hospital admission rates, and wide range of acute clinical diagnoses. There is a need for an enhanced focus on developing specialised acute geriatric care for NHRs in hospitals, to drive improvement in overall clinical outcomes.

P-0094

Vascular purpura in the elderly: clinical insights and pathophysiological considerations

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Background: Vascular purpura (VP) is a common clinical manifestation, referring to the involvement of small vessels in the dermis and possibly the hypodermis. Diagnosing the underlying cause can be challenging due to diverse etiologies, which may vary with factors such as age. This study aimed to compare VP characteristics between individuals younger than 65 years and those aged 65 and older.

Methods: A retrospective study was conducted between January 2005 and March 2025, including patients hospitalized for VP in an internal medicine department. Statistical analyses were performed to compare collected data between two groups: an elderly group (E-VP) for those aged 65 and above, and a younger group (Y-VP).

Results: A total of 52 patients were included, 13 of whom were elderly (25.5%). The sex ratio was 1. VP was isolated among 9 patients. Extra-cutaneous manifestations included fever (n = 24), joint pain (n = 19), renal involvement (n = 12), peripheral neuropathy (n = 11), general state alteration (n = 9) and abdominal pain (n = 9). Age-related manifestations were general state alteration (p = 0.01), and peripheral neuropathy (p = 0.03). Hemorrhagic complications appeared to be more frequent in E-VP (p = 0.06). The average time to diagnosis was 16.6 days [0–75]. The main etiologies included IgA vasculitis (n = 6), other systemic vasculitis (n = 15), connective tissue diseases (n = 10), post-infectious disorders (n = 9), medication-related illness (n = 6) and malignancy-related vasculitis (n = 3). E-VP was associated with IgA vasculitis (p = 0.03) and malignancy

($p = 0.014$), while connective tissue disease was linked to Y-VP (0.04).

Conclusion: Age impacts the presentation and etiologies of VP, highlighting the need for tailored management strategies for elderly patients.

P-0095

Suicide following mechanical ventilation in mid- to late-life patients who overdose on opioids

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A prior study found that mechanical ventilation (MV) was associated with elevated 1-year suicide risk among individuals age 18–64 who had overdosed on opioids. Using data from the U.S. Department of Veterans Affairs (VA) Health Administration, Medicare claims, and the Mortality Data Repository, we examined the relationship between MV following opioid overdose and suicide in persons 50 and over and in two age-strata (50–64; 65+). Veterans who were hospitalized for non-fatal opioid overdoses between January 1, 2011 and December 31, 2019 were followed until December 31, 2020. Propensity scores were used to match veterans who received and did not receive MV on 45 variables, many associated with suicide (e.g., alcohol use disorder, bipolar disorder, cancer, congestive heart failure, major depression, self-harm, suicide ideation). The overall propensity-matched sample included 3532 Veterans. About 1% of the sample died by suicide within a year of hospital discharge; the median time to suicide was 8 days. The hazard ratio (HR) for suicide was 3.09 times higher (95%CI[1.45,6.56]) for those who received MV. HRs in the age-stratified samples were 5.74 [1.68,19.58]) for those 65+ and 1.24 [0.49, 3.15] for those 50–64. In a U.S. nationally representative cohort of veterans 50 years of age or older who were hospitalized following an opioid overdose, MV was associated with increased risk of suicide death in the entire sample. This finding is largely attributable to heightened risk among those who are 65+. These findings underscore the importance of initiating appropriate suicide-prevention care in at-risk patients who have received MV.

P-0096

Inherent potential of a Geriatric Emergency Department

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Introduction: At the Geriatric Emergency Department (GED), interdisciplinary geriatric competencies are assembled to combine acute medicine and geriatric interventions for older acutely admitted older patients. This study aimed to investigate possible differences in outcome and characteristics between patients directly discharged from the GED or from the acute medical ward (AMU).

Methods: Outcomes and characteristics from two distinct clinical cohorts were compared: 323 patients from the Copenhagen

PROTECT Study (patients ≥ 65 years acutely admitted to the AMU) and 201 patients from the BFH-GED Cohort (patients ≥ 65 years acutely admitted to the GED) by the Wilcoxon signed-rank or chi2 test. Outcomes were length of stay (LOS (h)), and 90-day readmission and 90-day mortality. Characteristics included age, sex, frailty (CFS), early warning score (EWS), C-reactive protein, Charlson Comorbidity Index (CCI), residential stay, cohabitation, and the orientation-memory-concentration test (OMC).

Results: Median LOS was significantly shorter in the GED than in the AMU (6.0 h (IQR = 2.6) vs. 29.9 h (IQR = 24.4), $p < 0.0001$) with similar risk of 90-day readmission ($p = 0.38$) and death ($p = 0.88$). Median age was higher ($P = 0.002$) and EWS was lower ($p < 0.0001$) in the GED than the AMU, and more patients had $CCI \geq 5$ ($P = 0.03$) and $CFS = 7-9$ ($p < 0.0001$). All other characteristics were found non-significantly different between the cohorts.

Key conclusions: Our geriatric emergency department assessed frail and older patients with a higher degree of comorbidities rather than acute deterioration during short length of stay. Correctly identifying patients for GED units might potentially allow for shorter stays without increasing readmission- and mortality rate.

P-0097

Transient global amnesia in older adults: a case series with review of brain imaging

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Introduction: Transient Global Amnesia (TGA) is a clinical syndrome characterized by acute onset of anterograde amnesia. While magnetic resonance imaging (MRI) can be normal, restricted diffusion in the hippocampal/entorhinal cortex network is commonly found 24–72 h after symptom onset, an area important for the formation of early memory and its transference to remote memories stored in the neocortex. Such patients are often referred for stroke work-up. Few studies have characterised patients admitted to a Geriatric Medicine Unit.

Methods: Retrospective review and characterisation of consecutive cases presenting with transient amnesia to a Geriatric Medicine Unit with presumed transient ischaemic attack (TIA) or minor stroke.

Results: In total, 5 cases were available: 3 females and 2 males, age range 55–76 years. The average duration of symptoms was 3.9 (range 30 min to 8) hours. All had full resolution. Most (80%), reported recent life stressors. While all patients were initially treated as a TIA or minor stroke, none had neurological findings on examination and none received thrombolysis. Immediate CT imaging was normal. MRI brain (1.5 Tesla) with diffusion weighted imaging (DWI) was done on average within 43.4 ($R = 31-50$) hours from symptom onset. All showed hippocampal abnormalities on DWI, localized to the lateral portion of the hippocampus. Lesions tended to be small (1–3 mm) with high signal foci in the CA1 field of the hippocampus.

Conclusions: Older patients with transient amnesia are unlikely to have a TIA or stroke. This retrospective study highlights the importance of delayed imaging with MRI to support a clinical diagnosis.

P-0098

The development and evaluation of evidence-based training on the communication practices of acute hospital ward staff which avoid, de-escalate or resolve the distressed behaviours of inpatients living with dementia

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Introduction: Distress in PLWD may be indicated by a range of behaviours, including agitation, verbal and physical aggression, exit-seeking and resistance to personal care [1]. These behaviours are common in the hospital context, with 20% of people over 70 admitted to UK emergency units displaying 'agitation or aggression' [2] and staff reporting a lack of training in how to manage such behaviour [3]. The VOICE2 study used conversation analysis to unpack the everyday communication practices used by hospital staff to avoid, de-escalate and resolve distressed behaviours in order to inform a training programme.

Methods: Video recordings of naturally occurring interactions between healthcare professionals (HCPs) and PLWD who had previously shown distress were collected from older person's wards in two UK acute general hospitals. HCPs were recruited from across the multidisciplinary team. Activities and contexts where distress had been triggered for participants were targeted for data collection. The 53 recordings collected were analysed using Conversation Analysis with a focus on identifying potentially 'trainable' communication practices.

Results: The analysis revealed three areas of trainable communication practices for HCPs in avoiding and reducing distress: dealing with patients' reality disjunctures; accounting for activities that cause patients concern; and avoiding breaking conversational rules.

Key conclusions: Conversation analysis has made explicit some of the subtle communication practices used by HCPs in reducing distress for PLWD in hospital. This new knowledge has been used to form the content of a new training intervention, developed with stakeholders, which is being evaluated for feasibility across three UK hospital sites.

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P-0099

Bochdalek hernia: a case report

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Introduction: In 1848, Bochdalek first described the improper fusion of the posterolateral foramina of the diaphragm. Although a childhood

disease, it may be incidentally found on computer tomography in adult patients. Just over 100 studies of asymptomatic hernias have been reported in literature. Symptomatic cases are rare.

Methods: A lady in her 70s presented to hospital due to fall and subsequent chest pain. She had a background history of a Bochdalek hernia, severe kyphosis and anxiety. She was also dependent on benzodiazepines. During her hospital stay, she developed type 2 respiratory failure.

Results: This was felt to be secondary to oversedation due to dependency on benzodiazepines, which were weaned. Her anxiety symptoms then worsened due to her chronic shortness of breath. This was likely secondary to her large Bochdalek hernia and she became dependent on nocturnal non-invasive ventilation (NIV) as a result. Her management and discharge destination proved challenging as she was keen to go home. Despite full multidisciplinary input, and support at home, she had multiple readmissions with respiratory failure due non-compliance with her nocturnal NIV machine.

Conclusions: Bochdalek hernia is a rare phenomenon in adulthood. In the geriatric population it is difficult to manage co-morbidities. The elderly often have atypical presentations of diseases and subtle symptoms. Polypharmacy and medication side effects can also mask a clinical picture or contribute to a complicated clinical course. It is important to involve the patient in discussions regarding goals of care, to ensure interventions are in line with their expectations.

P-0100

Improved screening for delirium in an acute geriatric ward: a quality improvement project

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Introduction: Delirium commonly affects inpatients in medical wards and can have serious effects on patients, such as increased mortality and length of hospital stay. The incidence of delirium during admission can reach 29% (1). In Landspítali University Hospital Acute Geriatric Ward there is currently a lack of screening for delirium. Our aim is to increase delirium screening with the goal that each inpatient is screened daily.

Method: Our setting is at the largest hospital in Iceland which is a referral hospital for the whole country. Screening is performed using the Delirium Observation Screening (DOS) scale which is a 13-point screening tool, based on DSM-IV delirium criteria, designed to be completed by a nurse or nurse assistant. The DOS is integrated and easily accessible in the patients' daily medical records. To encourage DOS screening, an informational staff meeting was held with ward staff and an internal group of champions was appointed to implement the DOS into the staff's work routine.

Results: Baseline measures show a lack of screening. During a 14-day measuring period only two days had DOS documentation. On those two days when DOS was documented only one patient of 22 was screened (0.05%). Further data will be collected as the quality improvement project progresses. The project timeline is from January to June 2025.

Conclusion: There is a lack of screening for delirium at Landspítali University Hospital Acute Geriatric Ward. By increasing awareness and using simple implementation strategies we hope to improve screening for delirium.

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P-0101**Audit of traumatic brain injury (TBI) management at the National Major Trauma Centre**

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Introduction: Ireland's National Trauma Strategy advocates for coordinated, specialist-led trauma care within Major Trauma Centres (MTCs) to improve patient outcomes. This audit evaluated the management of traumatic brain injuries (TBIs) at the newly designated National MTC during its first 14 months, benchmarking against national trauma guidelines.

Methods: A retrospective review of TBI admissions from July 2023 to September 2024 was performed. Data collected included demographics, injury characteristics, care pathways, and outcomes such as length of stay and 30-day mortality. Compliance with national standards for specialist ward admission and neurosurgical referral was assessed.

Results: Of 203 TBI cases, 147 (72.4%) were male and 107 (52.7%) were aged ≥ 65 years old. Intensive care was required in 29 (14.3%) cases, while 123 (60.6%) were managed on trauma wards. 13.8% (28) required transfer to neurosurgical centre. GCS changes were the only significant predictor of transfer ($p = 0.017$). Among older patients, frailty was common (mean clinical frailty score 4.88), and 30-day mortality was higher (7.4%) compared to younger patients (2%). The median length of stay was longer for ≥ 65 year-olds (9 days) than < 65 year-olds (5 days).

Conclusion: This audit highlights the diverse patient cohort in trauma care. It highlights adherence to guidelines with neurosurgical transfer guided by clinical deterioration. Guidelines advocate for specialist beds however, some patients were managed outside dedicated trauma wards. A TBI unit has opened to this to meet demand. Cycle two will examine the effects of these changes on 30-mortality and length of stay.

P-0102**Readmission. Should we embrace them?**

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At the Geriatric Emergency Ward (GAVA) at Ryhov County Hospital in Sweden, a study was conducted to explore readmissions and their potential causes. Initially, the team sought treatable factors that could reduce readmissions but discovered that many cases were not preventable. The study questioned if readmissions were truly indicative of mortality or simply a part of end-of-life care.

GAVA attends fragile, elderly patients, most of whom have multiple comorbidities. Between June and November 2023, 350 patients were treated, with 59 (30%) readmitted within 30 days. Despite reviewing their cases, only two instances showed preventable readmissions—

one involving a community nurse missing a medication dose, and the other due to a nursing home failing to follow a palliative care plan. The majority of readmissions were unavoidable.

An extended analysis of 2022 data showed a readmission rate of 15% and a mortality rate of 66% in readmitted patients compared to 54% in those not readmitted. The study highlighted that readmissions in frail patients may be inevitable and questioned whether this should be accepted as part of end-of-life care.

The study concluded that, given the high fragility of the patients, readmissions may be an inherent part of their care, suggesting that improving the experience of readmissions through smoother transitions, palliative care, and continuity might be the best approach. Further research is needed to understand these trends.

P-0103**Heart failure as a first symptom of systemic sclerosis**

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Introduction: Cardiac involvement is clinically overt in approximately 10 to 30 percent of patients with systemic sclerosis (SSc). Often unrecognized until late in the disease course. The myocardium, pericardium, and conduction system can all be affected.

Methods: A 86-year male with no cognitive impairment and independent for basic daily activities was admitted in an acute care unit with the diagnosis of heart failure (HF). He had a history probable prostate cancer pending biopsy, atrial fibrillation of at least 30 years, and in a routine check-up in December 2023 an echocardiogram (previous in 2018) detected severe pulmonary hypertension and severe pericardial effusion is detected (without hemodynamic compromise), that is treated with anti-inflammatories but no further studies are carried out. In the next year he's admitted multiple times for heart failure. In one of these admissions he presented Raynaud's phenomenon on multiple occasions so an autoimmune study was started.

Results: The capillaroscopy presented a delayed pattern compatible with scleroderma pattern. ANA and Anti-centromere B antibodies were positive. It also presented telangiectasias, calcinosis in the left elbow, microstomia and mild sclerodactyly. In November of 2024 he started with chronic oxygen therapy and maintained dyspnea at rest.

Key conclusions: Although there is no specific treatment HF secondary to scleroderma, it's advisable to understand it's etiology in order to choose the appropriate treatments, know it's complications and understand the prognosis.

P-0104**Improving quality of post take ward round for ischaemic stroke**

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Introduction: Ischaemic stroke is a leading cause of disability and mortality. Optimising initial investigations and management is crucial to improve outcome after stroke. Effective ward round documentation is also important ensuring adherence to evidence-based secondary prevention treatment and investigations after stroke. This audit evaluates initial consultant ward round (post take ward round-PTWR) documentation and identifying areas for improvement.

Methods: Data was collected for patients admitted with ischaemic stroke between January and March 2025 at RCHT. The audit reviewed documentation for 8 areas: intermittent pneumatic

compression use (IPC), short term and long-term antiplatelet therapy/ anticoagulation plan, 24-h cardiac monitoring request, carotid imaging request, proton pump inhibitor cover (PPI), treatment escalation plan completion, cholesterol lowering medication prescription.

Results: A total of 50 patients with ischaemic stroke were included, mean age 78.4 (11.3) years, 50% female. The distribution of stroke subtypes was: 54% partial anterior circulation stroke, 28% lacunar stroke, 10% total anterior circulation stroke, and 8% posterior stroke. Documentation compliance across all variables was 54.57%, with the highest for short-term antiplatelet (91.49%) and the lowest for PPI cover (15.15%).

Key conclusions: Our audit highlights variability in PTWR documentation for ischaemic stroke, with gaps in PPI cover, cholesterol lowering prescription and IPCs. Standardised assessment, electronic notes and clinician education may improve compliance. Further research is needed to assess the impact of PTWR documentation quality on patient outcomes.

P-0105

Short-term prognostic accuracy in hospitalized older adults with severe frailty: a prospective analysis

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Introduction: Accurate short-term prognosis is crucial for adequate care planning in the growing population of older inpatients with severe frailty, yet their survival prediction remains underexplored. This study aimed to assess (i) agreement among healthcare professionals on short-term prognosis, (ii) predictive accuracy of multiprofessional survival estimates, and (iii) factors affecting prognostic accuracy.

Methods: A prospective observational study was conducted on patients aged ≥ 65 years with severe frailty admitted to an Acute Geriatric Unit. Participants underwent a Comprehensive Geriatric Assessment (CGA) and palliative care needs screening using the NECPAL tool. Healthcare professionals provided 1- and 3-month survival estimates through a modified surprise question. Inter-rater agreement was assessed using Fleiss' kappa, and Kaplan–Meier curves compared survival across multiprofessional prognostic categories. Logistic regression was used to identify patient-related factors associated with prognostic accuracy.

Results: Among 117 patients (mean age: 86.4 years, 57.3% female), prognostic agreement was moderate for both 1 month ($\kappa = 0.475$) and 3 months ($\kappa = 0.528$). Multiprofessional estimates classified 39.3% of patients as having < 1 month survival, 18.8% as 1–3 months, and 41.9% as > 3 months. Forty-seven patients (40.2%) died, 70% of whom had positive NECPAL screening. Survival estimates differentiated patients by short-term survival (log-rank $p < 0.001$), with 60.7% overall accuracy. Delirium at admission was associated with reduced prognostic accuracy (OR 0.38; 95% CI: 0.16–0.88).

Key conclusions: Given the limited accuracy of multiprofessional survival estimates and the misleading effect of delirium, there is a need for reliable short-term prognostic models for severely frail older adults in acute care.

P-0106

Association between sepsis and frailty in the hospitalized older patients: data from the aged European population quality of life in infectious disease (AEQUI study) in Italy

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Introduction: Sepsis is a major cause of morbidity and mortality in hospitalized older adults, but its long-term impact on frailty and quality of life is not well understood among older people. This study explores the link between sepsis and frailty in older hospitalized patients, using data from the AEQUI study.

Methods: A prospective multicenter study with six months follow-up across nine hospital departments in Italy. Multidimensional frailty was assessed with the Multidimensional Prognostic Index (MPI). Septic patients (cases) were defined as a positive blood culture and SOFA scores ≥ 2 ; controls were defined as older patients hospitalized without infective conditions.

Results: 529 Italian patients were enrolled (234 cases, 295 controls). Among cases, 31 patients had sepsis (mean age 72.5 years, 39% female). Fever (87%), asthenia (55%), and dyspnea (42%) were common symptoms. All received broad-spectrum antibiotics, and two patients died in hospital. The average length of the stay was 22.4 days. At discharge, cases showed an improvement in the MPI value (reduction from 0.42 to 0.40, $p = 0.21$), while in patients with sepsis the MPI worsened further, from 0.49 to 0.50 ($p = 0.48$). At six months a stabilization or worsening of the MPI in control cases (from 0.40 to 0.42, $p = 0.21$) were observed, while in patients with sepsis the MPI improved from 0.49 to 0.44 ($p < 0.05$).

Key conclusions: Sepsis significantly increases multidimensional frailty in older patients, with incomplete recovery by six months. This highlights the need for long-term follow-up and proactive management to reduce multidimensional frailty's impact after sepsis.

P-0107

The paper trail: introduction of an MDT record proforma on the specialist geriatric medicine ward in a model three hospital

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Introduction: The Multidisciplinary Team (MDT) is core to managing frailty, facilitated by skilled medical, nursing and health and social care professionals (HSCPs). MDT Meeting (MDTM) documentation may not always be consistent and comprehensive, resulting in ambiguity of clinical decisions and sub-optimal organisation of clinical care. This study aimed to assess the effectiveness of introducing ‘MDT Record Proformas’ for MDTM documentation on the Specialist Geriatric Ward in a Model Three Hospital.

Methods: A review of 18 medical charts was performed. An ‘MDT Record Proforma’ was implemented, followed by a second review of 22 charts.

Results: Baseline documentation was inconsistent. Post introduction of the MDT proforma, there was an increase in documentation of the MDT date, treatment plan, and diagnosis. Documentation of mood doubled (37% to 73%), with an 18% increase in stroke workup documentation. Documentation of assessments and plans by physiotherapy, occupational therapy, speech and language therapy increased, with a two-fold increase in nutrition and dietetics (by 44%). International Dysphagia Diet Standardisation Initiative (IDDSI) Food and Fluid level documentation increased two- and three-fold, respectively. Outcome documentation of the MDT was increased by 11%, with a 23% and 34% increase in ‘Predicted Date of Discharge’ and ‘Expected Discharge Destination’ documentation.

Conclusion: The development of an ‘MDT Record Proforma’ allowed for standardised, accurate and comprehensive documentation which is easily retrievable and identifiable in medical records. This leads to an improvement in consistency of MDTM real-time documentation which would potentially improve care coordination and facilitate patient-centered models of care, whilst removing duplication of documentation.

P-0108

The unseen struggle: evaluating compliance with dysphagia assessment guidelines in hospitalised Parkinson’s patients

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Introduction: Dysphagia is a distressing and often overlooked complication in individuals living with Parkinson’s disease (PD), significantly increasing the risk of aspiration pneumonia—the leading cause of death in this population [1]. It can also hinder medication intake and nutritional status, both of which are crucial for symptom control and recovery. Timely recognition of swallowing difficulties can help prevent avoidable harm, reduce hospital readmissions, and support a more compassionate, holistic approach to care [1][3].

Methods: A retrospective audit was conducted on 45 patients with PD admitted to a District General Hospital during acute illness between May 2023 and December 2024. Clinical records were reviewed to assess compliance with the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) recommendations [2]. The audit evaluated dysphagia screening at admission, referrals to Speech and Language Therapy (SLT), medication adaptations, nutritional assessments, and documentation in discharge summaries.

Results: Only 18% of patients were screened for dysphagia at admission. Among those found to have swallowing difficulties, fewer

than half were referred to SLT. Although 91% of patients received their prescribed medications during admission, 27% of those with dysphagia had no documentation of alternative administration routes. Nutritional assessments were completed in just 51% of cases. Only 7% of discharge summaries included written information on managing dysphagia. Several patients were re-admitted with aspiration pneumonia, indicating missed opportunities for early detection and intervention.

Conclusion: This audit reveals significant gaps in dysphagia screening and multidisciplinary management for people with PD during hospital admissions. Embedding swallow assessments at the time of admission, improving referral pathways, and ensuring effective discharge communication regarding swallow status can greatly improve patient outcomes and continued quality of care in the community. To reduce avoidable complications, it is crucial to increase awareness among healthcare professionals about Dysphagia assessments and the importance of recognizing red flags—such as recurrent chest infections, communication difficulties, and reduced oral intake—which may be signs of silent dysphagia. A proactive, coordinated approach is essential to safeguard the wellbeing and dignity of this vulnerable population [1][2][3].

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Short poster presentation

Acute hospital care

P-0109

Language preference and use of physical and chemical restraints among hospitalized older adults with dementia

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Introduction: Non-English-speaking patients in predominantly English healthcare settings are at risk of adverse events when hospitalized. We examined whether non-English language preference was associated with increased use of physical or chemical restraints in hospitalized older adults with dementia.

Methods: We conducted a retrospective cohort study of medical inpatients aged 65 and older with dementia admitted to 2 hospitals in Toronto, Canada between June 1, 2022 and July 1, 2023. We screened 1233 charts for dementia diagnosis, and abstracted language preference, patient characteristics, medications and physical restraints. We examined the relationship between preferred language and physical

and chemical restraints through multivariable regression analysis, using log-link binomial generalized linear models to estimate relative risks, adjusting for variables known to influence restraint use.

Results: We included 596 patients with dementia (median age 86 years [IQR 11], 53.5% female) and 208 (34.9%) were prescribed an antipsychotic, 77 (12.9%) were prescribed a sedative-hypnotic, and 134 (22.5%) had physical restraints applied. Compared to patients who preferred English, patients with a non-English preferred language had an increased risk of receiving a physical restraint (18.2% vs 27.2%; aRR 1.37, 95% CI 1.02–1.86). There were no differences in the use of antipsychotics (aRR 1.03, 95% CI 0.85–1.25) or sedative-hypnotics (aRR 1.45, 95% CI 0.95–2.21).

Key conclusions: In medical inpatients with dementia, those with a non-English preferred language were 1.37 times more likely to be physically restrained compared to patients who preferred English. Addressing language barriers may be a way to reduce restraint use in hospitalized patients with dementia.

Poster

Acute hospital care

P-0110

Risk factors for in-hospital mortality in older patients with viral respiratory infections admitted to the geriatric acute care unit

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Introduction: Viral respiratory infections represent a significant cause of morbi-mortality in older adults. We analyse the mortality rate in geriatric patients, identifying associated risk factors.

Methods: A retrospective observational study was conducted from October 1, 2024 to December 31, 2024. Sociodemographic variables, clinical data, and mortality were analyzed.

Results: Non-deceased patients vs deceased.

Mean age ($91 \pm 3,62,7$ vs. 92 ± 5 p = 0,13), female (71% vs. 29%), male (30% vs 60% p = 0,01), Barthel Index ($55,4 \pm 33$ vs 36 ± 37 , p = 0,05, cognitive impairment (61.63% vs. 80%; p = 0.17), SPPB test < 10 (98% vs 86.67% p = 0.12), institutionalization (46.5% vs. 60%; p = 0.33).

Viral etiology: Influenza 4.65% vs 0% (p = 0.39), Respiratory Syncytial Virus (VSR) 12.7% vs. 6.6% (p = 0.49), COVID-19 11.64% vs. 26.6% (p = 0.11), adenovirus 9.3% vs. 13.3%; (p = 0.62), rhinovirus 13.9% vs. 13.3% (p = 0.94), enterovirus 29% vs. 26.6% (p = 0.84) coinfections 9.3% vs. 13.3%; (p = 0.629).

Comorbidities: Arterial hypertension (HTA) 79% vs. 60% (p = 0.24), type 2 diabetes mellitus (T2DM) 34% vs. 36% (p = 0.084), atrial fibrillation (AF) 50% vs. 53.3%; p= 0.87) and heart disease 71% vs. 73%; (p = 0.78), COPD 10.4% vs. 20% (p = 0.45), Chronic Kidney Disease (CKD) 40,7% vs. 40% p = 0.95), immunosuppression 15.2% vs. 26.6% (p = 0.26).

Laboratory findings: Leukocytosis $9,997 \pm 3,979$ vs. $13,449 \pm 7,03$ (p = 0,007), neutrophils $7,754 \pm 3,555$ vs. $11,309 \pm 6,936$ (p = 0,0039), lymphocytes $1,319 \pm 932$ vs. 975 ± 659 (p = 0.17); C-Reactive-protein (CRP): $6,9 \text{ mg/L}$ vs. $11,51 \pm 9,8$ p = 0,029) Procalcitonin (PCT) $0,55 \text{ ng/mL}$ vs. $1,74,4$ vs. $2,69 \pm 5,4$ p = 0,025) Ferritin: $250 \pm 262,7$ vs. 905 ng/mL vs. $1,262$ (p = 0,002) Fibrinogen: 596.5 mg/dl vs. 598 mg/dl vs. 159 ; (p = 0.096).

Vaccination status: Not vaccinated (33.7% vs 53.3%), vaccinated (66.2% vs 46.6%) p = 0.14.

Conclusion: In-hospital mortality was associated with male sex, a higher degree of functional dependency, as well as an increase in leukocytosis, neutrophilia, CRP, ferritin, and procalcitonin levels. The main viruses observed in the deceased group were: COVID-19, Adenovirus, and coinfections.

P-0111

A case report: hidden pulmonary risks of humidifiers use

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Introduction: Humidifiers are a rare cause of hypersensitivity pneumonitis. In this case, exposure to fungi and bacteria dispersed by these devices serves as an environmental trigger. Its symptoms are nonspecific and can easily be mistaken with those of other lung diseases, making diagnosis difficult.

Methods: A literature review was conducted on a 78-year-old man with an excellent general condition and no relevant medical history, who was admitted several times for acute respiratory failure with no apparent cause. Radiological tests revealed bilateral ground-glass infiltrates. Fibrobronchoscopy with bronchoalveolar lavage showed clear lymphocytosis, suggestive of hypersensitivity pneumonitis. Although the patient improved during hospitalizations, he experienced desaturation and dyspnea upon returning home, leading to repeated readmissions.

Results: After excluding infectious and autoimmune causes, non-fibrotic hypersensitivity pneumonitis appeared to be triggered by the use of the humidifier. Avoiding the exposure to the device, symptoms resolved and the patient recovered respiratory function, not requiring further admissions.

Conclusion: In patients with recurrent symptoms in whom no clear trigger is identified, making a thorough medical history is essential. Therefore asking about environmental, social and domestic exposures is required in order to make an accurate differential diagnosis. The growing popularity of humidifiers and its antigenic potential should alert healthcare professionals to the risks associated with its use.

P-0112

Hospital at home: a scoping review of international experience to draw up a pragmatic and comprehensive inventory of the elements of operating models of hospital-at-home services that provide acute care at home for older people as an alternative to convey

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Background: Hospitalization at home (H@H) has emerged as a viable alternative to conventional hospitalization. However, operational models vary from country to country, hence the need for a comprehensive inventory of the key elements of successful H@H services.

Objective: This scoping review aims to identify and categories the operational elements of international H@H models that provide acute care for older people. By mapping existing structures, this study seeks to offer practical perspectives for the development of a structured H@H service in France.

Methods: A systematic search was conducted in PubMed, Cochrane and EMBASE, focusing on H@H models for acute geriatric care. Studies were selected using a multi-stage selection process, focusing on acute care. Data extraction was carried out using a structured grid, covering service structure, eligibility criteria, care coordination, patient management and clinical outcomes.

Results: The analysis reveals that experiences are not uniform. Three major trends emerge. To set up such a service, the team must be multidisciplinary and linked to a local hospital. The admission criteria must be clearly established (certain pathologies are excluded from the outset because they are too acute). The arrangements for managing emergencies in the home must be based on 24-h care.

Conclusion: This review provides a basis for implementing an acute geriatric H@H model in France, even though it was difficult to obtain operational details of the various experiments. Finally, one of the main problems is the question of the opposition between non-hospital H@H and hospital H@H, which would certainly merit further research.

P-0113

Profile of frailty and delirium in older adults in an Irish teaching hospital

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Introduction: Frailty and delirium are associated with adverse clinical outcomes in hospitalised older adults. Specialist geriatric ward admission improves care. Screening for both conditions has been introduced to an Irish teaching hospital Emergency Department (ED). The profile of these conditions was studied to identify service needs. **Methods:** A retrospective study of all inpatients ≥ 70 years admitted following ED presentation was completed on a specified date in February 2025. Records of frailty screening in ED using the Variable Indicative of Placement (VIP) score and delirium screening in ED using the 4AT score were assessed. Data collated on Excel was analysed using Chi-square tests.

Results: In the 256 bedded hospital, 166 patients aged ≥ 70 years were admitted through ED. The mean age was 80.65 (SD = 6.99) years. Eighty-five (51.2%) were female and were significantly older than male patients ($p < 0.01$). Screening for frailty was completed in 166 (100%) patients and delirium in 87 (52.4%) patients. The prevalence of frailty was 68% ($n = 113$) and of delirium, in those screened was 27.6% ($n = 24$). Twenty one (87.5%) patients who had delirium were frail. Frailty was associated with a higher likelihood of having delirium ($p = 0.037$) and being older than non-frail patients ($p < 0.001$). There was no significant gender difference in prevalence of frailty ($p = 0.296$) or delirium ($p = 0.343$). Frail patients were admitted under 12 different specialists (including 2 geriatricians) to all 11 acute wards.

Conclusions: Frailty and delirium are prevalent in older patients in hospital and highlight the need to implement hospital wide age friendly healthcare to ensure optimal outcomes.

P-0114

Characteristic profile of an elderly population with Chronic Obstructive Pulmonary Disease (COPD) admitted to a geriatric acute care unit

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Introduction: COPD is a highly prevalent disease with elevated morbimortality amongst elderly patients. This study aims to describe characteristics of elderly COPD patients admitted to a geriatric acute care unit.

Methods: Prospective, longitudinal, epidemiological study. Patients ≥ 84 years with confirmed diagnosis of COPD/strong likelihood (Chronic Bronchitis, Asma, or similar pathologies without medical follow-up nor recent testing) admitted to a geriatric acute care unit between 31/01/2025–31/03/2025.

Results: 53 patients included. 20 confirmed COPD patients (remaining 33 are not included in this analysis due to ongoing complementary testing to confirm/reject COPD): 90% male, age 89.7 ± 4.4 , 30% institutionalized, 30% cognitive decline, previous month Barthel Index (BI) 75.2 ± 25.9 , discharge BI 61.3 ± 22.5 , Yesavage 5.33 ± 3.2 , Bronchitic phenotype 55%, GOLD 2 50%, Exacerbation Grade E 65%.

Clinical variables: Hypertension 80%, cardiopathy 80%, chronic renal disease 70%, atrial fibrillation 60%, depression 20%, respiratory/cardiac insufficiency at admission 40%.

Home treatment: Extreme polypharmacy 85%, long-acting beta agonists(LABA) 95%, long-acting muscarinic antagonist(LAMA) 90%, inhaled corticosteroids 85%, inadequate inhaler use 95%, triple therapy 75%. Analysis: hemoglobin 11.3 ± 2.58 , leucocytes at admission $13,752 \pm 17,964.81$, eosinophils at admission 176 ± 322 , eosinophils at discharge 106.5 ± 141.4 .

Hospitalization 9.2 ± 3.2 days with 100% survival rate.

Conclusion: COPD patients admitted to the geriatric acute care unit were slightly dependent males with elevated comorbidity. The majority use triple therapy in a single device demonstrating inadequate use. Respiratory infection with cardiac insufficiency was the most frequent cause of admission. Patients showed slight cardiac functional loss during hospitalization. No fatalities occurred during admission.

P-0115

Therapeutic profile of elderly chronic obstructive pulmonary disease (COPD) patients admitted to a geriatric acute care unit (GACU)

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Introduction: COPD is a chronic pathology that requires frequent therapeutic adjustments following exacerbations. This study aims to compile a therapeutic profile of elderly COPD patients admitted to a GACU.

Methods: Prospective, longitudinal, epidemiological study. Included are patients with confirmed diagnosis of COPD or strong likelihood admitted to a GACU during two months (February–March 2025).

Results: N = 53. Confirmed COPD n = 20 (remaining 33 are not included in this analysis due to ongoing complementary testing to confirm/reject COPD):

COPD Group: 90% male, age 89.7 ± 4.4 , 30% institutionalized, 30% cognitive decline, previous month Barthel Index (BI) 75.2 ± 25.9 , Bronchitic phenotype 55%, GOLD 2 50%, Exacerbation Grade E 65%. Number of prescriptions at admission 11.8 ± 3.3 . Inadequate inhaler use: 95%

Home COPD treatment:

Long-acting beta agonists (LABA)/ long-acting muscarinic antagonist (LAMA): 5%

LABA: 100%

Metered-dose inhaler (MDI): 100%

LABA + LAMA: 15%

Combination Inhaler: 100%

Dry Powder Inhaler (DPI): 100%

LABA + LAMA + Inhaled Corticosteroids (ICS): 75%

Single combination inhaler: 86.7%

MDI: 84.6%

DPI: 15.4%

Two separate inhalers: 13.3%

DPI: 100%

Azithromycin: 30%.

Treatment during hospitalization:

Antibiotic Therapy: 85%

Short-acting Beta Agonist (SABA): 70%

Short-acting Muscarinic Antagonist (SAMA): 85%

ICS: 70%

Systemic corticosteroids: 70%

Increased diuretic: 80%.

Discharge Treatment:

LABA/LAMA: 5%

LABA: 100%

MDI: 100%

LABA + LAMA: 15%

Combination Inhaler: 100%

DPI: 100%

LABA + LAMA + ICS: 75%

Single Combination Inhaler: 86.6%

MDI: 78%

DPI: 22%

Two separate inhalers: 6.7%

DPI 100%

Three separate inhalers: 6.7% (both MDI and DPI).

Azithromycin: 35%

Systemic Corticosteroids (descending dose): 55%

Conclusion: The sample of COPD patients admitted to the GACU were mostly males with bronchitic phenotypes and elevated exacerbation likelihood. Triple therapy was maintained at discharge with high prevalence of metered-dose inhalers, demonstrating strikingly inadequate use during hospitalization.

P-0116

Malignant hypercalcemia as a trigger for delirium: a challenge for comprehensive diagnostic assessment

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Introduction: Delirium is one of the most frequent reasons for consultation in geriatric departments, associated with a wide range of underlying causes. Hypercalcemia, although less common, can induce delirium, and its identification is crucial for the appropriate management.

Objective and methods: To describe the differential diagnosis of delirium secondary to calcium metabolism disturbance. Descriptive study based on a clinical case attended in the Geriatrics Department.

Results: An 86-year-old male patient with hypertension and benign prostatic hyperplasia. Functionally independent (Barthel Index 100/100). FRAIL scale score of 3/5. No evidence of cognitive impairment or affective disorders. He lived with strong social and family support.

The patient presented to the Emergency Department with disorientation, episodes of aggression, fluctuating cognitive status, and mechanical pain during ambulation. Laboratory tests revealed moderate hypercalcemia and cranial CT scan showed a solid occipital lesion. Additionally, imaging identified rib fractures in the 8th and 9th ribs and a likely pathological pelvic fracture on X-ray.

Treatment was initiated with anti-hypercalcemic measures and adjustment of neuroleptic medication. Further investigation of the hypercalcemia showed suppressed parathyroid hormone (PTH) levels, and PET-CT scan revealed findings compatible with metastatic cholangiocarcinoma involving the bone. The diagnosis was confirmed by liver biopsy. Following normalization of calcium levels, the delirium resolved. The patient was referred to the Oncology Department.

Conclusion: Delirium may be the initial manifestation of severe metabolic disturbances such as hypercalcemia secondary to malignant neoplasms. This case highlights the importance of a comprehensive diagnostic approach to identify and treat underlying causes, leading to resolution of delirium.

P-0117

Not always a urinary tract infection: a case study of an 84-year-old patient with giant cell arteritis

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Introduction: Older patients with rapidly progressive deconditioning are often referred to the hospital. Infectious diseases are among the most common reasons, especially when high inflammatory markers are observed. This study highlights the need for diagnostic caution and consideration of less common diseases.

Methods: A case study of an 84-year-old hospitalized patient with pneumonia, urinary tract infection (UTI) and giant cell arteritis (GCA).

Results: The patient was initially referred to the emergency department due to a fall and subsequent head injury. He did not report headaches or jaw claudication but had experienced progressive motor and cognitive decline over several months. Based on the overall clinical picture and additional examinations pneumonia and a urinary tract infection (with a positive urine culture) were diagnosed. However, despite targeted antibiotic therapy, inflammatory markers

remained elevated so diagnostics were extended. The patient underwent inter alia vascular ultrasound (USG). The USG revealed signs of vascular inflammation in the left brachial, right subclavian and the right axillary artery. CT angiography was performed. An initial therapy of intravenous steroids followed by maintenance oral steroid therapy was administered. The treatment resulted in a significant decrease in inflammatory markers and clinical improvement.

Key conclusions: It is important to consider GCA as a differential diagnosis in older patients with high inflammatory markers even without typical GCA clinical manifestations. Vascular USG is a helpful diagnostic tool in this group of geriatric patients.

P-0118

Sarcoidosis presenting as constitutional syndrome: a case report

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Introduction: Constitutional syndrome, characterized by unintentional weight loss, asthenia, and anorexia, is a frequent concern in clinical practice, particularly among older adults. It is associated with multiple conditions, including malignancies, infections, and inflammatory diseases. Given its nonspecific presentation, a comprehensive evaluation is essential to achieve an accurate diagnosis and initiate timely management.

Methods: A 78-year-old male patient presented with a six-month history of progressive weight loss (7 kg), fatigue, and anorexia. Initial laboratory tests revealed hypercalcemia (11.2 mg/dL) and elevated inflammatory markers. A chest X-ray showed bilateral hilar and mediastinal lymphadenopathy, prompting further investigation with positron emission tomography/computed tomography (PET/CT), which confirmed hypermetabolic lymphadenopathy. A transbronchial biopsy was performed, revealing noncaseating granulomas, leading to the final diagnosis of sarcoidosis.

Results: The patient was diagnosed with sarcoidosis, an inflammatory disease of unknown etiology that can mimic malignancies. Hypercalcemia, a known manifestation of sarcoidosis, contributed to the patient's constitutional symptoms. Corticosteroid therapy was initiated, resulting in clinical improvement and resolution of hypercalcemia.

Conclusions: Constitutional syndrome remains a diagnostic challenge, particularly in elderly patients, where multiple etiologies must be considered. This case highlights the importance of a thorough assessment, including imaging and histopathological confirmation, to differentiate between malignancy and inflammatory diseases. Sarcoidosis should be included in the differential diagnosis of constitutional syndrome, especially when associated with mediastinal lymphadenopathy and hypercalcemia. Early recognition and appropriate management can significantly improve patient outcomes.

P-0119

Myasthenia gravis presenting as constitutional syndrome: a case report

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Introduction: Constitutional syndrome, characterized by unintentional weight loss, asthenia, and anorexia, is a frequent concern in clinical practice, particularly among older adults. It can be a manifestation of various underlying conditions, including neuromuscular disorders such as myasthenia gravis (MG). Given the potential for delayed diagnosis, a thorough clinical assessment is crucial for timely intervention.

Methods: A 77-year-old female patient was referred for progressive weight loss, fatigue, and anorexia over several months. Neurological symptoms, including evening diplopia, upper limb claudication, and dysphagia, were noted. A bedside ice pack test yielded transient improvement, and pyridostigmine provided symptom relief. Serological testing confirmed acetylcholine receptor antibodies, supporting the diagnosis of MG. Despite initial improvement, she developed worsening dysphagia and respiratory fatigue, requiring systemic corticosteroids and intravenous immunoglobulins.

Results: The patient's condition deteriorated, leading to myasthenic crisis with severe bulbar involvement and respiratory failure. Non-invasive ventilation was initially attempted but proved insufficient, necessitating endotracheal intubation and mechanical ventilation. Intensive care management, including plasma exchange and high-dose corticosteroids, led to gradual clinical improvement, allowing eventual extubation and initiation of long-term immunosuppressive therapy.

Conclusions: Constitutional syndrome can be the initial presentation of MG, particularly in elderly patients. This case highlights the risk of progression to myasthenic crisis, emphasizing the need for early diagnosis and close monitoring. Recognizing neuromuscular fatigue as a contributor to weight loss and asthenia is essential for timely intervention and improved patient outcomes.

P-0120

Uncommon presentation of metabolic acidosis

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Introduction: Metabolic acidosis is a common presentation in daily clinical practice. High anion gap metabolic acidosis is mainly due to lactic acidosis, ketoacidosis and poisoning of medication and substances. We present a case with an uncommon presentation of metabolic acidosis.

Case presentation: An 82-year-old gentleman, non-drinker with multiple co-morbidities including mild CKD presented to hospital with a one-week history of unexplained lethargy, nausea, loss of appetite, and mild pain in the right hypochondrium. Physical examination was remarkable for mild tachypneic and slight tenderness over the RHC. Investigations showed there was severe high anion gap metabolic acidosis with impaired liver and renal function. Slightly raised plasma lactate and negative urine ketone excluded lactic acidosis and ketoacidosis. Collateral was taken from the rest of the family, as this wasn't volunteered by the patient, which revealed that he had been taking over-the-counter paracetamol for chronic knee pain. Blood paracetamol levels were mildly detected, thus intravenous N-acetylcysteine (NAC) was administered immediately. Clinical condition and investigations improved, and he was successfully discharged after 10 days of hospitalization.

Discussion: Paracetamol ingestion should be considered as differential diagnosis when older patients with chronic pain present with metabolic acidosis without evidence of lactic and ketoacidosis.

Caution is advised with the usage of paracetamol, particularly in the elderly population, as they are vulnerable to causing hepatic and nephrotoxicity.

P-0121

Cardiac complications associated with viral respiratory infections in elderly patients

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Introduction: Several studies have suggested a link between viral infections and an increase in cardiovascular complications.

Objective: To describe the prevalence of acute cardiac events in adults aged 84 years and older hospitalized for viral respiratory infections (VRI).

Method: Retrospective study of patients over 83 years old admitted for VRI in a geriatric acute care unit. Sociodemographic, functional (Barthel Index (BI)), cognitive, frailty (Short Physical Performance Battery (SPPB)), and comorbidity data were collected. Cardiac admission motive (heart failure, atrial fibrillation, ischemic events), complications, readmissions within one month, and hospital and one-month mortality were also recorded.

Results: N = 101. Average age 91 years (± 12), 67.2% female, BI 53 (± 34), SPPB 4 (± 2.58), cognitive decline 63.3%, hypertension 75.2%, diabetes mellitus 33.6%, atrial fibrillation 50.4%, prior cardiopathy 70.2% (valvular 29.5%, hypertensive 25.3%).

Admission motive: Non-cardiac 78% vs. cardiac 23.2%.

Influenza (n = 4) 100% vs. 0%, COVID-19 (n = 14) 85.7% vs. 14.2%, Respiratory Syncytial Virus (RSV (n = 12) 66.6 vs 33.%, Adenovirus (n = 10) 60% vs. 40%, Enterovirus (n = 29) 86.2% vs. 13.7%, Rhinovirus (n = 14) 64.2% vs. 28.5%, Coronavirus (n = 5) 60% vs. 40%, Viral coinfections (n = 10) 80% vs. 20%.

Complications: Non-cardiac 47% vs cardiovascular 53%.

Influenza (n = 4) 25% vs 75%, COVID-19 (n = 14) 57.1% vs 42.8%, RSV (n = 12) 50% vs. 50%, Adenovirus (n = 10) 70% vs. 30%, Enterovirus (n = 29) 41.3% vs 58.6%, Rhinovirus (n = 14) 35.7% vs. 64.2%, Coronavirus (n = 5) 40% vs 60%, Viral co-infections (n = 10) 50% vs. 50%.

Readmissions (n = 24, 23.7%): Cardiac complications 50%.

Influenza (n = 2) 0% vs 100%, COVID-19 (n = 2) 0% vs 100%, RSV (n = 1) 0% vs. 100%, Adenovirus (n = 3) 75% vs 25%, Enterovirus (n = 9) 44.4% vs. 55.5%, Rhinovirus (n = 4) 75% vs 25%, Parainfluenza (n = 1) 100% vs 0%, Viral coinfections (n = 2) 50% vs. 50%. Average hospital stay non-cardiac complication 8 vs cardiac 9 days. In-hospital Mortality (n = 15, 14.8%): Non-cardiac 26.6% vs cardiovascular 73.3%.

COVID-19 (n = 4) 50% vs. 50%, RSV (n = 1) 0% vs 100%, Adenovirus (n = 2) 50% vs. 50%, Enterovirus (n = 4) 25% vs. 75%, Rhinovirus (n = 2) 0% vs. 100%, Co-infection (n = 2) 0% vs. 100%. One-Month Mortality (n = 14, 13.8%): Non-cardiac 28.5% vs. cardiovascular 71.4% COVID-19 (n = 1) 0% vs 100%, RSV (n = 2) 0% vs. 100%, Adenovirus (n = 3) 66.6% vs 33.3%, Enterovirus (n = 5) 40% vs. 60, rhinovirus (n = 1) 0% vs. 100%, Coronavirus (n = 1) 0% vs 100%, Co-infection (n = 1) 0% vs. 100%.

Conclusion: More than half of hospitalized patients with VRI experienced acute cardiovascular complications during admission (most commonly in influenza, enterovirus, rhinovirus, RSV, and co-infections), with a longer average hospitalization, and in half of the cases,

readmission within a month. Three out of four suffered cardiovascular fatalities.

P-0122

Low back pain beyond the obvious

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Introduction: Low back pain is frequent in older adults. It affects 13% of the population in the United States and is a cause of functional impairment and disability. Although usually caused by musculoskeletal affections, it is important to identify other underlying severe conditions such as fractures, infections or tumours.

Clinical case: We present the case of a 92-year-old woman without cognitive impairment and moderate dependence (IB:45) with type 2 diabetes, hypertension, lumbar spine stenosis, renal lithiasis and vitamin D deficiency.

She was evaluated in our hospital because of leg pain. The pain had intensified progressively in the last weeks. It affected the third upper external region and right thigh and worsened with flexion. No neuropathic symptoms nor voiding clinic were reported. The blood analysis revealed elevated C-reactive protein blood levels (197 mg/dL), leukocytosis with neutrophilia and the urinalysis showed/revealed leukocyturia. Lumbar X-ray showed no change.

The urine culture on admission was positive for *Klebsiella pneumoniae* and treatment with Ceftriaxone was initiated. Since pain and functional limitation persisted, a CT scan was performed. It revealed a new infrarenal right lesion, not shown two years before. The ultrasound characterized it as a complicated right renal cyst extended to the psoas. The interventional radiologist conducted its successful drainage. In the culture of the drained content grew the same *Klebsiella pneumoniae*. The microbiology ruled out tuberculosis.

Conclusion: Low back pain is not always due to musculoskeletal affections. Alarm symptoms, their persistence or functional impairment indicate the need for further studies to reach an accurate diagnosis.

P-0123

Optimising patient care for hip fractures: the impact of non-orthopaedic admissions—a Singapore tertiary care experience

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Background: Singapore has the highest incidence of hip fractures in Asia. Hip Fracture Programme launched in 2014 at our hospital, optimised outcomes through early surgery (< 48 h), mobility, and reduced length of stay (LOS) using Best Practice Elements. However, some patients admitted under non-orthopaedic specialties, raising concerns about access to specialised care and potential delays.

Aim: This study evaluates the impact of admitting hip fractures to non-orthopaedic care, on time to surgery, LOS, and mortality, aiming to determine whether early surgery improves outcomes while ensuring appropriate specialised care for patients unfit for early surgery.

Methods: A retrospective review of hip fracture patients aged > 60 years admitted to non-orthopaedic care between June & September 2024 conducted. Comparison analysis performed with 206 patients under Orthopaedic care during same period using Welch's t-test.

Results: Total: 26 (Female: 60%); Medical Diagnoses: Cardiovascular events, Pneumonia, Renal and Hyponatremia; 100% had Ortho review on diagnosis; 70% Orthogeriatric review. 30% of hip fractures were confirmed only after admission.

Comparison analysis: 81% operated in Non-orthopaedic vs. 94% Orthopaedic care. Mean time to surgery, 192 h vs. 51 h ($p < 0.001$); LOS, 22 vs. 9 days ($p < 0.001$). In-patient mortality 8% vs. 2.6% ($p < 0.0001$).

Conclusion: Hip fracture patients in non-orthopaedic care experience increased LOS & Mortality primarily due to medical presentations needing further evaluation with bigger data set. However, 1/3rd hip fractures confirmed only after admission, highlights the need for an exclusive pathway intervention for patients with inconclusive initial X-rays and enhanced multi-departmental training for siting prioritisation.

P-0124

Prognosis of hospitalized older adults based on sarcopenia severity and muscle mass assessment by rectus femoris ultrasound, L3 CT, and bioelectrical impedance: the SARCSOFIA project (pilot study results)

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Objectives: To evaluate functional decline at discharge and one month post-discharge in sarcopenic patients admitted to the Geriatric Acute Care Unit at Infanta Sofía University Hospital, using the Derringer Index (DI) as a diagnostic tool. Muscle mass (MM) was assessed via bioelectrical impedance analysis (BIA), rectus femoris ultrasound, and L3-level computed tomography (CT) as the gold standard.

Methods: In this prospective, longitudinal study, sarcopenia is quantified using the DI, a continuous variable integrating MM, handgrip strength (HS), and gait speed (GS) via geometric mean. MM was measured 48–72 h pre-discharge using BIA-1 (InBody S10), BIA-2 (seca mBCA 525), ultrasound, and CT. The pilot phase included 10 patients (age 88 ± 5 years; 50% women).

Results: Charlson Comorbidity Index was $7 (\pm 1.5)$, hospital stay 12.5 days (IQR 21). Pre-admission Barthel Index (BI) was $42.5 (\pm 32.4)$, and $38.5 (\pm 32.3)$ at discharge; 30% experienced functional decline ($\Delta BI > 5$). HS was $12.1 \text{ kg} (\pm 8.3)$; GS was 0.1 m/s (IQR 0.3). MM by BIA was 15.5 kg (IQR 12.8). Rectus femoris area by ultrasound was $1.8 \text{ cm}^2 (\pm 0.8)$, and muscle area at L3 by CT was $94.0 \text{ cm}^2 (\pm 28.8)$. DI was consistent across methods (0.4), with Pearson correlations > 0.9 between CT and other modalities.

Conclusions: The DI allows continuous sarcopenia assessment while minimizing data loss. BIA, ultrasound, and CT are highly correlated and reliable tools for muscle mass evaluation. This pilot study supports the feasibility of the full-scale research protocol.

P-0125

“Granulomatous peritonitis mimicking peritoneal sarcomatosis: a case report”

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Introduction: Peritoneal sarcomatosis is a rare but aggressive condition characterized by widespread dissemination of sarcoma within the peritoneal cavity. However, non-malignant conditions such as granulomatous peritonitis may closely mimic this presentation both clinically and radiologically, posing a significant diagnostic challenge.

Methods: We report the case of a 84 year-old female patient presenting with abdominal distension, pain, and weight loss. Contrast-enhanced CT and PET-CT with octreotide demonstrated diffuse peritoneal thickening, omental caking, and hypermetabolic peritoneal lesions—findings initially suggestive of peritoneal sarcomatosis. Ascitic fluid analysis revealed an exudative profile with lymphocytic predominance but no malignant cells. Image-guided peritoneal biopsy was performed.

Results: Histopathological analysis of the biopsy revealed multiple non-caseating granulomas without evidence of malignancy. Stains and cultures for mycobacteria, fungi, and other infectious agents were negative. A diagnosis of idiopathic granulomatous peritonitis was made after exclusion of secondary causes, including tuberculosis and sarcoidosis. The patient was managed conservatively with corticosteroid therapy and symptomatic support, with gradual clinical improvement over subsequent weeks.

Conclusion: This case illustrates the importance of considering granulomatous peritonitis in the differential diagnosis of suspected peritoneal sarcomatosis. Minimally invasive diagnostic techniques—including advanced imaging, ascitic fluid analysis, and peritoneal biopsy—are critical for accurate diagnosis and to avoid unnecessary surgical intervention or cytotoxic therapy.

P-0126

Evaluation of demographic and clinical data in patients over 65 years of age requiring renal replacement therapy in the anesthesia and reanimation intensive care unit

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Introduction: The increasing elderly population globally has led to a rise in older adults admitted to intensive care units (ICUs), notably due to acute kidney injury (AKI), which substantially elevates morbidity and mortality. This study aimed to evaluate demographic and clinical data of elderly patients undergoing hemodialysis for AKI at the Anesthesiology and Reanimation ICU, Ege University Faculty of Medicine.

Methods: This retrospective study analyzed electronic records of 132 ICU patients aged over 65 years, undergoing hemodialysis due to AKI between January 2016 and December 2020. Demographic data, comorbidities, ICU admission reasons, surgical history, SOFA, APACHE, Glasgow Coma Scale (GCS) scores, and laboratory values were examined. Descriptive and chi-square statistical analyses were performed.

Results: Among 132 patients (mean age 77.42 ± 6.98 years), 49.2% were female. Common comorbidities included hypertension (76.5%), cardiovascular (55.3%), pulmonary (31.8%), neurological diseases (21.2%), diabetes mellitus (46.2%), cancer (23.4%), and preexisting kidney disease (30.3%). The mortality rate was 93.9%. Survivors showed significantly higher urine output within the first 24 h, higher

initial and final GCS scores, and elevated initial total protein and albumin levels compared to deceased patients. Conversely, deceased patients had significantly higher final SOFA scores, more frequent cardiopulmonary resuscitation, and higher neutrophil-to-lymphocyte ratios.

Key conclusion: Mortality among elderly ICU patients undergoing hemodialysis due to AKI remains high. Preventative measures and increased clinical awareness are essential to improve outcomes.

Keywords: Acute kidney injury; elderly; hemodialysis.

P-0127

Challenges in the treatment of a geriatric patient with endocarditis and bullous pemphigoid

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Introduction: An 89-year-old patient was admitted to the Geriatrics department due to acute endocarditis on a native mitral valve, with blood cultures positive for *Cutibacterium acnes*. The patient had a history of bullous pemphigoid, requiring drainage and debridement for perineal subcutaneous abscess, chronic corticosteroid use.

Methods: The first complication was an acute spontaneous hematoma on the left inferior gluteal artery, which was embolized without incidents. Elevated prothrombin levels and vitamin K-dependent coagulation factors improved after antibiotic therapy, suggesting cefazolin-induced hypoproteinemia.

Later, purulent discharge appeared in the perineal region, with cultures positive for *Candida albicans* and *Pseudomonas aeruginosa*. Treatment with fluconazole and ceftazidime was initiated. A magnetic resonance revealed three pelvic collections, endoscopic ultrasound-guided transrectal drainage of a perianal abscess was performed. After a positive urine culture for *Abiotrophia defectiva* y *Enterococcus faecium*, teicoplanin was added.

Malposition of the rectal prosthesis led to a new drainage and ceftazidime was replaced with meropenem due to a positive culture for *Klebsiella BLEE* to expanded antibiotic coverage.

Results: Finally, due to the appearance of a fistulous tract with the scrotum, the patient was evaluated by General Surgery, and it was decided to place a seton as palliative treatment for the complex suprasphincteric fistula in order to avoid a false closure, considering the surgical risk and the patient's wishes. After three months, the patient was discharged to a nursing home.

Conclusions:

- Bullous pemphigoid is an autoimmune condition with high infection risk.
- Cultures before starting antibiotics are essential to reduce bacterial resistance.

P-0128

Clinical efficacy of Cangfu Daotan decoction combined with Xuebijing injection on severe pneumonia with phlegm-damp retention pulmonary: a prospective randomized clinical study

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Objectives: To explore the clinical efficacy of Xuebijing combined with Daotan decoction and reducing formula in the treatment of severe pneumonia with phlegm dampness accumulation in the lungs.

Methods: This was a prospective, randomized, controlled trial that included 80 adults aged 17–90 years with severe community-acquired pneumonia. The participants were randomly divided into the Combined group (n = 40) or the Control group (n = 40). The Control group received conventional medications, while the Combined group was treated with Xuebijing (intravenous infusion) in conjunction with Daotan decoction and reducing formula (oral/nasal feeding), in addition to the non-traditional Chinese medicine group.

Outcomes and main results: The two groups were observed for testing indicators, scoring indicators, efficacy related indicators, and adverse reactions. After traditional Chinese medicine treatment, RBC, WBC, NEUT%, PCT, CRP, IL-6 were significantly lower, and PaO₂/FiO₂ was significantly higher than the Control group (P < 0.05). The CPIS and SOFA scores of the Chinese medicine group after treatment were significantly lower than the non-traditional Chinese medicine group (P < 0.05). The 28-day mortality rate (5.00% vs 17.50%) and mechanical ventilation time (2.02 ± 0.46 vs 3.91 ± 0.82 days) of the Chinese medicine group were significantly lower than the non-traditional Chinese medicine group (P < 0.05).

Conclusions: In patients with severe pneumonia and phlegm-damp retention pulmonary, Cangfu Daotan decoction combined with Xuebijing injection led to a statistically significant improvement in the primary endpoint of the pneumonia severity index as well a significant improvement in the secondary clinical outcomes of mortality, duration of mechanical ventilation and duration of ICU stay.

Ageing biology

P-0129

Predicting adverse outcomes in healthy aging community-dwelling early-old adults with the timed up and go test

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Introduction: Simple, easy-to-perform, safe and cost-effective methods for the prediction of adverse outcomes in older adults are essential for the identification of patients who are most likely to benefit from early preventive interventions.

Methods: The study included 160 community-dwelling individuals aged 60–74 years, with 44.4% women. A comprehensive geriatric assessment was performed in all participants. Bioimpedance body composition analysis included 149 subjects. Among other tests, functional assessment included Barthel Index, MMSE, TUG and Fried frailty phenotype. Follow-up by telephone was made after at least 365 days. The composite endpoint (CE) included fall, hospitalization, institutionalization and death.

Results: Cohort characteristics: age 66.8 ± 4.2 years, 3.81 ± 2.23 diseases, 4.29 ± 3.60 medications or supplements, and good functional status (MMSE 29.0 ± 1.5, Barthel Index 98.1 ± 8.2, prevalence of Fried frailty phenotype 2.5%). During one-year follow-up, 34 subjects (21.3%) experienced CE: hospitalizations (13.8%) falls (9.38%), death (0.63%) and no institutionalization. A higher probability of CE was associated with age ≥ 70 years, taking any medication or supplements, usual pace gait speed ≤ 0.8 m/s and TUG > 9 s. TUG was the only independent measure predicting one-year CE occurrence in multivariate logistic regression.

Conclusion: The TUG test was superior to frailty phenotype measures in predicting one year incidence of a CE consisting of fall, hospitalization, institutionalization and death in a cohort of healthy-

aging community-dwelling early-old adults, although its value as a standalone test was limited.

P-0130

Predictors of adverse outcomes in healthy aging adults: coronary artery disease, lower educational status and higher P-selectin levels

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Background: Societal aging – as a global demographic phenomenon – shows no indication of abating. As a result, the problem of age-associated disability and related long-term care is emerging as a major public health challenge. It is important that methods for identifying older adults at risk of adverse outcomes are implemented early.

Methods: The study group consisted of 145 individuals, 44.1% women, who were randomized from community-dwelling 60–74-year-old adults. A comprehensive geriatric assessment was supplemented with Fried frailty phenotype evaluation and blood tests (including adhesion molecules, matrix metalloproteinases and neurotrophic factors).

A follow-up by phone call was made for at least 3 years after the initial examination. Composite endpoint (CE) included falls, hospitalization, institutionalization and death.

Results: Mean study group age was 66.5 ± 4.1 years and mean number of diseases was 3.7 ± 2.2 . During a three-year follow-up, 71 participants (49.0%) experienced any CE-events. The Wilcoxon-Gehan test indicates that a higher probability of three-year CE completion was associated with an age > 65 years, coronary artery disease (CAD), 6-Minute Walk Test < 432 m, serum glucose > 120 mg/dL, serum cortisol > 10 µg/dL, leptin ≥ 15 ng/mL, P-selectin ≥ 23 ng/mL and GDNF ≥ 20 pg/mL. CAD, educational status and P-selectin levels were independent measures predicting three-year CE occurrence in multivariate logistic regression analysis adjusted for clinical and functional measures, and blood tests.

Conclusion: Coronary artery disease, poorer lower educational status and higher P-selectin levels were predictive of adverse outcomes in the community-dwelling healthy-aging early-old adults during three-year follow-up.

P-0131

Small extracellular vesicles from young adipose-derived stem cells ameliorate age-related changes in the heart of old mice

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Introduction: Aging causes a gradual decline in function and raises the risk of cardiovascular diseases like heart failure and aortic stenosis. New therapies that utilize stem cell-derived products, especially those that operate through paracrine mechanisms, may assist in reversing damage related to aging.

Methods: We evaluated the effects of small extracellular vesicles (sEVs) derived from young adipose-derived stem cells (ADSCs) on cardiac aging. Aged C57BL/6J mice received intravenous injections of ADSC-sEVs, while phosphate-buffered saline (PBS)-treated aged mice served as controls. Young untreated mice were also included to identify age-specific changes. Cardiac function was assessed through transthoracic echocardiography and physical endurance tests. Histological and molecular analyses of heart tissue were performed to evaluate structural changes, oxidative stress, inflammation, and cellular senescence. Heart metabolomes were analyzed using a comprehensive metabolomic approach.

Results: ADSC-sEV treatment significantly improved several markers of cardiac aging. Structural improvements included reduced fibrosis and enhanced vascularization. Molecular assays demonstrated decreased levels of oxidative stress, inflammatory markers, and senescence-associated proteins. Echocardiographic results indicated a reversal of age-associated diastolic dysfunction and left ventricular remodeling. Metabolomic profiling revealed a shift towards a more youthful metabolic state in the hearts of the treated mice.

Key conclusions: sEVs derived from young ADSCs exhibit significant therapeutic potential to address age-related cardiac decline. These findings support the development of ADSC-sEVs as a noninvasive intervention for cardiac aging.

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P-0132

Diagnostic value of combined detection of serum lipoprotein a and BNP in patients with heart failure

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Objective: To explore the diagnostic value of combined detection of serum lipoprotein a [Lp(a)] and brain natriuretic peptide (BNP) in patients with heart failure.

Methods: A total of 100 patients with heart failure admitted to our hospital from January 2021 to January 2024 were retrospectively selected as the study group, and another 100 healthy volunteers who underwent physical examinations in our hospital during the same period were selected as the control group. The levels of Lp(a) and BNP in the two groups were analyzed. The receiver operating characteristic curve (ROC) was drawn to analyze the diagnostic value of combined detection of serum lipoprotein a and BNP in patients with heart failure.

Results: The levels of Lp(a) and BNP in the observation group were both higher than those in the control group ($P < 0.05$); the AUC value of combined detection of serum lipoprotein a and BNP was higher than that of single detection ($Z = 16.253, 12.875, 5.941, P < 0.05$).

Conclusion: The combined detection of Lp(a) and BNP has good diagnostic efficacy for patients with heart failure and is worthy of clinical promotion.

P-0133

Accelerated biological aging and its association with social isolation and loneliness: evidence from 396,263 UK Biobank participants

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Existing evidence has predominantly supported a unidirectional hypothesis: social isolation and loneliness contribute to biological aging. The possibility of a reverse causation hypothesis is neglected. This study is aimed to investigate whether accelerated biological aging may increase the risk of social isolation and loneliness. We analyzed data from 396,263 participants from the UK Biobank (UKB) baseline survey conducted between 2006 and 2010. Biological age was determined using the PhenoAge algorithm. Multivariable regression analyses examined the relationships between accelerated biological aging and social isolation and loneliness. Specifically, we conducted a moderation analysis to assess potential gender differences. To further understand the causal relationship between biological aging and social isolation/loneliness, we employed a two-sample Mendelian Randomization (MR) analysis. Results showed that participants with PhenoAge acceleration values one-standard deviation (SD) older than expected for their chronological age had 4.3% higher odds of social isolation and a 6.5% higher odds of loneliness. Gender differences were observed in these relationships: older women were biologically more vulnerable to social isolation, while there was no significant gender difference in biological aging and loneliness. Two-sample MR analysis indicated that biological aging increased the risk of reduced participation in activities and feelings of loneliness. Our study offers compelling evidence that accelerated biological aging contributes to an elevated risk of social isolation and loneliness among middle-aged and older adults. The findings underscore the importance of developing targeted policy interventions to mitigate accelerated biological aging, which may serve as a critical step toward enhancing social well-being.

P-0134

Serum vitamin D level is inversely associated with the non-HDL/HDL ratio: a cross-sectional study of KNHANES 2022–2023 data

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Background and purpose: Vitamin D plays a crucial role in metabolism, and an increased non-HDL/HDL ratio is a recognized metabolic risk factor. Low vitamin D levels have been linked to adverse lipid profiles, but their association with the non-HDL/HDL ratio remains unclear. This study aimed to investigate the relationship between serum 25-hydroxyvitamin D [25(OH)D] levels and the non-HDL/HDL ratio in both the general population and individuals with diabetes.

Methods: We analyzed adults aged 19 years and older, classifying them into three serum 25(OH)D groups: deficient (< 15 ng/mL), insufficient (15–30 ng/mL), and sufficient ($\geq$ 30 ng/mL). Non-HDL cholesterol was calculated as total cholesterol minus HDL-C, and the non-HDL/HDL ratio was determined. ANOVA was used to compare metabolic parameters across 25(OH)D groups. Multiple regression analyses examined the association between serum 25(OH)D and the non-HDL/HDL ratio in both the general and diabetes groups, adjusting for potential confounders.

Results: Triglycerides ($P < 0.001$), LDL cholesterol ($P = 0.003$), and the non-HDL/HDL ratio ($P < 0.001$) differed significantly across vitamin D groups, with more favorable lipid profiles in the sufficient group. Serum 25(OH)D levels were negatively correlated with the non-HDL/HDL ratio in both the general population ($r = -0.09$) and the diabetes group ($r = -0.18$). Multiple regression analysis confirmed this inverse association after adjusting for confounders.

Conclusions: Higher serum vitamin D levels were associated with a lower non-HDL/HDL ratio, suggesting that vitamin D deficiency may contribute to metabolic risk, particularly in individuals with an elevated non-HDL/HDL ratio.

P-0135

Association of oxidized LDL with hypertension in older patients on cardiovascular disease with and without diabetes mellitus

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Introduction: High blood pressure is considered a risk factor for cardiovascular disease in people with diabetes because increased blood pressure itself can contribute to vascular damage, making vessels more susceptible to inflammation. Hypertension can induce multiple changes in lipoproteins and oxidation-peroxidation processes, with oxidized low-density lipoproteins (Ox-LDL) representing an important predictive risk factor in this regard.

Methods: The study was proposed to assess the LDL susceptibility to lipid peroxidation in two study groups of older patients (aged 71 ± 12 years): a group of patients with cardiovascular disease (group I) and a group of patients with cardiovascular disease associated with type 2 diabetes mellitus (NIDDM) and hypertension (group II). The LDL susceptibility to in vitro induced lipid peroxidation was evaluated following its incubation with a prooxidant system.

Results: Our results showed the susceptibility of LDL to in vitro oxidation was increase in group II of patients compared with a group I (9.05–3.91 v.s. 4.26–2.07 mmol MDA/dL serum) and constitute an evidence that the prevalence of cardiovascular disease is higher in individuals with diabetes and hypertension.

Key conclusions: The results of this study indicate that oxidative processes increase in hypertension and cause increasing level of serum Ox-LDL. Diabetes mellitus and hypertension are interrelated diseases that strongly predispose an individual to atherosclerotic cardiovascular disease. The prevalence of coexisting hypertension and diabetes appears to be increasing in industrialized nations because populations are aging and both hypertension and NIDDM incidence increases with age.

P-0136

Application value of salbutamol combined with BAL in patients with acute bronchial asthma and the effect on patients' inflammatory factors and blood gas indexes

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Objective: To investigate the application value of salbutamol combined with BAL in patients with acute bronchial asthma and the effect of salbutamol combined with BAL on inflammatory factors and blood gas indexes in patients with acute bronchial asthma.

Methods: 100 cases of bronchial asthma patients admitted to our hospital from March 2020 to March 2024 were selected as the study subjects, and were divided into the control group ($n = 49$) and the observation group ($n = 51$) according to the method of randomized numerical table, the control group was treated with cloth BAL, and the combined group was treated with salbutamol combined with BAL. The two groups were compared in terms of clinical efficacy and pulmonary function [forceful lung volume (FVC), maximal expiratory flow rate (PEF), forceful expiratory volume in the first second (FEV1)], inflammatory factors [C-reactive protein (CRP), interleukin-6 (IL-6)], and blood gas indexes [oxygen saturation (SaO₂), partial pressure of oxygen (PaO₂), and partial pressure of carbon dioxide (PaCO₂)] before and after treatment.

Results: The total effective rate of treatment in the observation group was 92.89%, which was higher than 76.38% in the control group, and the difference was statistically significant ($P < 0.05$). Before treatment, there was no statistically significant difference in the comparison of pulmonary function FVC, PEF and FEV1 between the two groups ($P > 0.05$); after treatment, the FVC, PEF and FEV1 of the two groups were greater than that before treatment, and the observation group was greater than that of the control group, with a statistically significant difference ($P < 0.05$). The improvement time of cough, chest tightness and shortness of breath, and pulmonary rates in the observation group was shorter than that in the control group, and the difference was statistically significant ($P < 0.05$). Before treatment, there was no statistically significant difference between the CRP and IL-6 levels of the two groups ($P > 0.05$); after treatment, CRP (1.33 ± 0.19) ng/ml and IL-6 (10.22 ± 2.33) pg/ml in the observation group, and CRP (1.88 ± 0.25) ng/ml and IL-6 (15.22 ± 3.22) pg/ml in the control group. Both groups were lower than before treatment, and the observation group was lower than the control group, the difference was statistically significant ($P < 0.05$). Before treatment, lung function SaO₂ in both groups, PaO₂, PaCO₂, the difference was not statistically significant when compared ($P > 0.05$); after treatment, PaCO₂ of the observation group was lower than that of the control group, and SaO₂ and PaO₂ were higher than that of the control group, the difference was statistically significant ($P < 0.05$).

Conclusion: Salbutamol combined with BAL has precise efficacy in the treatment of bronchial asthma in patients with acute bronchial asthma, which can reduce the inflammatory response, improve the clinical symptoms, and improve the lung function of patients, and is worthy of clinical promotion and application.

P-0137

Human oral microbiome in aging: a systematic review

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Introduction: Studying aging and the risk factors associated with chronic non-communicable diseases is becoming increasingly relevant due to the progressive aging of population in general and of older people themselves. The most studied risk factors include diet, physical exercise, cognition and lifestyle habits. However, recent studies

are starting to investigate how the microbiome can affect health and potentially contribute to the onset of different chronic diseases. Our study aimed to systematically review available literature on the potential link between human oral microbiome and aging.

Methods: This systematic review was performed following the methodology stated in the Cochrane handbook for systematic reviews and reported based on the PRISMA statement. Literature searches were performed using PubMed, Cochrane Library, and Embase.

Results: Overall, 3,490 records were identified, of which six met the eligibility criteria. Included studies were qualitative assessed using the Revised Risk of Bias Assessment Tool for Nonrandomized Studies of Interventions. Results reported no significant differences in the bacterial and fungal communities analysed in the observed populations except for an increase in periodontal pathogens in older subjects. Specifically, bacterial species richness and diversity (α -diversity) was found to decrease with age in most studies, whereas no age clustering (β -diversity) was observed.

Conclusions: Studies provided valuable insights into the relationship between aging and changes in the oral microbiome. However, further studies are needed addressing confounding factors, methodological differences, sample size limitations, and gender differences to clarify how age-related changes in the composition of the oral microbiome may play a role in global health.

P-0138

The role of electrolytes imbalance in determining poor health outcomes in a cohort of older in-patients: the ELECTROHEALTH study, focus on hyponatremia

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Introduction: Electrolytes are crucial for various physiological processes. Hyponatremia, defined as a serum sodium level < 135 mmol/L, is common in older adults. Even mild hyponatremia can be associated to severe health issues. However, whether hyponatremia is a causal factor, a marker, or an innocent bystander remains unclear. This study investigates the relationship between serum sodium levels and clinical outcomes in geriatric inpatients.

Objectives: To investigate the role of hyponatremia in older inpatients in influencing length of hospital stay, functional and cognitive status, early rehospitalization, and all-cause mortality up to one-year post-discharge.

Methods: ELECTROHEALTH is a retrospective cohort study conducted on patients aged 75 and older admitted to the acute or geriatric rehabilitation wards of the University Hospital of Lausanne (CHUV). Inclusion criteria were patients aged 75 and older with sodium level measurements within 24 h of hospital admission. Data were extracted from electronic medical records, including patient demographics, serum sodium levels, comorbidities, multidimensional geriatric assessment and clinical outcomes. Patients were followed for rehospitalization and all-cause mortality until the last data extraction date.

Results: Out of 5072 patients, 2575 were included in the analysis. Hyponatremia was present in 15% of patients. The study found no significant differences in geriatric assessments, length of hospital stays, early rehospitalization, or mortality between hyponatremic and normonatremic patients. However, severe hyponatremia was associated with higher mortality.

Key conclusions: In this cohort, hyponatremia did not significantly impact clinical outcomes, acting as an innocent bystander rather than an independent factor influencing clinical outcomes.

P-0139

Risk factors for postoperative pulmonary infection in laryngeal cancer patients: an analysis using lasso and logistic regression to develop a preliminary nomogram-based prediction model

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Objective: This study aims to identify risk factors for postoperative pulmonary infection in patients with laryngeal cancer and to establish a risk prediction model using a nomogram.

Methods: A retrospective analysis was conducted on patients with laryngeal cancer who were admitted to the otolaryngology department of our hospital from February 2019 to May 2024. Patients were divided into an infection group and a non-infection group based on the occurrence of postoperative pulmonary infection. Univariate analysis, the Least Absolute Shrinkage and Selection Operator (Lasso) algorithm, and multivariate Logistic regression were utilized to identify risk factors for postoperative pulmonary infection. Risk prediction was visualized using a nomogram developed with R software. Internal validation was performed using the Bootstrap method. Discrimination of the model was assessed by the concordance index (C-index), and calibration was evaluated using calibration plots.

Results: Univariate analysis, Lasso regression, and Logistic regression identified the following as significant predictors of postoperative pulmonary infection in patients with laryngeal cancer: age (OR = 7.073, 95%CI: 2.002–24.987), diabetes (OR = 9.317, 95%CI: 3.027–28.678), coronary artery disease (OR = 21.182, 95%CI: 3.190–140.653), surgical method (OR = 4.521, 95%CI: 1.331–15.349), duration of surgery (OR = 25.167, 95%CI: 4.044–153.059), and postoperative administration of intravenous albumin (OR = 32.32, 95%CI: 7.491–235.147). The predictive model demonstrated a C-index of 0.946 (95%CI: 0.912–0.979) with a specificity of 87.3% and a sensitivity of 92.6%. The model's Brier score was 0.062. After internal validation, the model's C-index was 0.938. Calibration plots showed high congruence between the predicted probabilities and actual outcomes.

Conclusion: The Nomogram-based risk prediction model for postoperative lung infection in laryngeal cancer patients demonstrates excellent discrimination and calibration, providing valuable clinical insight for predicting postoperative lung infections in these patients.

P-0140

Associations between pain with non-motor symptoms and quality of life in patients with early-onset Parkinson's disease

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Background: Pain is a common and debilitating non-motor symptoms that may have a negative impact on the quality of life in patients with Parkinson's disease (PD). However, the influence of pain on quality of life and its associations with other non-motor symptoms in early-onset PD remain largely underappreciated.

Methods: We prospectively included 87 patients with early-onset (age less than 50 years) PD treated at our hospital between March 2020 and July 2024. Pain severity and quality of life was evaluated with the 9-item Brief Pain Inventory and 39-item Parkinson's Disease Questionnaire (PDQ-39), respectively. Non-motor symptoms were assessed using the 30-item Non-Motor Symptoms Scale (NMSS).

Results: Mean age of the 87 patients were 44 years, with a male prevalence of 70.11%. A total of 53 patients (60.92%) reported pain, with the most common (69.81%) type being musculoskeletal pain.

Compared with patients without pain, those with pain had significantly lower PDQ-39 score ($P < 0.001$) and higher NMSS scores both in frequency (12.5 ± 3.8 vs 19.4 ± 5.4 , $P < 0.001$) and severity (8.8 ± 3.1 vs 12.9 ± 4.6 , $P < 0.001$). Multivariate logistic regression indicated that pain is an independent factor for patient's quality of life ($\beta = 0.81$, 95% CI 0.71–0.90).

Conclusion: Pain is a common non-motor symptom that positively associated with the frequency and severity of other non-motor symptoms in patients with early-onset PD. Furthermore, pain independently affects patients quality of life. Thus, appropriate pain screening and management in patients with early-onset PD is important to improve patient's quality of life.

P-0141

Efficacy of human fetal mesenchymal stem cells in bone regeneration: an ovariectomy mouse model study

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Background: The investigation of various origins of human fetal mesenchymal stem cells (hfMSCs) and their biological properties provides a foundation for therapeutic applications in the clinical treatment of various human diseases. Recently, hfMSCs derived from fetal calvaria have been discovered and characterized. These cells expanded rapidly in vitro for up to 24 passages without showing any changes in proliferation ability, morphology, and expression of specific MSC markers.

Aim: To evaluate the efficacy of hfMSCs on bone regeneration in an ovariectomy (OVX) mouse model.

Methods: Transplantation of fetal-derived mesenchymal stem cells was performed in C57BL/6 mice (8 weeks old) two weeks post-ovariectomy. Micro-computed tomography was used to assess bone mineral density (BMD), bone volume, and trabecular number in the distal femur spongy bone. Four groups were evaluated: control, OVX, OVX + hfMSC, and OVX + hfMSC with cyclosporine.

Results: Bone volume and trabecular volume were significantly larger in the hfMSC groups compared to the OVX mice. Trabecular number was also higher in the hfMSC groups than in the OVX mice. However, BMD did not differ significantly among the four groups.

Conclusion: The study demonstrates the potential of hfMSCs in bone regeneration in an ovariectomy mouse model. Future studies could explore the use of these cells in treating postmenopausal osteoporosis patients.

Short poster presentation**Ageing biology**

P-0142

Study on the mechanism of SIRT1 improving age-related inner ear damage by regulating ferroptosis through NRF2

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Research background: Globally, the intensification of the aging population is pushing age-related hearing loss to the forefront of public health agendas. Age-related hearing loss is a type of sensorineural hearing loss that gradually develops with age, with its typical characteristic being a decline in the ability to perceive high-

frequency sounds. Research indicates that oxidative stress and mitochondrial dysfunction play a central role in the molecular mechanisms of age-related hearing loss. Silent information regulator 1 (SIRT1) may have a significant impact on regulating oxidative stress and mitochondrial function abnormalities. Nevertheless, the specific role and mechanism of SIRT1 in age-related hearing loss still await further investigation. This study aims to reveal the specific mechanism by which SIRT1 regulates ferroptosis through NRF2, improving inner ear damage in the elderly, providing a scientific basis for the development of new treatment strategies.

Research objectives:

1. To verify the successful construction of the aging model induced by D-galactose (D-gal), establishing the research foundation.
2. To evaluate the changes in SIRT1 expression in aging inner ear cells and its effects on cells.
3. To deeply analyze the specific mechanisms by which SIRT1 regulates age-related inner ear damage.
4. To explore the pathways by which SIRT1 regulates ferroptosis to improve age-related inner ear damage.

Methods:

1. Model Construction: Use D-gal to construct an aging model and verify the successful construction of the model through β -galactosidase staining, Ki67 staining, CCK8, synapse staining, basilar membrane staining, and ABR detection.
2. Assessing the Role of SIRT1 in Aging Inner Ear Cells: Use Western Blot (WB), CCK8, PI staining, Annexin/PI flow cytometry, basilar membrane staining, HE staining, and ABR detection to assess from morphological and functional aspects.
3. Mechanism Exploration: Use CCK8, QPCR, and WB to detect the expression of ferroptosis-related genes and proteins, fluorescent detection of Fe²⁺, GPX4, glutathione (GSH), malondialdehyde (MDA), superoxide dismutase (SOD), mitochondrial membrane potential, and reactive oxygen species levels.
4. Verification of SIRT1-NRF2 Regulatory Pathway: Use agonists and antagonists of SIRT1 and NRF2 to detect the protein levels of ferroptosis.

Results:

1. After treatment with 35 mg/ml D-gal for 24 h, HEI-OC1 cells were Ki67 negative and β -galactosidase positive; after 4 weeks of intraperitoneal injection of 500 mg/kg/d D-gal in guinea pigs, there was a loss of hair cells in the high-frequency region of the basilar membrane and disorder in the spiral ganglion, an increase in high-frequency hearing threshold, and 35 mg/ml D-gal treatment of cochlear explants also met the characteristics of the aging model, confirming successful modeling ($P < 0.001$).
2. WB detected a significant decrease in SIRT1 protein expression in aging HEI-OC1 cells; after activating SIRT1, cell viability increased, the proportion of PI-stained cells decreased, the loss of hair cells and spiral ganglion cells decreased, and hearing improved. The results are statistically significant.
3. After using various inhibitors, it was found that the cell viability of the ferroptosis inhibition group was the highest; after activating SIRT1, the expression of GPX4 and FTH1 genes increased, the expression of COX2 and ASCL4 genes decreased, the expression of GPX4 protein increased, the expression of ASCL4 protein decreased, the expression of Fe²⁺ decreased, the expression of GPX4 fluorescence increased, the expression of GSH fluorescence increased, the expression of MDA fluorescence decreased, the ratio of red/green fluorescence of mitochondrial membrane potential increased, and reactive oxygen species decreased. After activating SIRT1, the content of Fe²⁺ in the serum of the aging animal model decreased, the content of GSH and SOD increased, the content of MDA decreased, and WB detection after cochlear grinding found that the expression of GPX4 protein increased and the expression of ASCL4 protein decreased. The results are statistically significant.

4. After activating SIRT1, the expression of HO-1 decreased, the expression of NRF2 increased, the expression of SIRT1 increased, and the expression of NF- κ B decreased in aging HEI-OC1 cells; after using SIRT1 agonists and antagonists as well as NRF2 agonists and antagonists, it was found that there was differential expression of SIRT1, GPX4, HO-1, and NRF2 ($P < 0.001$).

Conclusion: This study confirms the key role of SIRT1 in delaying age-related inner ear damage and reveals that its activation can enhance the cell's resistance to oxidative stress by regulating ferroptosis and upregulating the expression of NRF2. This finding emphasizes the potential of SIRT1 and its downstream signaling pathways in the treatment of age-related inner ear damage, providing important scientific evidence for the development of new treatment strategies.

POSTER

Ageing Biology

P-0143

Risk factors for hyponatremia and correlation to outcomes in adults with tuberculous meningitis

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Background: Tuberculous meningitis represents a common type infection involving the central nervous system that is associated with a high morbidity and mortality rate. Hyponatremia is the most common and potentially life-threatening electrolyte disturbance in tuberculous meningitis. This study aimed to determine risk factors of hyponatremia and its association with patient outcomes.

Methods: Data of adults with confirmed tuberculous meningitis treated at ? Hospital during October 2020 and July 2024 were retrospectively collected and analyzed. Hyponatremia and severe hyponatremia was defined as serum sodium level < 135 mmol/L and < 120 mmol/L, respectively. Primary outcomes were functional outcome as assessed by the modified Rankin scale > 2 or patient death within a year after diagnosis.

Results: A total of 78 patients were included, of which hyponatremia and severe hyponatremia occurred in 36 (46.15%) and 11 (14.10%) patients, respectively. Compared with those without hyponatremia, patients with hyponatremia were significantly younger (58 ± 6 vs 49 ± 5 , $P < 0.001$), more likely to be men (20/42 vs 26/36, $P = 0.03$), and a lower Glasgow Coma Scale (13 ± 1 vs 11 ± 0.5 , $P < 0.001$). The 1-year mortality rate or rate of modified Rankin scale > 2 were similar between those with and without hyponatremia ($13/36$ vs $9/42$, $P = 0.15$).

Conclusion: Although hyponatremia is common in adult patients with tuberculous meningitis, severe hyponatremia is uncommon. The presence of hyponatremia does not significantly affect patient's mortality rate or functional outcomes.

P-0144

Development and validation of a nomogram for predicting hypertension in noise-exposed workers

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Background: A effective risk stratification tools for noise-exposed workers with hypertension are still lacking. We aimed to develop and valid a nomogram to predict the risk of hypertension individually in noise-exposed workers.

Methods: A total of 122,652 noise-exposed workers were included in this study from the First Affiliated Hospital of Chongqing Medical and Pharmaceutical College from 2023 to 2024. The samples were randomly divided into training and validation cohorts at a ratio of 2:1. A nomogram prediction model was constructed using the potential predictors of hypertension screened from the training set using Lasso-Logistic regression. The model was validated using ROC, calibration, and clinical decision curves.

Results: The reported rate of hypertension among noise-exposed workers is 15.8%. Lasso-Logistic regression found that occupational noise exposure, age, overweight, obesity, hyperglycemia, hypercholesterolemia, ECG abnormalities and family history of hypertension were significant risk factors for hypertension. A nomogram was built using the above 8 predictors. The area under the ROC curve (AUC) of our predictive model was 0.821 in the training set and 0.765 in the validation set, with corrected C-indices of 0.817 and 0.764, respectively. Furthermore, the calibration curves demonstrated good alignment with the ideal line ($P > 0.05$), and the decision curve analysis results indicated positive clinical utility.

Conclusions: The nomogram model constructed in this study may be an effective tool for predicting hypertension in noise-exposed workers. It helps identify high-risk groups and provides more reliable information for the early prevention and intervention of hypertension.

P-0145

Bcl-xL overexpression in T cells enhances mitochondrial metabolism and protects against oxidative damage

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In previous transcriptomic analyses, we revealed an upregulation of the anti-apoptotic protein Bcl-xL in the blood of centenarians compared to younger cohorts. Bcl-xL expression decreases in T cells with age, while B cells remain unaffected. Thus, the aging effect on Bcl-xL appears to be more pronounced in T cells, indicating a specific vulnerability in the survival pathways of these cells as individuals age. This study utilized a transgenic mouse model that overexpresses human Bcl-xL in all T cell subsets.

We first used flow cytometry to measure the dynamics of T cell subsets in our mouse model. Next, we analyzed T cell oxygen consumption using a Seahorse Extracellular Flux Analyzer and their lipid and protein oxidative damage using UPLC and OxyBlot, respectively. CD4 + helper T cells in both genotypes increased with age, reaching a peak in later stages, while CD8 + cytotoxic T cells declined over time. Both helper and cytotoxic T cell subsets showed a peak in naïve cells during adulthood, balanced by a decrease in effector cells. Significant increases in effector cytotoxic T cells were observed in the transgenic group at advanced ages.

T cell oxygen consumption analysis indicated that mitochondrial proton leak was significantly reduced in T cells overexpressing Bcl-xL. Basal respiration was also lower, suggesting a decreased oxygen requirement—likely due to enhanced mitochondrial efficiency, as reflected by the reduced proton leak. Non-mitochondrial oxygen consumption (NMOC) was also diminished, particularly in young T cells overexpressing Bcl-xL. Much of the NMOC results from the activity of oxygenases and oxidases, both of which generate ROS.

Consequently, levels of lipid peroxidation and protein carbonylation in T cells were lower in transgenic mice compared to wild-type mice. In conclusion, Bcl-xL overexpression does not alter T cell subsets with aging, but it modulates their metabolism and prevents oxidative damage.

P-0146

Modeling the consequences of hemorrhagic stroke: glycation exacerbates erythrophagocytosis in the adult zebrafish telencephalon

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Introduction: Hemorrhagic stroke, particularly intracerebral hemorrhage (ICH), is a highly lethal subtype of stroke that occurs mostly in the elderly. It is responsible for a poor prognosis and a high rate of disability, peculiarly in diabetic and aged patients. These conditions are known to exacerbate the consequences of ICH and promote red blood cell (RBC) glycation. This process favors eryptosis and subsequent phagocytosis, and may influence brain repair/damage after ICH.

Methods: We aimed to establish a method to glycate RBC. We consequently developed in vitro MGO-mediated glycation of human RBCs and evaluated its effect by using microscopy, cell flow cytometry and ektacytometry. To next investigate this effect on RBC clearance in vivo, we micro-injected RBCs into the brain parenchyma of zebrafish, an animal model used to study aging and brain plasticity. The clearance of RBC by phagocytic cells was studied taking advantage of transgenic fish Tg(mpeg1.1:mCherry) to visualize microglia.

Results: After MGO-glycation, RBC displayed characteristics of senescence (i.e. eryptosis, disrupted morphology and deformability). We reported that the erythrocyte injection in the telencephalon has no effect on the increased recruitment of mpeg1.1-positive cells due to the micro-injection process. However, glycation strongly increased erythrophagocytosis in our model. These data suggest that glycation could favor overloading of microglia and disrupt RBC clearance resulting in stronger toxicity.

Conclusion: We developed a simple model to mimic ICH consequences, and provide a deeper understanding of the RBC phagocytosis in the brain under glycated conditions. This will allow future studies on microgliosis and ageing after an ICH.

P-0147

Paraoxonase2 modulator alleviates cellular senescence with metabolic regulation and circadian clock

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Introduction: Cellular senescence, marked by irreversible cell cycle arrest, is closely linked to metabolic dysfunction and circadian rhythm disruption. Obesity accelerates aging by increasing oxidative stress through mitochondrial overload from fatty acid oxidation. Since senescence, metabolism, and circadian rhythms are interconnected, targeting one may influence all three.

Methods: Paraonase2(PON2) modulator, a small molecule that enhances mitochondrial function, was tested on senescent human dermal fibroblasts (HDFs). Cells were treated chronically, and senescence markers (SA- β -gal, CDKN1A, CDKN2A), circadian clock gene BMAL1, and mitochondrial structure and function were assessed.

Results: PON2 modulator treatment significantly reduced senescence markers, restored BMAL1 expression, and prevented mitochondrial structural and functional deterioration. These findings suggest that PON2 modulator alleviates cellular senescence and associated circadian and metabolic dysfunctions.

Key conclusions: PON2 modulator effectively mitigates cellular senescence while restoring circadian rhythmicity and metabolic regulation. These results highlight its potential for treating aging-related diseases and support the intricate link between senescence, metabolism, and circadian regulation.

This study was published in 2024 [1].

Reference:

[1] Heo et al., Antioxidants (Basel). 2024 Jan 16;13(1):109. <https://doi.org/10.3390/antiox13010109>.

P-0148

Differences in morale between men and women among very old adults

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Introduction: Morale can be viewed as future-oriented optimism or pessimism and relates to psychological well-being. Differences in morale between men and women remain understudied relative to other well-being measures.

Aim: This study aims to investigate whether there is a sex-based difference in morale among very old people and, if so, which variables are associated with this difference.

Methods: Data from the Umeå 85 +/Gerontological Regional Database (GERDA) was used. Participants included every other 85-year-old, every 90-year-old, and 95-year-old or older from selected municipalities in northern Sweden and western Finland. Interviews were conducted every five years between 2000 and 2017. Demographic, health, and functional variables were collected. A total of 558 men and 1083 women completed at least 12 of the 17 “yes/no” items from the Philadelphia Geriatric Center Morale Scale (PGCMS), with higher scores indicating better morale. Linear regression analyses were performed separately for each sex to identify significant variables.

Results: Men consistently displayed higher morale across all age groups, all cohorts, and all studied variables. While men had significantly higher PGCMS means for each studied variable, significance disappeared for many variables reflecting strain (e.g., depressive symptoms). Of the 17 PGCMS items, six showed sex differences, primarily related to depression. Notably, depressive disorders and perceived loneliness emerged as significant factors for both sexes in the linear regression models.

Conclusions: While reasons for higher morale among very old males remain unclear, depressive symptoms appear to be relevant.

P-0149

PhenoAge outperforms chronological age in predicting all-cause mortality in octogenarians

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Aim: Given the limited evidence comparing Phenotypic age(PA), the observable signs of biological aging, and chronological age(CA) in predicting important outcomes such as mortality, this study aimed to assess the mortality prediction power of PA and CA in octogenarians.

Methods: Octogenarians receiving home-care between January 2024–January 2025 were included and followed for mortality. All patients underwent comprehensive geriatric assessment. PhenoAge calculator, a valuable tool for assessing biological aging using machine-learning algorithms, was used for PA calculation.

Results: A total of 163 patients were included, and 63.8% (n = 104) were female. The median (IQR) CA and PA of participants were 85.7 (82.9–90.5) and 84.1 (78.2–92.3) years, respectively. Median (IQR) follow-up period was 111 (62–165) days. Mortality rate was 13.7%(n = 22). The Difference Between Ages (DBA) was defined as the difference between PA and CA (PA minus CA).In the ROC analysis performed to analyze the DBA that predicts mortality, DBA over + 9.43 years was associated with mortality (AUC:0.698, 95%CI:0.579–0.818, p = < 0.001, sensitivity: 45.5%, specificity: 91.0%). In the Cox regression analyses for all-cause mortality, when it is adjusted for sex, frailty, malnutrition, depression, Chronic Heart Failure, dementia and dependency, although CA was not associated with mortality, PA and DBA over + 9.43 years was independently related to mortality (for CA HR: 0.99; 95%CI: 0.91–1.08; p = 0.916, for PA HR: 1.07; 95%CI: 1.02–1.12; p = 0.005, for DAB HR: 3.94; 95%CI: 1.50–10.3; p = 0.005).

Conclusion: This study is the first to demonstrate that PA is a better predictor of all-cause mortality in octogenarians, regardless of confounders. Larger-sampled prospective studies are warranted to confirm our findings.

P-0150

Atherogenic status and the risk of age-related disease at octogenarian patients

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Previous studies have shown that in almost all elderly population dyslipidemia is present. The process of aging is linked with metabolic disorders and thus could be linked with lipid ratios: atherogenic index (AI), TyG index (TyG) and Cholesterol Index (ChI). These indices are more reliable than lipid values and the aim of this study was to observed atherogenic status changes with advancing age.

Observational cross-sectional study was conducted on 194 patients of which 92 octogenarians (over 85 years) vs. 102 older patients (up to 65 years) as control group. AI was calculated as $\log(\text{TG}/\text{HDL})$, TyG as $\ln(\text{TG} \times \text{glucose}/2)$, ChI as LDL/HDL . Cut-off limits: ChI < 2.07, AI < 0.24; TyG < 8.5.

Data revealed at octogenarians high levels of: AI (0.30 vs. 0.19; p < 0.01); TyG (8.54 vs. 8.24; p < 0.001); ChI (3.29 vs. 1.85; p < 0.0001) vs. control. We noticed that with age, there is a statistically positive correlation with all atherogenic indices (p < 0.001).

Also, linear regression equation revealed significant positive correlations ($p < 0.0001$) between all atherogenic indices. As for cutoff limits, these are exceeded at octogenarians as follows: AI 57.6%; TyG index 51.08%; CholIndex 75%.

With advancing age lipoproteins changes are complex. Due to a number of confounding factors, the relationship between age and physiological function remains poorly understood. Nevertheless, we observed that atherogenic profile is associated with age, explaining the increased risk of age-related diseases.

P-0151

Analysis of serum folate levels in institutionalised elderly people

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Introduction: Folates are involved in the metabolism of amino acids and the process of cell division. Folate deficiency is common in elderly people with polypathologies and polymedications, and may be the cause of anaemia, depression and cognitive impairment.

Methods: We analysed serum folate levels in elderly people in long-term care units and nursing home, attached to the psychiatric hospital in Rennes, France from 01 January to 31 December 2024. We also studied their dietary intake and drug interactions that could influence their serum folate levels.

Results: In routine annual care, folate analysis dosage was performed in 212 patients aged between 59 and 98, including 113 women and 99 men.

Dietary folate intakes were 225 µg/day for menus with normal texture, 175 µg/day for all menus with chopped texture, excluding breakfast and snacks. The recommended daily dose was 500 µg/day. All patients received folic acid treatment of 5 mg per day for 1 month in the previous year.

In 107 patients (50%) folate levels were < 3.3 ng/ml.

Key conclusions: Dietary intake of folate is insufficient in elderly people living in institutions. Long-term supplementation with folic acid (synthetic form of vitamin B9) is necessary. We recommend biological monitoring of folate levels at least every 6 months in this population.

P-0152

Multi-modal imaging fusion for early diagnosis and risk assessment of cerebrovascular diseases in the elderly

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Cerebrovascular diseases (CVDs) significantly impact elderly health, requiring prompt and precise diagnosis. This study introduces a new framework for early CVD diagnosis and risk assessment in older adults using multi-modal imaging fusion. It combines magnetic resonance imaging (MRI), computed tomography angiography (CTA), and positron emission tomography (PET) data to improve diagnostic accuracy and prognosis. The methodology uses a deep learning fusion model to combine complementary data from various imaging modalities. Trained on a diverse dataset of healthy individuals and CVD patients, it employs a multi-channel convolutional neural network to capture spatial and temporal features of cerebrovascular pathology.

Initial findings suggest that the fusion model substantially surpasses single-modality approaches in the detection of early indicators of

CVDs, including microbleeds, white matter hyperintensities, and cerebral microinfarcts. Furthermore, the model exhibits strong efficacy in stratifying patients based on their risk of future cerebrovascular events, thereby providing critical insights for the development of personalized treatment plans.

The findings of this research have significant implications for improving clinical decision-making processes, with the potential to decrease the occurrence of stroke and other cerebrovascular complications in the elderly population. This study highlights the promise of multi-modal imaging fusion as a valuable asset in contemporary neuroimaging, facilitating more precise and individualized management of cerebrovascular diseases.

In summary, the integration of multi-modal imaging data via sophisticated fusion techniques constitutes a substantial advancement in the diagnosis and risk assessment of cerebrovascular diseases. This methodology shows potential for enhancing patient outcomes and alleviating the impact of cerebrovascular diseases in the aging population.

P-0153

Advanced therapeutic paradigms for multiple sclerosis in the geriatric population: integrating immunomodulation and neuroprotection

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Background and significance: The development of MS involves complex interactions between the immune and nervous systems, leading to inflammation, demyelination, and neurodegeneration. In older adults, these issues are worsened by age-related immune system and CNS changes. Current treatments mainly focus on immunosuppression, which may not effectively address neurodegeneration or the added impact of immune aging in the elderly.

Research methods: Our investigation combines immunomodulatory agents with neuroprotective treatments. We conducted a systematic review and meta-analysis of clinical trials to evaluate their effectiveness, particularly for the elderly. Furthermore, we created a preclinical model to explore the potential synergistic benefits on disease modulation and CNS restoration in aging.

Key findings:

1. Immunomodulation: Using monoclonal antibodies to target specific immune cells and inflammatory cytokines significantly reduces relapses and slows disease progression in older MS patients.
2. Neuroprotection: Neuroprotective agents like antioxidants and neurotrophic factors show promise in reducing axonal damage and promoting remyelination, crucial for countering aging effects on CNS repair.
3. Combined immunomodulatory and neuroprotective therapies significantly reduce disease activity and improve neurological function more than single treatments, offering a promising approach for enhancing therapy in the elderly.

Conclusion: Our findings highlight the need for a comprehensive treatment approach that reduces immune damage and supports CNS repair, promising better long-term outcomes for elderly MS patients. Future research should continue to assess the effectiveness and safety of these therapies in older adults to provide optimal, personal tailored care.

Short poster presentation

Ageing Biology

P-0154

Longer leucocyte telomere length protects from adverse cardiovascular effects of prolonged air pollution exposure

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Introduction: Higher air pollution exposure (HAPE) and shorter leukocyte telomere length (LTL) are both associated with increased risk of cardiovascular disease. In this study we tested whether effects of prolonged HAPE on cardiovascular health can be mediated through LTL decrease or if LTL and HAPE can have interacting effects on cardiovascular state.

Methods: In this cross-sectional analysis we selected 394 individuals (43.2% men), aged 62.4 ± 11.8 , from the Corinthia study [1]. Half of the participants lived in high air pollution areas (HAPA) and the other half in low air pollution areas (LAPA), for at least 10 years. LTL was measured by Southern blot and carotid-femoral pulse wave velocity (cfPWV), carotid intima-media thickness (cIMT) and presence of carotid plaque were determined to evaluate cardiovascular health.

Results: We found no difference in age and sex-adjusted LTL between HAPA and LAPA ($p = 0.42$). Using the median LTL (6.78 kb) as a cutoff, the cohort was divided into four groups, G1 (LAPA/long LTL): 100 patients, G2 (LAPA/short LTL): 92 patients, G3 (HAPA/long LTL): 98 patients and G4 (HAPA/short LTL): 104 patients. G4 patients displayed higher cfPWV and cIMT than the patients from the 3 other groups ($p < 0.05$ subsisting after age and sex-adjustment). Carotid plaque prevalence increased from 15% (G1) to 18% (G2), 27% (G3) and 39% (G4, $p < 0.01$).

Conclusions: Prolonged HAPE displays no direct effect on LTL. Interestingly, longer LTL may at least partially protect from negative effects of HAPE on vascular health. These results could be used for personalized cardiovascular risk prevention.

Reference:

[1] Oikonomou E. The association of air pollutants exposure with subclinical inflammation and carotid atherosclerosis. *Int J Cardiol.* 2021 Nov 1;342:108–114.

Poster

Ageing biology

P-0155

Exploration of risk factors for Alzheimer’s disease and construction of risk prediction models

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Background and purpose: Alzheimer’s Disease (AD) has caused serious social and economic burdens. Early identification of elderly populations at risk of AD conversion and targeted primary prevention are important research directions for us. This study intends to explore the independent risk factors for the development of AD, and to

develop and validate a risk prediction model for rapid assessment of conversion to AD in the elderly population.

Methods: Data for this study were obtained from the Alzheimer’s Disease Neuroimaging Initiative (ADNI) database, in which we screened 2,399 patients who were not diagnosed with AD at baseline (411 patients diagnosed with AD during follow-up and 1,988 patients not diagnosed with AD). Patients’ demographic data, clinical data (disease history, mood, scale results), imaging data, and blood biomarkers were extracted. We used logistic regression analysis to screen patients for independent risk factors for the diagnosis of AD. According to the difficulty of obtaining clinical information, the risk factors were incorporated into the models in batches, and the basic model included demographic information, emotion-related symptoms and scales, while the extended model included imaging information, genetic information and blood biomarkers. The models were evaluated and compared using the area under the curve (AUC) of the Receiver Operating Characteristic (ROC) curve and calibration curves, and the clinical decision curves were plotted to demonstrate the value of the models for clinical use.

Results: The risk factors for Alzheimer’s disease were hippocampus volume (OR = 0.9993, 95%CI: 0.9991–0.9994, $P < 0.001$), baseline MMSE score (OR = 0.754, 95%CI: 0.713–0.797, $P < 0.001$), anxiety (OR = 1.901, 95%CI: 1.454–2.470, $P < 0.001$), apathy (OR = 1.952, 95%CI: 1.462–2.585, $P < 0.001$), age (OR = 1.030, 95%CI: 1.014–1.046, $P < 0.001$), baseline FAQ score (OR = 1.171, 95%CI: 1.143–1.201, $P < 0.001$), PTau181 (OR = 1.024, 95%CI: 1.019–1.030, $P < 0.001$) and APOE4 (OR = 1.856, 95%CI: 1.587–2.171, $P < 0.001$). Three models were constructed. The basic model included Model 1, which included age, anxiety, and indifference, and the AUC and brier values were 0.613 and 0.140 after internal verification and calibration. In Model 2, age, baseline FAQ score and baseline MMSE score were included, and the AUC and brier values after calibration were 0.744 and 0.131 respectively after internal verification. Model 3 included p-tau181, baseline FAQ score, baseline MMSE score, hippocampus volume, and APOE4. The AUC and brier values after calibration were 0.778 and 0.125 respectively for internal verification. Model 2 has better discrimination in the base model and model 3 has better discrimination in the extended model. Therefore, all the above three models can be applied clinically for demonstration by nomogram.

Conclusions:

P-0156

Associations between plant and animal protein intake ratio with all-cause mortality in elderly patients with sarcopenia

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Background: Prior studies have indicated that the animal-sourced proteins have superior amino acid profiles than plant-based proteins.

Methods: In this single-center study, elderly patients with sarcopenia as defined by the 2019 Asian Working Group for Sarcopenia Consensus was surveyed with a food frequency questionnaire between April 2019 and October 2022. The plant to animal protein ratio was calculated based on percent energy. The primary outcome was death-censored all-cause mortality. The association between plant-to-animal protein ratio and all-cause mortality was evaluated with the Cox proportional hazard regression analysis.

Results: A total of 189 patients were included, with a mean age of 78 years and 69.31% were men. During a median follow-up time of 49 (interquartile range 30–56) months, 38 (20.11%) died. Cox regression analysis after adjusting for participant’s age, sex, handgrip strength and comorbidities of hypertension, stroke and diabetes

indicated that the hazards ratio (95% confidence intervals) for the 2nd, 3rd and highest quartile were 1.11 (0.91–1.20), 0.95 (0.84–1.01) and 0.81 (0.73–0.90), respectively, with the lowest quartile as the reference. Restricted cubic spline analysis indicated a linear and reverse association between plant-to-animal protein ratio and all-cause mortality.

Conclusion: A higher intake of plant-based protein, paradoxically, appeared to be associated with a lower risk of all-cause mortality in elderly patients with sarcopenia. Prospective interventional studies are needed to conclusively determine the effects of plant and animal-sourced proteins in the outcomes of elderly patients with sarcopenia.

P-0157

Effectiveness of early rehabilitation nursing in improving functional recovery of dysphagia in patients with Alzheimer's disease

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Background: In patients with Alzheimer's disease, inadequate food and fluid intake can result in malnutrition, dehydration and increased morbidity and mortality. Patients may lose self-care abilities.

Methods: We recruited 100 patients with Alzheimer's disease with dysphagia from hospital. This was a randomized controlled trial that randomly assigned patients to experimental ($n = 50$) and control ($n = 50$) groups. While the experimental group received early rehabilitation nurse interventions, the control group received standard nursing care. The Swallowing Function Assessment (SSA) scale, Koda's drinking water test, the Video Fluoroscopic Swallowing Study (VFSS), Saito's 7-level evaluation score, and the Swallowing-related Quality of Life (SWAL-QOL) questionnaire were used to assess the nursing satisfaction and swallowing function status of patients in both groups. SPSS software was used to perform the chi-square test, t-test, and generalized estimation equation for data analysis.

Results: Following treatment, there was a statistically significant difference ($P < 0.05$) in nursing satisfaction between the observation group and the control group. The observation group's quality of life scores were statistically substantially higher than the control group's ($P < 0.05$ for all). With statistical significance ($P < 0.05$ for all), the observation group's SAS, VFSS, and SWAL-QOL ratings were significantly higher than the control group's. Both Water Swallowing and Saito's 7-level evaluation score, improved considerably more in the observation group than in the control group, and the difference was statistically significant ($P < 0.05$).

Conclusion: Early rehabilitative nursing intervention is advised for patients with dysphagia who have Alzheimer's disease. It can significantly enhance the patients' quality of life and dysphagia symptoms.

P-0158

Development of a predictive model for hearing loss in hypertensive patients using the random forest algorithm

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Objective: The aim of this study is to examine the factors influencing hearing loss in patients with hypertension and to develop a predictive model using the random forest algorithm.

Methods: Clinical data from 235 hypertensive patients treated at our hospital were collected. These patients were divided into two groups

based on the presence or absence of hearing loss. Univariate and multivariate logistic regression analyses were performed to identify independent predictive factors for hearing loss in hypertensive patients. A random forest machine learning model was then constructed based on these factors.

Results: Among the 235 hypertensive patients, the incidence of hearing loss was 41.7% (98/235). Older age (OR = 1.630, 95%CI 1.124 ~ 6.356, $P = 0.016$), variability in 24-h systolic blood pressure (OR = 1.382, 95%CI 1.131 ~ 3.338, $P = 0.014$), and diabetic retinopathy (OR = 1.258, 95%CI 0.985 ~ 2.912, $P = 0.026$) were identified as independent predictors of hearing loss. The random forest model demonstrated substantial predictive performance with an area under the curve (AUC) of 0.863 (95%CI 0.735 ~ 0.918). The model achieved a sensitivity of 74.8%, specificity of 88.2%, and an overall accuracy of 85.0%.

Conclusion: The random forest-based machine learning model proved to be a valuable tool for predicting hearing loss in hypertensive patients.

P-0159

Application effect of Zhenwu Tang combined with Shengxian Tang plus reduction in patients with chronic heart failure (CHF)

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Abstract: Objective: to explore the application effect of Zhenwu Tang combined with Shengtang Tang plus reduction in patients with chronic heart failure (CHF). **Methods:** Sixty-four patients with chronic heart failure admitted to our hospital from February 2022 to February 2024 were divided into the control group ($n = 32$) and ($n = 32$) according to the method of randomized numerical table. The control group was treated with conventional western medicine, and the observation group was treated with Zhenwu Tang combined with Shengxian Tang plus reduction, and both groups were treated continuously for 3 months. The two groups were compared in terms of clinical efficacy, Chinese medicine symptoms [palpitation, fatigue, lumbar and knee pain and weakness, shortness of breath when moving], cardiac function indexes, C-reactive protein (CRP) levels, plasma brain natriuretic peptide (BNP) levels, and the occurrence of adverse reactions.

Results: The total effective rate of the patients in the control group was 71.88%, and the total effective rate of the patients in the observation group was 93.75%; compared with the control group, the total effective rate of the treatment in the observation group was higher ($P < 0.05$). There was no significant difference between the Chinese medicine symptom scores (palpitation, fatigue, lumbar and knee pain and weakness, and shortness of breath when moving) of the patients in the control group and those in the observation group ($P > 0.05$); the scores of palpitation, fatigue, lumbar and knee pain and weakness, and shortness of breath when moving of the patients in the control group were (1.55 ± 0.54), (1.23 ± 0.48), (1.42 ± 0.56), and (1.43 ± 0.69), and those of the patients in the observation group were (1.43 ± 0.69), and those of the patients in the control group were (1.43 ± 0.69). The scores of palpitation, fatigue, lumbar and knee pain and weakness, and shortness of breath on movement in the patients of the observation group were (0.82 ± 0.51), (0.62 ± 0.53), (0.79 ± 0.48), (0.82 ± 0.47), respectively, and the TCM evidence points of both groups compared with those of the current group before the treatment, and the TCM evidence points of the observation group after the treatment were lower when compared with those of the control group (all $P < 0.05$). Compared with the control group, the observation group had lower left ventricular end-systolic internal

diameter (LVESd) and higher output per beat (SV), left ventricular end-diastolic internal diameter (LVEDd) and left ventricular ejection fraction (LVEF) after the treatment (all $P < 0.05$). Before treatment, there was no statistical significance in the comparison of CRP and BNP levels between the two groups ($P > 0.05$); after treatment, CRP and BNP levels were lower than those before treatment in both groups, and CRP and BNP levels were lower than those in the control group in the observation group after treatment (all $P < 0.05$); the difference in the incidence rate of adverse reactions between the two groups was not statistically significant ($P > 0.05$).

Conclusion: The application of Zhenwu Tang combined with Shengxian Tang plus reduction has a better therapeutic effect, which is conducive to the improvement of cardiac function and inflammatory indexes, reduces the inflammatory response of the body, promotes the recovery of cardiac function, and has no obvious adverse reactions.

Short poster presentation

AI and big data

P-0160

Technical validation and usability of CAREPATH system for managing older patients with mild cognitive impairment or mild dementia was conducted to validate CAREPATH in older adults with multimorbidity and mild cognitive impairment or mild dementia

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Objective: To validate the CAREPATH system for older adults with mild cognitive impairment (MCI) or mild dementia (MD) due to Alzheimer's disease, ensuring its usability and functionality.

Methods: The technical validation and usability study (TVU) involved installing the system in the homes of four participants in Albacete, Spain. The system includes motion and temperature sensors, self-measurement devices (such as a pulse oximeter, blood pressure monitor, scale, thermometer), and a tablet with a personalized application containing individual care plans. Participants received training on device usage during installation. Over three months, participants used CAREPATH according to their care plans, with follow-up conducted through 11 phone interviews per participant. A task protocol was administered after one month to reinforce application usage. Participants also completed simple questionnaires (SEQ) via the application, evaluating system functions on a Likert scale (1–7).

Results: The average age was 74.8 years; two participants had MCI and two had MD, with an average of 2.3 comorbidities and a mean Mini-Mental State Examination score of 24.5. All participants completed the study, reporting 22 system-related issues. SEQ responses ($n = 71$) showed a median usability score of 6 (out of 7), with a lowest score of 4, indicating good to very good usability. User

experience assessments highlighted excellent scores in attraction, efficiency, and novelty, while clarity and stimulation were rated as good.

Key conclusion: CAREPATH demonstrated strong usability and validity for older adults with multimorbidity and MCI or MD due to Alzheimer's disease, supporting its potential as an effective tool for integrated care.

Poster

AI and big data

P-0161

AI-driven interventions for preventing and managing malnutrition in older adults: a systematic review

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Malnutrition in older adults is a critical public health challenge, linked to increased morbidity, mortality, and healthcare costs. This systematic review explores the transformative role of artificial intelligence (AI) in addressing malnutrition through tailored, efficient, and scalable interventions.

Following PRISMA guidelines, a comprehensive search of peer-reviewed studies from the past five years was conducted, focusing on AI-driven nutritional care for older adults.

Key findings highlight that AI applications, including predictive analytics, machine learning, and clinical decision support systems (CDSS), improve risk screening, early detection, and personalized meal planning. Technologies such as self-monitoring apps and AI-powered tools for identifying swallowing difficulties enhance dietary habits and prevent complications.

Challenges include concerns around usability, algorithm biases, and the delicate balance between automation and human connection in caregiving. Ethical considerations emphasize data privacy, transparency, and user-centered designs. The review concludes that while AI-driven interventions hold immense potential for improving health outcomes in older adults, further research is needed to validate these technologies in diverse populations and ensure equitable adoption.

This review underscores AI's capability to revolutionize geriatric nutrition, offering a pathway to enhanced health and quality of life for older adults globally.

Keywords: Malnutrition, Older Adults, Artificial Intelligence, Personalized Nutrition, Geriatric Care.

P-0162

Chronotype distribution of day and night activities and moods among baby boomers in Taiwan: Actigraphy and ecological momentary assessment (EMA) by age and gender

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Introduction: This study examined lifestyle profiles among middle-aged and older baby boomers by gender.

Methods: Data was derived from the middle-aged and older Chinese adults' health using actigraphy in Taiwan (MOCHA-T) dataset. The MOCHA-T study is an ongoing survey aiming to measure subjective, objective, and momentary health and lifestyle, considering gender and rural–urban differences among baby boomers in the community in

Taiwan. The baseline data of subsamples was collected in 2021–2024. A subsample of 127 Baby Boomers aged 59–77 living in urban areas with valid actigraphy and EMA data was analyzed.

Results: The results reveal that: (1) The sleep patterns, physical activity, and circadian rhythms of baby boomers did not differ significantly by age in men. (2) Older women spent less time in moderate to vigorous physical activity than middle-aged women ($M = 83.9$ vs. 133.1 min, $p = 0.035$). (3) Older adults were happier than middle-aged adults throughout the day, especially women. (4) For middle-aged men, the main activity during the day was work (33.3–36.2%), and in the evening was sedentary activities (53.3%), while middle-aged women mostly engaged in sedentary activities (18.9–47.3%) and housework (17.0–19.0%) throughout the day. (5) Older adults showed more diverse daily momentary activities than middle-aged adults: Although sedentary activities and housework were frequently engaged, gardening, volunteering, and gathering were also highly engaged in older men. Older women spent most of their time on religious activities, classes, and gathering.

Conclusion: The findings provided scientific evidence of the diverse lifestyles by age and gender among baby boomers with novel measurements.

P-0164

The impact of lidocaine combined with budesonide/formoterol on FeNO levels and symptom improvement in asthma patients

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Objective: To investigate the effects of combining lidocaine with budesonide/formoterol on fractional exhaled nitric oxide (FeNO) levels, asthma symptoms, pulmonary function, and overall quality of life in asthma patients. **Methods:** 80 asthma patients treated at our hospital between January 2022 and December 2023 were randomly assigned to either the treatment group or the control group. The treatment group ($n = 40$) received lidocaine (40 mg inhaled daily) combined with budesonide/formoterol ($320 \mu\text{g}/9 \mu\text{g}$ twice daily), while the control group ($n = 40$) received budesonide/formoterol ($320 \mu\text{g}/9 \mu\text{g}$ twice daily) alone. FeNO levels were measured using a NIOX MINO device. Asthma symptoms were assessed using the Asthma Control Test (ACT). Pulmonary function was evaluated using spirometry, measuring forced expiratory volume in one second (FEV1) and peak expiratory flow (PEF). Additionally, patients' quality of life was assessed using the Asthma Quality of Life Questionnaire (AQLQ).

Results: At baseline, there were no significant differences in FeNO levels, ACT scores, pulmonary function tests, or AQLQ scores between the two groups. After 12 weeks of treatment, both groups showed significant reductions in FeNO levels and improvements in ACT scores, pulmonary function, and AQLQ scores ($P < 0.05$). The treatment group exhibited a more significant decrease in FeNO levels (mean reduction: 21 ppb) compared to the control group (mean reduction: 14 ppb) ($P < 0.01$). Additionally, the treatment group showed greater improvement in ACT scores (mean improvement: 5 points) compared to the control group (mean improvement: 3 points) ($P < 0.01$). The treatment group also experienced more substantial improvements in FEV1 (increase of 13% vs. 8%, $P < 0.01$) and PEF (increase of 16% vs. 10%, $P < 0.01$) compared to the control group. Quality of life, as measured by AQLQ scores, improved more significantly in the treatment group (mean improvement: 1.6 points) compared to the control group (mean improvement: 0.8 points) ($P < 0.01$). The combination therapy was well-tolerated, with no significant adverse effects reported.

Conclusion: Lidocaine combined with budesonide/formoterol effectively reduces FeNO levels, improves asthma symptoms, enhances pulmonary function, and boosts the quality of life in asthma patients more than budesonide/formoterol alone. This combination therapy represents a promising approach to asthma management, potentially leading to better patient outcomes and overall quality of life.

P-0165

From concept to clinic—results from the first 10 months after opening a specialized tapering clinic

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Introduction: Tapering and management of prescription opioids is a well-known practice and is a part of the current clinical guidelines on safe prescribing. Every patient should receive thorough monitoring, education and a tapering plan when prescribed with opioids or receiving refills after a prolonged treatment. [1–3] There are, however, challenges associated with tapering, including close follow-up, patient education, clinician time, management knowledge level, withdrawal safety and much more. The evolution of follow-up through smartphone applications has shown promising results in some fields of medicine and patients are increasingly interested in the idea of using smartphone applications for follow-up [4–5].

Methods: The Prescriby Clinic opened in collaboration with SÁÁ, National Center for Addiction Medicine, and is staffed by two clinical pharmacists and a physician. The Clinic services both naive and chronic patients, who are using opioids, benzodiazepines or sleep medications (z-drugs). Treatment for naive patients is through phone interviews, while treatment for chronic patients is a mix of in-person interviews and follow-up by phone. During onboarding, patients are introduced to the Prescriby smartphone application, which reinforces trust between clinician and patient and makes follow-up more personalized.

Results and conclusions: This is an ongoing data collection, since the Clinic opened in October 2024. Data collection will continue through August 2025 and all the relevant data will be presented at the conference. Preliminary data shows that 50.4% of patients in the Clinic are over the age of 65, whereas the average age is 61 and median age is 65.

P-0166

Efficacy and safety of a digital tapering intervention in patients prescribed opioids post-surgery

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Introduction: More than 300 million surgical procedures are performed worldwide each year, and opioids remain a primary approach for managing postoperative pain [1, 2]. A significant number of patients do not discontinue opioid treatment and continue to use opioids after surgery [2]. Every patient should receive thorough

monitoring, education and a tapering plan when prescribed with opioids or receiving refills after a prolonged treatment [3–5]. Follow-up through smartphone applications has shown promising results and patients are open to the idea of using smartphone applications for follow-up [6–7].

Methods: This study is a prospective cohort exploratory study. Participants are recruited via referrals to the Prescribly Clinic from orthopedics departments in the hospital after surgery, where they will receive a personalized tapering treatment and follow-up with a clinical pharmacist. Preliminary data indicated that around 82% of patients are older than 60 years of age.

The efficacy of the intervention will be measured in tapers successfully completed, doses successfully lowered during tapering, number of “active-users”, satisfaction with the intervention and patients successfully remaining off opioid medication at 6 and 12 months after intervention. Participant safety will be monitored by assessing adverse effects using the Numeric Pain Rating Scale (NPRS) to assess the severity of pain.

Results and conclusions: This is an ongoing study and recruitment of participants will conclude at the end of May 2025. There will be preliminary results of the secondary objectives and a rough outline of conclusions presented at the time of the conference, which will be presented later.

P-0167

Metabolic dysfunction-associated steatotic liver disease increased the incidence of vascular dementia in the elderly Korean women, based on the Korean NHIS-HEALS cohort

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Background: Metabolic dysfunction-associated steatotic liver disease (MASLD) is associated with various diseases such as cardiovascular diseases and mortality. However, studies examining the effects of MASLD on cognitive impairment, especially dementia, are lacking.

Objective: This study was designed to investigate the association between MASLD and the risk of dementia in individuals aged 60 years or older.

Methods: This study was retrospectively designed using the NHIS-HEALS cohort (median follow-up of 9.4 years). Study population was categorized into three groups according to the severity of MASLD: non-, intermediate, and high MASLD. To evaluate the association between MASLD and dementia, Kaplan–Meier estimate plot and Cox proportional hazards regression models were performed.

Results: Compared to non-MASLD, hazard ratios (HRs) (95% confidence intervals [CIs]) of intermediate and high MASLD for vascular dementia were 1.026 (0.934–1.128) and 1.138 (0.992–1.307), respectively, in men and 1.036 (0.957–1.121) and 1.178 (1.037–1.338), respectively, in women after full adjustment, of the 114,067 included participants.

Conclusions: This study suggests that MASLD increases the risk of vascular dementia in the elderly Korean women.

P-0168

Machine learning prediction of survival in centenarians after age 100: a retrospective, population-based cohort study

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Background: Survival at extreme ages is often thought to be influenced by stochastic factors, making it challenging to predict. However, with the surge in data availability, this assumption may be challenged. This study aimed to examine the feasibility of using big data and machine learning (ML) to predict mortality in centenarians and identify key survival determinants.

Methods: A total of 9,718 centenarians (83% women) were identified from the territory-wide electronic health record (EHR) database in Hong Kong between 2004 and 2018. The sample was randomly split into 70% training and 30% testing cohorts. Using 82 potential predictors (including demographics, diagnoses, prescriptions, and laboratory results), we trained a stepwise logistic regression model and four ML algorithms to predict 1-year, 2-year, and 5-year mortality beyond age 100 and evaluated their discrimination and calibration performance.

Results: The median age at death of the included centenarians was 102.7 years. The eXtreme Gradient Boosting algorithm provided the best discrimination and calibration, with an area under the receiver operating characteristic curve of 0.707 (95% CI = 0.685–0.730) for 1-year mortality and 0.704 (0.686–0.723) for 2-year mortality in the testing cohort. However, all the models had poor calibration for 5-year mortality. Albumin, number of prior hospitalizations, urea, medications for soft-tissue inflammation, and red cell distribution width were identified as the most important predictors.

Conclusions: ML models based on routinely collected EHRs can predict short-term survival beyond age 100 with moderate discrimination, which could potentially be used to identify high-risk centenarians and facilitate end-of-life care planning.

Short poster presentation

AI and Big Data

P-0169

The Scottish Bio-Hermes-001 data challenge: democratising data access to accelerate sustainable dementia research

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Direct access to individual participant data (IPD) from completed research studies is an aspiration, but frequently ‘open’ data are not equally open to all in the research community. Through a partnership of Scottish Brain Health Alliance for Research Challenges, Global Alzheimer’s Platform, and Alzheimer’s Disease Data Initiative (ADDI), we attempted to truly democratise data access, creating The Scottish Data Challenge data sharing initiative.

We used the Bio-Hermes-001 dataset, containing clinical, demographic and test data, including a variety of novel dementia biomarkers, from over 1000 participants, made available on the ADDI workbench. The cohort is uniquely drawn from populations typically underrepresented in dementia research. We ensured ethics and data governance were in place to minimise administrative burden, and offered end-to-end support from developing the research question, to running analyses and dissemination. The only request of applicants was to prioritise collaboration, support early career researchers and consider equality, diversity, and inclusion in the composition of their teams.

Following expressions of interest, 40 international teams, comprising over 100 individual researchers from multidisciplinary backgrounds have accessed the resource. A total 22 projects resulted from the challenge, investigating the effect of frailty on dementia risk, incorporating biomarkers into cognitive reserve models, and assessing the moderating effect of cardiovascular risk factors.

By allowing researchers to focus on what they do best – research, our easy access, open data resource succeeded in facilitating innovation through collaboration. The quality and volume of results produced in a year since the launch are testament to the potential of open data.

Poster

AI and big data

P-0170

Dangerous combinations: AI alerts for high-risk drug interactions

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Introduction: Polypharmacy affects 40% of elderly individuals, with hyperpolypharmacy (use of ≥ 10 medications) in 13.3%, increasing the risk of drug-drug interactions due to age-related pharmacokinetic changes. Conventional screening methods are time-intensive and prone to oversight, prompting evaluation of artificial intelligence (AI), specifically DeepSeek-V3, for detecting hazardous interactions in geriatric long-term care facilities (LTCFs).

Methods: A comprehensive medication review was conducted for 178 patients, including prescriptions, over-the-counter (OTC) drugs, and supplements.

Results: AI detected 13 clinically relevant drug interactions, including tramadol-selective serotonin reuptake inhibitor (SSRI) combinations ($n = 2$) with serotonin syndrome risk, opioid-benzodiazepine combinations ($n = 3$) causing central nervous system depression and respiratory compromise, and SSRI-nonsteroidal anti-inflammatory drug (NSAID) use ($n = 2$) increasing gastrointestinal bleeding risk. Additional findings included valproic acid-SSRI interactions ($n = 2$) affecting coagulation and seizure thresholds and benzodiazepine-hydroxyzine combinations ($n = 2$) amplifying sedation and fall risk. Manual verification confirmed all AI-identified interactions with zero false positives detected. The algorithm also identified several moderate-risk pharmacokinetic interactions involving cytochrome P450 metabolism that warrant clinical surveillance. Findings demonstrate both high sensitivity and specificity in detecting clinically relevant pharmacological interactions.

Key conclusions: The study findings suggest that broader implementation of AI technology could substantially enhance pharmacovigilance in LTCFs. AI represents a valuable decision-support tool for clinicians managing complex geriatric pharmacotherapy, particularly in cases of extensive polypharmacy. While demonstrating high efficacy in this cohort, further large-scale

validation studies are warranted to fully establish the system's clinical reliability. These results support the potential integration of AI systems as adjunctive tools for optimizing medication safety in elderly populations.

P-0171

Interpretable machine learning for identifying cardiometabolic predictors of myocardial infarction in type 2 diabetes

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Introduction: Type 2 diabetes mellitus (T2DM) significantly increases the risk of cardiovascular diseases, particularly myocardial infarction (MI). Dyslipidemia, chronic hyperglycemia, and endothelial dysfunction play a crucial role in the development of MI. Traditional statistical models may fail to capture complex interactions between risk factors. Explainable machine learning (ML) offers new opportunities for personalized cardiovascular risk assessment.

Aim: To identify key markers associated with MI in patients with T2DM using interpretable ML techniques.

Methods: We analyzed data from 355 T2DM patients (230 men, 125 women), mean age 62 ± 11.1 years. SHapley Additive exPlanations (SHAP) and permutation importance were applied to 50 ML models to determine the most significant features. The mean AUC of the top 10 models was 0.76. Clinical parameters included glycemia, lipid profile, diabetes duration, and comorbidities.

Results: Ischemic heart disease (IHD) was the strongest predictor of MI. Dyslipidemia, particularly elevated LDL and decreased HDL, significantly contributed to MI risk. Older age and longer diabetes duration were also associated with higher MI probability. Anthropometric data had lower predictive importance but still added value to model performance.

Conclusions: Cardiometabolic factors, especially dyslipidemia, age, and diabetes duration, are key markers associated with MI in T2DM. Early glycemic and lipid control are essential for MI prevention. Explainable ML provides clinically relevant insights and may support more personalized risk stratification in patients with T2DM.

P-0172

How will artificial intelligence may impact on loneliness of older adults—an Irish perspective

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Artificial intelligence (AI) is poised to revolutionize healthcare and social support for older adults in the Republic of Ireland. From early diagnosis and personalized care to remote monitoring and mental health support, AI can enhance the quality of life for older people. However, challenges such as digital literacy, ethical considerations, and equitable access must be addressed. The Irish Government has developed a National AI Strategy for the country to ensure it's safe and governed implementation – with the aim to “positioning Ireland as a leader in seizing AI's economic and societal benefits”. This article explores AI's potential, its applications, and the steps needed to ensure its responsible implementation in the care of older adults.

P-0173

Cerebellar ataxia type 13 associated with systemic sclerosis in an elderly adult: case report and analysis

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Introduction: Spinocerebellar ataxia is a group of genetic disorders based on progressive degeneration affecting the cerebellum, brain-stem, and spinal cord. Clinically, it is characterized by lack of coordination, imbalance, gait instability, intellectual alterations, and mood changes.

Method: Case presentation.

Female, 70 years old: The condition began 15 years ago with gait disorder, slowness, and slight dragging of the feet, which progressed to a wide-based gait, without completing the cycle, associated with balance and coordination alterations, and the presence of scanning speech. Physical examination revealed distal muscle atrophy, dysmetria, dysdiadochokinesia, balance and gait coordination alterations.

Results: Severe cerebellar atrophy was evidenced in cranial CT and MRI. Positive systemic sclerosis (SS) profile. PCR (C-reactive protein) for ATXN2, 3, and 7 genes showed no pathological range. A variant in the KCNC3 gene in heterozygous state associated with spinocerebellar ataxia 13 (OMIM: 605,259) with autosomal dominant inheritance pattern was identified.

Conclusions: The diagnosis of SCA with SS is complex and involves clinical correlation, imaging studies, and molecular genetic testing for each case. Emphasizing proper gait semiology and not underestimating its examination will help avoid delays in patient diagnosis and impact their quality of life.

P-0174

Lifestyle guidance to promote elderlies' mental health and their working productivity: an analysis of data from corporate health insurance claims

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Purpose: This study explores what intervention to modify lifestyles should make to improve mental health for elderly workers to work productively over a long lifetime.

Background: To achieve a vibrant, long-lived society, it is essential that elderlies work actively under a good mental condition. Since the medical and psychological literature established maintaining a favorable mental state improves workers' performance and lifestyles greatly affect mental state, corporate managers and their health insurers started providing lifestyle consultations to employees in their H&PM (health and productivity management) program by analyzing information from health checkup results and wearable devices of insured employees.

Data/methodology: We applied a logistic regression model targeting onset of mental illnesses to large-scale public corporate health insurance claims data from Japan (approx. 9.7 million) combined with lifestyle data collected from health checkup questionnaire and wearable devices of workers up to 74 years old participating in Fitbit platform.

Results: The analysis revealed having a daily sleep duration exceeding eight hours and/or poor subjective sleep quality were positively related to the onset of depressions ($p = 0.038$ and 0.018 , respectively). No clear significance was recognized regarding social jetlag, daily walking steps and alcoholic consumption, but we found a

possibility that short daily physical activity time (< 10 min.) can also trigger depressive symptoms.

Conclusions: The results suggest employers and their health insurers to monitor employees' sleeping and exercise habits via wearable devices, and to provide lifestyle consultation to maintain an appropriate sleep duration (< 8 h) and exercise time (> 10 min) to improve their subjective sleep quality.

Cardiovascular medicine

P-0175

Incidences of antithrombotic therapy discontinuation, bleeding and thromboembolic events in patients with cancer during their last phase of life: insights from primary care consultations records

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Introduction: Given the lack of high-quality studies, it remains uncertain whether patients with cancer still benefit from antithrombotic therapy (ATT) in their last phase of life. We aimed to estimate incidences of ATT discontinuation, bleeding, venous thromboembolic (VTE), and arterial thromboembolic events (ATE) in patients with cancer during their last phase of life.

Methods: We included patients ≥ 18 years with cancer at first reimbursement claim for general practitioner (GP) palliative care between 2018 and 2022 in the Netherlands. From this first claim

onwards, we manually identified outcomes in free-text reports of routine primary care consultations. Patients were followed until death or loss to follow-up.

Results: Among 2860 included patients, 32.5% used ATT at the index date. The median age was 77 years (IQR 70–84) for ATT users and 73 years (IQR 64–82) for non-users. The median follow-up was 43 days (IQR 14–190) for ATT users and 42 days (IQR 13–149) for non-users. During follow-up, 22.6% of ATT users discontinued ATT, with a median of 8 (IQR 3–28) days before death. Bleeding occurred in 28.5% of ATT users and 22.0% of non-users. VTE occurred in 3.1% of ATT users and 3.0% of non-users and ATE in 2.5% of ATT users and 1.9% non-users.

Conclusion: Most patients continued ATT until death or discontinued shortly before. Bleeding events largely outnumbered thromboembolic events, both in ATT-users and non-users. These findings provide new insights into ATT management and inform future research on optimizing ATT use in patients with cancer during their last phase of life.

P-0176

Efficacy and safety of SGLT2 inhibitors in heart failure: real-world evidence in geriatric patients AGING-HF

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Background and aims: SGLT2i have shown beneficial effects in heart failure (HF) management, but data on their use in geriatric populations with high comorbidity remain limited. This study aimed to assess the real-world efficacy and safety of SGLT2i in older patients with HF.

Methods: This prospective multicenter study included 496 patients hospitalized for acute heart failure across three geriatric units. The mean age was 90 years, and the mean Charlson Comorbidity Index score was 8.21. Participants were divided into two groups: the “SGLT2i group” (n = 260) receiving SGLT2i (empagliflozin or dapagliflozin) alongside standard HF treatment and the “Control group” (n = 236) receiving only standard HF treatment. The primary outcomes were all-cause mortality, AHF hospitalizations, and adverse events over one year.

Results: The SGLT2i group had significantly lower all-cause mortality (HR 0.61, $p = 0.002$) and AHF hospitalizations (HR 0.54, $p < 0.001$) compared to the control group. Adjusted analyses confirmed these benefits, especially in HFpEF (aHR 0.47, $p < 0.001$). Although the SGLT2i group had higher rates of urinary and genital infections, the treatment discontinuation rate was low (2.7%).

Conclusion: In geriatric HF patients, SGLT2i therapy was associated with substantial reductions in mortality and hospitalizations. The treatment was generally well tolerated, with an acceptable safety profile in this frail population.

P-0177

Subclinical atherosclerosis, mortality, and major cardiovascular events over 20 Years in community-dwelling independent older adults without clinical atherosclerotic disease

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Objective: To determine mortality and/or major adverse cardiovascular events (MACE) over 20 years of follow-up in community-dwelling adults without clinical atherosclerotic disease, based on the presence of atherosclerotic plaques detected by supra-aortic trunk (SAT) Doppler ultrasound.

Methods: A cohort of 161 adults aged ≥ 65 years, free of clinical atherosclerotic disease, was included in 2003, with valid follow-up data for 20 years. Baseline data included functional and cognitive tests, and SAT Doppler ultrasound performed by an expert radiologist. Mortality and MACE associated with the presence of atherosclerotic plaques, and plaque heterogeneity/calcification were analyzed using models adjusted for age and sex.

Results: The mean age was 73.7 years (SD 4.6); 63.4% were women. Hypertension was present in 54.7%, diabetes in 15.5%, and dyslipidemia in 39.8%. Mean Barthel Index was 100 (SD 3), Lawton Scale 7.3 (SD 1.3), and MMSE score 26 (SD 3). Carotid plaques were detected in 91 participants (56.5%), with heterogeneous/calcified plaques in 71 (44.1%). Over the follow-up period (mean duration: 5485 days), 92 participants (57.1%) died, and MACE occurred in 87 participants (54%). Mortality or MACE was higher among participants with plaques (81.1% vs. 64.3%; $p = 0.016$) and heterogeneous/calcified plaques (83.1% vs. 66.3%; $p = 0.016$). Adjusted HR for mortality or MACE were 1.46 (95% CI: 1.01–2.13; $p = 0.047$) for any plaque and 1.56 (95% CI: 1.08–2.25; $p = 0.019$) for heterogeneous/calcified plaques.

Key conclusion: Older adults aged ≥ 65 years without clinical atherosclerotic disease have an increased adjusted risk of mortality and MACE when carotid plaques or heterogeneous/calcified plaques are detected via SAT Doppler ultrasound.

P-0178

Impact of medical nutrition therapy on cardiovascular disease management in older adults

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Introduction: Cardiovascular disease remains the leading cause of morbidity and mortality in older adults, with management complicated by age-related physiological changes, comorbidities, and polypharmacy. Medical Nutrition Therapy (MNT) offers a targeted approach to modifying cardiovascular risk factors while addressing the unique nutritional needs of older adults. Despite evidence supporting dietary interventions, standardized MNT protocols specifically designed for geriatric cardiovascular care remain underutilized in clinical practice.

Aim: This quality improvement project evaluated the effectiveness of a structured, geriatric-specific MNT intervention on cardiovascular outcomes, medication requirements, and quality of life in adults aged ≥ 70 years with established cardiovascular disease in an outpatient setting.

Methodology: A prospective intervention study was conducted with 64 older adults (mean age 78.2 years) with hypertension, dyslipidemia, or heart failure. Participants received individualized MNT from registered dietitians using a protocol addressing sodium restriction, heart-healthy fat consumption, and micronutrient optimization with consideration for medication interactions, cognitive function, and food accessibility. Interventions included personalized meal planning, simplified dietary patterns, and caregiver education. Clinical outcomes were measured at baseline and 16-week follow-up.

Results: Following intervention, significant improvements were observed in multiple cardiovascular parameters. Mean systolic blood pressure decreased by 9.6 mmHg ($p < 0.01$), and LDL cholesterol reduced by 14% ($p = 0.003$). Heart failure patients demonstrated improved symptom scores and reduced hospital admissions (52% reduction, $p < 0.01$). Medication adjustments occurred in 38% of participants, with 22% achieving dose reductions while maintaining target parameters. Quality of life scores improved significantly ($p = 0.002$), with enhanced nutritional status in 72% of participants.

Conclusion: Structured MNT interventions tailored to older adults significantly improved cardiovascular outcomes while potentially reducing medication burden. Results highlight the importance of geriatric-specific nutritional approaches as an integral component of cardiovascular disease management. Integration of specialized MNT protocols into standard care may enhance treatment efficacy while improving quality of life in this vulnerable population.

P-0179

Differential characteristics of oldest old patients who die during six-month follow-up after hospitalization for acute heart failure: OCTA-HF study

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Introduction: Acute heart failure (AHF) is one of the leading causes of hospitalization in elderly patients and is associated with high post-discharge mortality.

Objective: Identify clinical and functional characteristics of patients aged ≥ 80 years who die within six months after hospitalization for AHF.

Methods: Observational, prospective, and longitudinal study. Demographic, clinical, functional, laboratory and assessment of congestion severity using the Composite Congestion Score (CCS) were collected at admission. Patients were divided into two groups based on survival status during follow-up. Results: N = 188 patients discharged after hospitalization for AHF; mean age 89.6 ± 5.1 years (72.9% women). During follow-up, 22.3% of patients died. Those who died had a lower Barthel Index (51.8 ± 30.2 vs. 72.1 ± 27.2 ; $p < 0.001$); higher frailty levels based on the Clinical Frailty Scale (CFS) (6.50 ± 1.07 vs. 5.58 ± 1.29 ; $p < 0.001$); higher Charlson Comorbidity Index (4.14 ± 1.76 vs. 3.39 ± 1.80 ; $p = 0.017$); higher prevalence of malnutrition according to MNA-sf (28.6% vs. 20.5%; $p = 0.041$); chronic kidney disease (64.3% vs. 38.4%; $p < 0.003$); median CCS [1.67 (1.00–2.67) vs. 1.33 (0.67–2.33); $p = 0.028$]; and higher CA125 levels [57.7 (29.8–153.5) vs. 42.0 (20.2–80.1); $p = 0.023$].

Conclusion: In our study population, patients who died exhibited greater frailty, functional dependence, comorbidities, higher congestion burden, and increased CA125 biomarker levels at admission. These characteristics may have prognostic implications and contribute to optimizing management strategies in this patient group.

P-0180

Risk factors associated with mortality in oldest old patients at six-month follow-up after hospitalization for acute heart failure: OCTA-HF study

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Introduction: Acute heart failure (AHF) is one of the leading causes of hospitalization and mortality in elderly patients. Identifying risk factors is crucial for improving prognosis and treatment planning.

Objective: Determine risk factors associated with six-month mortality following hospitalization for AHF.

Methods: Observational, prospective, longitudinal study. Demographic, clinical, functional, and laboratory variables were collected at admission. Odds ratios (OR) and 95% confidence intervals (95% CI) were calculated for each variable, followed by a multivariate analysis.

Results: N = 188; mean age 89.6 ± 5.1 (72.9% women). In the univariate analysis, the factors associated with higher mortality were:

- Barthel Index (0.978; 95% CI = 0.966–0.989; $p < 0.001$).
- Clinical Frailty Scale (CFS) (2.123; 95% CI = 1.450–3.108; $p < 0.001$).
- Severe-very severe frailty (CFS 7–8) (5.958; 95% CI = 1.604–22.140; $p < 0.001$).
- Chronic kidney disease (2.890; 95% CI = 1.417–5.907; $p = 0.004$).
- Creatinine (1.874; 95% CI = 1.124–3.124; $p = 0.016$).
- Jugular venous distension (2.780; 95% CI = 1.338–5.775; $p = 0.006$).
- Composite Congestion Score (CCS) (1.531; 95% CI = 1.047–2.240; $p = 0.028$).

In the multivariate analysis, only severe-very severe frailty (4.314; 95% CI = 1.095–16.992; $p < 0.001$) and creatinine levels (1.775; 95% CI = 1.044–3.017; $p = 0.034$) remained as independent risk factors.

Conclusions: In our study population, severe-very severe frailty and elevated creatinine levels were the main independent risk factors for mortality. These findings highlight the importance of assessing frailty and renal function in elderly patients to optimize their management and prognosis.

P-0181

Cohort of geriatric patients diagnosed with high blood pressure: 24 h systolic blood pressure map and two different types of medication.

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Introduction: High blood pressure (BP) in elderly patients is a common medical condition. Systolic hypertension can cause organ

damage, cardiac disease, and stroke, especially in older adults. This study evaluates systolic blood pressure using a 24-h monitoring system in elderly patients, considering their use of antihypertensive medications: angiotensin-converting enzyme inhibitors (ACEIs) and calcium channel blockers; and the risk of cardiovascular events and mortality.

Methods: A retrospective study was conducted on patients over 75 years at Hospital Clinic Barcelona (2022–2024) who underwent 24-h systolic blood pressure monitoring. Variables collected included blood pressure values and antihypertensive treatments. Statistical analysis was performed using SPSS 28.

Results: The study included 63 geriatric patients (41% male, 58% female) with a mean age of 79.34 years (SD 4.39). Among them, 76% underwent 24-h monitoring: 16.6% had SBP > 160 mmHg, 35.4% had SBP 140–159 mmHg, and 47.9% had SBP 90–139 mmHg. Regarding medication, 15.87% were taking ACEIs, 22.2% were on calcium channel blockers, and 7.93% were taking both. No cardiovascular events were recorded within a year, and 12-month mortality was 0%.

Conclusions: Non-invasive techniques, such as 24-h systolic blood pressure monitoring, aid in both diagnosis and follow-up. This method provides valuable insight into a patient's blood pressure throughout the day, helping identify those who require better control to reduce cardiovascular risk and mortality. Given the fragility of elderly patients, a comprehensive geriatric assessment is essential to ensure appropriate treatment, avoiding undertreatment based solely on age.

P-0182

Frailty index and mortality prediction in heart failure patients; the Adelina study

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Introduction: Cardiovascular diseases, particularly heart failure (HF) decompensation, are a leading cause of hospital admissions among the elderly in Spain. HF patients experience high mortality rates and a decline in their quality of life due to overlapping symptoms with frailty syndrome. This study aims to create a frailty index (FI) that predicts one-year mortality and length of hospitalization.

Methods: We conducted an observational, longitudinal, and prospective study, collecting variables during hospital admission. Follow-up occurred at three, six months, and one year after discharge using electronic medical records.

Scope and subjects: The study included patients admitted to the Acute Geriatric Ward (AGW) who met inclusion criteria and provided informed consent between October 1, 2021, and October 1, 2022. After exclusions, 85 patients (69.7%) with HF decompensation were selected.

Variables: We collected sociodemographic, clinical, functional, mental, nutritional, and social data. Frailty scales, admission analytical parameters, imaging tests, in-hospital mortality, and follow-up data were also recorded.

Results: Participants had an average age of 90 years (SD: 5.37), with 68.24% (58) being female. Hypertensive HF was the main etiology (61.77%), triggered primarily by infection and arrhythmia (both 25.88%). The mean FI score was 0.448 (SD 0.225), with higher frailty observed among females (0.472, SD 0.225). FI correlated with age

(Pearson's r 0.370), length of hospitalization (r 0.226), mortality (r 0.364), and Clinical Frailty Scale (CFS) (r 0.727).

Conclusion: We developed a 25-item frailty index that correlates with hospitalization duration, one-year mortality, and CFS. Further studies, considering additional parameters, are needed to refine the frailty index for clinical use.

P-0183

Intra-individual variability of Direct Oral AntiCoagulant levels in frail older patients upon, during and after acute hospitalisation; the DOAC-FRAIL study

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Background: Utilization of DOACs among frail older patients has increased. Recent studies raise concerns, particularly in relation to bleeding risk potentially caused by increased DOAC levels. Data on intra-individual variability of DOAC levels remains scarce and addressing this is essential for optimizing DOAC management. Therefore, we aimed to explore the intra-individual variability of DOAC levels in frail older patients during the peri-hospitalization period.

Methods: This prospective exploratory cohort study included patients aged 65 years or older, using a DOAC and acutely admitted to the department of internal medicine between February 2022 and December 2022. DOAC levels were measured upon, during and after hospitalization.

Results: In 22 patients 63 DOAC levels were measured: 22(31.8%) were above and 4(12.7%) were below the on-therapy range. Seven patients(31.8%) had levels within the on-therapy range during all time points. Ten patients(45.5%) had an SD of levels of > 100 ng/ml and in 11 patients (50%) the coefficient of variation (CV) was > 35%. Rivaroxaban was associated with an average of 97.28 units higher SD ($p < 0.001$). A reduced dose was associated with an average of 49.53 points lower SD ($p = 0.09$).

Conclusions: Intra-individual variability of DOAC levels was observed in this frail older population. Rivaroxaban was associated with higher intra-individual variability, while an reduced DOAC dose showed lower intra-individual variability. Given the risk of thromboembolic and bleeding events with deviant DOAC levels, high intra-individual variability may have clinical consequences. Future research should focus on this topic as it is essential for guiding DOAC management in the frail older population.

P-0184

The DOAC-FRAIL study; evaluation of DOAC-levels in acutely admitted frail older patients: an exploratory study

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Background: DOAC-use among frail older patients increases with the aging population. Extrapolating risk–benefit ratios from younger to geriatric populations may not be valid. No recommendations are available on DOACs in this population and data on DOAC levels

during acute illness is lacking. This study evaluates DOAC levels in (frail) older patients acutely admitted to the hospital.

Methods: This cohort study included patients aged ≥ 65 years, using a DOAC and acutely admitted to the internal medicine. DOAC levels were measured as soon as possible after admission. The time interval between DOAC intake and blood sample collection was recorded.

Results: In 90.5% of the 42 patients, NVAf was the DOAC indication. Apixaban was prescribed most often (52.4%) and 95.2% had an adequate dose. 54.8% of all DOAC levels measured (54.8%) were outside the on-therapy range (40.5% above, 14.3% below). Patients admitted with an infection had lower odds of a level above the on-therapy range ($p = 0.003$). Impaired renal function < 30 ml/min/ 1.73 m², a low BMI (< 20), and rivaroxaban had higher odds of a DOAC level above the on-therapy range. Patients using a PPI had lower odds of having a DOAC level below the on-therapy range ($p = 0.03$).

Conclusions: This is the first study that evaluates DOAC levels in frail older patients during acute hospitalization. Half of all DOAC levels were outside the on-therapy range emphasizing the importance of gaining insight into DOAC-use in the frail older population. Future research should focus on causes for deviated DOAC levels and their implications to establish guidelines for DOAC management in this population.

P-0185

Perceptions and considerations of healthcare professionals in prescribing DOACs to frail older patients; insights from the DOAC-FRAIL questionnaire.

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Background: Direct oral anticoagulants (DOACs) are increasingly prescribed for conditions such as atrial fibrillation (AF) and venous thromboembolism (VTE) due to their ease of use and absence of monitoring. However, the prescription of DOACs in frail older populations remains challenging due to heightened bleeding and thrombosis risks, polypharmacy, and their underrepresentation in clinical trials. This study aims to explore healthcare professionals' prescribing behavior and the challenges they face in managing DOAC therapy in frail older patients.

Methods: A cross-sectional study was conducted between April 2024 and January 2025 using an online questionnaire distributed to healthcare professionals in the Netherlands and Belgium, involved in the care of frail older patients. The survey included 25 items across four sections: demographics, factors influencing anticoagulant choice, DOAC management and case-based scenarios. Descriptive statistics and thematic analysis were applied to quantify responses and explore open-text comments.

Results: The questionnaire was completed by 355 general practitioners, cardiologists, geriatricians, and other prescribers of DOACs in the frail older population. Prescribers consider frailty (56.9%), fall risk (47.1%) and cognitive impairment (40.0%) when choosing anticoagulation treatment. Respondents had a preference for apixaban as type of DOAC (56.6%) in frail older patients. A significant portion of respondents (74.9%) did not routinely measure DOAC levels. In addition, during acute hospitalization respondents rarely measure a

DOAC level (62.8%). Despite the preference for DOACs, there were reservations about switching from VKAs to DOACs due to the increased bleeding risk found in the FRAIL-AF study. Furthermore, many respondents (48.1%) indicated the need for clearer, more tailored guidelines for prescribing DOACs in this frail older population.

Conclusions: This study highlights the complexity of DOAC prescribing in frail older patients. The majority of respondents prefer DOAC use in this specific population. DOAC measurement is not routinely performed, even not in acute hospitalization. The study indicates that healthcare professionals consider various factors when prescribing DOACs, with no consistent approach across the board. Additionally, approximately half of the healthcare professionals expressed a need for clearer guidelines regarding DOAC management in the older population. Further randomized controlled trials are needed to fill this knowledge gap and inform clinical practice.

P-0186

Mortality in older patients after TAVI for aortic stenosis: characteristics of patients with worse outcomes

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Objectives: To analyze mortality in patients undergoing transcatheter aortic valve implantation (TAVI) and to identify variables associated with poorer outcomes after the procedure.

Materials and methods: We conducted a retrospective study of 177 patients with severe aortic stenosis treated at a tertiary care center between 2016 and 2022. Patients were referred by cardiology and underwent a comprehensive geriatric assessment (CGA) in an out-patient setting. TAVI was performed using a minimally invasive approach, followed by admission to critical care and hospitalization units according to current protocols. Mean follow-up was 23.6 ± 7.6 months.

Results: TAVI was successfully performed in 121 patients. The mean age was 83 ± 4.9 years, and 49.7% were male. During follow-up, the overall mortality rate was 20.7%, with cardiovascular mortality at 6.6%. Stroke occurred in 5.8% of patients, myocardial infarction in 0.8%, heart failure in 14.9%, major adverse cardiovascular events (MACE) in 21.5%, and institutionalization in 6.6%.

Variables associated with increased mortality included atrial fibrillation (52% vs. 22.1%, $p < 0.01$), poor nutritional status assessed by the Mini Nutritional Assessment (MNA) (11.2 ± 2.4 vs. 12.6 ± 2 , $p < 0.01$), and low family support (84% vs. 95.7%, $p = 0.05$). There was also a trend toward worse outcomes in patients with greater cognitive impairment measured by MMSE (27.2 ± 2.9 vs. 28.2 ± 2.5 , $p = 0.09$) and higher frailty scores based on Fried criteria (1.2 ± 0.5 vs. 1 ± 0.7 , $p = 0.09$).

Conclusions: At two-year follow-up after TAVI in octogenarian patients, the mortality rate was 21%. Atrial fibrillation, malnutrition, and low family support were significantly associated with higher mortality.

P-0187

Unveiling the prognostic impact of diastolic dysfunction in older adults: insights from older (≥ 80 years) community-dwelling patients with preserved left ventricular ejection fraction

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Introduction: Diastolic dysfunction (DD) is a common feature in older adults, but its prognostic value is unclear. This study aims to assess the ability of DD against NTproBNP and frailty to predict all-cause and cardiovascular mortality in older adults.

Methods: Secondary analysis of the community-dwelling patients aged ≥ 80 years of the BELFRAIL cohort with cardiac echography at inclusion. Exclusion criteria: LVEF $< 50\%$, significant valvular disease, or missing data (NTproBNP values, DD, or frailty assessment). DD was defined according to the American Society of Echocardiography guidelines, elevated NTproBNP as level $> 400\text{ng/mL}$, and frailty as Fried Frailty Index ≥ 3 . Multivariable Cox regression was used to adjust the hazard of mortality. A hierarchical decision tree was computed using classification and regression trees (CART).

Results: Of the 393 patients (mean age 85 years [SD 3.6], 257 (65%) women), 185 (47%) had DD, 76 (19%) an elevated NTproBNP, and 50 (13%) were frail. During 5.1 ± 0.2 years, 143 (36%) patients died, of whom 55 (14%) from CV causes. Crude survival was worse (log-rank $p < 0.05$) for patients with DD, elevated NTproBNP or frailty. After adjustment, DD predicted only CV mortality (HR 1.84 [1.03–3.31]). NTproBNP predicted both all-cause (HR 1.52 [1.03–2.24]) and CV mortality (HR 2.16 [1.20–3.87]). Frailty only predicted all-cause mortality (HR 2.10 [1.38–3.21]). Regarding 5-year all-cause mortality prediction, using CART, frailty was the root node. **Conclusion:** DD appears to be a significant predictor of cardiovascular mortality but not of all-cause mortality, while NTproBNP might predict both.

P-0188

Peripheral arterial disease screening in Slovakia—step by step

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Introduction: Peripheral arterial disease (PAO) of the limbs occurs in about 5–10% of the population older than 60 years. The measurement of the ankle-brachial index (ABI) is a basic diagnostic investigation method in the diagnosis of PAO. Determination of ABI is also of great importance in determining the risk of cardiovascular diseases.

Methods: In the observational retrospective study, we compared a set of patients sent to an angiological department with suspicion of PAO in the first half of 2015 and the first half of 2019 (before and after the inclusion of ABI test in the preventive examination). We analysed the

specialty of the referring physician, risk factors, clinical findings on the lower limbs.

Results: The group consisted of 151 patients (50.3% women, 49.7% men). In the first half of 2015, 40 patients with suspected PAO were referred for the first time, in the first half of 2019 there were 111 patients, which is a statistically significant increase. In 2015, 32.5% of patients were referred by general practitioners, in 2019 it was 41.4%, which, although not statistically significant, is an increase of 8.9 percentage points. The typical clinical manifestation of PAO—claudication was present in 41.4% of patients. If the referred patient has already developed leg ulceration, unfortunately, his chance of death within 3 years from the first visit to an angiologist was 2.422 times higher than for a patient who was referred without ulceration.

Key conclusion: It seems that the introduction of ABI measurement into the preventive check-up at the general practitioner is beneficial. Higher detection of patients with PAO and subsequent management of patients with PAO has the potential to improve quality of life and avoid to limb amputation.

In addition to health care system efforts, public awareness of PAO will need to be improved.

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P-0189

Vascular intervention in presenium can decide the quality of life in a patient with peripheral arterial disease

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Introduction: Peripheral artery disease (PAD) seriously affects the mortality rate of the population, as well as the quality of daily life of individuals, mainly through claudication, which limits walking and daily activities.

Case: Three years ago, 60-year-old patient comes to our clinic with claudication of the right leg 100 m. Smoker with previously untreated arterial hypertension (AH), an electrician, married, 16-year-old daughter. Sonography showed severe atherosclerotic changes in the superficial femoral artery (AFS) l. dx. We encourage the patient to quit smoking, start to treat of AH, add statins. He starts daily muscle training. Claudication does not worsen further. We potentiate the treatment with naftidrofuryl and ginko biloba, he completely quit smoking. Claudication does not worsen but does not improve either. His desperate wife comes in, reporting erectile dysfunction (ED), the patient is considering prematurely terminating his work, there is a significant decrease in the ankle-brachial and toe-brachial index. So, despite the absence of signs of critical limb ischemia, we consult the vascular interventionist. CT angiography showed severe stenotizations of the a. ilica l. dx. (AIE) and the right AFS. Intervention technically successful recanalizes AIE l. dx., antiplatelet therapy follows. The claudication distance increases to 650 m. He returns to work, decides to support his daughter studies for the next 5 years. Management of risk factors as a prevention of restenosis continues.

Conclusion: A comprehensive, consistent approach to addressing risk factors as well as vascular intervention has the potential to improve and sustain quality of life in patients with PAO.

P-0190

Sex differences in elderly patients with atrial fibrillation

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Introduction: Atrial fibrillation (AF) is a common condition in individuals over 65 years old. Early diagnosis is crucial for preventing complications and initiating appropriate therapy. Existing literature highlights sex differences in the incidence and prevalence of AF-related complications.

Methodology: The study included 100 participants aged 65 years or older diagnosed with AF, with an equal gender distribution (50% male, 50% female). Participants were assessed for comorbidities such as hypertension, heart failure, coronary artery disease, and diabetes, as well as complications associated with AF (stroke and exacerbation of heart failure).

Results: Heart failure was more prevalent among females (70.6% vs. 64.6%), while decompensated heart failure was more frequent in males (33.3% vs. 29.4%). Hypertension was more common in females (82.3% vs. 70.6%), but diabetes mellitus was more frequent in males (31.4% vs. 21.6%). Females exhibited a higher incidence of previous cerebrovascular insults (33.3% vs. 15.7%), whereas coronary artery disease was more common in males (25.5% vs. 11.7%). The average CHA2DS2-VASc score was higher in females (5.2 vs. 3.7). Regarding complications, new cerebrovascular insults were more frequent in females (5.9% vs. 3.9%), while new onset heart failure associated with AF was more prevalent in males (39.2% vs. 29.4%).

Conclusion: In elderly patients with AF, differences in the frequency of comorbidities and complications were observed between sexes, although these differences were statistically non-significant. These findings underscore the importance of further research with larger patient samples to better understand the impact of sex on AF-related outcomes.

Keywords: atrial fibrillation, comorbidity, complications, sex differences.

P-0191

Prognostic impact of multimorbidity and frailty on 90-day survival in older patients hospitalized for acute heart failure: a prospective study

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Introduction: Acute heart failure (AHF) is a leading cause of hospitalization in older adults. Frailty and multimorbidity (MM) are

prevalent in this population and worsen prognosis. However, data on the combined effect frailty and MM on short-term outcomes in AHF are scanty. This study examines the joint impact of MM and frailty on 90-day survival in older adults hospitalized for AHF.

Methods: This prospective observational study (April 2022–November 2024) defined MM as the presence of ≥ 3 chronic diseases and frailty as a Clinical Frailty Scale ≥ 6 , according with recent guidelines [1]. Patients were categorized into 4 groups: non-MM/non-frail (Group 1), MM/non-frail (Group 2), non-MM/frail (Group 3), and MM/frail (Group 4). Kaplan–Meier curves and Cox regression models were used to assess survival.

Results: Among 399 patients (median age 87.4, 52% female), 90-day mortality was 8.3% in the Group 1, 15% in the Group 2, 30% in the Group 3, and 29% in the Group 4 ($p = 0.0051$). In multivariable analysis, frailty, regardless of MM, was associated with a threefold higher mortality vs Group 1 (Group 3: adj. HR 3.34, 95% CI 1.18–9.45; Group 4: adj. HR 3.11, 95% CI 1.11–8.75). MM without frailty (Group 2) was not significantly associated with an increased 90-day mortality risk (adj. HR 1.94, 95% CI 0.58–6.46, $p = 0.28$).

Key conclusions: Frailty was a stronger predictor of 90-day survival than MM in older patients with AHF. These findings support frailty assessment to improve prognostic evaluations.

Reference:

[1] McDonagh TA, et al. Eur J Heart Fail. 2022;24(1):4–131.

P-0193

Elderly Satelia surveillance in heart failure (ElderSAT-HF): predictive factors of events after discharge of Cardiogeriatric Unit

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Introduction: Acute Heart Failure (AHF) is a major public health concern, particularly in elderly patients, due to high rehospitalization and mortality rates. Telemonitoring has improved HF management by enabling remote monitoring, facilitating treatment adjustments, and potentially reducing hospital readmissions. This study aimed to identify geriatric and cardiologic predictors of adverse events (death or rehospitalization) within 90 days post-discharge in patients admitted for AHF in a cardiogeriatric unit.

Methods: A retrospective, observational study was conducted at La Porte Verte Hospital (Versailles) using the Satelia® Cardio program. Patients aged > 65 years hospitalized for AHF between April and November 2023 and enrolled in HF telemonitoring at discharge were included.

Results: Among 156 analyzed patients (mean age 86 years), 43 (27.6%) experienced an adverse event within 90 days. The median time to rehospitalization was 22 days [14–42], and to death, 42 days [17–72]. Obesity ($p = 0.03$), dyslipidemia ($p = 0.01$), and elevated pulmonary artery pressure (PAPs) ($p = 0.04$) were significantly associated with adverse events. No significant associations were found with geriatric factors. Patients with a positive metabolic profile had longer hospital stays ($p = 0.03$) but lower rehospitalization rates ($p = 0.001$), supporting the “obesity paradox.”

Conclusion: Elderly AHF patients face high early rehospitalization or mortality risks. The protective effect of obesity warrants further study. Telemonitoring remains a promising tool for HF management, potentially reducing hospital burden and improving outcomes.

P-0194

Delirium subtypes and short-term survival in older patients hospitalized for acute heart failure: a prospective observational study

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Introduction: Delirium is common in hospitalized older patients and associated with increased mortality risk. While acute heart failure (AHF) may exacerbate the risk of delirium, limited research has investigated its occurrence, its psychomotor subtypes, and their effect on short-term survival in older patients.

Methods: We conducted a prospective observational study (April 2022–November 2024) on patients admitted to our Acute Geriatric Unit. Delirium and its motor subtypes were identified using the 4AT tool and DSM-5 criteria. Sociodemographic, clinical, and follow-up data were collected. The OS function was estimated using the Kaplan–Meier method and compared via the log-rank test. Cox proportional-hazards regression models were applied.

Results: Among 399 AHF patients (median age 87.4, 52% female), 132 (33%) experienced delirium (prevalence: 13.8%, incidence: 19.2%). Of these, 48% were hyperactive, 31% hypoactive, and 21% mixed subtypes. Delirium increased 90-day mortality risk (36% vs. 19%, $p < 0.001$), with the mixed and hypoactive subtypes showing the highest mortality rates (41% and 44%) compared to the hyperactive (28%) and those without delirium (19%; $p = 0.004$). Kaplan–Meier curves supported these findings ($p < 0.001$). Multivariable analysis revealed a twofold increased risk of 90-day mortality for mixed (HR 2.33, 95% CI 1.21–4.48, $p = 0.012$) and hypoactive (HR 2.03, 95% CI 1.15–3.59, $p = 0.015$) delirium compared to those without delirium.

Key conclusions: Delirium is common in older adults with AHF, significantly affecting 90-day mortality, particularly in the hypoactive and mixed subtypes. These findings underscore the need to improve delirium awareness among physicians and implement targeted interventions to manage it in this population.

P-0195

The DOAC-FRAIL study: prevalence of deviant DOAC levels in frail nursing home residents

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Background: Direct Oral Anticoagulants (DOACs) are preferred over Vitamin K Antagonists (VKAs) managing atrial fibrillation (AF) and venous thromboembolism (VTE) due to superior safety and efficacy. DOAC-use in frail nursing home residents is complicated by multimorbidity, polypharmacy and altered pharmacodynamics, potentially leading to suboptimal DOAC levels. This study assesses the prevalence of deviant DOAC levels in this population.

Methods: This cohort study evaluates DOAC levels in nursing home residents receiving DOACs. Blood samples were collected during routine testing from July 1, 2024, onward. Levels outside the expected ranges were defined as described by the Dutch antithrombotic guideline (in line with Douthil).

Results: Until March 2025, 73 nursing home residents were included. Blood samples were collected from 41 participants (mean age 83.8 ± 7.65 years, 41.5% male, mean BMI 23.5 ± 4.89 kg/m²). DOAC therapy indications included AF (82.9%), deep vein thrombosis (7.3%), and pulmonary embolism (9.8%). Of those with known kidney function (85.4%), 48.57% had impaired renal function (eGFR < 60 ml/min/1.73m²). Apixaban was used by 25 participants, edoxaban by 4, and rivaroxaban by 12. Overall, 41.5% had deviant DOAC levels: 7.3% below and 34.1% above the expected range. Among apixaban 44% had levels above the range. For rivaroxaban, 25% had levels above and 25% below the expected range. All edoxaban users had levels within range.

Conclusion: A significant proportion (41.5%) of nursing home residents exhibited deviant DOAC levels, potentially increasing bleeding and thrombotic risks. Larger studies are essential to investigate whether these deviations translate into clinical complications.

P-0196

TAVI among the elderlies

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Introduction: Transcatheter Aortic Valve Implantation(TAVI) is a less invasive way of replacing the Aortic valve in comparison with classic surgery.

Objectives: To compare the mortality of patients that had TAVI with patients that where subsidiary to TAVI but weren't intervened.

Study their characteristics through a Comprehensive Geriatric Assessment to select the subsidiary patients.

Methods: It is a prospective longitudinal study of patients in which Comprehensive Geriatric Assessment was performed to register several characteristics: Frail-VIG Index, Barthel, Pfeiffer, Lawton and MiniMNA and to study mortality and time until intervention.

Results: N: 141; 107 approved for TAVI. 66 underwent surgery. Average age: 83.

Women: 47%.

Barthel Index > 90 : 82.2%; Lawton Index > 6 : 65.3%; 74.6% had no cognitive decline; Frail- VIG Index < 0.28 : 75.6% and 54.2% had > 11 MiniMNA.

Mortality at one year, 2 years and 4 years from intervention was 6%,12% and 30%, whereas in patients without TAVI was 38%, 67% and 85.8% respectively.

66.7% were intervened in less than a year, 30.3% in 1–2 years and 3% > 2 years.

14 patients declined the intervention, 8 are still waiting, 11 has died waiting and 8 weren't intervened for other reasons.

Key conclusions: TAVI has proven to be a good alternative to classic surgery since improves long term survival.

Comprehensive Geriatric Assessment keeps proving to be a useful tool to select patients subsidiary to TAVI.

The delays for the intervention had been reduce after COVID.

Information about TAVI's procedure should be amplified among patients.

P-0197**Severe pain, necrotic ulcer and hypertension: a forgotten cause in older adults**

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A 77-year-old woman with no known drug allergies and a history of poorly controlled hypertension, stage IV chronic kidney disease (creatinine 2.6 mg/dL), hyperparathyroidism, calcified mitral stenosis, and multiterritorial cerebral infarctions. She is mildly dependent for basic activities of daily living (Barthel Index: 65) and presents moderate frailty (FRAIL-VIG: 0.40). Usual treatment includes erythropoietin, anticoagulants, and antihypertensive drugs.

She was admitted to the Nephrology Department due to painful, superinfected ulcers on the left lower limb (LLL) with ten days of evolution and poor pain control. Physical examination revealed two superficial necrotic lesions with edema on the mid-lateral aspect of the LLL and absent pedal pulse.

Given the clinical context, ulcer characteristics, and timeline, a bone telemetric study was performed, ruling out calciphylaxis. Doppler ultrasound by the vascular team showed patent proximal vessels with triphasic waveforms and distal disease with severe calcification of the anterior tibial artery and monophasic waveforms in the posterior tibial artery.

Due to the atypical course of these mixed-etiology ulcers, a skin biopsy was performed. Histology showed epidermal fibrinoid necrosis, arteriolar hyalinosis, and > 90% obliteration of the lumen in a subcutaneous medium-caliber vessel. These findings were consistent with hypertensive microangiopathy, suggestive of Martorell hypertensive ischemic leg ulcer (MHILU).

MHILU accounts for 0.2–1% of leg ulcers and is frequently underdiagnosed. It typically affects women aged 70–75 years (4:1 female predominance), with poorly controlled hypertension as the main risk factor. The patient fulfilled 6 out of 7 diagnostic criteria for MHILU, supporting the clinical suspicion.

P-0198**Preferences of older adults and their informal caregivers around deprescribing antihypertensive medications in primary care: a discrete choice experiment**

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Introduction: Antihypertensives, one of the most commonly used drug classes among older adults in England, reduce the risk of stroke, myocardial infarction and heart failure. However, they are also associated with adverse events. Deprescribing may therefore be appropriate when treatment harms outweigh benefits. How older adults and informal caregivers prioritise these trade-offs is unknown. This study explores their preferences in deprescribing decisions.

Methods: A discrete choice experiment survey was conducted, with nine tasks where respondents chose between ‘status quo’ and ‘deprescribing’ options. These varied across four attributes: stroke risk, heart attack risk, fall risk, and side effect severity. The survey was distributed via social media and community centres in two versions: one for patients (65 + years, England, prescribed 1 + antihypertensive) and one for informal caregivers (18 + years). Multinomial logit models identified which attributes influenced respondents’ willingness to deprescribe.

Results: A total of 1,082 responses were received. Patients (n = 803) were 77 years (IQR:72–82), predominantly white (96.5%), female (61.7%) and degree-educated (56.9%). Caregivers (n = 279) were 72 years (IQR:65–78), white (97.0%), female (68.1%) and degree-educated (61.5%). Both groups preferred continuing antihypertensives over deprescribing.

Higher stroke risk (OR = 0.67; 95% CI:0.61–0.73) and heart attack risk (OR = 0.52; 95% CI:0.45–0.58) significantly reduced respondents’ willingness to deprescribe, while lower fall risk (OR = 1.28; 95% CI:1.19–1.37) and absence of side effects (OR = 1.22; 95% CI:1.13–1.30) significantly increased it.

Conclusions: Patients and informal caregivers favour continuing antihypertensives, but specific risks and side effects influence their decisions. Providing accurate information on treatment benefits and harms may influence these preferences.

P-0199**Amiodarone surveillance in older adults: a nationwide cohort study in Iceland**

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Introduction: Amiodarone is associated with common and serious side effects, including thyroid and liver dysfunction and notable drug interactions. Regular monitoring with electrocardiograms, thyroid function tests and liver function tests is recommended every three to six months. The aim of the study is to investigate the adherence to these recommendations in Iceland.

Method: Data was collected with chart review from all patients prescribed amiodarone in Iceland in 2014. The follow up period ranged from treatment initiation to discontinuation or March 1, 2018. Optimal surveillance was defined as documentation of all three tests within six months prior to end of follow up.

Results: Among 436 patients, 38% had optimal surveillance and 86% were older than 65 years old. Factors significantly associated with suboptimal surveillance were older age (OR = 1.03, 95% CI: 1.00–1.05), daily dose < 200 mg (OR = 1.7, 95% CI: 1.1–2.8) and nursing home residency (OR 3.31, 95% CI: 1.4–8.4). With increasing age patient more often had longer treatment duration, were females, and atrial fibrillation/flutter as treatment indication without reaching statistical significance. Among 308 patients treated for atrial fibrillation/flutter 43 (14%) had atrial fibrillation/flutter on their latest ECG. It was missed or overlooked in 22 (51%) instances.

Conclusion: Amiodarone surveillance in older adults is often sub-optimal, especially among nursing home residents. Treatment indication should be re-evaluated regularly, especially in frail older adults with polypharmacy. Deprescribing may be appropriate more often than currently practiced.

P-0200**Real-world treatments and outcomes in very old patients with heart failure with preserved ejection fraction**

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Background: Heart failure with preserved ejection fraction (HFpEF) is prevalent in geriatric populations, but evidence for sodium-glucose cotransporter-2 inhibitors (SGLT2i) in patients over 90 years old is

limited. This study evaluated the real-world impact of SGLT2i in very old HFpEF patients by investigating factors associated with mortality or heart failure (HF) rehospitalizations.

Methods: This prospective multicenter study included 298 consecutive patients (mean age: 90 years, mean Charlson score: 8.29) admitted with acute HFpEF to three geriatric units in Paris, France, between April 2021 and July 2023. Demographics, comorbidities, and discharge medications were collected. The primary outcome was a composite of all-cause mortality or HF rehospitalization at one year. Multivariate Cox regression analysis was used to identify factors associated with the composite outcome.

Results: At discharge, 49.6% received SGLT2i. One-year mortality was 28.1%, and the HF rehospitalization rate was 22.8%. SGLT2i use significantly reduced the composite outcome risk (HR: 0.43; 95% CI: 0.29–0.66), with event rates of 29.7% in the SGLT2i group versus 56.6% without ($p < 0.001$). Renin-angiotensin system blockers also showed a significant risk reduction (HR: 0.56; 95% CI: 0.38–0.82). Severe malnutrition, hypertension, and high intravenous furosemide doses were associated with worse outcomes.

Conclusion: This study provides robust observational evidence supporting SGLT2i use in very old HFpEF patients with high comorbidity burdens. Advanced age and multimorbidity should not preclude SGLT2i therapy in this population.

P-0201

Cardiovascular outcomes of cholinesterase inhibitors in parkinsonism—a systematic

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Introduction: Cholinesterase inhibitors (ChEi) may have utility in managing Parkinson's disease (PD) symptoms such as cognitive impairment, falls and hallucinations. Despite concerns around cardiovascular adverse events, previous reviews focus only on overarching safety and efficacy of ChEi. We have specifically evaluated the cardiovascular safety of cholinesterase inhibitors in PD.

Methods: The protocol was registered with PROSPERO (CRD4202348539) and completed under the preferred reporting items for systematic reviews and meta-analysis (PRISMA). Scientific databases were searched from inception to February 2023. Two authors conducted screening and data collection, and a third resolved any conflicts. We Included studies that were a) randomised controlled trials of b) acetylcholinesterase inhibitors that c) recruited people with parkinsonism. All included papers underwent a risk of bias assessment.

Results: Of the 710 papers identified, 26 were included for analysis. The populations studied were: idiopathic Parkinson's disease $n = 17$ (65.4%), Parkinson's disease dementia $n = 4$ (15.4%), Dementia with Lewy body $n = 3$ (11.5%), and atypical parkinsonism $n = 2$ (7.7%). We will present the full results in respect to cardiovascular safety including comparison of the prevalence of cardiovascular adverse events between trial arms and describe the approach to management of cardiovascular safety in these trials.

Conclusions: We found very little in the way of standardised approach to assessing cardiovascular safety with ChEi trials. Evidence from trials that assess causality in real-world populations is limited, making the true safety profile of these drugs uncertain. To address this gap, data from inclusive randomised controlled trials, which better reflect clinical practice, would be valuable.

P-0202

Atrial fibrillation and heart failure in elderly population with hypertension admitted with fractured neck of femur (NOF): a retrospective audit

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Background: Atrial fibrillation (AF) and heart failure (HF) are common comorbidities in elderly patients with hypertension. These conditions increase the risk of adverse outcomes in patients with a fractured neck of femur (NOF). AF predisposes patients to thromboembolic complications, whilst HF can exacerbate perioperative morbidity. Hypertension further complicates management by contributing to cardiovascular instability. Perioperative optimization by an orthogeriatrician is vital in reducing complications through anticoagulation and fluid balance management. The orthogeriatrician plays a major role in the multidisciplinary team, working alongside orthopaedics, cardiology, and anaesthetics to improve outcomes in this high-risk population.

Methods: This was a retrospective audit of 400 patients admitted to Milton Keynes University Hospital, UK, with NOF. The prevalence of hypertension in this cohort was 74.25%. Among hypertensive patients, the prevalence of HF and AF was 7.4% and 20.8%, respectively.

Results: Delirium was observed in 22.7% and 25.8% of patients with HF and AF, respectively. Postoperative complications, including pneumonia, acute kidney injury, and urinary tract infection, were present in 73.3% and 71% of patients with HF and AF, respectively. A frailty score greater than 4 was recorded in 72.7% of HF patients and 54.8% of AF patients. The average hospital stay for both conditions was approximately three weeks. Mortality was recorded in 31.8% of HF patients and 20.9% of AF patients.

Conclusion: Individuals with hypertension who experience a NOF fracture tend to have a high prevalence of AF, whereas HF is more strongly associated with a higher prevalence of frailty. Both conditions increase mortality.

P-0203

Impact of frailty on mortality in older adults with atrial fibrillation and prolonged hospitalization

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Introduction: Frailty is a common syndrome in older adults with atrial fibrillation (AF), associated with reduced physiological reserve and increased mortality, especially during prolonged (PH) and very prolonged (VPH) hospitalization. This study evaluates the impact of frailty on mortality in patients with AF who experienced prolonged or very prolonged hospitalization.

Methods: A retrospective study included 400 patients aged ≥ 80 years with AF (2019–2022). Demographic data, comorbidities, and frailty were collected using the Short Physical Performance

Battery classified as robust(R: ≥ 10), pre-frail(PF:7–9), frail(F:4–6), and extreme frailty(EF:0–3). PH were defined as ≥ 12 days and VPH as ≥ 16 days. Kaplan–Meier survival analysis and Cox regression were applied.

Results: The mean age was 89.31 ± 4.07 years (65.5% female). Key comorbidities included diabetes mellitus(DM:35.5%), cognitive impairment(CI:35.5%), and heart valvular disease (HVD:36.87%). Frailty:(EF:33.9%, F:23%, PF:27.6%, R:15.5%). Kaplan–Meier showed decreased survival with increasing frailty in PH(R:87.2%, PF:70.5%, F:57.9%, FE:52.3%; Log-Rank = 33.5, $p < 0.001$) and VPH (R:82.1%, PF:74.7%, F:50.8%, FE: 45.6%; Log-Rank = 25.4, $p < 0.001$).

In multivariable Cox regression, frailty predicted mortality in PH(FE: HR = 2.95, $p = 0.002$; F:HR = 2.15, $p = 0.08$). In VPH, mortality was associated with CI(HR = 1.75, $p = 0.020$) and comorbidities(DM: HR = 1.85, $p = 0.02$; HVD: HR = 2.10, $p = 0.010$).

Conclusions: Frailty is an independent predictor of mortality in PH, while in VPH, comorbidities (DM, CI and HVD) play a more significant role. Optimizing functionality and managing chronic diseases may enhance survival outcomes.

P-0204

Predictors of hospital readmission in older adults with atrial fibrillation and prolonged hospitalization

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Introduction: Atrial fibrillation (AF) is common among older adults and is associated with an increased risk of hospital readmission, especially during prolonged (PH) and very prolonged (VPH) hospitalization. This study investigates the predictors of readmission in older adults with AF and PH and VPH.

Methods: A retrospective study included 400 patients aged ≥ 80 years with AF (2019–2022). Demographic data, comorbidities, and frailty using Short Physical Performance Battery; robust(R: ≥ 10), pre-frail(PF:7–9), frail(F:4–6), and extreme frailty(EF:0–3). Functional status using the Barthel Index, totally dependent(TD), severe dependency(SD), moderate dependency(MD), mild dependency(LD) or independent(I). Prolonged stays were defined as ≥ 12 days(EHP) and very prolonged stays as ≥ 16 days(VPH). Readmissions were categorized as early (RE: < 1 month), delayed(RD:1–6 months), and late(RL: > 6 months). Cox regression analysis was used to identify independent predictors of readmission.

Results: The mean age was 89.3 ± 4.1 years(65.5% female). Key comorbidities included diabetes mellitus (DM:35.5%), heart ischemic disease (HID:22%), and heart valvular disease (HVD:36.87%) The average hospital stay was 9.8 ± 6.9 days. In the VPH subgroup, RL were more frequent among patients with lower functional status (TD:24.6%, SD:31.5%, MD:19.5%, LD:14.8%, I:9.7%; $p < 0.03$) and higher frailty (EF:22.5%, F: 30%, PF:20.5%, R:27% $p < 0.04$). However, in the multivariable analysis, neither functionality nor frailty emerged as independent predictors of readmission; instead, DM(HR = 1.52; $p = 0.025$), HVD(HR = 1.52; $p = 0.018$), and HID(HR = 1.48; $p = 0.048$) were significantly associated with readmission.

Conclusions: While functional status and frailty may contribute to readmission risk, cardiovascular comorbidities and DM appear to have a stronger independent impact on hospital readmissions in older adults with AF and prolonged stays. A comprehensive assessment and

optimized management of chronic diseases are crucial to reducing readmission rates.

Short poster presentation

Cardiovascular medicine

P-0205

Thromboembolic events among participants enrolled in the population-based cohort study—EpiHealth

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Introduction: Atrial fibrillation (AF) is associated with complications such as thromboembolic events (TEE), increased morbidity, reduced quality of life, and increased mortality. The association between AF and ischemic stroke is well-researched, but less is known about the link between AF and non-cerebral TEE. This study aimed to investigate and estimate the risk of TEE among participants, with and without AF, enrolled in the general population study EpiHealth.

Methods: In a longitudinal design, baseline data from EpiHealth were linked to the Swedish Patient Register, Riksstroke, Prescribed Drug Register, and Cause of Death Register. Participants were monitored through register data until the occurrence of TEE, death, or the study's end date (maximum follow-up time five years).

Results: A total of 22,616 participants were included, of whom 873 had AF at baseline. Participants with AF were older, predominantly male, and had more cardiovascular comorbidities. During follow-up, 286 participants developed AF (incidence: 5.22/1000 person-years), and 372 experienced TEE (incidence: 5.26/1000 person-years). AF was associated with a higher risk of both TEE and mortality, even after adjusting for age, sex, cancer, and prior TEE. While most TEEs affected cerebral blood flow, about 25% of TEEs in AF participants and 40% in non-AF participants involved non-cerebral blood flow.

Key conclusions: These findings reinforce existing knowledge about the increased risk of TEEs, particularly cerebrovascular events, and higher mortality associated with AF. Notably, non-cerebral TEEs accounted for 25–40% of all TEEs, underscoring their significance.

Poster

Cardiovascular medicine

P-0206

Association between Life's essential 8 and mortality among individuals with hypertension

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Introduction: The “Life’s Essential 8” (LE8) score is an assessment of cardiovascular health recently introduced by the American Heart Association. This study aimed to explore the correlation of the total LE8 score and its individual metrics with all-cause and cardiovascular disease (CVD) mortality in patients with hypertension.

Methods: Data from 10,556 hypertension adults were retrieved from the National Health and Nutrition Examination Survey (NHANES) from 2005 to 2018. After a median follow-up of 6.75 years, patients’ mortality outcomes were analyzed. Cox regression analysis was conducted to evaluate the association between LE8 scores and mortality risk.

Results: Patients with high LE8 scores (≥ 75 points) showed significantly lower mortality rates from all causes and CVD ($P < 0.001$). Cox regression analysis indicated that high LE8 scores were associated with a 40% lower risk of all-cause [0.60(0.50–0.73)] and CVD mortality [0.60(0.43–0.83)] compared to low scores. As the total LE8 score increased linearly, the likelihood of all-cause and CVD mortality decreased, with a potential threshold at 60 points. Subgroup analyses revealed that diet, sleep, nicotine exposure, physical activity, and blood glucose control affected both types of mortality.

Conclusions: The LE8 score was negatively correlated with the risks of all-cause and CVD mortality in hypertensive patients. Life interventions and management of physical indicators based on the LE8 score may be an effective way to improve mortality in hypertensive patients.

P-0207

Enhancing anticoagulation adherence: the impact of doctor-patient communication

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Introduction: Atrial fibrillation (AF) is the most common cardiac arrhythmia, associated with a significant thromboembolic risk, requiring appropriate direct oral anticoagulation (DOAC). In elderly patients with multiple comorbidities, balancing the prevention of thromboembolic events with the risk of bleeding represents a therapeutic challenge.

Material and method: A 77-year-old female patient with AF, essential hypertension, mitral regurgitation, bilateral carotid bulb atheromatosis, and hypercholesterolemia. In March 2024, the patient was admitted to our clinic, where she was diagnosed with AF after an ECG Holter: AF rhythm, an average ventricular rate, without terminal phase modifications. She continued treatment with a beta-blocker and DOAC.

Results: She was discharged with instructions to seek medical care for adverse reactions such as bleeding or petechiae. Petechiae appeared on her arms and thighs (a rare side effect, up to 1 in 10,000 people). Her general practitioner stopped DOAC without referring her for specialist consultation or alternative treatment. Three weeks later, she developed acute upper limb ischemia (Doppler evaluation), requiring surgical embolectomy and initiation of Apixaban. In 2024–2025: Platelet count remained within the normal range. Serum creatinine decreased from 0.81 mg/dL (2024) to 0.60 mg/dL (2025), while eGFR increased from 70.73 to 88.17 mL/min/1.73 m². Total cholesterol decreased from 265 mg/dL to 163 mg/dL, LDL

cholesterol from 204 mg/dL – 88 mg/dL; ESR remained elevated (34 mm/h in 2024–32 mm/h in 2025), indicating persistent moderate pro-inflammatory status.

Conclusions: The unjustified discontinuation of OAC can have severe consequences, highlighting the importance of thorough monitoring and a continuous multidisciplinary team (geriatrician-cardiologist and general practitioner) approach to optimize anticoagulant therapy.

P-0208

Vitamin D and cardiovascular diseases in elderly

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Background: Vitamin D is crucial for various physiological processes. Hypovitaminosis D is prevalent among elderly people. Vitamin D receptor activation may have a protective effect on the cardiovascular system, influencing blood pressure regulation, inflammation, and vascular function. This work discusses about hypovitaminosis D in the elderly and its association with cardiovascular diseases because of anti-inflammatory properties by modulating inflammatory cytokines and immune responses of Vitamin D.

Methods: We create a retrograde analysis on the presence of hypovitaminosis D and the presence of cardiovascular diseases, and we look for a connection between the two conditions.

Results: Over a three-month period (October 2024–January 2025), vitamin D was tested in 191 patients, of which 84 patients were elderly patients over the age of 65. The mean vitamin D value in all patients was 18.10 ng/mL, and the mean value in elderly patients was 17.2 ng/mL. Of these 84 patients, 45 were hospitalized in geriatric hospital and theirs mean vitamin D value was 11.47 ng/mL, while in the 39 patients who were not hospitalized in geriatric hospital mean vitamin D value was 23.81 ng/mL. 74 elderly patients among other comorbidities had cardiovascular disease (hypertension, cardiomyopathy, heart failure, vascular disease). 45 elderly patients had fatigue. Of them 38 were hospitalized in geriatric hospital.

Conclusion: Hypovitaminosis D is a common issue in the elderly population, with significant implications for cardiovascular health. The link between low vitamin D levels and increased incidence of cardiovascular diseases underscores the importance of prevention, early detection, and treatment of vitamin D deficiency. By focusing on maintaining adequate vitamin D levels through dietary changes, sensible sun exposure, and supplementation when necessary, the elderly can improve their overall health outcomes and potentially reduce the risk of cardiovascular diseases.

P-0209

Shining light on orthostatic hypotension: measurements of postural blood pressure and cerebral oxygenation

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Introduction: Orthostatic hypotension (OH) is common in older adults, and associated with dizziness, falls, decreased physical and cognitive function, and mortality. Intermittent blood pressure (BP) devices used in clinical practice cannot capture BP dynamics, measure cerebral perfusion, or reflect daily-life BP fluctuations. Near-infrared spectroscopy (NIRS)-measured cerebral oxygenation (O2Hb) may overcome these drawbacks.

Methods: Two studies assessed the feasibility and validity of using NIRS to measure OH. In the first study, 41 participants (aged 20–88 years) performed standardized postural changes in a laboratory setting, while BP, cerebral blood velocity (CBv; transcranial Doppler) and cerebral (long channels) and superficial (short channels) O2Hb were continuously measured. Correlations between these signals were analyzed. In the second study, 10 older (≥ 70 years) participants with OH and 11 without wore a NIRS sensor for two days at home, where oxygenation changes were measured during daily activities and standardized supine-stand tests. We evaluated differences in O2Hb responses between participants with and without OH and between symptomatic and asymptomatic postural changes.

Results: BP and O2Hb showed significant correlations in the first minute after standing up. Associations between CBv and O2Hb were stronger for long-channel than short-channel measurements. At home, O2Hb recovery was slower in OH participants than non-OH participants, with deeper O2Hb drops during symptomatic postural changes. **Conclusion:** Our studies suggest that long-channel NIRS captures both the systemic (BP) and cerebral response to postural changes, and is therefore promising for OH diagnosis and monitoring. Feasibility was shown both in the laboratory and home setting.

Short poster presentation

Cardiovascular medicine

P-0210

Associations between physical activity measured with accelerometer and 8-year incidence of cardiovascular events in well-functioning older adults: age-based differences

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Introduction: Moderate-to-vigorous physical activity (MVPA) protects against cardiovascular disease (CVD), but less is known about how different physical activity (PA) patterns influence CVD risk. This study examined these associations considering age-related differences.

Methods: Data from 423 CVD-free participants aged 66 and older from the Swedish SNAC-K study were analyzed. Accelerometer data was collected from 2016 to 2019 and CVD events (fatal and non-fatal) over an 8-year period were obtained from national registers. Cox regression models were employed to assess associations between PA patterns—including steps per day, sit-to-stand transitions, daily time in light PA (LPA) and MVPA, and LPA- and MVPA walking-events—and CVD risk. Cubic splines evaluated non-linear

relationships, and interactions between PA patterns and age group (< 70 vs. ≥ 80 years) were explored.

Results: Over a mean follow-up period of 5.6 years, 125 participants (30%) experienced at least one CVD event. In the total sample, each additional 10 MVPA walking events significantly reduced CVD risk (HR 0.90, 95% CI 0.82–0.98). Among the oldest-old, each additional 100 LPA walking events (HR 0.61, 95% CI 0.39–0.95) and each additional 10 MVPA walking events (HR 0.87, 95% CI 0.76–0.98) significantly reduced CVD risk. No significant associations were observed in younger-old.

Key conclusions: In this generally well-functioning cohort of older adults, frequent engagement in daily MVPA was associated with a reduced risk of incident CVD. Among the oldest-old, frequent participation in both LPA and MVPA was linked to lower CVD risk, underscoring the importance of regular transitions to movement in advanced age.

Poster

Cardiovascular medicine

P-0211

Health-related quality of life after cardioversion and pulmonary vein isolation procedures for atrial fibrillation among older adults

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Introduction: Atrial fibrillation (AF) is the most common arrhythmia, and significant contributor to decreased health-related quality of life (HRQoL). Little is known about HRQoL changes after AF cardioversion (CV) and pulmonary vein isolation (PVI) in older population. We studied changes in disease-specific and generic HRQoL in ≥ 70 -year-old patients undergoing CV or PVI.

Methods: Altogether 127 patients underwent CV (average age 74.6 years) and 80 PVI (72.5 years). They responded to disease-specific ASTA instrument measuring HRQoL and AF symptom burden and generic (15D) HRQoL instrument before treatment and at 12 months.

Results: Patients undergoing CV were older, had higher prevalence of persistent AF, and lower baseline ASTA and 15D total scores than the PVI group.

At 12-months, significant improvements in ASTA score were observed in CV and PVI groups (change -6.3 and -11.9 , $p < 0.001$ for both, respectively). In addition, symptom burden decreased significantly in both groups ($p = 0.002$ for CV and $p = 0.003$ for PVI). CV patients improved their 15D score (0.013, $p = 0.010$) and dimensions ‘breathing’, ‘distress’, and ‘vitality’ significantly. However, there were no significant improvements in 15D or dimensions in the PVI group.

At 12 months, 29.9% of CV patients were asymptomatic whereas 48.7% had experienced recurrent AF. In PVI patients, the proportions were 20.3% and 55.0%, respectively.

Key conclusions: Older patients experienced significant improvement in disease-specific HRQoL and symptom relief after CV and PVI. However, changes in generic HRQoL after PVI likely reflect advanced age of the population rather than treatment effects and underline the importance of using disease-specific outcome measures.

Short poster presentation

Cardiovascular medicine

P-0212

Use of medications to manage cardiovascular conditions among older adults over 9 years: register-based follow-up of an RCT

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Background: Hypertension, dyslipidemia, and diabetes are common conditions, and medications to manage them are widely used among older adults. However, few longitudinal studies have investigated how medication use changes over time.

Methods: The FINGER study included 1259 individuals, aged 60–77 years, with an increased risk of dementia. The participants were randomized to receive either regular health advice or a multidomain lifestyle intervention (exercise training, dietary counselling, cognitive training, and management of vascular risk factors) for two years. Data on medication purchases were collected from a nationwide register covering nine years from the study onset. Participants who made at least two purchases per year were categorised as medication users for that year.

Results: A total of 56% of participants used antihypertensive medications at the start of the study, with steady increase over time so that 72% used them after nine years (p for increase < 0.001). Lipid-lowering medications increased moderately, from 41% at baseline to 48% after nine years ($p < 0.001$). Glucose-lowering medications were used by 13% at baseline with an increase to 19% ($p < 0.001$), and antithrombotic medication use increased from 7 to 25% ($p < 0.001$). The intervention allocation did not affect the medication usage during or after the active intervention.

Discussion: This study provides insights into the real-world use of medications to manage cardiovascular conditions among older adults. Medication use increased over time and the use of antihypertensives was more common than that of lipid-lowering medications. Glucose-lowering and antithrombotic medications were less common but showed the greatest increase over time.

Poster

Cardiovascular medicine

P-0213

Lipid-lowering therapy in community dwelling elderly patients: secondary prevention for atherosclerotic cardiovascular disease

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Introduction: Atherosclerotic cardiovascular disease (ASCVD) is highly prevalent among older adults and the potential benefits of secondary prevention represents significant public health challenge. Limited data regarding secondary prevention in elderly patients with history of ASCVD aimed us to assess the effectiveness of lipid-lowering therapy in adults aged < 75 and ≥ 75 years.

Methods: Comparative data analysis of 125 general practice office patients, with history of ASCVD, younger adults < 75 (mean age 71 ± 2) and older adults ≥ 75 (mean age 79 ± 4) for period from January 2023 to December 2024. We compared lipid-lowering therapy prescription, dosage, and lipid levels. Adherence to therapy was calculated with Medication Possession Ratio (MPR).

Results: Overall, 93% of adults aged < 75 and 82% of older adults ≥ 75 , were prescribed with lipid-lowering therapy with no difference in therapy adherence (68% in both groups had $MPR > 80\%$). Low and moderate intensity statins were prescribed in 51% of younger adults vs. 59% in older adults. No difference in proportion of patients who reached low-density lipoprotein cholesterol (LDL-c) < 1.4 mmol/L between adults < 75 and ≥ 75 years, (9.8% vs. 13.5%, respectively). Accordingly, no difference in lipid levels was noted (LDL-c 2.3 ± 0.8 mmol/L vs. 2.2 ± 0.8 mmol/L, non-high-density lipoprotein cholesterol 2.9 ± 0.9 mmol/L vs. 2.8 ± 1 mmol/L, younger and older adults respectively).

Key conclusion: Despite high prescribing rate and adherence, consistent with the latest guidelines recommendation, small proportion of patients in both groups achieved optimal lipid levels. While statin prescribing should remain a shared decision between patient and clinician, cardiovascular risk, prevalent comorbidity, adverse side effects, frailty and life expectancy must be carefully considered.

P-0214

Mitral valve prolapse—case report

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Introduction: Mitral valve prolapse (MVP) is the most common cardiac valve abnormality, which occurs in about 5% of the world population, more often in the female population. During ventricular contraction, in the phase of systole prolapse of one or both valves in the left atrium occurs. Mitral valve prolapse may be the cause of varying degrees of mitral regurgitation.

Case report: K.I.- 68 years old female patient with symptoms of palpitations, fatigue, mild pretibial edema. At her first cardio logical examination ECG showed sinus rhythm with heart rate 95/min. Color Doppler echocardiography showed elongated and thickened mitral cusps, with prolapse of the both cusps, predominantly in meso—tele systole.

Systolic and diastolic dimension and volumes of the left ventricle were enlarged, with preserved ejection fraction with obvious hyper kinetic of the walls of left ventricle, due to volume overload, because of the present mitral regurgitation. Diastolic function of the left ventricle was normal. The diameter, area and volume of the left atrium were with borderline values. Color Doppler—mitral regurgitation that fills the entire left atrium and enters the pulmonary veins.

Conclusion: Patient with mitral valve prolapse of the both cusps, with concomitant mitral regurgitation which is echocardiographically assessed as severe mitral regurgitation. The dimensions of the left ventricle are enlarged, with preserved systolic and diastolic function.

An echocardiographic indication for surgical treatment of a heart defect is indicated.

P-0215

Drugs and orthostatic hypotension in geriatric inpatients population: a link?

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Introduction: The prevalence of orthostatic hypotension (OH) rises with age and frailty.

Method: Retrospective study over 12 years (from 1 January 2012 to 31 December 2024) of all geriatric in-patients, observing the link between the orthostatic testing (OT) and their medications: antihypertensive drugs (AH), drugs with potential hypotensive effects (H), as well as co-morbidities favoring OH.

OT is a manual measurement of blood pressure (BP) after 5 min supine (T0), and 1 (T1), 3 (T3) and 5 (T5) minutes after rising to an upright position. OH was defined by a ≥ 20 mmHg decrease in systolic BP and/or a ≥ 10 mmHg decrease in diastolic BP.

Results: 32% of the 10,245 subjects (mean age 82.78 years, 62% women) had OH, 25.6% at T1, 15.4% at T3, and 15.2% at T5. The statistically significant parameters associated with OH were: use of H (72% of the group) [particularly antidepressants, opioids, antiparkinsonians], the number of drugs and male sex.

Multivariate analysis showed that H increased OH by 12% (OR 1.12; CI 1.01–1.23, $p < 0.030$), number of drugs by 1% (OR 1.01, CI 1.00–1.02, $p < 0.012$), dementia by 12% (OR 1.12, CI 1.01–1.24, $p < 0.025$), and Parkinson's disease by 69% (OR 1.69, CI 1.39–2.06, $p < 0.001$).

Conclusion: OH affects 1/3 of geriatric in-patients, mainly those suffering from dementia, diabetes or Parkinson's disease.

A review of H should be systematically carried out, targeting antiparkinsonians, antidepressants and opiates, and discussing their possible discontinuation. AH drugs don't cause OH in this study.

P-0216

Orthostatic hypertension in geriatrics: a new challenge?

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Introduction: With ageing, baroreflex dysfunction can lead to orthostatic hypertension (OHT), which exacerbates cardiovascular morbidity and mortality.

Method: A retrospective study of OHT and its association with comorbidities and medication in 10,245 elderly hospitalized patients, was carried out from 1 January 2012 to 31 December 2024. Orthostatic tests were performed, measuring systolic (SBP) and diastolic blood pressure after 5 min of lying in bed (T0), and at 1 (T1), 3 (T3), 5 (T5) minutes after standing up.

OHT was defined as an exaggerated increase in blood pressure on standing (ERST) – the increase in SBP being at least 20 mmHg, with an SBP value of at least 140 mmHg while standing.

Results: 14% of the group (with a mean age 82.78 years, 62% female) had OHT.

Factors that significantly increased the occurrence of OHT included female gender, age, hypertension, use of drugs such as antihypertensive, hypotensive, or a combination hypo-antihypertensive, opioid, angiotensin-converting enzyme inhibitors, angiotensin II antagonists. On the other hand, Parkinson's disease or an antiparkinsonian drug indicated a reduced occurrence.

In a multivariate analysis, the predominant factors associated with OHT were:

- Female gender (1.9 $\times$ greater risk than male gender, OR: 1.9, 95% CI: 1.66–2.17, $p < 0.001$).

- Age ($\uparrow$ 3% risk, OR = 1.03, 95% CI: 1.02–1.04, $p < 0.001$).

- Hypertension ($\uparrow$ 46% risk, OR = 1.46, 95% CI: 1.27–1.68, $p < 0.001$).

- Parkinson's decreased the risk by 45% (OR = 0.55, 95% CI: 0.37–0.79, $p < 0.002$).

Conclusion: With the occurrence of OHT in 14% of the sample group, it is essential to syst.

Short poster presentation

Cardiovascular medicine

P-0217

Sex differences in stroke risk and predictive value of CHA2DS2-VASc versus CHA2DS2-VA in older patients with newly diagnosed atrial fibrillation: a nationwide cohort study based on Swedish registry data (2009–2020)

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Introduction: Women with atrial fibrillation (AF) have a higher reported stroke risk than men, with more frequent underuse of oral anticoagulation therapy (OAT). The inclusion of female sex in the CHA2DS2-VASc score (Sc for female sex) for clinical stroke risk stratification remains debated, as recent studies question the persistence of the previously reported sex gap. Using Swedish nationwide registry data, we assessed potential sex differences in 1-year stroke risk from 2009 to 2020 and compared the predictive value of CHA2DS2-VASc versus CHA2DS2-VA in older patients with AF.

Methods: We followed a cohort of OAT-naïve patients aged ≥ 65 years, from first AF diagnosis until stroke, death, OAT initiation or emigration. To assess sex differences in stroke risk, we calculated hazard ratios with 95% confidence intervals (aHRs [95% CIs]), adjusted for sociodemographics and comorbidities using Cox models. We compared the prediction performance of CHA2DS2-VASc and CHA2DS2-VA using Net Reclassification Improvement (NRI) and Integrated Discrimination Improvement (IDI) indices.

Results: Among 279,468 patients (50.5% female; mean age: 79.8 years), female sex was associated with increased stroke risk over the study period (aHR: 1.24[1.18–1.29]), with no significant trend over time (p -value = 0.8983). CHA2DS2-VASc outperformed CHA2DS2-VA according to NRI (0.17[0.15–0.19]) and IDI (0.0011[0.0005–0.0015]). Sex differences were more pronounced in patients aged ≥ 80 years.

Key conclusions: In Swedish OAT-naïve patients with incident AF and aged ≥ 65 years, this study supports retaining female sex in the CHA2DS2-VASc score, particularly in the oldest patients. Further research is needed to explain the persistence of sex differences in stroke risk in Sweden.

Poster

Cardiovascular medicine

P-0218

Deprescribing loop diuretics in very old patients with heart failure: clinical phenotype and safety

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Introduction: Managing loop diuretics (LD) in very old patients with heart failure (HF) is challenging. While they are crucial for reducing congestion during acute decompensation, their overtreatment in the chronic phase can lead to adverse effects such as dehydration, electrolyte imbalances, hypotension, and falls. In older adults, deprescribing LD has been suggested as a safe strategy to improve quality of life without worsening outcomes, but clear evidence remains lacking.

Purpose: To identify the phenotype of very old patients with HF best suited for safe diuretic deprescribing.

Methods: This retrospective study included very old (> 80 years) patients with HF and on LD discharged from our Geriatrics Unit between 2020 and 2024 (T0) who had at least two follow-up visits (T1 and T2) at our cardio-geriatric clinic. Patients underwent a Comprehensive Geriatric Assessment, blood tests, NYHA classification for dyspnea, and assessment of congestion through POCUS. HF-related hospitalizations at 6 months from T1 and all-cause mortality at 12 months were recorded. Multivariate logistic regression models were used to identify determinants of diuretic deprescribing. Kaplan–Meier curves and Cox regression survival analysis were used to assess the time to first HF hospitalization and all-cause mortality.

Results: The study population had a mean age of 87.2 (SD 5.7) years, a median diuretic burden of 33.5 mg, and NYHA class 2. Of 114 patients, 24 underwent deprescribing at T1. No significant differences in frailty, disability, or comorbidity burden were found between the deprescribed group and controls. Both groups had similar dyspnea severity and HF-related hospitalizations between T0 and T1. The deprescribed group tended to have lower NTproBNP levels ($p = 0.098$) and less congestion on POCUS, with a smaller inferior vena cava diameter ($p = 0.008$), a lower degree of pleural effusion ($p = 0.022$), and fewer B-lines ($p = 0.078$). Additionally, the deprescribed group had higher LD doses ($p = 0.003$) at T1 and more frequent use of ACEi/ARBs ($p = 0.021$). Multivariate logistic regression found that ACEi/ARB use was most strongly associated with deprescribing, with a non-significant trend [OR 4.01 (95% CI: 0.95–16.98, $p = 0.060$)]. At T2, patients who underwent deprescribing did not experience worsening dyspnea or increases in diuretic doses compared to controls. All-cause mortality (22.2% vs. 16.7%, $p = 0.553$) and HF re-hospitalizations (14.4% vs. 8.3%, $p = 0.421$) were similar between the groups, and survival curves did not differ significantly (Fig. 1).

Conclusions: In very old patients on ACEi/ARB and higher diuretic burden, combined with lower biochemical and ultrasound congestion, LD deprescribing seems to be a safe strategy that does not increase

the risk of hospitalization for HF or mortality. Our pilot study supports LD deprescribing to combat clinical inertia, reduce drug costs, and potentially improve the quality of life in very elderly patients.

P-0219

Role for smoking cessation services in secondary stroke prevention

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Introduction: Evidence exists for primary prevention of stroke following smoking cessation. Little evidence exists regarding the impact of providing dedicated smoking cessation services to stroke patients on secondary prevention. Aim of this cross-sectional point prevalence survey was to establish the prevalence of smoking in acute stroke patients and explore their attitudes towards such services.

Methods: Data was obtained from patients admitted to a stroke unit serving an inner-city multi-ethnic population. Data collected included socio-demographic details and smoking history. Their attitude towards engaging with smoking cessation was measured using a 10-point scale [1 = extremely unlikely, 10 = extremely likely].

Results: Of 60 patients [50% males, average age (SD) 69.7 (13.3), age range 40–95], 13 [21.7%] were current smokers, 7 [11.7%] were ex-smokers. There were no age, gender or ethnicity differences between non-smokers [$n = 40$] and ex/current smokers [$n = 20$] except there were more male smokers [10/30 (33%) vs 3/30 (10%), $p = 0.06$]. Mean smoking years for 20 ex/current smokers was 34. Of 13 current smokers, only 4 [30.8% of smokers; 6.7% of total cohort] agreed to actively engaging with cessation services [scores of 8–10 on scale]. 9/13 smokers [69.2%] had a score of 1. Methods previously attempted by 10 of the ex/current smokers to quit smoking included vaping [$n = 1$], nicotine replacement therapy [$n = 3$] and abstinence [$n = 6$].

Conclusion: This study suggests that there may not be a role for smoking cessation services in acute stroke settings. Such resources could perhaps be allocated elsewhere in the community to target towards primary prevention. The study provides valuable information for clinicians and researchers on future allocation of such services and potential implications of service utilisation for these patients.

P-0220

Orthostatic hypotension and cerebral small vessel disease: a systematic review

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Introduction: Orthostatic hypotension (OH) is highly prevalent in ageing populations and may contribute to cognitive decline through cerebral small vessel disease (CSVD). Research on the association between OH and CSVD is fragmented and inconsistent.

Methods: We systematically reviewed the literature for studies assessing the association between OH and CSVD, published until December 1st 2023 in MEDLINE, PubMed or Web of Science. We included studies with populations aged ≥ 60 , that assessed OH in relation to CSVD including white matter hyperintensities (WMH),

lacunes and cerebral microbleeds. Modified JBI checklist was used to assess risk of bias. A narrative synthesis of the results was presented. **Results:** Of 3180 identified studies, eighteen were included. Fifteen studies reported on WMH, four on lacunes, seven on microbleeds. Six of fifteen studies on WMH found that OH was related to an increased burden of WMH, neither longitudinal studies found associations with WMH progression. Findings were inconsistent across studies concerning lacunes and microbleeds. Across outcomes, adequate adjustment for systolic blood pressure tended to coincide with smaller effect estimates.

Conclusion: Current evidence on the OH-CSVD association originates mostly from cross-sectional studies, providing inconsistent and inconclusive results. Longitudinal studies using standardized and fine-grained assessment of OH and CSVD and adequate adjustment for supine blood pressure are warranted.

P-0221

Cognitive dysfunction and mortality risk in older heart failure patients

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Background: Cognitive impairment in patients with heart failure (HF) is common and related to adverse events. However, the independent prognostic importance of cognitive function has not been studied in detail. This study relates cognitive impairment to mortality risk in HF patients and examines whether this relationship is modified by severity of HF, comorbidities, or frailty.

Methods: This prospective cohort study included 272 HF patients (78 yrs; 44% female). Cognitive impairment was defined as an MMSE score < 26 and/or a Clock-drawing score < 4. HF was categorized as HFrEF and HFmEF/HFpEF based on ejection fraction; HF-severity was assessed with NYHA class; physical frailty with the Fried frailty criteria. Cox-proportional hazards analyses were used to relate cognitive impairment to 1-year mortality risk in the whole population and within strata of age, sex, HF-severity, HF-categories, comorbidities, or frailty.

Results: N = 108 (40%) were cognitively impaired and the one-year mortality rate was 22%. HF patients with cognitive impairment had a two-times higher 1-year mortality risk (HR, 95% CI: 2.1, 1.2–3.6) than HF patients without cognitive impairment, independent of important confounders. Stratified analyses showed that this relationship was modified by age and physical frailty (p-interaction < 0.10), with stronger relations in younger and non-frail patients (figure).

Conclusions: HF patients with cognitive impairment have a higher mortality risk, particularly those who are young and less frail. Competing mortality risks could be an explanation for these findings. Standard cognitive screening in HF patients could identify high risk groups who might benefit from advance care planning.

P-0222

Mortality and functional characteristics in patients with severe aortic stenosis after TAVI: a descriptive cohort analysis

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Introduction: The transcatheter aortic valve implantation (TAVI) is a therapeutic alternative in elderly patients with symptomatic severe

aortic stenosis and high surgical risk. The identification of frailty markers, functional autonomy, and cognitive impairment is essential to optimize selection.

Methods: A retrospective study was conducted on 107 geriatric patients, with demographic, functional, and cognitive variables evaluated. Age, the indexes Barthel, Charlson and Lawton, the mini-mental state examination (MMSE), and the Pfeiffer test were expressed as mean $\pm$ standard deviation. The percentage of frail patients was determined according to the FRAIL, EFT, and Frail-VIG scales, and functional limitation was assessed using the Short Physical Performance Battery (SPPB). An average follow-up of 26.5 months (range: 4–55) was recorded, and mortality was stratified into short term (< 6 months) and long-term (> 6 months).

Results: The mean age was 84.2 ± 5.8 years; with a Barthel index of 86.16 ± 15.3 points. Cognitive assessment with MMSE of 24.4 ± 4.47 points and a Pfeiffer test of 1.93 ± 1.71 errors; instrumental (Lawton) score 3.43 ± 2.48 points, and the Charlson index was 5.26 ± 2.16 points. Mortality was 3% in the short term and 23% in the long term. Deceased patients showed greater dependency and cognitive impairment at baseline ($P < 0.05$).

Conclusions: Comprehensive geriatric assessment is crucial in patients with aortic stenosis, allowing identification of those at higher risk of adverse outcomes. The integration of functional and cognitive evaluations facilitates decision-making and optimizes therapeutic management, thereby improving the quality of life of this population.

P-0223

Blood pressure changes in late-life are associated with declining cardiovascular function: analysis of UK Biobank cohort

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Introduction: Blood pressure (BP) trends vary in older age, with different phenotypes ranging from new onset hypertension to declining BP. Mechanisms driving late-life BP declines remain unexplained. We used detailed data from the UK Biobank cohort study linked to healthcare records with serial BP measures to investigate the association between late-life changes in BP and cardiovascular function.

Methods: We estimated associations between systolic BP trend (stable normotension, increasing, stable low, declining) and cardiovascular function in UK Biobank participants who underwent cardiac MRI (CMRI) with ≥ 3 systolic BP (SBP) measurements in the 10 years before CMRI. Outcome measures included stroke volume, ejection fraction and arterial stiffness index. Regression models were used to estimate the association between categories of SBP trend and CMRI measures.

Results: We analysed data from 3452 (N = 3835 stable normotension, N = 193 increasing, N = 350 declining, and N = 74 stable low) participants (59.2% female; mean age 73 years). SBP reduction over 10 years was associated with reductions in stroke volume ($\beta = -1.7$ mL/m 95%CI, $-2.6, -0.8$; $p < 0.05$), end-diastolic volume ($\beta = -6.63$ mL 95%CI $-10.1, -3.2$; $p < 0.05$), end-systolic volume ($\beta = -4.9$ mL 95%CI, $-8.0, -1.8$; $p < 0.05$), and an increase in arterial stiffness ($\beta = 0.64$ m/s 95%CI, $0.49, 0.78$; $p < 0.05$).

Conclusion: We found that declining SBP was associated with impaired cardiac function: reduced stroke volume, end-diastolic volume, end-systolic volume with an increase in arterial stiffness. This provides insights into the underlying pathophysiology of BP declines in later life. Further research is planned to explore distinct BP phenotypes in cardiovascular ageing and frailty to guide treatment

approaches, including selection of people appropriate for de-prescribing.

P-0224

Heart failure with preserved ejection fraction in older inpatients: uncovering prevalence and diagnostic uncertainty

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Introduction: 55 words.

Heart failure with preserved ejection fraction (HFpEF) represents about half of all heart failure cases and remains particularly challenging to diagnose in older adults. Despite guideline-recommended use of natriuretic peptides, transthoracic echocardiography (TTE), and algorithms like H2FPEF and HFA-PEFF [1–3], diagnostic accuracy is limited in the elderly due to frequent coexisting conditions that mimic heart failure [1].

Methods: 86 words.

We conducted a prospective, single-center cohort study involving patients aged ≥ 65 years who were consecutively admitted to the acute geriatric ward of an Italian university hospital over a 12-month period. Patients without a known history of HF but presenting with at least one typical HF symptom/sign or elevated NT-proBNP were enrolled. TTE data were collected and both H2FPEF and HFA-PEFF scores were calculated, including a modified version of HFA-PEFF with age-adjusted cut-offs. HFpEF prevalence was estimated based on European guidelines, and diagnostic accuracy analyses were performed.

Results: 66 words.

During the study period 115 patients were enrolled (median age 86.0 years, 55.7% female). Nearly all had ≥ 1 HF signs/symptoms (107, 93.0%) and ≥ 1 HF-mimic (109, 94.8%). HFpEF prevalence was 48.7%, based on age-adjusted NT-proBNP confirmed by TTE findings. Diagnostic accuracy was modest for H2FPEF (AUROC 0.657) and HFA-PEFF (AUROC 0.705), while the modified HFA-PEFF score showed improved performance (AUROC 0.865; specificity 88%, sensitivity 68%).

Key conclusions: 40 words.

HFpEF remains an underdiagnosed yet highly prevalent condition in older adults, where multiple comorbidities complicate the clinical scenario. These findings highlight the need for age-adapted diagnostic thresholds for both biomarkers and TTE parameters to avoid misdiagnosis and potentially inappropriate treatment.

Total Word Count: 247/250.

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P-0225

Evaluating cognitive impairment and quality of life in heart transplant candidates: implications for eligibility and post-transplant outcomes: a systematic review

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Background: Heart transplantation (HT) is a critical option for patients with end-stage heart failure, especially as life expectancy increases. Recent trends show a rising number of older transplant candidates, with studies indicating that patients over 70 can achieve acceptable outcomes when selected using specific criteria. Despite improved survival rates, the impact of frailty and cognitive decline on HT and can modify the quality of life (QoL) during all the transplant paths.

Methods: This systematic review, following PRISMA guidelines, evaluates studies from 2013 to June 2024 on assessment and impact on the morbidity and mortality of cognitive outcomes in HT recipients and consequences on QoL, focusing on older populations. Databases including PubMed, Scopus, and Embase were searched using a validated query, combining terms related to HT, HF, QoL, and cognitive impairment.

Results: The review examined eight studies on cognitive assessment in heart failure patients, focusing on their role in survival prediction, and QoL as a protection factor. Psychosocial factors including treatment adherence, mental health, substance abuse, cognitive impairment, and socioeconomic status, were key determinants of postoperative outcomes. Moreover, cognitive status prior to the transplant shows that cognitive outcomes after HT are not solely attributable to pre-existing impairment, but are also directly influenced by the procedure itself. In fact, studies show that, two years after HT, patients who recover cognitive domains have better survival outcomes.

Conclusions: Despite evidence that diagnosing cognitive deficits in heart failure patients is highly predictive of outcomes, our review highlights the rarity of pre-transplant cognitive assessment. Studies emphasize the urgent need for multidimensional approach and further research to better understand the pathophysiological mechanisms of cognitive decline in heart failure, which differ from those related to neurodegenerative diseases.

P-0226

The Cardiology for Older Persons Service (COPS)—a description of Comprehensive Geriatric Assessment (CGA)-prompted interventions for older adults with cardiovascular disease on cardiology wards

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Introduction: Cardiovascular disease (CVD) affects seven million people in the UK and 113 million people across 57 European Society of Cardiology member countries [1, 2]. CVD incidence increases with age, with a median age of 65–80 years at diagnosis[3]. CVD and geriatric syndromes like frailty and sarcopenia have a bidirectional relationship.

Increasingly, CGA is recognised for improving outcomes for older adults [4,5,6]. However, it is unclear whether this model translates to cardiology wards and which components are key to deliver optimal care. We describe CGA-prompted interventions delivered by a geriatrician-led service in a tertiary centre.

Methods: A retrospective study of adult cardiology inpatients seen by COPS between 2022–2024.

Results: 263 inpatients were reviewed. On average patients were 83.3 years (SD 7.3); had 7 comorbidities (SD 3.1); CFS 5; 8 medications (SD 4.4) and 56% male. Median length-of-stay was 18 days (IQR 13–35). Over 75% were alive at 30-days. The most common diagnoses were valvular disease (37%), acute coronary syndrome (17%) and heart failure (13%). Half received a new diagnosis (52%), long-term medication optimisation (50%) or started new medication (57%). Advice was given on continence (36%), delirium (19%), falls (17%) and pain (15%). COPS were involved in discharge planning (48%); shared-decision-making (28%); next-of-kin discussions (24%), capacity assessments (17%) and resuscitation discussions (10%).

Conclusion: This service demonstrates some of the unique contributions geriatric medicine can bring to a multidisciplinary, interspecialty heart team. More research is needed to understand the impact of geriatricians within cardiology liaison.

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P-0227

The Cardiology for Older Persons Service (COPS)—a description of Comprehensive Geriatric Assessment (CGA)-prompted interventions for older adults with cardiovascular disease on cardiology wards

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Conclusion: This service demonstrates some of the unique contributions geriatric medicine can bring to a multidisciplinary, interspecialty heart team. More research is needed to understand the impact of geriatricians within cardiology liaison.

P-0228

Carotid-femoral pulse wave velocity as a predictor of cognitive performance in older adults: findings from the toledo study for healthy aging

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Age-related changes in the vascular wall affect the function of various organs. Therefore, we evaluated how arterial stiffness, assessed by carotid-femoral Pulse Wave Velocity (cf-PWV), influences both baseline cognitive performance and changes in cognitive function over the follow-up.

We developed a prospective, population-based cohort study with 1581 participants aged > 65 years were obtained from The Toledo Study for Healthy Ageing. Participants from the second wave (2011–2013) were selected for the cross-sectional analysis. Those who also performed the cognitive assessment in the third wave (2015–2017) were selected for the prospective analysis.

Arterial stiffness was evaluated by cf-PWV. Multivariate segmented regression models were used to evaluate the association between cf-PWV scores and basal neuropsychological evaluation scores and change of neuropsychological evaluation scores along follow-up. Cross-sectional analysis showed that as cf-PWV grew within the cf-PWV (5–< 10) category an improvement was observed in 7 Minute test (7MT), free short-term memory, and hole peg test. Furthermore, in the cf-PWV (> 13–18) category a decrease was observed in total short-term memory, free long-term memory, and total long-term memory. Prospective analysis showed a progressive worsening of cognitive function as cf-PWV increases within the cf-PWV (> 13–18)

category in 7MT, object denomination, immediate and short-term memory, and Hole Peg test, while in the cf-PWV ($5 < 10$) category, there was observed a decrease in Cumulative Executive Dysfunction Index score and short-term memory.

In conclusion, higher cf-PWV score is linked to poorer cognitive performance and worse progression, highlighting the need to plan interventions to delay arterial stiffness and its consequences.

P-0229

Cholinesterase inhibitors and reduced risk of hospitalization and mortality in patients with Alzheimer's dementia and heart failure

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Introduction: Cholinesterase inhibitors (ChEIs) have beneficial effects on the heart. Associations between ChEI-use and reduced mortality and cardiovascular events in Alzheimer's disease (AD) have been shown. Whether these associations exist in those with both heart failure (HF) and AD is unknown. HF being the most common cause for inpatient care in geriatric patients calls for improvement in care.

Methods: A propensity score (PS) matched cohort with patients with HF and AD was obtained through linking registers for cognitive/dementia disorders, comorbidities, drug prescription, and death, was established with 455 patients with and 455 without ChEI treatment.

Results: ChEI use was associated with reductions of mortality and hospitalization due to HF by 21% (0.79; CI 0.66–0.96) and 47% (0.53; CI 0.38–0.75) respectively. Donepezil and galantamine but not rivastigmine were associated with lower risk of death compared to non-users. Donepezil was associated with a lower risk of hospitalization due to HF compared to non-users. There was no significant difference in hospitalization for bradycardia, AV block or implantation of pacemaker between ChEI use and non-use.

Key conclusions: This study suggests that in persons with HF and AD, treatment with ChEIs is associated with improved survival and a decreased risk of hospital care for HF but results due to type of ChEI vary. Further research is needed on differences between varying types of HF, varying types of ChEIs and possible effects in patients with HF, but without AD.

P-0230

Elderly Satelia Surveillance in Heart Failure (ElderSAT-HF): predictive factors of events after discharge of Cardiogeriatric Unit

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Introduction: Acute Heart Failure (AHF) is a prevalent condition, with incidence increasing significantly with age. High rates of unplanned rehospitalizations and mortality make AHF a critical public health issue. The advent of telemonitoring has enhanced HF management by enabling remote patient monitoring, facilitating timely treatment adjustments, and providing therapeutic education, ultimately reducing or preventing hospital readmissions. This study aims to identify both geriatric and cardiologic predictors of adverse

events (death or rehospitalization) within 90 days following hospital discharge in patients admitted for AHF in a cardiogeriatric unit.

Methods: We conducted a retrospective, observational study at La Porte Verte Hospital in Versailles, utilizing the Satelia® Cardio program. The study included patients aged over 65 who were hospitalized for AHF between April and November 2023 and enrolled in telemonitoring for HF upon discharge.

Results: Among the 201 patients included, 156 were analyzed, with a mean age of 86 years and a mean Activities of Daily Living (ADL) score of 5.5/6. Hypertension was present in 65% of patients, diabetes in 39%, dyslipidemia in 26%, cancer in 15%, and stroke in 15%. Additionally, 74% had chronic kidney disease with an estimated glomerular filtration rate (eGFR) < 30 mL/min. The median Charlson Comorbidity Index was 8.0 [6.0–9.0]. Cognitive impairment was observed in 21% of patients, severe malnutrition in 25%, and obesity in 26%. In terms of cardiac history, 51% had ischemic heart disease, 64% had atrial fibrillation, and 32% had a pacemaker or implantable cardioverter defibrillator (ICD). Regarding left ventricular ejection fraction (LVEF), 63% had heart failure with preserved ejection fraction (HFpEF), and 20% exhibited pulmonary artery pressure (PAPs) elevation on echocardiography.

A total of 43 patients (27.6%) experienced an adverse event—either an unplanned rehospitalization or death—within 90 days of discharge. The median time to rehospitalization was 22 days [14–42], while the median time to death was 42 days [17–72]. Dyslipidemia ($p = 0.01$), obesity ($p = 0.03$), and body mass index (BMI) ($p = 0.03$) were significantly associated with adverse events. Additionally, PAPs elevation was significantly linked to an increased risk of adverse events ($p = 0.04$). However, no significant associations were found between geriatric factors and adverse outcomes.

Patients with a positive metabolic profile had a significantly longer hospital stay ($p = 0.03$) but a significantly lower rate of unplanned rehospitalization ($p = 0.001$), despite a trend toward a longer delay before readmission ($p = 0.08$). Mortality rates did not differ between metabolic and non-metabolic groups ($p = 0.76$).

Conclusion: Elderly patients with AHF remain at substantial risk for early rehospitalization or death, regardless of their geriatric characteristics and comorbidities. However, our findings highlight the “obesity paradox,” suggesting that obesity may confer a protective effect against mortality and hospital readmissions. Telemonitoring, irrespective of the specific modality used, appears to be an effective and flexible tool for monitoring elderly HF patients at home, potentially improving outcomes and reducing hospital burden.

P-0231

Malnutrition in elderly with heart failure (Malnut-HF)

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Introduction: Acute heart failure (AHF) is a prevalent condition that disproportionately affects older adults, contributing to high rates of unplanned rehospitalizations and mortality, making it a major public health concern. The management of chronic heart failure (CHF) necessitates a multimodal approach, incorporating structured care pathways and continuous monitoring, particularly in frail elderly populations. Undernutrition and sarcopenia are increasingly prevalent with aging and may influence clinical outcomes. This study aimed to evaluate whether specific phenotypic or etiological indicators of malnutrition and/or sarcopenia serve as independent risk factors for

adverse events (unscheduled hospitalization or death) within 90 days post-discharge in elderly patients with heart failure.

Methods: We conducted a retrospective observational study at La Porte Verte Hospital in Versailles, including patients aged ≥ 65 years hospitalized for AHF between January and March 2024 who were subsequently discharged home.

Results: Among the 289 patients screened, 162 were analyzed, with a mean age of 87.5 years. Within 90 days of discharge, 55 patients (34%) experienced an adverse event (rehospitalization or death). The cohort exhibited high comorbidity rates: hypertension (64%), diabetes (20%), dyslipidemia (33%), cancer (24%), stroke (13%), and chronic kidney disease with an eGFR < 30 mL/min (78%). The median Charlson Comorbidity Index was 7.0 [6.0–9.0]. Cardiovascular profiles included ischemic cardiopathy (46%), atrial fibrillation (70%), cardiac amyloidosis (2.5%), and pacemaker/implantable defibrillator presence (21%).

Malnutrition was identified in 92 patients (57%), including 60 cases (37%) of severe malnutrition ($P = 0.57$, 95%CI = 0.48–0.64). Sarcopenia was present in 59 patients (36%) ($P = 0.36$, 95%CI = 0.31–0.46). While no significant association was observed between malnutrition status and adverse events at 90 days, a trend was noted for severe malnutrition ($P = 0.11$) and recent weight loss ($P = 0.09$). The positive predictive value of weight loss within the past month was 0.60 (95%CI = 0.25–0.89), whereas the negative predictive value of severe malnutrition was 0.71 (95%CI = 0.61–0.79). Weight loss within the past month was associated with adverse events (OR = 3.13, 95%CI = 0.85–12.7). After adjusting for age, gender, Charlson Comorbidity Index, ADL score, pacemaker/defibrillator presence, and social isolation, recent weight loss remained significantly associated with adverse events at 90 days ($P = 0.05$, OR = 3.81, 95%CI = 1.01–16.1).

Conclusion: Elderly patients hospitalized for AHF remain at elevated risk of adverse outcomes within 90 days post-discharge. While this study did not establish malnutrition or specific phenotypic/etiological factors as independent risk predictors, trends suggest a potential association, particularly with severe malnutrition and recent weight loss. Increasing the study's power could further elucidate the relationship between AHF and malnutrition, emphasizing the need for targeted nutritional interventions as a modifiable frailty factor in AHF management.

P-0232

Elderly management of acute HF in diuretic day hospital

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Introduction: Heart failure (HF) is a prevalent condition in the elderly, with high rehospitalization and mortality rates. Full hospitalization carries iatrogenic risks, necessitating alternative outpatient approaches. A diuretic day hospital (DH) was established at La Porte Verte Hospital (Versailles) to manage decompensated HF patients without hospitalization. Patients receive diuretic therapy under cardiogeriatric supervision and are discharged with home hospitalization (HH) or home healthcare provider (HHP) follow-up.

Methods: This single-center observational study included all patients aged ≥ 70 admitted to the DH for acute HF between January 1st and February 7th, 2025. The study assessed the feasibility of this care model and described the diuretic DH care pathway.

Results: Ten patients (mean age 85.6 ± 8.0 years, 50% women) were included. The mean ADL score was 5.5/6. Referral sources included general practitioners (20%), HF telemonitoring (20%), the emergency

department (12.5%), and the geriatric DH (50%). The mean time to admission was 1.2 ± 1.7 days. One patient required full hospitalization. Most were discharged with HHP (40%) or HH (30%). Patients received an average of 215.3 ± 85.5 mg IV furosemide per session, requiring 3.1 ± 2.2 sessions over 7.7 ± 7.2 days. Outpatient-managed complications included electrolyte imbalances (20%), kidney failure (20%), and infection (10%).

Conclusion: The diuretic DH is a safe, effective alternative to hospitalization, reducing iatrogenic risks while ensuring appropriate HF management. Further patient enrollment is needed to confirm its long-term benefits in HF care pathways.

P-0233

Relation between resistant hypertension with novel and traditional anthropometric indices in Spanish elderly hypertensive men

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Introduction: Obesity may be a risk factor for the development of resistant hypertension (RH), however, this association has not been established with the new anthropometric indices that measure adiposity and have been proposed as alternatives to body mass index (BMI). The aim was to study the association between RH status with novel and traditional anthropometric indices in Spanish elderly hypertensive men.

Methods: This cross-sectional study investigated a consecutive sample of 168 Spanish elderly hypertensive men (age mean 72.03 ± 5.92). Eight anthropometric indexes, including BMI, body shape index (ABSI), abdominal volume index (AVI), body roundness index (BRI), conicity index (CI), Clinica Universitaria de Navarra – Body Adiposity Estimator (CUN-BAE), WHI, waist-to-height ratio (WHtR) and waist-adjusted-waist index (WWI) were investigated. RH was defined as blood pressure that remains above goal in spite of concurrent use of three or more anti-hypertensive agents of different classes, at least one was diuretic.

Results: Of all participants, 72 (43.9%) subjects had resistant hypertension. Between adiposity indexes studied, BMI (30.46 ± 3.84 vs 29.05 ± 4.82), AVI (24.74 ± 4.63 vs 22.96 ± 6.13), CUNBAE (33.36 ± 5.22 vs 31.78 ± 5.22) and WHtR (0.66 ± 0.06 vs 0.63 ± 0.08) values were significantly higher in the group compared to non-RH group. According to the ROC analyses, AVI and WHtR provided the largest area under the curve (AUC = 0.630; $p = 0.005$ and 0.605; $p = 0.018$ respectively), and ABSI showed the lowest value (AUC = 0.524; $p = 0.607$).

Conclusions: AVI and WHtR were the best adiposity indices to detect RH in elderly hypertensive men.

P-0234

Prominent crista terminalis and Eustachian ridge mimicking a right atrial mass: case report of 74-y man

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The crista terminalis and Eustachian ridge are normal anatomic structures within the right atrium that are not usually visualised in the standard views during a transthoracic echocardiogram (TTE).

A 74-year-old man was the healthy control for a research study and had a TTE. He had hypertension, but no history of heart disease. The patient was well and stable. Normal sinus rhythm was detected by electrocardiography. A Philips Epic 7 echocardiography showed normal left ventricular ejection fraction (EF 62%) and normal heart valves. There was mild tricuspid and aortic valve regurgitation. A single formation (about 2.4 cm long × 0.8 cm wide) oval-shaped was seen in four-chamber apical view, elongated along the parasternal long axis. It was fixed, hyper-echogenic with regular and clear margins, did not cause obstruction, and originated from the anterior wall of the inferior vena cava.

There are no diagnostic criteria for “prominent” crista terminalis, and its prevalence during a TTE examination is unclear. If it is superior, it can appear as a right atrial mass and turn anteriorly to skim the right side of the inferior vena cava orifice. Considering the patient's history, no other causes were identified.

This case is notable because the prominent terminal ridge (a normal anatomical variant) presented as a “right atrial mass”, which required differentiation from a pathological cardiac mass.

P-0235

Relevance of ambulatory systolic blood pressure for assessing cardiac remodeling in elderly hypertensive patients

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Introduction: Left ventricular hypertrophy (LVH) is a key structural consequence of chronic hypertension (HTN) and is closely associated with increased cardiovascular morbidity and mortality. In patients aged 75 years and older, early identification of ventricular remodeling is essential for optimizing clinical management. This study investigates the association between various blood pressure (BP) parameters and left ventricular mass index (LVMI) in an elderly hypertensive cohort, excluding wall thickness assessment.

Methods: A retrospective analysis from 63 patients using clinical data from patients ≥ 75 years old with available 24-h ambulatory blood pressure monitoring (ABPM), central blood pressure measurements, and echocardiographic assessment of LVMI. Variables included systolic and diastolic BP from 24-h ABPM, central systolic and diastolic BP, and LVMI. Pearson correlation analysis was performed to assess the relationships between BP parameters and LVMI.

Results: A moderate positive correlation was identified between 24-h systolic ABPM and LVMI ($r = 0.43$). A weaker association was observed with central systolic BP ($r = 0.25$). Both diastolic ABPM and central diastolic BP showed weaker correlations ($r = 0.21$ and $r = 0.14$, respectively). These findings suggest that sustained systolic

load, particularly as captured through ambulatory monitoring, has a stronger impact on left ventricular structural remodeling.

Conclusions: Ambulatory systolic BP appears to be more strongly associated with increased LV mass than central or diastolic pressures. These results underscore the clinical value of ABPM in elderly hypertensive patients and support the prioritization of systolic BP control to mitigate hypertensive cardiac damage.

P-0236

MHR as a biomarker of renal function decline, all-cause mortality, and cardiovascular disease in a large cohort of older adults

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Introduction: The monocyte to high-density lipoprotein ratio (MHR) has emerged as a potential biomarker of inflammation and cardiovascular risk. This study examines the association between MHR, kidney function, mortality, and incident heart disease over a four-year period using data from the Health and Retirement Study (HRS).

Methods: We evaluated 6,453 older adults enrolled in the HRS with available data on kidney function, chronic disease history, and 4-year mortality. MHR was used as a continuous variable or categorized into tertiles. The cross-sectional association between MHR and eGFR was studied using weighted linear regression, while the longitudinal association with mortality and incident heart disease was assessed using weighted Cox regression and Fine-Gray models.

Results: The median MHR in the study population was 0.40 (0.31–0.47). Higher MHR was associated with decreased eGFR in multivariable linear regression models (β , SE = − 1.56, 0.35, $p < 0.001$). Longitudinal analyses showed that MHR was strongly associated with all-cause mortality (HR, 95% CI: 1.52, 1.06–2.18) and was linked to increasing age, lung disease, eGFR decline, hypertension, stroke, and low hemoglobin. In patients without baseline cardiovascular disease ($n = 4,197$), MHR was associated with an increased incidence of heart disease (HR, 95% CI: 1.56, 1.26–2.24). An additive interaction was present between MHR and CKD.

Conclusions: These findings suggest that MHR may be a useful biomarker for identifying individuals at higher risk for renal and cardiovascular complications. Further studies are needed to confirm these associations and explore clinical applications.

P-0237

MHR as a biomarker of renal function decline, all-cause mortality, and cardiovascular disease in a large cohort of older adults

Luca Soraci (1), Guido Gembillo (2), Alberto Montesanto (3), Ersilia Paparazzo (3), Luigi Peritore (2), Vincenzo Calabrese (2), Andrea Corsonello (1), Domenico Santoro (2)

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Conclusions: These findings suggest that MHR may be a useful biomarker for identifying individuals at higher risk for renal and cardiovascular complications. Further studies are needed to confirm these associations and explore clinical applications.

P-0238

Apple watch vs loop recorder for surveillance of atrial fibrillation after MAZE ablation: a case report

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Introduction: Atrial fibrillation (AF) disproportionately affects older adults. Implanted pacemakers or loop recorders can accurately assess recurrence and overall AF burden in certain patients. Smart watches now include rhythm capturing capabilities comparable to a 1-lead ECG. These devices may offer a convenient and low-cost approach to AF management.

Methods: A 69-year-old with recurrent AF underwent a surgical MAZE ablation with concomitant placement of a LINQ-II loop recorder (Medtronic, Inc.). He also wore a smart watch (Apple, Inc.) during daylight hours, starting the ECG application feature if he felt symptoms of AF. Electronic readouts from both devices were compared over a 10-month period.

Results: The LINQ-II device reported 96 total instances of AF, representing 12 greater episodes of AF lasting 8–40 h for an average of 21.5 h. All episodes of AF spontaneously resolved. The Apple device was self-activated by the patient during 11 of these episodes correctly identifying AF with delays of 0–9 h after implanted device first identified AF, averaging a 2.5-h delay. Full interrogation of the LINQ-II device showed a cumulative AF burden of 4%.

Key conclusions: Implanted devices provide very robust and detailed data to assist decision making for AF therapies, particularly in older

adults who are more prone to adverse effects of anticoagulation. Smart watch ECG is a promising technology that may be useful as a convenient and inexpensive adjunct for AF surveillance.

Short poster presentation

Cardiovascular medicine

P-0239

Long-term burden of atrial fibrillation in patients after MAZE procedure

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Introduction: Atrial fibrillation (AF) is a common condition of older adults with ever increasing prevalence. Management includes rate or rhythm control with medication and escalates to catheter or surgical ablation and anticoagulation. However, the true incidence or continuous “burden” of AF post-ablation is not well described. Failure of ablation has been defined as any recurrence of AF > 30 s and results in lifelong anticoagulation.

Methods: 135 patients with a median age of 68 (range 28–86) underwent surgical ablation over a 10-year period. Continuous rhythm monitors (LINQ Reveal, Medtronic Inc.) were implanted in 60 patients and another 29 patients received permanent pacemakers. These devices were interrogated at 3 and 6 months and annually to assess ongoing AF burden.

Results: At 3 months, 81% of patients had < 10% cumulative AF burden and 68% had a < 1% cumulative AF burden. At 6 months, 86% had an AF burden < 10% and 75% of patients had an AF burden < 1%. Cumulative AF burden < 10% at each subsequent year interval was consistent with 82% at 1 year, 88% at 2 years, 86% at 3 years, 84% at 4 years and 80% at 5 years. Only 6% of people had > 90% AF burden at 1 year.

Key conclusions: Continuous rhythm monitoring demonstrates durable success of surgical ablation with most patients having minimal recurrent AF. Consideration should be given to overall AF burden in the management of patients after surgical ablation, including possible discontinuation of anticoagulation and anti-arrhythmic therapy in select patients, particularly the elderly.

Poster

Cardiovascular medicine

P-0240

Physical activity and heart failure in older adults with congenital heart disease

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Background: Adults with congenital heart disease (ACHD) represent a diverse cohort with significant variability in the extent and severity of structural cardiac anomalies and clinical manifestations. has expanded substantially in recent decades, due to advancements in surgical interventions and medical management strategies. Medical management strategies have improved, resulting in a larger population of older adults with congenital heart disease. This has led to a

new subgroup: geriatric ACHD patients. Individuals with Atrial Septal Defect, Ventricular Septal Defect, Persistent Foramen Ovale, and a history of stroke require further attention. Additionally, the connection between sedentary behavior, physical activity (PA), and overall health outcomes in these individuals is still not fully understood, necessitating further investigation.

Methods: Eligible participants had at least one visit to the Department of Cardiology at Uppsala University Hospital, Sweden, between January 2017 and July 2023. A questionnaire was sent to eligible individuals covering marital status, diabetes, smoking, ethnicity, education, employment, commuting, sedentary time, physical activity (both occupational and leisure), and daily activities. Heart failure was evaluated using NT-proBNP levels and the NYHA classification. Biomarkers for the heart and muscles were measured, and clinical data such as blood pressure, intervention type, medication use, and arrhythmia or pacemaker presence were recorded from the latest visit.

Results: This cross-sectional study includes sub-analyses of 84 adults aged > 50 years (61% of the total cohort, 41% women) with atrial septal defect (ASD, $n = 44$), ventricular septal defect (VSD, $n = 3$), or persistent foramen ovale (PFO, $n = 37$) closure after a stroke. Fifty-seven individuals had done catheter intervention (70.4%), 13 had open surgery (16%), and 11 (13.6%) individuals had no intervention. In self-reported New York Heart Association (NYHA) classifications, 16 individuals (19%) were in class III or IV, while 43 individuals (51.2%) were in class I.

Sixteen individuals (19%) reported sitting for 10 or more hours daily. Thirty-seven individuals (44.6%) engaged in less than 30 min of physical exercise per week, while 24 (28.9%) reported more than 90 min weekly. Atrial fibrillation was present in 11 individuals (14.1%). Circulating biomarkers were analyzed in 34 individuals, revealing a mean P-NT-proBNP of 458 ng/L (SD = 692), an HbA1c of 40.8 mmol/mol (SD = 10.3), and an LDL cholesterol level of 2.6 mmol/L (range: 1.2–4.4 mmol/L). Forty individuals were prescribed antihyperlipidemic medications. P-NT-proBNP was positively correlated with sedentary time ($r = 0.25$, $p = 0.027$). NYHA classes showed negative correlations with sedentary time ($r = -0.27$, $p = 0.013$), physical exercise ($r = -0.25$, $p = 0.022$), everyday activities ($r = -0.29$, $p = 0.010$), and activity minutes ($r = -0.38$, $p < 0.001$).

P-0241

Association of high serum uric acid and increased arterial stiffness is dependent on cardiovascular risk factors in middle-aged and older coastal female population

Yin Yuan (1), Xiaoming Huang (2), Feng Huang (1), Pengli Zhu (1)

(1) Fuzhou University Affiliated Provincial Hospital, (2) Shengli Clinical Medical College, Fujian Medical University

Introduction: This study explored the relationship between SUA and arterial stiffness, assessed by brachial-ankle pulse wave velocity (baPWV), and the extent to which this association is influenced by cardiovascular risk factors.

Methods: Increased arterial stiffness was defined as $\text{baPWV} > 1,400 \text{ cm/s}$. Cardiovascular risk factors included hypertension, diabetes, dyslipidemia, and a $\text{BMI} \geq 24.0 \text{ kg/m}^2$. Multivariate logistic regression with stepwise adjustment for confounders was used to analyze the association between SUA and baPWV.

Results: Among 3,342 participants (1,334 men, 2,008 women; mean age 53.79 ± 13.18 years), SUA levels increased with the number of cardiovascular risk factors. In females, baPWV levels increased significantly with higher SUA quartiles ($P < 0.001$), but this trend was not observed in males. In women with two or more cardiovascular risk factors, compared with the first quartile of SUA, higher SUA quartiles were associated with a higher likelihood of increased baPWV (OR = 1.500, 1.478, 1.774 for SUA Q2–Q4). Further stratified analysis showed a graded association between SUA quartiles and increased baPWV in participants with $\text{TC} \geq 5.2 \text{ mmol/L}$ (OR = 1.758, 1.942, 2.354 for Q2–Q4), $\text{LDL-C} \geq 3.3 \text{ mmol/L}$ (OR = 1.510, 2.255 for Q3 and Q4) and $\text{FBG} \geq 7.0 \text{ mmol/L}$ (OR = 1.516, 1.748 for Q3 and Q4).

Key conclusions: In middle-aged and older Chinese coastal female population, the association between high SUA and increased arterial stiffness depends on the coexistence of at least one cardiovascular risk factor, especially hypercholesterolemia.

P-0242

Association of elabela serum levels with cardiovascular events in patients with chronic total occlusion of coronary arteries

Jian Zhang (1)

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Objective: This study aimed to investigate the relationship between elabela (ELA) serum levels and cardiovascular events in patients with chronic total occlusion (CTO).

Methods: This study included 98 patients with CTO diagnosed by angiography and who underwent percutaneous coronary intervention for revascularization. Enzyme-linked immunosorbent assay (ELISA) was used to detect patient ELA serum levels. All patients were followed up at 6 months, 1 year, and 2 years after discharge. The occurrence of cardiovascular events was recorded, including cardiac death, heart failure, non-fatal myocardial infarction, repeat PCI, and stroke.

Results: During a follow-up period of 20.7 ± 3.02 months, 28 cases (28.57%) experienced cardiovascular events. Patients with high ELA serum levels had a 2.649-fold higher risk of MACE compared to those with low ELA serum levels. The receiver operating characteristic curve analysis showed that the area under the curve for predicting MACE in CTO patients by ELA serum levels was 0.815 (95% CI: 0.703–0.931, $P < 0.001$). High ELA serum levels were an independent risk factor for cardiovascular events in CTO patients (HR: 1.24, 95% CI: 0.65–2.38, $P = 0.057$), with an optimal cutoff value of 2.73 ng/ml, a sensitivity of 53.75%, and a specificity of 85.0%. ELA serum levels in CTO patients were positively correlated with the Gensini score ($r = 0.559$, $P < 0.001$) and negatively correlated with left ventricular ejection fraction ($r = -0.265$, $P = 0.03$).

Conclusion: Elevated ELA serum levels are significantly associated with the occurrence of cardiovascular events in CTO patients and can be used to predict cardiovascular risk in CTO patients.

Short poster presentation

Cognition and dementia

P-0243

Linking gut microbiota to health-related performance of Malaysian older adults

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Introduction: Ageing is associated with changes in gut microbiota that may affect the health of older adults. This study, which is part of the Transforming Cognitive Frailty to Later Life Self-Sufficiency (AGELESS) Project, aimed at uncovering the relationships between gut microbiota, short chain fatty acids (SCFA) as well as cognitive, physical and psychosocial performance of Malaysian older adults.

Methods: Stool samples were analysed for 16S v3-v4 rRNA marker genes using the NovaSeq 6000 platform. Faecal SCFAs were quantified using the gas chromatography-mass spectrometry (GC-MS). Cognitive, physical and psychosocial performance parameters were also assessed.

Results: A total of 231 older adults (average 71 years old) were recruited. The present study found significant ($p < 0.05$) associations between the phylum with age and gait speed. The present findings indicated age to be negatively associated with Actinobacteriota and Firmicutes (SCFA producers) but positively associated with Proteobacteria (mainly pathobionts). Besides, age was also found to be negatively ($p < 0.05$) associated with faecal acetate, propionate and butyrate. Particularly, participants > 80 years old were presented with significantly lower ($p < 0.05$) faecal acetate when compared to those between 60–69 years old. SCFA was significantly ($p < 0.05$) lower in participants with mild cognitive impairment. Spearman correlation analysis revealed a significant negative correlation between butyrate and Depression and Anxiety Stress Scale scores ($r = -0.35$, $p < 0.05$), but a significant positive correlation between acetate and Montreal Cognitive Assessment scores ($r = 0.27$, $p < 0.05$).

Key conclusions: The present findings warrant intervention that could restore gut microbiota in favour of promoting cognitive, physical and psychosocial performances in older adults.

P-0244

Survival prediction tool to guide care planning for dementia patients in nursing homes

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(1) Karolinska Institutet, (2) Leiden University

Objective: This study aimed to develop survival prediction tables to provide physicians and individuals with dementia to visualize survival probabilities after nursing home admission and to evaluate the accuracy of these predictions.

Method: We conducted a nationwide registry-linkage study involving data from 2,649 individuals with dementia from the nursing home population in the Swedish registry for cognitive/dementia disorders (SveDem). The data was collected between 2012 and 2022, and included sociodemographic factors, comorbidities, assessment of function, Body Mass Index (BMI), and dates of death obtained from several Swedish records. We applied Cox's proportional hazards

regression models to identify predictors of two-year survival. Survival probabilities for different risk factor profiles were visualized in tables.

Results: By May 2022, 1,665 (62.9%) individuals in our cohort had died. The median survival time from nursing home admission was 2.0 years (interquartile range (IQR): 1.3–3.2) for women and 1.8 years (IQR: 1.1–2.7) for men. Predictors of mortality were older age, male sex, lower BMI, higher dependency in ADL, and higher comorbidity burden. The prediction model achieved a c-index of 0.66 (95%-confidence interval: 0.65–0.67) and demonstrated good calibration. Based on these data, survival prediction tables for men and women were developed.

Conclusions: Two-year survival after nursing home admission can be predicted with moderate accuracy and good calibration. The survival prediction tables developed in this study can serve as a useful tool for nursing home staff, physicians, and individuals with dementia, supporting care planning and decision-making.

Poster

Cognition and dementia

P-0245

Osteoporosis as a risk factor for cognitive impairment in Older Chileans

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Introduction: The association between dementia and osteoporosis has been well documented, and the arguments for this association are mainly clinical. The bidirectional association is also being discussed, although the inverse association is much less studied in longitudinal studies and, as far as we know, no one considers genetic factors for dementia.

Objective: To determine the risk of cognitive impairment associated with osteoporosis, adjusted by ApoE4 allele carrier, in older Chileans.

Methods: From a baseline sample of 837 community-dwelling people 60y and older participants of ALEXANDROS cohort study from Santiago/Chile, with DEXA scan, we made a longitudinal study in 398 (68.1% women, mean age 66.3 ± 4.6 y) subjects without cognitive impairment, evaluated with MMSE score < 22 previously validated in Chile and available ApoE allele determination. The participants were followed from 5–15 years to determine the incidence of cognitive impairment according to osteoporosis/osteopenia. Multivariate logistic models were made to assess associations.

Results: At baseline, we observed an association between osteoporosis and cognitive impairment (OR = 1.86; 95%CI 1.15–3.03). The frequency of ApoE4 allele carriers was 17.3%, similar in both sexes. Osteoporosis/osteopenia was identified in 31.4% of women and 11% of men ($p < 0.0001$). After follow-up, the logistic regression model for cognitive impairment associated with osteoporosis/osteopenia showed an OR = 2.39(95%CI: 1.04–5.50), adjusted by age, sex, education and being a carrier of ApoE4 allele.

Conclusion: In this epidemiologic study, we have shown osteoporosis as a risk factor for cognitive impairment. Studies to elucidate mechanisms for this association are necessary, considering the importance of both conditions as main menaces for healthy aging.

P-0246**Role of nutritional therapy in management of mild cognitive impairment among older adults**

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Mild Cognitive Impairment (MCI) represents a transitional state between normal aging and dementia, affecting 15–20% of adults over 65. While pharmacological interventions show limited efficacy, growing evidence suggests nutritional factors may influence cognitive trajectory. Specific dietary patterns, micronutrient status, and metabolic health appear particularly relevant to cognitive function, yet nutritional interventions remain underutilized in standard MCI management protocols.

Aim: This quality improvement project evaluated the impact of a comprehensive nutritional intervention on cognitive performance, mood, and functional independence in older adults with diagnosed MCI, while assessing feasibility of implementation in outpatient geriatric care.

Methodology: A prospective intervention study was conducted with 56 community-dwelling older adults (mean age 74.6 years) with MCI diagnosed using standardized criteria. Participants received a 24-week multicomponent nutritional intervention comprising Mediterranean-DASH diet principles, omega-3 supplementation, vitamin B/D optimization, and structured meal planning addressing age-related barriers to nutrition. Cognitive function was assessed using validated neuropsychological tests at baseline and follow-up. Secondary outcomes included mood assessment, inflammatory markers, and functional independence measures.

Results: Following the intervention, significant improvements were observed in executive function (mean increase 14%, $p = 0.008$) and delayed recall (mean increase 18%, $p = 0.003$) compared to baseline. Verbal fluency and processing speed showed modest but significant improvement. Inflammatory markers decreased in 62% of participants, while depressive symptoms improved by 28% on standardized scales. Notably, 76% of participants maintained or improved functional independence scores. Protocol adherence reached 81%, with high satisfaction ratings.

Conclusion: Structured nutritional intervention significantly improved cognitive performance and mood in older adults with MCI. Results suggest that targeted nutritional strategies addressing multiple pathways implicated in cognitive decline should be integrated into standard MCI management. This approach represents a feasible, non-pharmacological strategy that may modify disease trajectory and maintain functional independence in this vulnerable population, potentially delaying progression to dementia.

P-0247**Efficacy and safety of ‘INFORMA 2.0’ software in Mild Cognitive Impairment and mild dementia: Study Protocol of a Nationwide placebo-controlled, double-blind, randomized trial in Italy**

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Introduction: The INFORMA software is an innovative, public health tool designed to provide personalized, home-based cognitive stimulation and cognitive training for individuals with Mild Cognitive Impairment (MCI) and mild dementia. Based on the Cognitive Activation Therapy model, it offers adaptive, asynchronous activities and enables remote therapist monitoring to support cognitive and functional abilities. This randomized controlled trial (RCT) aims to assess the efficacy and safety of INFORMA2.0 in improving cognitive function and daily living abilities in individuals with MCI and mild dementia.

Methods: This study is part of the Italian Fund for Alzheimer’s and Dementia 2024–2026 and is funded by the Italian Ministry of Health. This placebo-controlled, double-blind RCT will be conducted across 21 memory clinics in 14 Italian regions. It follows a single-centre pilot study that will preliminarily assess the usability of INFORMA2.0 in 20 patients. The trial will enrol 470 participants aged ≥ 50 with MCI or mild dementia.

Results: Participants will engage in a 20-week program, including baseline assessments and training, an 8-week remote cognitive intervention, a post-treatment assessment at 8 weeks and a final assessment at 20 weeks. The primary outcome is the proportion of responders to INFORMA2.0, measured by the Montreal Cognitive Assessment (MoCA) at 8 weeks. Secondary outcomes include the proportion of responders at MoCA and Clinical Dementia Rating Scale-Sum of Boxes at 20 weeks, along with functional, behavioural, and quality-of-life measures.

Conclusion: This is the largest RCT to date evaluating a telerehabilitation tool for MCI and dementia, with results expected by July 2027.

Short poster presentation**Cognition and dementia****P-0248****Effect of supplementation with Bifidobacterium lactis BPL 1 on cognitive function in older adults with mild to moderate cognitive impairment in a hospital in Monterrey**

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(1) Universidad de Monterrey, (2) Universidad de Montemorelos

Introduction: Cognitive impairment (CI), a geriatric syndrome that affects cognitive domains, functionality, and quality of life in older adults. [1,2,3] Its high prevalence motivates the search for therapeutic measures [4]. Therefore, the study of potential mechanisms regulating brain health has emerged: the gut-brain axis. [5] Studies have shown associations between probiotic supplementation and outcomes in cognitive function. [6,7,8,9,10,11].

Objective: To test the effect of Bifidobacterium Lactis BPL 1 on cognitive function in older adults with mild to moderate CI.

Materials and methods: Randomized, single-blind, placebo-controlled clinical trial where older adults received a daily dose of probiotic (Bifidobacterium Lactis BPL 1 [12]) or placebo for 4 weeks.

Cognitive functions were assessed using the MoCA and MMSE tests. [13,14,15].

Results: 55 patients were analyzed (probiotic 30, placebo 25). In the probiotic group, the pre-treatment MMSE score was 20.0 (SD: 4.5), increasing to 23.3 (SD: 3.9) post-treatment ($p = 0.001$). In the placebo group, MMSE was 19.8 (SD: 4.5) pre-treatment and increased to 20.6 (SD: 4.7) post-treatment ($p = 0.161$).

Conclusions: Cognitive improvement was observed in MMSE scores after 4 weeks of Bifidobacterium Lactis BPL1 consumption compared to placebo, mainly in attention, orientation, language, and mood.

Keywords: probiotics, cognitive impairment, microbiota-gut-brain axis.

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Poster

Cognition and dementia

P-0249

Memory complaints. Impact of perceptions of memory problems and quality of life on the decision to come for a memory consultation

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Introduction: Using a health psychology approach, we assessed the perceived quality of life and perceptions of memory disorders in elderly people in order to study the influence of these perceptions on the decision to refer to a memory clinic.

Methods: We recruited 133 people over the age of 60 who expressed a memory complaint. The group was divided in two subgroups according to their help-seeking behavior: a group of 98 people who came to our memory clinic and a group of 35 people who didn't come to a memory clinic (recruited through the press). Each participant was asked to complete a questionnaire on perceptions of memory problems, a quality of life questionnaire and a Mini Mental State Examination (MMSE).

Results: The groups were comparable on MMSE score and intensity of memory complaints. People who came to the memory clinic were on average younger than those who don't. Analyses of quality of life and perceptions show that people who come to the memory clinic are less satisfied with their relationships with their loved ones, and perceive more consequences of memory problems in their daily lives. Logistic regression analyses revealed the impact of perceptions on the decision to come for a memory consultation.

Key conclusions: Thus, perceptions of memory disorders are more predictive of a visit to a memory clinic than the intensity of the disorders themselves. Perceptions and quality of life should be taken into account in preventive measures to encourage early diagnosis and management of neurodegenerative diseases.

P-0250

When it's not Alzheimer's disease: a diagnostic challenge in older people

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Alzheimer's disease (AD) is the leading cause of dementia, accounting for 60% of dementia cases in individuals over 75 years old. Accurate classification of AD and non-AD cases is essential for studying disease mechanisms and exploring new treatment options. The typical clinical presentation of AD involves progressive cognitive decline, primarily characterized by memory impairment. Structural, functional, and molecular brain imaging, along with CSF biomarkers of amyloid pathology, neurodegeneration, and the presence of a vulnerability-associated APOE genotype, support the diagnosis of AD. The use of biomarkers has led to the identification of individuals with mild cognitive impairment who are amyloid-negative, pointing to a conceptually distinct clinical entity known as suspected non-Alzheimer disease pathophysiology (SNAP). The clinical presentation and progression of SNAP can mimic AD, leading to diagnostic uncertainty in up to 30% of cases at clinical centers that do not employ biomarkers. Non-AD pathologies are common in both cognitively impaired and clinically normal elderly individuals, particularly with advancing age. These pathologies include Argypophilic Grain Disease (ARG), Tangle Predominant Dementia, and TDP-43 proteinopathy. The terms Primary Age-Related Tauopathy (PART) and Limbic-Dominant TDP-43 Age-Related Encephalopathy (LATE) have been proposed as the most relevant biological and emerging clinical constructs for describing these conditions in individuals over 80 years old. Current evidence highlights the limitations of existing diagnostic tools, which are insufficient to fully capture the complexities of these disorders. Addressing these diagnostic challenges is critical for ensuring accurate diagnoses, reducing misdiagnoses of AD, and implementing appropriate therapeutic strategies for elderly patients with mild cognitive impairment and dementia.

Poster**Cognition and dementia**

P-0251

Mini "This Is Me®"—a quality improvement project to improve the care of people with dementia in hospital

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Introduction: Patient-centred care is critical during hospital admissions in dementia. A UK technique is the Alzheimer's Society's "This Is Me®" (TiM®): a patient-held document summarising information for healthcare workers. Transition to electronic patient records (EPR) highlighted time issues locating and reading TiM® at a large UK general hospital. A quality improvement project was initiated to develop easy-access Mini-TiM® embedded in the EPR, starting with stage one, understanding current usage.

Methods: A survey was created to assess clinicians' baseline TiM® utilisation, and a design consultation on the new model was opened to

healthcare workers. Links to both were disseminated separately via virtual and ward-based posters and emails to relevant staff.

Results: There were 37 survey respondents. 73% (27/37) clinicians did not know the online location of TiM®. During day shifts (DS) when caring for a patient with dementia 17% (6/33) clinicians would often check TiM®, compared to 9% (3/33) out-of-hours (OOH). 36% (13/36) in DS sometimes checked TiM®, versus 15% (5/33) OOH. 25% (9/36) would rarely review TiM® in a DS with 48% (16/33) rarely OOH. Meanwhile 22% (8/36) would never check TiM® on a DS, and 27% (9/33) never check OOH.

The 45 consultation responses identified the most important questions about the patient to include in the new summary model, and four as the most appropriate number.

Key conclusions: TiM® is markedly underused with most sampled clinicians unaware how to access it in the EPR, signalling a clear need for an easier-to-access version. Mini-TiM®, training, and facilitatory digital interventions will be informed by the above results and consultation process.

P-0252

Relevance of mild behavioral impairment: longitudinal data from a geriatric outpatient service

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Introduction: Late-onset neuropsychiatric symptoms (NPS) are often undetected [1]. Mild Behavioral Impairment (MBI) was introduced to identify specific domains of NPS with an increased likelihood of future dementia [2]. We aimed: 1) to evaluate the prevalence of MBI in older individuals assessed for cognitive-behavioral complaints in a Geriatrics Service, 2) to assess the association between MBI and incident dementia.

Methods: This monocentric longitudinal study was conducted on older patients with cognitive-behavioral complaints, visited in the Geriatrics Service of the University Hospital of Ferrara from October 2020 and October 2022. At baseline, sociodemographic, clinical data, cognitive and functional assessments were collected. Among dementia-free patients, MBI was screened by MBI-Checklist (MBI-C) and diagnosed according to ISTAART criteria. Incident dementia and mortality were assessed after one year.

Results: The mean age of the 205 included patients was 80.5 years; 56.6% were female and the mean Mini Mental State Examination (MMSE) score was 25.1. Among free-dementia individuals (n = 98), the prevalence of MBI was 42.0%. The most common NPS reported by patients with MBI were depression, anxiety, apathy, and sleep disorders. After adjustment for age, sex, and MMSE, MBI was associated with a higher incidence of dementia at one-year follow-up

(OR 5.73, 95% CI 1.33–24.75), but not with mortality (OR 2.59, 95% CI: 0.61–10.90).

Conclusions: Our preliminary data suggest an association between MBI and dementia development at one-year follow-up, independently of baseline cognitive performance. NPS should be routinely assessed using the MBI-C in older individuals with initial cognitive-behavioral complaints to better stratify their risk of conversion to dementia.

P-0253

A qualitative interview study to explore the need for a prescribing tool specific to people living with dementia

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Introduction: People living with dementia (PLWD) are disproportionately affected by polypharmacy and potentially inappropriate prescribing [1, 2], yet few tools exist to guide prescribing for this patient population. This study aims to explore the perspectives of individuals who conduct research on medicines use in older people and PLWD on the suitability of current prescribing tools for PLWD and the need for a prescribing tool specific to PLWD.

Methods: Researchers were purposively sampled via online searches of relevant publications and personal contacts, with additional recruitment via snowball sampling. Semi-structured interviews were conducted online using a pre-prepared and piloted topic guide. Interviews were audio-recorded, transcribed verbatim, and analysed using thematic analysis. Data analysis is ongoing.

Results: To date, ten interviews have been conducted, lasting between 14 and 29 min. Findings have highlighted the large number of tools available, which are often labour intensive to use: “they’re long, and they’re cumbersome, and they can be difficult to apply” [R01]. Generally, participants have indicated that existing tools are not specific enough for the unique medication-related challenges that PLWD face and have expressed desire for a more specific tool to be developed: “A lot of the time, they’re not specific... those other complexities around managing medicines for people with dementia...aren’t captured by these existing tools” [R03].

Key conclusions: This study has highlighted a need for a prescribing tool specifically designed for PLWD, therefore future work should focus on the development of this. Further interviews may be conducted to ensure data saturation is achieved.

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P-0254

phosphorylated tau at threonine 217 (p-tau 217) in plasma and its association with neuropsychological (NPS) test performance in cognitive impairment

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(1) Author, (2) Co-author

Abstract: Plasma p-tau 217, a blood-based biomarker, shows diagnostic accuracy comparable to cerebrospinal fluid markers, even in preclinical Alzheimer’s disease (AD). This study investigates its

association with NPS test outcomes in older adults with cognitive impairment, considering demographic factors.

Methods: A retrospective, cross-sectional study was conducted at the Psychogeriatrics Unit, General Hospital of Granollers (Barcelona), including patients evaluated from June to December 2024. A total of 54 patients aged 75–90 years (mean age: 79.83) with p-tau 217 blood tests and NPS assessments were analyzed. Data were stratified by cognitive impairment level, sex, and educational background.

Results: Of the 54 patients, 35% (n = 19) had p-tau 217 levels ≥ 0.40 , suggestive of AD. Among these, 58% had mild cognitive impairment (MCI), and 42% had moderate-to-severe impairment. Women represented 79% of this group. Education levels were: illiterate (21%), primary completed (42%), incomplete primary (16%), completed or incomplete secondary (11%), and university (10%).

Conclusions:

Key Points:

- Our study shows that elevated plasma p-tau 217 correlates with increased cognitive impairment and is prevalent in women and individuals with lower educational levels.
- Over half of MCI patients with elevated p-tau 217 exhibited levels suggestive of AD, supporting its utility for early detection and risk stratification. However, follow-up and larger studies are needed to validate its integration into clinical practice.

P-0255

Diagnostic accuracy of brief cognitive screening tools in older adults with lower education level

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Background: Cognitive assessment in older adults with low educational attainment presents a diagnostic limitation. Conventional instruments may yield reduced accuracy in populations with limited literacy. Determining valid and sensitive tools is critical for the early identification of mild cognitive impairment (MCI).

Methods: In this prospective study, individuals with an education level below primary school, who applied to a tertiary university hospital geriatric clinic, were evaluated. Patients aged 65 years without prior cognitive impairment were included. Participants completed four validated screening tools (RUDAS, QMCI, MMSE, DemTect). MCI was diagnosed by blinded geriatricians using Petersen criteria. ROC analysis and multivariate logistic regression were conducted.

Results: A total of 242 participants (age 74.0 ± 5.8 , 62.0% female) were included. RUDAS demonstrated the highest diagnostic accuracy for detecting MCI (AUC: 0.740, 95% CI: 0.666–0.798), with a cut-off of 23 yielding 83.0% sensitivity and 73.2% specificity. QMCI and MMSE followed with lower accuracy (AUCs of 0.666 and 0.631, respectively). DemTect showed limited diagnostic value (AUC: 0.464). In regression models, RUDAS remained the strongest independent predictor of MCI (OR = 0.55, 95% CI: 0.45–0.66, $p < 0.001$). Clinical Frailty Scale (CFS) was positively associated with MCI (OR = 1.39, 95% CI: 0.80–2.41), but did not reach statistical significance ($p = 0.24$).

Conclusion: This study demonstrates that among older adults with low educational attainment, RUDAS is the most effective brief

cognitive screening tool for identifying MCI. These findings challenge the generalized MCI screening approach and suggest that educational background would not only require different thresholds but also different tests for accuracy.

P-0256

Icelandic multidomain intervention of WORWIDE-FINGERS among APOE-4 homozygotes (ICE-FINGER/APOE4)

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The FINGER (Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability) trial, an ongoing multi-center randomized controlled study in Finland, aims to evaluate the impact of a multi-domain intervention in delaying cognitive decline and disability among elderly individuals at high risk of dementia. Given the growing interest in non-pharmacological approaches to delaying Alzheimer's disease (AD), researchers in Iceland are developing an Icelandic version of the FINGER intervention, specifically targeting individuals who are APOE-ε4 homozygotes. These individuals are at a significantly increased risk of developing AD, with over 50% developing AD by age 85.

The Icelandic study, aligned with the World-Wide FINGERS (WW-FINGERS) network, aims to prevent or delay cognitive impairment and dementia in APOE-ε4 homozygotes. The study will implement a 24-month multidomain intervention, including components such as physical exercise, cognitive training, social activities, nutritional guidance, and cardiovascular risk management. The trial will assess the efficacy and potential additive or synergistic effects of these interventions on cognitive and physical function. This randomized controlled trial will involve three groups: an intervention group of APOE-ε4 homozygotes, a control group of APOE-ε4 homozygotes, and a “super control” group of non-APOE-ε4 carriers, both receiving general health advice. This study is expected to generate valuable evidence on the effectiveness of lifestyle interventions in delaying or preventing dementia in genetically high-risk populations.

P-0257

A wearable real-time neuromorphic gait analysis system to aid early diagnosis of Alzheimer disease

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Introduction: Gait performance is impaired early during dementia, which is controlled by multiple brain areas vulnerable to the pathologies of Alzheimer disease (AD). Measuring subtle changes in gait performance serves as a promising biomarker for early AD diagnosis. Wearable digital devices provide the opportunity to assess gait in real-life activities. However, the low spatial-temporal resolution and high-power consumption of conventional gait measure devices hinder their ability to extract fine features of dynamic movement. Our developed neuromorphic sensing system (Science 2024, 384:660–5) can overcome these limitations. This study aims to

develop a wearable gait measure device by implementing our innovative neuromorphic sensing system to aid early AD diagnosis.

Methods: The gait measure device is embedded within a pair of insoles. The device in each insole consists of an integrated sensor unit (including pressure sensors, accelerometers and gyroscopes), a neuromorphic circuit unit, and a wireless communication unit. The sensor unit records high-resolution plantar pressure video and 3D acceleration and rotation rates of both feet in real time. The neuromorphic circuit unit encodes sensor signals into spikes. The wireless communication unit compresses and transmits spiking signals to mobile phones.

Results: We are developing the device according to the methods listed above.

Key conclusions: Our novel neuromorphic gait analysis system will efficiently monitor subtle gait changes. In the future, we will enroll healthy controls and patients and measure their daily gait performance with our system. The baseline and years of follow-up will be recorded and analyzed to establish spiking neural networks by machine learning.

P-0258

Primary studies of community co-living design guidelines for dementia care facilities

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The concept of promoting the interaction between dementia patients and community residents in a co-living way to achieve shared prosperity is a crucial topic in designing care facilities.

This study adopts in-depth interviews, focus group discussions, and participant observation as the research methods to explore the design guidelines for planning care facilities using a community co-living approach. The findings are then applied to a real planning and design case.

The research findings indicate the following:

1. Integrated facility planning with local community life and care resources
2. Provide living spaces that encourage interaction between elderly individuals and young children
3. Offer multi-level and continuous care services and facilities
4. Provide pathways or gardens that allow residents to enjoy nature and sunlight
5. Relocate residential units to the second floor or above as part of a disaster-prevention design in response to extreme weather conditions
6. Consider the zoning of community epidemic prevention and infection control
7. Integrate with local community organizations to provide a co-living and mutual assistance environment.

The spirit of community co-living lies in fostering interaction between individuals with dementia and community residents through planning and design. By integrating medical care, long-term care services, and health promotion into a comprehensive service system, the community becomes an extension of a home-like environment. This approach supports individuals with dementia in continuing their participation in daily activities, maintaining physical and mental functions, and slowing the progression of decline. Ultimately, it aims to realize the ideals of shared prosperity and sustainable development within the community.

P-0259

The impact of cognitive impairment on disease activity in COPD patients: can inhaler treatment be effectively administered?

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Introduction: Inhaler use is crucial in treating COPD, especially in older patients. This study aims to explore the factors influencing inhaler use and adherence in older COPD patients.

Methods: A total of 45 older adults were enrolled in the study. All participants underwent spirometry, the Modified Medical Research Council (mMRC) scale, the COPD Assessment Test (CAT), the Age, Dyspnea, and Obstruction (ADO) index, the Morisky-Green-Levine Medication Adherence Scale, and inhaler device usage scoring performed by an experienced chest physician. The Quick Mild Cognitive Impairment Screen (QMCI), Montreal Cognitive Assessment (MoCA), Mini-Mental State Examination (MMSE), and Clock-Drawing Test (CDT) were carried out for each patient and evaluated by a geriatrician for cognitive function assessment.

Results: A total of 45 patients (Male/Female:38/7) with a mean age of 71.5 ± 4.5 years were included in the study. The inhaler device usage score was positively correlated with the QMCI, MoCA, MMSE, and CDT scores ($p = 0.006, 0.001, 0.001, 0.045$, respectively). In contrast, higher mMRC, CAT scores, and ADO index were linked to lower inhaler device usage scores ($p = 0.002, p = 0.004, p = 0.019$, respectively). There was no significant relationship between the patients' income status, education level, or caregivers' characteristics and the inhaler device usage score.

Conclusions: Since the majority of COPD patients are in the geriatric age group, they often face difficulties in using devices correctly. Therefore, evaluating cognitive functions is crucial in determining the appropriate use of inhaler medications.

P-0261

Association between antidepressants and *C. difficile* infection in elderly hospital patients

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Background: Clostridioides difficile infection (CDI) is common in the elderly. Studies have shown that antidepressants can modify the intestinal microbiota.

The aim of this study is to determine an association between antidepressants and CDI.

Methods: This was a single-centre, retrospective, case-control study of geriatric inpatients in a Parisian university hospital, between 10/2016 and 03/2024.

Patients were matched on age, sex, antibiotic use, Charlson score, diagnosis of an anxiety-depressive syndrome. A propensity score was used.

Analyses were performed in 2 subgroups: depressed/anxious patients and non-depressed/non-anxious patients.

Results: We included 134 cases of CDI and 17,016 control cases. Mean age: 86 years.

In the overall univariate analysis of the cohort, we found a significant difference in the use of antibiotics (85.8% vs 43%; $p < 0.001$), antidepressants (50.7% vs 38.4%; $p = 0.003$), depression (25.4% vs 13.2%; $p < 0.001$) in CDI cases.

Subgroup depressive/anxiety syndrome (38 CDI cases and 2600 controls): there was significantly higher intake of antidepressants in CDI cases (71.1% vs. 49.7%; $p = 0.009$) with an increased risk of CDI: OR 2.48 [CI95%: 1.26; 5.24].

Subgroup non-depressive/anxiety syndrome (43 cases vs. 7145 controls): we found significantly higher use of antidepressants CDI cases (67.4% vs 49.9%, $p = 0.022$) with an excess risk of CDI: OR 2.01 [CI95% 1.08, 3.93].

We did not find significant difference between classes of antidepressants, but a trend of association between CDI and escitalopram $p = 0.002$, citalopram $p = 0.019$ and venlafaxine $p = 0.03$.

Conclusion: In this study, the use of antidepressants was associated with CDI in the elderly and might represent an additional risk factor for CDI.

P-0262

Co-creation with experts by experience: good practices of the working groups of people with dementia and informal caregivers in Belgium

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With our advocacy work as a patient organization in Belgium we have a clear starting point: we believe that the most powerful way to break the stigma around dementia and build tailor-made care, support and precision medicine is to look at what we can learn from people with dementia and their caregivers. In this presentation we share good practices of our working groups of people with dementia and informal caregivers as the way forward towards co-creation in research and policy work.

In the academic field there is a growing validation of people with lived experience as research partners, but there is still a need for more awareness, knowledge and useable methodologies for structural involvement. We developed tailored advice and pilot projects based on the insights of focus group discussions with our working groups of people with dementia and informal caregivers. Examples will be given on the topic of development and monitoring of regional and national dementia strategies, initiatives on the topic of prevention for and with people with dementia and their experiences as research partners in the field of science, with a focus on appreciative inquiry and experience mapping as co-creation methodologies to inspire future initiatives in the field.

Short poster presentation

Cognition and dementia

P-0263

Abuse in older people with dementia, the risk and protective factors—a systematic review

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Introduction: Dementia has emerged to be one of the leading causes of disability, dependency and death in older people (OP). Abuse in OP is known to be more frequent among those with dementia, and includes physical, psychological, sexual abuse, financial exploitation, and neglect. This study aims to analyse the causality between dementia and abuse in OP.

Methods: Search was made in PubMed and Cochrane databases using MeSH Terms “elder abuse” and “dementia”, published in 2015–2025. Inclusion criteria were defined according to PEO model. Strength of Recommendation Taxonomy scale was applied to evaluate levels of evidence.

Results: The search resulted in 59 studies, 55 after duplicates removal and 16 after screening: 2 systematic reviews, 7 cross-sectional, 3 observational, 1 cohort, 1 scope and 1 literature reviews. The majority of the articles identified caregiver burden and behavioral symptoms in OP with dementia as risk factors for abuse. Social support was identified by several articles to be a protective factor, and a possible intervention to prevent abuse in OP with dementia.

Conclusion: Available evidence suggests multiple reasons for an increased frequency of abuse in OP with dementia. Nevertheless, further research is needed to deeply understand the causes and develop effective preventive strategies. Abuse in OP should be addressed as a community concern, focusing on health, social and economic determinants. This highlights the importance of Family Medicine and Primary Care given their unique capacity to manage these complex patients with a longitudinal and holistic vision.

Poster

Cognition and dementia

P-0264

Association of physical frailty with the risk of vascular dementia in patients with type 2 diabetes mellitus: a population-based cohort study

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Introduction: Type 2 diabetes mellitus (T2DM) increases dementia risk, while frailty—a multisystem decline linked to aging—is a critical T2DM complication. This study investigated associations between physical frailty, neuroimaging biomarkers, proteomic

profiles, and vascular dementia (VaD) in T2DM patients using UK Biobank data.

Methods: A cohort of 10,976 T2DM patients (aged 56.18 ± 8.09 years; 36.81% male) without baseline dementia was analyzed. Frailty was assessed via weight loss, exhaustion, weakness, inactivity, and slow walking speed, categorizing participants into non-frail, pre-frail, and frail groups. Cox models evaluated frailty-proteomic-VaD associations, adjusted for demographics, disease duration, biomarkers (HbA1c, glucose, C-reactive protein [CRP]), genetics, and comorbidities. Imaging-derived phenotypes (IDPs) in a subset ($n = 126$) identified frailty-associated brain changes.

Results: Frailty prevalence was 20.8% ($n = 2,287$), pre-frailty 58.6% ($n = 6,433$), and non-frailty 20.6% ($n = 2,256$). Frail individuals had higher body mass index (BMI), CRP, and comorbidities ($p < 0.001$). Over 16 years, 243 participants developed VaD. Frailty conferred elevated VaD risk (HR = 1.91, 95% CI: 1.29–2.83, $p < 0.01$), particularly in subgroups without depression (HR = 1.97, 1.28–3.03) or stroke (HR = 1.93, 1.28–2.91), and with hypertension (HR = 2.23, 1.45–3.43; $p < 0.01$). Proteomics identified FETUB (HR = 0.42, 0.18–0.96; $p = 0.02$) as protective and PENK (HR = 2.85, 1.14–7.12; $p < 0.001$) as risk-associated. Frail patients exhibited gray matter reductions in left superior temporal gyrus ($\beta = -0.43$, $p = 0.02$) and middle occipital gyrus ($\beta = -0.46$, $p = 0.01$), correlating with cognitive decline ($r = -0.23$, $p = 0.02$; $r = -0.21$, $p = 0.03$).

Conclusion: Frailty significantly increases VaD risk in T2DM. Neuroimaging and proteomic biomarkers elucidate underlying mechanisms, supporting early frailty screening and biomarker-guided interventions to mitigate dementia.

Short poster presentation

Cognition and dementia

P-0265

Effect of cognitive stimulation on cortisol secretion in patients with neurocognitive disorder

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Introduction: Elevated cortisol levels are associated with an increased risk and accelerated progression of neurocognitive disorders (NCD). While non-pharmacological interventions such as exercise and mindfulness have been shown to modulate cortisol secretion, the effect of cognitive stimulation (CS) remains unexplored. This study aims to assess whether CS influences cortisol levels and its circadian pattern in patients with NCD and to compare its effects with pharmacological therapy.

Methods: A total of 62 older adults diagnosed with NCD were recruited from the Cognitive Disorders and Dementia Centre at the

University Hospital of Padova. Participants were divided into two groups: 34 underwent a 3 months CS intervention (cs-NCD), while 28 received pharmacological treatment (ph-NCD). Salivary cortisol was measured at six time points throughout the day at baseline (T0), after three months of intervention (T1), and, for the CS group, three months after the intervention was concluded (T2). Statistical analyses included comparisons of cortisol levels and circadian patterns between groups.

Results: At T1, patients in the cs-NCD group exhibited a significant reduction in morning cortisol levels (7.75 nmol/L at baseline vs. 6.20 nmol/L, $p = 0.013$) and overall daily cortisol exposure (-17.5%), compared to minimal changes in the ph-NCD group (-1.2%). However, three months after discontinuing CS, cortisol levels showed an upward trend.

Key conclusions: CS appears to modulate cortisol secretion, suggesting a potential role in mitigating HPA axis dysregulation in NCD. These findings support CS as a promising non-pharmacological intervention for improving neuroendocrine balance in patients with cognitive decline.

Poster

Cognition and dementia

P-0266

Inclusion of older adults in Alzheimer's disease clinical trials: a retrospective analysis from the Toulouse Clinical Research Center

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Introduction: The aims of this study are: 1) To describe the proportion of patients aged ≥ 80 years old included in phase II and III Alzheimer's Disease (AD) Randomized Controlled Trials (RCTs) at the Clinical Research Center of Toulouse University Hospital. 2) To compare the screen failure rate between ≥ 80 years old participants and younger individuals.

Methods: A retrospective analysis of patient records from the last four years (2021–2024).

Results: A total of 134 patients were enrolled in AD RCTs at our center (mean age: 74.9 years, SD = 6.4; 54.5% [$n = 73$] female). 24 patients were aged ≥ 80 years old, representing 17.9% of the trial population. Among patients ≥ 80 years old, 41.7% ($n = 10$) were enrolled in immunotherapy trials, 33.3% ($n = 8$) participated in trials evaluating other therapeutic agents, and 25.0% ($n = 6$) were included in behavioral clinical trials. 54.2% ($n = 13$) of these patients participated in phase II trials, 37.5% ($n = 9$) were enrolled in phase III clinical trials and 8.33% ($n = 2$) with medical device. The screen failure rate in this population was 44.2% ($n = 19$), compared to 31.7% ($n = 51$) in younger individuals ($p = 0.18$).

Discussion: Older adults remain underrepresented in AD clinical trials. We did not find a statistically significant difference in the screen failure rate between patients aged ≥ 80 and younger patients in our population. These findings should be confirmed in a larger sample. Efforts should continue to promote the inclusion of older adults in AD trials to ensure the generalizability of RCT findings to this population.

P-0267

Cognitive training, alone and combined with acetylcholinesterase inhibitors, as an effective intervention for mild dementia: evidence from a 30-month longitudinal study

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Introduction: This longitudinal study investigated the effects of Cognitive Training (CT), by itself and combined with pharmacological treatment, in mild dementia.

Methods: A total of 108 older adults with mild dementia attending Padua University Hospital (Italy) were recruited. Participants received either AChE inhibitors + CT ($n = 39$) or CT alone ($n = 69$). Cognitive functioning (MMSE, ENB-2 and CRiQ for cognitive reserve) was assessed at baseline and every six months for 30 months.

Results: At baseline, no differences were observed between the two groups. Over time, CT alone was associated with the greatest improvement across all cognitive measures ($\beta = 0.50$, 95% CI 0.04–0.96, $p = 0.03$ for MMSE; $\beta = 1.79$, 95% CI 0.61–1.96, $p = 0.003$ for ENB-2), both in global cognition and in specific measures of attention, memory and executive function. Those benefits were especially pronounced for individuals with low cognitive reserve and men.

Conclusions: These findings provide evidence, currently underexplored, on the long-term efficacy of CT in maintaining cognitive functioning and symptom stability, reinforcing its role as a cornerstone in caring for older adults with dementia.

P-0268

Cerebellar Volumes' Selective Association with MoCA over MMSE: a diagnostic insight into mild cognitive impairment and mild dementia

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The cerebellum, traditionally associated with motor control, has increasingly been recognized for its role in cognitive functions and, more recently, in neurodegenerative disorders. Despite its complex structure and historical underestimation in dementia research, recent studies suggest that cerebellar alterations may contribute to early cognitive decline. This retrospective observational study investigates the comparative associations between Mini-Mental State Examination (MMSE) and Montreal Cognitive Assessment (MoCA) scores with cerebellar volumes in individuals with mild cognitive impairment (MCI) or mild dementia. The results show a significant positive correlation between MoCA scores and cognitive-related cerebellar regions, specifically the left Crus I lobule ($r = 0.40$, $p = 0.02$) and total Crus I volume ($r = 0.36$, $p = 0.04$). Linear regression analysis, adjusted for age and sex, confirmed these associations, with MoCA scores significantly linked to the left Crus I lobule ($\beta = 0.08$, $p = 0.02$) and the right VIIB lobule ($\beta = 0.033$, $p = 0.032$). In contrast, MMSE scores showed limited correlation with cerebellar

volumes, except for a negative association with right Lobule X thickness ($r = -0.35$, $p = 0.04$). These findings suggest that MoCA may be more sensitive to cerebellar-related cognitive impairments, highlighting the importance of considering cerebellar involvement in the early diagnosis and management of neurodegenerative disorders.

P-0269

Correlation between BPSD, frailty and dementia in the older population in an outpatient setting: a one-year follow-up study

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Dementia is characterized by progressive cognitive decline and loss of independence in daily living, with Alzheimer's disease (AD) as the leading cause. Behavioral and Psychological Symptoms of Dementia (BPSD) exacerbate caregiver burden, often paralleling the evolution of dementia and, in some cases, contributing to its worsening. The primary objective of the research project was to investigate the correlation between specific BPSD and the progression of dementia in a population of elderly patients ($n = 290$) with cognitive impairment in an outpatient setting over a 1-year follow-up. The secondary objective was to evaluate the link between frailty, BPSD, pharmacological interventions and how they modify the trajectory of dementia. BPSD were assessed using the Neuropsychiatric Inventory (NPI) and grouped into three clusters: "mood/apathy," "psychosis," and "hyperactivity."

The results of the study showed a significant association between the presence of disinhibition and hallucinations as major predisposing factors of cognitive decline worsening, according to Mini-Mental State Examination (MMSE) score.

These findings underscore the importance of early detection and characterization of BPSD in patients with cognitive impairment to identify those at higher risk of rapid decline. Further studies with larger samples are warranted to confirm these associations and inform clinical strategies.

P-0270

Dynamic analysis of word recall in the Rey Auditory Verbal Learning Test in older adults

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Introduction: The Rey Auditory Verbal Learning Test (RAVLT) assesses verbal memory, learning, and attention by requiring the recall of 15 words across five immediate and one delayed trial. Although total recall scores are commonly used, they may not adequately capture subtle cognitive changes.

Methods: This study examined recall patterns across the five immediate trials to enhance the characterization of early cognitive

impairment. Fifty-five participants aged ≥ 60 years (Mini-Mental State Examination [MMSE] ≥ 10 , Clinical Dementia Rating [CDR] ≤ 1 , no depressive disorders) were recruited and classified into three groups: subjective memory complaint (SMC), mild cognitive impairment (MCI), and major neurocognitive disorder (DNC), based on comprehensive clinical evaluation. The word list was divided into three serial positions (initial, middle, final). Recall performance during trials 1, 3, and 5 was analyzed using a mixed-effects model.

Results: In the MCI vs SMC comparison, a progressive decline was found in the recall of initial (0.21 to -0.53 to -1.28) and middle (-0.38 to -0.68 to -0.97) words, while performance on final words remained stable (-0.30 to -0.31 to -0.31). Conversely, in the DNC vs MCI comparison, greater decline was observed in middle (-0.14 to -0.51 to -0.88) and final (0.16 to -0.01 to -1.18) words, with smaller changes in initial words (-0.90 to -0.81 to -0.72). The most marked differences emerged in the final repetition: between MCI and SMC for initial words, and between DNC and MCI for final words.

Conclusions: Serial-position analysis of recall dynamics provides greater sensitivity than total scores alone, supporting earlier detection and improved monitoring of cognitive decline.

P-0271

Is it too late to consider diagnosis of LATE syndrome? Retrospective review of patients' medical records based on LATE clinical criteria of Wolk et al. 2025

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Background: The Limbic predominant Age-related TDP-43 Encephalopathy (LATE syndrome) appears for the first time in the scientific literature in 2019 and is defined as a slowly progressive, amnesic clinical syndrome. However, given these nonspecific criteria, the differential diagnosis with Alzheimer's Disease (AD) appears difficult, especially with the need to distinguish them considering new therapeutic possibilities for Alzheimer's disease. Several consensus meetings had taken place since, with the most recent in 2025, which helped define probable and possible cases of LATE syndrome.

Methods: In our monocentric, observational study conducted in database of Nancy University Hospital Memory Clinic (France), we identified 18 cases with negative CerebroSpinal Fluid (CSF) markers for AD and positive cerebral Positron Emission Tomography (PET) images. We had adjusted these patients with the new 2025 LATE syndrom criteria defined by Wolk et al. These criteria permitted to make the difference between possible and probable LATE syndrome.

Results: The main finding shows that among 18 patients, 11 have hippocampal atrophy, that could place them in the probable LATE category, though the remaining 7 patients fit into the possible LATE group.

Conclusion: It is the first communication concerning on going patients in our Memory Clinic with the diagnosis of LATE syndrome that could be made with the help of the new criteria. With these new criteria, we can distinguish different case of LATE syndrome and could made studies to define more specifically this new disease.

P-0272**Profiling communication ability in dementia (P-CAD): validation of a new cognitive communication tool**

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Introduction: People with dementia have communication limitations resulting from cognitive impairments. To design and implement effective interventions for people with dementia, communication assessment is integral. Yet few communication tests are available for people with dementia and their caregivers. The P-CAD was developed to address this gap. This study examines the psychometric characteristics of the P-CAD in a population of people with dementia across stages and subtypes.

Method: The P-CAD was administered to 122 people with dementia and their communication partners in Ireland ($n = 100$) and Canada ($n = 22$). To establish concurrent validity scores were compared with the Functional Linguistic Communication Inventory (FLCI), the Mini-Mental State Examination (MMSE-2), and Global Deterioration Scale (GDS). Inter-rater reliability and longitudinal validity were analysed using data from a subgroup of participants.

Results: P-CAD scores significantly correlate with FLCI and the MMSE-2. Levels of communication support categories on the P-CAD correlated with GDS rankings and MMSE-2 total scores (i.e., increased communication support necessary as cognition and communication test scores declined). Inter-rater reliability was high for all tests. No statistically significant differences in test scores were found for the 12 participants who completed follow-ups at 3 months.

Key conclusions: P-CAD has demonstrated good concurrent validity and inter-rater reliability with English speaking participants in two countries. The P-CAD is appropriate for use to evaluate communication abilities of people with dementia, including during conversational interactions with caregivers.

P-0273**Temporal dynamics of blood pressure and functioning in adults aged 85 years and older: a dynamic time-warping approach in the Leiden 85-plus study**

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Introduction: Hypertension, physical decline, and cognitive decline commonly co-occur in late life. The temporal dynamics between changes in blood pressure (BP) and functional or cognitive status remain unclear. This study explores these dynamics in adults aged 85 years and older using Dynamic Time Warping (DTW).

Methods: This study used data from the Leiden 85-plus Study, where BP, physical function, and cognitive function were measured at baseline (age 85) and annually over five years. Participants with at least two follow-up measurements were included ($n = 427$ of 599). Physical function was assessed using Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Cognitive function was measured with the Mini-Mental State Examination (MMSE). DTW was applied to assess temporal relationships.

Results: Among the 427 participants (all aged 85 years at baseline, 69% female, 39% on antihypertensive medication), BP increases over time were associated with later IADL decline, while BP decreases were associated with IADL improvement ($p < 0.05$). Similarly, decreases in diastolic BP over time were associated with later decreases in MMSE, while increases in diastolic BP were linked to later improvements in MMSE ($p < 0.05$). Changes in diastolic BP were associated with later changes in physical and cognitive function more than other BP parameters ($p = 0.02$).

Conclusion: DTW analysis revealed BP changes were inversely associated with IADL changes over time, while changes in diastolic BP preceded concordant changes in cognitive function. These findings highlight the importance of BP changes in old age, as they might reflect later functional or cognitive decline.

P-0274**Clinical performance of the fully-automated Lumipulse plasmap-tau217 assay in older adults with mild cognitive impairment and mild dementia—data from TIMC-BRAiN**

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Introduction: Plasma phosphorylated tau (p-tau)217 has emerged as a leading blood-biomarker for the detection of amyloid beta (A β) pathology. However, real world studies of plasma p-tau217 in older adults are lacking. Additionally, many studies examine biomarker performance using platforms only available in research laboratories. We assessed the performance of a novel fully-automated plasma p-tau217 immunoassay (Lumipulse) to detect A β pathology in older adults with mild cognitive impairment (MCI)/mild dementia.

Methods: Paired plasma and cerebrospinal fluid (CSF) samples were obtained at time of diagnostic lumbar puncture (LP) in a specialist memory service. Plasma p-tau217 was measured using the Lumipulse immunoassay platform and ability to detect CSF-defined A β positivity assessed (assessed using Lumipulse A β 42:A β 40 ratio) using Receiver Operating Characteristic (ROC) analysis with stringent sensitivity and specificity thresholds applied in line with international best-practice guidelines.

Results: Of 148 participants (69.4 ± 6.5 years; 54.1% female), 101 had MCI and 47 mild dementia. Median plasma p-tau217 was > fourfold higher in A β + vs A β – individuals with an area under the curve of 0.92 (0.87–0.97). Application of 90%, 95%, and 97.5% sensitivity/specificity thresholds for plasma p-tau217 may have obviated the need for more than half of LPs. Analysis using the automated Lumipulse platform, outperformed research use only assays adding crucial ecological validity to our findings.

Key conclusions: Our real-world data support the clinical use of fully automated plasma p-tau217 immunoassays, although further studies in more diverse cohorts are required.

P-0275

Biomarkers of underlying Alzheimer disease pathology and neuroinflammation but not peripheral inflammation predict disease progression in mild-moderate Alzheimer's disease

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Introduction: Novel prognostic biomarkers are urgently needed in older adults with Alzheimer Disease (AD). Peripheral inflammation and systemic inflammatory events (SIEs) are increasingly recognised as AD risk factors, but their impact on established AD and temporal relationships with AD progression has not been assessed.

Methods: We analysed > 1,000 plasma/cerebrospinal fluid samples from 333 participants with mild-moderate dementia due to AD. Ten cytokines/chemokines (IFN- γ , IL-6, IL-10, IL-12p70, IL-17A, TNF- α , Eotaxin, IP-10, MCP-1, MIP-1 β) were quantified at baseline, 12, and 18-months using ultra-sensitive immunoassays. Baseline neurodegenerative biomarkers (p-tau217, p-tau181, t-tau, Neurofilament Light [NfL], Glial Fibrillary Acidic Protein [GFAP]) were measured. Clinical progression was assessed using Clinical Dementia Rating Scale (CDR-Sb). Results of linear and logistic regression models are reported as Beta Coefficients (B) and Odds Ratios (OR), respectively, with 95% Confidence Intervals and p-values.

Results: Baseline peripheral inflammatory biomarkers correlated significantly with age and sociodemographic factors but not AD severity, and remained remarkably stable over 18-months despite significant clinical decline. Conversely, plasma biomarkers of AD pathophysiology (p-tau217) and neuroinflammation (GFAP) at baseline strongly predicted accelerated AD progression (B: 0.54, 0.18–1.08, $p = 0.02$ for p-tau217; B: 0.53, 0.18–0.90, $p = 0.002$ for GFAP). Single (OR: 2.63, 1.55–3.71, $p < 0.001$) or multiple episodes of delirium (OR: 3.45, 1.77–5.13, $p < 0.001$)—but not SIEs—predicted greater progression on the CDR-Sb.

Conclusions: Biomarkers specific to AD pathology (p-tau217, GFAP) rather than peripheral inflammation had robust prognostic value in established mild-moderate AD. Delirium was consistently associated with clinically-meaningful decline, highlighting the importance of delirium prevention in older adults with AD.

P-0276

Herpesvirus exposure, cognitive decline and Alzheimer disease in older adults: insights from a multi-cohort study using a novel multiplex seroassay

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Introduction: Evidence increasingly supports the “infectious hypothesis” of Alzheimer Disease (AD), proposing that common pathogens—particularly herpesviruses—are associated with AD risk. Most studies to date have used medical records and clinically-detected infections. We developed a novel multiplex seroassay and applied it to multiple cohorts to clarify the infectious hypothesis.

Methods: Using nearly 6,000 samples from three studies (TUDA, TIMC-BRAiN, NILVAD), plasma IgG to 50 pathogens was measured via a multiplex bead-based assay. Associations were examined in the community-based TUDA cohort and further explored in clinical cohorts (TIMC-BRAiN, NILVAD) using paired plasma/cerebrospinal fluid (CSF) samples and biomarkers of inflammation and neurodegeneration. Linear regression results are presented as Beta Coefficients (B), 95% Confidence Intervals, and p-values.

Results: In the TUDA cohort ($n = 4,796$, age: 73.7 ± 8.17 years, 67.2% female), HSV1 seropositivity was significantly associated with poorer total RBANS scores (B: -3.78 , 95% CI: -5.50 to -2.07 , $p < 0.001$) and poorer performance on all RBANS domains. CMV seropositivity was significantly associated with poorer total RBANS performance (B: -1.38 , 95% CI: -2.23 to -0.52 , $p = 0.002$). In NILVAD, CMV seropositivity was associated with greater baseline dementia severity (B: 1.47 , 95% CI: 0.58 to 2.36 , $p = 0.001$ on CDR-Sb). In clinical cohorts (TIMC-BRAiN, NILVAD), pathogen seropositivity was not associated with AD biomarkers or AD clinical progression over 18-months. Across all three cohorts, herpesvirus

seropositivity was consistently associated with elevated systemic inflammatory markers (IL-6, TNF- α).

Conclusions: Herpesvirus exposure (HSV1, CMV) was robustly associated with poorer cognitive performance, potentially mediated by non-specific systemic inflammatory effects. However, direct involvement in AD pathogenesis or progression was not supported.

P-0277

Cognitive impairment as a predictor of functional decline in the elderly

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The aim: Assessment of functional status (FS) of multimorbid elderly patients with arterial hypertension (AH) depending on the burden and pattern of multimorbidity and its possible relationship with cognitive functions (CF).

Materials and methods: 330 patients aged ≥ 60 years with AH (median age 79 years) were included in the study. All patients underwent assessment of FS using the Functional Activities Questionnaire (FAQ) and cognitive functions (CF) using the Montreal Cognitive Assessment (MoCA) and Mini-Mental State Examination (MMSE).

Results: The median total FAQ score was significantly higher in the AH + atrial fibrillation (AF) (12 [9; 14] points) compared to the AH without AF group (10 [6; 12] points; $p = 0.001$); in the AH + chronic kidney disease (CKD) (11 [8; 14] points) than in the AH without CKD group (10 [6; 13] points; $p = 0.002$). The median total FAQ score was significantly ($p < 0.001$) higher in patients with a Charlson comorbidity index score ≥ 8 points (12 [9; 15] points) compared to the patients with a Charlson comorbidity index score of 0–4 points (9 [6; 11] points).

There was a significant relationship between FAQ score and the patients' age ($R^2 = 0.175$, $\beta = 0.422$), Charlson comorbidity index ($R^2 = 0.044$, $\beta = 0.216$), MMSE ($R^2 = 0.348$, $\beta = -0.591$) and MoCA scores ($R^2 = 0.286$, $\beta = -0.537$); all $p < 0.001$.

Conclusion: In elderly patients with AH, the presence of concomitant AF and CKD has a negative impact on the functional activity. Decrease in functional activity of elderly patients with AH is associated with increasing age, burden of multimorbidity and worse CF.

P-0278

Age and cognitive impairment in the elderly

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The aim: To evaluate the possible relationship of age with cognitive functions (CFs) in patients ≥ 60 years with arterial hypertension (AH).

Materials and methods: 330 patients ≥ 60 years with AH (median age 79 years; 60–74 years, 32.7%; 75–89 years, 62.7%; ≥ 90 years, 4.5%; 50.6% women) were included in the study. CFs were assessed using the Montreal Cognitive Assessment (MoCA), the Mini-mental

State Examination (MMSE), and the Alzheimer's Disease Assessment Scale-cognitive subscale (ADAS-cog).

Results: Linear regression analysis showed a significant association between patients' age ($R^2 = 0.175$, $\beta = 0.422$) and CFs (MMSE: $R^2 = 0.348$, $\beta = -0.591$; MoCA: $R^2 = 0.286$, $\beta = -0.537$; ADAS-Cog: ($R^2 = 0.345$, $\beta = 0.589$), $p < 0.001$ in all cases. ROC analysis indicated an association between patients' age and cut-off point for results of CFs screening, area under the curve (AUC), diagnostic specificity (Sp) and diagnostic sensitivity (Se) (MMSE ≤ 24 points: 81.5 years (AUC = 0.708 (95% CI: 0.633–0.784), Sp 66% (95% CI: 0.634–0.683) and Se 71% (95% CI: 0.590–0.813); MoCA ≤ 25 points: 72.5 years (AUC = 0.744 (95% CI: 0.675–0.914), Sp 59% (95% CI: 0.480–0.688) and Se—81% (95% CI: 0.781–0.835)); ADAS-Cog ≥ 13 points: 79.5 years (AUC = 0.768 (95% CI: 0.716–0.819), Sp—76% (95% CI: 0.711–0.811) and Se—72% (95% CI: 0.662–0.768)).

Conclusion: In elderly patients with essential AH, age has a pronounced negative effect on cognitive status.

P-0279

A qualitative study to enhance interactions between professional health caregivers and resident with dementia in flemish nursing homes: mapping the influencing factors

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Introduction: Person-centered care is considered as the gold standard for dementia care in nursing homes (NHs), where positive interactions between professional health caregivers (PHC) and residents are crucial. Through daily interactions, interpersonal relationships are fostered, which enhance the well-being and quality of life of residents while simultaneously creating job satisfaction for PHC. Despite existing literature reviews, there is still a lack of empirical knowledge about how PHC interact with individuals with dementia in NHs. This study aims to identify the influencing factors that constitute these interactions.

Methods: This qualitative study combined 15 participatory observations (106.35 h) and 24 semi-structured in-depth interviews (26.1 h) with PHC and staff members from seven Flemish NHs. A thematic content analysis was used to identify facilitators and barriers to effective interactions.

Results: PHC describe interactions with residents as rewarding, enriching, meaningful, and pleasurable, although they can also be challenging due to heavy workloads, lack of knowledge, and insufficient communication among staff. Environmental factors such as noise, neglect of personal needs, emotional outbursts, and physical discomfort complicate these interactions. However, providing a predictable routine, showing empathy, fostering interpersonal trust, demonstrating emotional involvement, using creativity to adapt to

different needs, and ensuring a familiar environment can improve these interactions.

Key conclusions: By identifying the facilitators and barriers, this study highlights influencing factors that enhance connecting interactions between PHC and residents with dementia. Our findings underscore the importance of supporting PHC in enriching their caregiving relationships and highlight the need for developing future interventions that support them.

P-0280

The “rainbow” concept: enhancing hydration in patients with dementia using colourful and sweetened drinks

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Introduction: Dehydration is a significant challenge for the UK healthcare system, affecting one in seven hospital patients and costing the NHS £1 billion annually. It is especially prevalent among elderly patients with dementia, who often experience cognitive, physical, and environmental barriers to proper hydration. This article explores the impact of dehydration on dementia patients and proposes a novel approach, the “Rainbow” concept, to improve hydration and overall health.

Methods: The “Rainbow” concept utilises colourful and sweetened drinks to enhance fluid intake in dementia patients. It proposes an interdisciplinary approach to hydration that includes personalised care strategies, environmental adjustments, and patient preferences.

Results: The “Rainbow” concept has shown promise in overcoming cognitive and sensory barriers to hydration. Coloured and sweetened drinks attract attention, stimulate sensory engagement, and increase fluid intake, particularly in advanced dementia stages. Additionally, these drinks provide essential nutrients and vitamins, addressing common nutritional gaps in dementia patients. The concept also promotes social interaction, making hydration a more enjoyable and communal activity.

Conclusions: Dehydration in dementia patients is a critical issue with substantial health and economic consequences. The “Rainbow” concept offers a cost-effective and scalable solution that enhances hydration while providing nutritional benefits. A personalised, patient-centred approach incorporating colourful drinks, along with a multidisciplinary care team, can improve fluid intake, reduce dehydration risks, and enhance the quality of life for dementia patients. Future research should evaluate the long-term effects and potential risks associated with this innovative strategy.

P-0281

Association between hemoglobin levels and mild cognitive impairment in European community-dwelling older adults: a three-year prospective analysis of the DO-HEALTH trial

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Objective: To investigate the associations between baseline hemoglobin levels, anemia, and mild cognitive impairment (MCI) over three years in European generally healthy older adults.

Methods: This is an observational analysis of the three-year DO-HEALTH trial, a double-blind, randomized controlled trial including 2157 European community-dwelling adults age 70 +. Cognition was assessed at baseline, 12, 24 and 36 months using the Montreal

Cognitive Assessment (MoCA). MCI was defined as a MoCA score below 26 at two consecutive time points. The exposures were the quintiles of hemoglobin levels and anemia at baseline. Logistic regression models based on generalized estimating equations controlled for age, sex, prior falls, study site, treatment allocation, body mass index, number of comorbidities, smoking status, alcohol consumption, renal function, and vitamin B12 levels.

Results: A total of 2150 participants were included in the analyses (mean age of 74.9 years; 61.7% women). Compared to the lowest quintile, participants in all higher quintiles had a significantly lower odds of MCI: 2nd = 34% lower odds of MCI (OR = 0.66, 95% CI 0.47–0.93, $p = 0.02$), 3rd = 37% (OR = 0.63, 95% CI 0.44–0.89, $p = 0.008$), 4th = 44% (OR = 0.56, 95% CI 0.38–0.82, $p = 0.003$), and 5th = 35% (OR = 0.65, 95% CI 0.43–0.97, $p = 0.04$). For the binary exposure anemia, there was no association with the odds of MCI over time.

Conclusions: Higher baseline hemoglobin levels above 130 g/L were associated with reduced odds of MCI over three years. While this study does not establish causal relationships, it points towards further investigations in monitoring and managing hemoglobin levels, even in generally healthy older adults.

P-0282

Navigating ethical dilemmas: experiences of informal caregivers for individuals with dementia in Albania

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Introduction: Dementia is a progressive neurodegenerative condition that significantly impacts not only the individuals diagnosed but also their families and caregivers. Caregiving is often laden with emotional, social, and ethical complexities, particularly within a cultural framework that emphasizes familial responsibility. This is part of a larger EDEM project.

Aim: This study aims to explore the extent to which ethical dilemmas and concerns in caring people with dementia are observed and experienced by informal caregivers in Albania.

Methods: In-depth interviews with family caregivers were conducted to explore their experiences, challenges, and ethical considerations. Interpretative phenomenological analysis was used to identify key themes and sub-themes.

Results: A total of 11 participants were included. Four key themes emerged which were: (1) The Big Burden of Family Caregiving: A Lifelong Commitment; (2) Prioritizing Autonomy, Safety, Dignity, and Well-being in Dementia Care; (3) Injustice in Care: The Plight of Dementia Caregivers in Albania; (4) Caregiver Decision-Making at the Intersection of Autonomy, Safety, and Well-being. Caregivers report experiencing significant emotional distress, social isolation, and role conflict, compounded by societal stigma and insufficient external support.

Conclusion: The research underscores the necessity for accessible community resources and specialized care services to ease caregiver burdens while honoring the autonomy and dignity of patients. Additionally, the study highlights a legal gap in dementia care that perpetuates social injustices and discrimination against both caregivers and those with dementia. Recommendations for systemic changes are proposed to enhance caregiver well-being and improve dementia care practices in Albania.

Keywords: Albania, dementia, caregiver, ethics, informal.

Short poster presentation

Cognition and dementia

P-0283

Comparative evaluation of ChatGPT-4.0 and Claude 3.7 in predicting dementia diagnosis

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Introduction: Large language models (LLMs) have shown potential as clinical decision support tools for early diagnosis of dementia. This study aimed to compare the predictive performance of two large LLMs, ChatGPT-4.0 and Claude 3.7, in diagnosing dementia based on patient clinical data.

Methods: The study included 210 patients with recorded demographic information (age, gender), cognitive status (Mini-Mental State Examination [MMSE] scores), and clinically confirmed dementia diagnoses (according to DSM-5 criteria). Both LLMs were evaluated first without MMSE scores and then with MMSE data added. Predictions were categorized as inconsistent, partially consistent, or completely consistent with the clinical diagnosis.

Results: Among the 210 patients (mean age 74 ± 5.9 years), 44 (21%) were clinically diagnosed with dementia. Patients with dementia had significantly lower MMSE scores than those without dementia (median 22 [16–25] vs. 28 [26–30], $p < 0.001$). ChatGPT-4.0 achieved 72.4% agreement with clinical diagnosis, and Claude 3.7 achieved 73.8% agreement when MMSE was not included. With MMSE included, ChatGPT-4.0 reached 93.8% agreement, and Claude 3.7 reached 90% agreement, respectively ($p = 0.003$; $p = 0.048$). The performance difference between the models with MMSE input was statistically significant (Kruskal–Wallis test, $p < 0.001$). Group comparisons using Mann–Whitney U test with Bonferroni correction indicated that the difference was driven by the fully compatible prediction category.

Key conclusions: These findings suggest that LLM-based AI systems can serve as valuable tools for dementia screening. However, their estimates should be viewed as complementary rather than a substitute for comprehensive clinical assessment.

Poster

Cognition and dementia

P-0284

DMT-IRIS: disease-modifying therapies in Ireland: readiness, infrastructure, synergy

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Introduction: With the recent European approval of disease-modifying therapies (DMTs) for early Alzheimer's disease (AD), the need for system-level preparedness has become urgent. Variability in

access across regions and healthcare systems presents challenges for equitable and timely delivery. This study explores real-world diagnostic and treatment pathways across different patient profiles to inform system design.

Methods: Based on clinical input from neurologists, old age psychiatrists and geriatricians across Ireland, we defined a series of virtual patient scenarios representing distinct care trajectories: (1) public system access, (2) mixed public–private routes, and (3) international or private cross-border treatment pathways. These pathways capture differences in geography, infrastructure, and out-of-pocket cost. Collaboration with health economists and systems engineers is guiding the application of graph theory to model patient transitions and system constraints.

Results: The virtual scenarios reflect the experience of patients across diverse regions—some receiving care through public pathways with long waits, others pursuing private or international routes for accelerated access. Differences in referral timelines, diagnostic bottlenecks, and regional service availability are being incorporated into a dynamic visual model to simulate system performance and identify pressure points.

Conclusions: This approach integrates clinical, economic, and engineering expertise to build a flexible model of DMT readiness based on real-life pathways. Mapping virtual scenarios for patients across local and international contexts offers a scalable framework to support national and cross-border planning for DMT implementation.

Poster

Cognition and dementia

P-0285

Mild behavioral impairment and frailty: two prodromal entities interacting in the genesis of dementia and disability

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Introduction: Mild behavioral impairment (MBI) and frailty are prodromal entities for dementia and disability, respectively. We aimed at testing whether older adults with both MBI and frailty were at higher risk of adverse outcomes than those with one or none of those; and if this potential difference corresponded to lower levels of intrinsic capacity (IC).

Methods: We performed longitudinal analyses of the Cogfrail study data (baseline 2017, mean FU 284 days, only pre-frail or frail subjects included). MBI was measured using the NPI-Q following a published algorithm. MBI was scored by domain presence and by their severity. MBI-positive was defined as severity ≥ 8 . Frailty was operationalized by gait speed (linear mixed models), and Fried's phenotype. Among those without the outcome at baseline we used Cox models for incident frailty (phenotype excluding pre-frail), dementia (CDR ≥ 1), and disability (Katz < 6) separately. IC was measured using five domains.

Results: $n = 317$, mean age = 82, SD = 5. Older adults with MBI had a steeper gait speed decline and a higher frailty risk compared to their counterparts. MBI, but not frailty was predictive of dementia. Frailty was predictive of disability, and MBI-with-frailty showed a higher risk of disability than frailty alone regardless of CDR score. Differences in IC were found across the comparison groups.

Key conclusions: MBI and frailty interact in the genesis of disability regardless of the cognitive status. MBI seems to be relevant as a prodromal entity not only for dementia but also physical functioning. Overlapping prodromal phenotypes impact IC and outcome risk at an additive scale.

P-0286

Health determinants of clusters of neuropsychiatric symptoms in an Italian geriatric population: a memory clinic-based study

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Introduction: Neuropsychiatric Symptoms (NPS) are well documented in dementia, but whether distinct patterns are already present in preclinical stages remains unclear. This study identified NPS clusters in a geriatric clinical population and their health determinants.

Methods: We conducted a cross-sectional analysis of 1234 participants from the Italian GERICO memory clinic cohort with available Neuropsychiatric Inventory (NPI) assessment. Data on sociodemographic, medical conditions, medication use, cognitive functioning, and blood sampling were collected. NPS frequency and severity were evaluated using the NPI. A machine learning approach derived clusters from the 12 NPS items separately for dementia and dementia-free participants. The optimal cluster number was determined via K-Means and the Elbow methods. Multinomial logistic regression estimated Odds Ratios (OR) and 95% CIs for associations between cluster allocation and health factors.

Results: Across 1234 participants (median age 80 years, IQR = 76–84; 64.3% female), four NPS clusters were identified: Cluster 0 (absent/minimal NPS), Cluster 1 (Depression-Anxiety-Apathy), Cluster 2 (Depression-Anxiety), Cluster 3 (Delusions-Agitation-Irritability). Cluster structures varied across the overall sample and dementia/no-dementia subgroups. Compared to Cluster 0, the Depression-Anxiety Cluster was associated with female sex (OR = 2.14, 95% CI 1.40–3.29) and poor glycemic control (OR = 2.42, 95% CI 0.94–6.23), with consistent findings in the no-dementia group. In the dementia group, the Delusions-Agitation-Irritability Cluster also showed an association with poor glycemic control (OR 2.04, 95% CI 0.61–6.75).

Conclusion: Poor glycemic control emerged as a key risk factor for anxiety-depression symptoms, underscoring the need for blood sugar management in overt dementia care but also in preclinical/prodromal stages.

P-0287

Cognitive effects of medium cut-off dialysis in elderly patients with end-stage renal disease: a prospective study

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Background: Cognitive impairment is common in elderly patients with end-stage renal disease (ESRD) and is linked to increased morbidity and mortality. Medium cut-off (MCO) dialysis membranes, by effectively removing middle molecules, may help improve cognitive outcomes in this vulnerable group.

Objective: To evaluate the effects of MCO dialysis on cognitive and executive functions in elderly hemodialysis patients.

Methods: This prospective study included 21 ESRD patients aged ≥ 60 years, all with a minimum of primary school education and Mini-Mental State Examination (MMSE) scores ≥ 24 . Patients underwent cognitive assessment at baseline and after 3 months of MCO dialysis using the Montreal Cognitive Assessment (MoCA), Trail Making Test Parts A and B, Digit Span Forward and Backward, and Verbal Fluency Tests (semantic and phonemic).

Results: After 3 months, MoCA scores improved significantly (24.52 ± 3.01 to 26.10 ± 3.02 ; $p = 0.018$). Digit Span Forward increased from 5.52 ± 0.93 to 5.85 ± 1.04 ($p = 0.035$), while Digit Span Backward showed a trend toward improvement (3.9 ± 0.83 to 4.19 ± 0.98 ; $p = 0.096$). Semantic verbal fluency increased significantly (12.10 ± 5.03 to 14.75 ± 5.41 ; $p = 0.002$), and phonemic fluency approached significance ($p = 0.056$). No significant changes were observed in Trail Making Test times, though slight reductions were noted.

Conclusion: MCO dialysis may provide measurable cognitive benefits, particularly in global cognition, attention, and semantic fluency, over a short period. These results support the potential neurocognitive advantages of MCO membranes in elderly dialysis patients.

P-0288

Creativity, leisure activities, social engagement and cognitive impairment: the AGES-Reykjavík study

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Background: Participation in leisure activities and extensive social network have been associated with lower risk of cognitive impairment (CI) and dementia.

Aims: We examined whether leisure activities (cognitive solitary, cognitive group, social, physical, or creative activities) and social involvement are associated with less incidence of CI or dementia.

Methods: Analyses were performed from data of 2933 cognitively intact individuals at baseline included in the AGES-REYKJAVÍK study. Odds ratios (OR) were calculated for incident CI and dementia in relation to cognitive individual, cognitive group, social, physical, and creative leisure activities as well as social networks. Models were adjusted for a number of known risk factors for cognitive decline.

Results: In 5 years, 12% of the cohort were diagnosed with CI or dementia. All leisure activities were associated with reduced likelihood of cognitive decline in the raw model, but in adjusted models, cognitive solitary [OR 0.49 (Confidence Interval (CI) 0.38–0.64)], cognitive group [OR 0.50 (CI 0.30–0.82)], and creative activities [OR 0.53 (CI 0.35–0.83)] were significantly associated with less cognitive decline. Analyses examining creative leisure activities independently, controlling for all other activities, suggested individuals participating in creative activities exhibited less CI [OR 0.64 (CI 0.41–0.98)]. Among social networks variables, frequency of meeting with friends and relatives was associated with reduced likelihood of CI [OR 0.49 (CI 0.31–0.75)].

Discussion: Cognitive and creative leisure activities and frequent gatherings with friends and relatives are associated with reduced incidence of CI in this older cohort.

Conclusion: Creative leisure activities might have special benefit for cognitive ability.

P-0289

Prescribing and discontinuation of lecanemab in a Community Memory Clinic

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Introduction: Lecanemab is a humanized monoclonal antibody that binds with high affinity to A β soluble protofibrils. It was approved in July 2023 by the FDA for treatment of mild cognitive impairment and early stage Alzheimer's disease. As a disease-modifying therapy, lecanemab has shown efficacy in slowing disease progression. The serious potential risk of amyloid related imaging abnormalities (ARIA) has made the medication controversial due to risk of patient harm.

Methods: This retrospective observational study was conducted at a specialty memory clinic of a not-for-profit community health system in Kentucky, USA. The study aimed to determine the rate of patients discontinuing treatment with lecanemab and to determine if ARIA was the reason treatment was discontinued. 150 patients who began treatment with lecanemab between August 2023 and February 2025 were observed.

Results: Of 150 patients who received lecanemab, 22 patients discontinued treatment. Although ARIA was observed in 31 of the 150 patients, ARIA was the cause of discontinuation of lecanemab in only 7 cases. 15 additional patients discontinued lecanemab due to other causes, including other medical conditions and patient choice.

Key conclusions: In this observational study in a community specialty memory clinic, ARIA was not the primary cause for patients to discontinue treatment with lecanemab. In this study, patients were twice as likely to discontinue treatment due to other causes. Although ARIA is a serious potential side effect of anti-amyloid therapy, fear of ARIA shouldn't prevent clinicians from considering lecanemab as a reasonable, effective therapy choice for treating early stage Alzheimer's disease.

Short poster presentation

Cognition and dementia

P-0290

Cognitive impairment in chronic kidney disease: the role of phenylacetylglutamine

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Background: Chronic kidney disease (CKD) leads to the accumulation of uremic toxins (UTs). Studies have suggested that UTs are associated with cognitive impairment (CI) in CKD patients. Recently studies reported that phenylacetylglutamine (PAG) contributes to the association between CKD and CI. However, this association has not been investigated in non-dialysis-dependent adults with CKD.

Methods: The CKD-REIN cohort study included 3033 patients with CKD stages 2–5. This cross-sectional analysis included those with a PAG measurement and a Mini-Mental State Examination (MMSE) score within 3 months of each other. CI was defined as an MMSE score 26/30. Logistic regression were used to assess the association between PAG and CI.

Results: Of the 2590 patients included (mean (standard deviation (SD)) age: 67 (13); mean (SD) estimated glomerular filtration rate (eGFR): 34 (13) mL/min/1.73m²; median [interquartile range] PAG level: 2.1 [1.2–3.6] mg/L), 908 (35%) presented an MMSE score 26/30. After adjustment for sociodemographic factors (age, sex, educational level), cardiovascular risk factors, cerebrovascular disease, eGFR, urinary albumin to creatinine ratio and other UTs known to be associated with CI risk, a two-fold increase in the PAG level was associated with CI (odds ratio [95% confidence interval]: 1.15 [1.02, 1.29]).

Conclusions: This study shows that elevated serum PAG levels are associated with CI in non-dialysis-dependent adults with CKD, suggesting a new physiological pathway linking UTs to CI. Further studies are needed to confirm the causal nature of this association and to explore strategies for reducing serum PAG levels to protect cognition.

Poster

Cognition and dementia

P-0291

The cumulative incidence of dementia, depression and delirium in patients aged 65 years and older during hospitalisation

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Introduction: Dementia, depression and delirium (3 D's) are prevalent conditions in the older population. These conditions are associated with higher rates of functional degeneration, institutionalization and death [1–4]. The 3 D's have been studied in pairs. Those patients have a poor prognosis [4]. This suggests that the prognosis for the 3 conditions together is even worse. It is essential that health care providers are made aware of the co-occurrence and the incidence of the 3 D's in order to provide better care. This research aims to find the cumulative incidence of the 3 D's and the factors that influence this co-occurrence.

Methods: 400 patient records were examined. The delirium observation screening scale (DOSS), mini-mental state examination (MMSE), geriatric depression scale (GDS), clinical suspicion, diagnoses and predefined factors were recorded.

Results: 7 patients were found with the 3 D's. The overlap-syndrome delirium and dementia was found in 101 patients. The GDS wasn't performed in 397 patients. In the study population the anticholinergic burden was high (63.8%).

Key conclusions: Dementia, depression and delirium can occur together in a patient. To assess the full scope of this problem the GDS needs to be implemented in standard of care. The total incidence is probably higher. Screening for these three conditions is essential to improve diagnostics and treatment plans.

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P-0292

Acetylcholinesterase inhibitors and memantine in a long-stay psychogeriatric unit

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Introduction: Acetylcholinesterase inhibitors (ACEIs) (donepezil, rivastigmine, and galantamine) are the specific symptomatic treatment for mild to moderate dementia, while memantine is used for moderate to severe dementia. It is also used to treat psychological and behavioral symptoms associated with cognitive impairment (BPSD). We conducted a study of acetylcholinesterase inhibitors (ACEIs) and memantine in a psychogeriatric unit.

Objectives: To determine the frequency of use of ACEIs and memantine in a long-stay psychogeriatric unit between June 1, 2024, and March 1, 2025.

Methodology-results: Data were collected retrospectively from the medical records of 102 patients diagnosed with cognitive impairment from a psychogeriatric unit. The mean age was 81.6 years, and 51 (50%) were women. 72 (71.2%) had a Barthel Index (BI) < 40. 16 mild cognitive impairment, 17 moderate Alzheimer's type dementia (GDS 5), moderate-severe Alzheimer's type dementia 24, advanced Alzheimer's type dementia 9. Moderate Vascular Dementia 7, Moderate Mixed Dementia 7, Moderately-severe Mixed Dementia 18, moderate-severe Lewy body dementia 3, severe depressive pseudodementia 1. The SPCD found: Agitation 41 (40.1%), depression 28 (27.4%), Anxiety 18 (17.6%), Anxiety and depression 8 (7.8%), Erratic walk 5 (4.9%), Visual hallucinations 3 (2.9%) Insomnia 3 (2.9%), Apathy 3 (2.9%) Auditory hallucinations 1 (0.98%). An ACE inhibitor or memantine was used in 14 patients (13.7%), including donepezil in 4, rivastigmine in 7, and memantine in 3.

Conclusions: The use of ACE inhibitors or memantine in our patients was low (13.7%). Rivastigmine was the most commonly used ACE inhibitor.

P-0293

The importance of a relationship-centred approach to deprescribing for people with dementia or mild cognitive impairment in primary care: a qualitative study

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Background: Polypharmacy is common in people with dementia or mild cognitive impairment (MCI) and is associated with poor outcomes. Limited research on deprescribing with this group of people has been undertaken in primary care. This study explored the perspectives of people with dementia or MCI, informal carers and healthcare professionals on deprescribing decision-making.

Methods: A qualitative interview study was completed using photo elicitation and in-person interviews with people with dementia or MCI and informal carers. Online interviews were also conducted with healthcare professionals. Analysis was undertaken using inductive thematic analysis.

Results: Nine people with dementia ($n = 7$) or MCI ($n = 2$), nine informal carers and 16 healthcare professionals (including general practitioners, pharmacists, nurses, social prescribers and NHS memory clinic professionals) participated in the study. Findings suggest the need to navigate ‘patient vs carer vs professional voices’ in the deprescribing process to ensure everyone’s voice is included, taking into account patient cognitive abilities, autonomy and independence, as well as carer experiences. Flexible, tailored, cross-system medication management processes are needed to support effective deprescribing. To facilitate deprescribing discussions, factors such as professional knowledge, safe environment, and sufficient time should be considered. Finally, careful consideration should be given to the potential impact of deprescribing decisions on day-to-day medication management and carer burden.

Conclusions: This study provides novel insights that demonstrate the need for a relationship-centred approach for deprescribing for people with dementia or MCI. The findings should inform future research on development of a primary care deprescribing intervention for this group of people.

P-0294

Associations of “ognitive frailty” and geriatric syndromes in patients with heart failure ≥ 65 years

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Background: Currently, the number of patients with chronic heart failure (CHF) is increasing worldwide [Khan M.S., 2024]. Most of them are elderly and senile patients [Savarese G., 2023]. CHF affects patients’ physical status and can lead to the development of cognitive impairments [Goyyal P., 2022].

Materials and methods: The study included 123 patients without dementia. All patients underwent a comprehensive geriatric assessment.

Cognitive frailty was defined as the combination of physical frailty (≤ 7 points on the Short Physical Performance Battery) and mild cognitive impairment (MCI; < 26 points on the Montreal Cognitive Assessment).

Results: Mean patient age was 77.27 ± 7.11 years (45.5% male). Cognitive frailty was present in 46 patients (37.4%). MCI without physical frailty was observed in 29 patients (23.6%), physical frailty without MCI was found in 21 patients (17.0%). Other 27 patients (22.0%) had normal physical and cognitive function.

Patients with cognitive frailty were older than those without cognitive frailty but did not differ in sex distribution. Patients with cognitive frailty had a higher prevalence of geriatric syndromes, then patients without cognitive frailty: Basic activities of daily living (ADL) dependence (63.0% vs. 23.4%, $p < 0.001$); Instrumental ADL dependence (65.2% vs. 33.8%, $p < 0.001$); Risk of malnutrition/malnutrition (47.8% vs. 19.9%, $p < 0.001$); High fall risk (Morse Fall Scale) (39.1% vs. 13.0%, $p < 0.001$); Probable depression (66.7% vs. 30.9%, $p < 0.001$).

Conclusion: In patients with HF ≥ 65 years the prevalence of cognitive frailty was 37.4%. Patients with cognitive impairment had a higher prevalence of geriatric syndromes.

Poster

Cognition and dementia

P-0295

Evaluation of professional practices in the diagnostic process of a neurocognitive disorder: role of lumbar puncture

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Introduction: The most common pathologies causing a neurocognitive disorder are Alzheimer’s disease and related diseases. The etiological diagnosis of a neurocognitive disorder is based on a bundle of clinical and paraclinical arguments and should be established according to the recommendations of the High Authority of Health.

Methods: Single-center, observational, retrospective, cross-sectional study, based on the analysis of the medical records of all patients who had a lumbar puncture as part of the etiological diagnosis of a neurocognitive disorder, followed in memory consultation in neurology and geriatrics, at the Dijon University Hospital, over a period of 5 years, from 09/30/2016 to 09/30/2021.

Results: 322 patients were included, 90.4% of whom were treated in neurology memory consultation and 9.6% in geriatric memory consultation. The Mini Mental State Examination score was reported in 82% of the files, a neuropsychological assessment in 47.5% of the files, morphological imaging in 94.4% of the files, a PET scan in 40.7% of the files and a DAT scan in 11.8% of the files. The diagnostic hypothesis of Alzheimer’s disease was raised in 71.5% of the cases. The dosage of biomarkers in the cerebrospinal fluid made it possible to modify the diagnostic hypothesis in 36.5% of the cases.

Conclusion: Lumbar puncture made possible to modify a third of the initial diagnostic hypotheses, making this examination relevant. Data traceability can be improved and is the subject of an area of improvement to be undertaken as part of a quality approach.

P-0296

Determinants of the non-diagnosis of neurocognitive disorders in elderly people admitted to nursing homes

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Introduction: Alzheimer’s disease and neurocognitive disorders (NCD) represent the main reason for admission to nursing homes and remain underdiagnosed at the time of admission. Alzheimer’s disease

and neurocognitive disorders (NCD) represent the main reason for admission to nursing homes and remain underdiagnosed at the time of admission. The aim of this study is to assess underdiagnosis at admission to nursing homes and to assess its medico-social determinants.

Methods: Descriptive observational study with retrospective collection of medico-social data from residents admitted to the Yonne departmental retirement home, from 2021 to 2023, with impaired GIR (1–2). Assessment of fragility and geriatric syndromes, including the Charlson comorbidity score.

Results: 96 residents were included, including 42 (43.8%) with known NCDs already diagnosed, and 54 (56.2%) with NCDs but not diagnosed. Residents with undiagnosed NCDs were more often alone at home (64.8 vs 38.1%; $p = 0.013$), came after a hospitalization (88.9 vs 42.9%; $p = 0.001$) and had significantly more often chronic renal failure (53.7 vs 21.4%; $p = 0.002$) but less often cardiovascular comorbidity (37.0 vs 59.5%; $p = 0.002$).

Conclusion: Underdiagnosis of Alzheimer's disease and other NCDs remains high and can be explained by the abundance of somatic comorbidities (chronic renal failure) and by a lack of alert due to isolation. Underdiagnosis leads to more frequent hospitalizations before entering a Nursing home. It is necessary to identify the presence of TNC during health episodes in order to integrate elderly people into appropriate care pathways and in particular to identify the best time to enter an EHPAD while avoiding crisis situations.

P-0297

Association between vitamin D3 levels and cognitive function in older hospitalized patients

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Introduction: In aging society cognitive decline is a problem of growing importance. According to current knowledge, vitamin D3 has neuroprotective effects and plays crucial role in cognitive health. However, data on association between vitamin D3 levels and cognitive function in hospitalised older adults remain inconsistent.

Purpose: This study investigates the association between vitamin D3 concentration and cognitive function assessed by Mini-Mental State Examination (MMSE) in older hospitalized patients.

Material and method: The selected study population included older patients hospitalized between December 2019 and December 2023 in the Department of Geriatrics in Lodz, Poland. Inclusion criteria were admission to the department, age 60 and above, and available data on MMSE results and vitamin D3 concentration. 643 patients (463 women and 180 men) were enrolled. Dementia was defined as MMSE scores below 24 points.

Results: The median age of the patients was 82 (76–88) years. Dementia was defined in 307 (47.7%) participants. Patients with dementia had significantly ($p < 0.0001$) lower vitamin D3 concentration (16.3 (8.0–27.9) ng/ml) compared to participants without dementia (22.1 (12.9–33.3) ng/ml). Also, patients with dementia were significantly ($p < 0.0001$) older. Correlation analysis revealed significant positive relationship between MMSE scores and vitamin D3 levels with $r = 0.16$. Age-adjusted linear model showed significant independent association between vitamin D3 levels and MMSE results.

Conclusion: The study revealed a significant association between vitamin D3 blood levels and cognitive function in hospitalized patients aged 60 and above. Vitamin D3 assessment should be

strongly considered if not routinely performed in older hospitalized patients, especially subjects with cognitive decline.

P-0298

Last year of life with dementia—social and healthcare service use and place of death for people dying from dementia

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Introduction: As populations age, dementia is an increasingly common cause of death. People who die from dementia may follow different care trajectories than those with other chronic illnesses.

Methods: We conducted a retrospective cohort study using Finnish registry data on causes of death, healthcare, and social service use. All deaths due to non-communicable diseases in 2019 were included. Descriptive statistics summarized service use and place of death. For hospital use comparisons, optimal full matching on age, sex, municipality type, and prior social service use was used, retaining the full sample with weights applied to controls. Hospital use was analyzed using zero-inflated negative binomial regression.

Results: Of 38,494 deaths, 9,607 (25%) were due to dementia. Among dementia deaths, 58% lived in long-term care facilities (LTCFs) 12 months before death and 70% one month before, compared to 13% and 19% in others, respectively. Of dementia deaths, 65% occurred in LTCFs compared to 16% in others. Palliative care diagnoses and palliative specialist services were recorded in 4% and 9% of dementia cases, versus 28% and 17% in others. In matched comparisons, those who died from dementia were more likely to have no hospital use in the last 3 months (OR 2.6, 95% CI: 2.48–2.78), and among those hospitalized, had 6% fewer hospital days (IRR 0.94, 95% CI: 0.91–0.98).

Conclusions: People who died from dementia had greater use of long-term care, were more likely to die in LTCFs, and had lower palliative care involvement and hospital use than those who died from other causes.

P-0299

Changes in gray matter volume associated with gait speed and muscle mass in older adults with mild cognitive impairment

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Background: Gait speed, a critical clinical marker of sarcopenia and physical function, serves as an important indicator of overall health outcomes and is associated with brain atrophy in older adults. Sarcopenia has been linked to structural brain change, particularly in regions involved in motor and cognitive functions. However, the relationship between sarcopenia and regional gray matter volume

(GMV) in individuals with mild cognitive impairment (MCI) remains unclear.

Methods: This cross-sectional study included 234 older adults with MCI. Sarcopenia was diagnosed based on the 2019 Asian Working Group for Sarcopenia criteria. Gait speed, handgrip strength, and appendicular skeletal muscle mass index (ASMI) were assessed by DEXA. Brain T1-weighted magnetic resonance imaging were used and voxel-based morphometry were performed to identify GMV differences according to age, sex, and brain size.

Results: Participants with slower gait speed had lower GMV in the bilateral putamen and left superior frontal cortex, regions critical for motor planning and control. Participants with lower ASMI had higher GMV in the left inferior temporal cortex. No significant differences in GMV were found between participants with and without sarcopenia or with low and normal handgrip strength.

Conclusion: Slower gait speed is associated with reduced GMV in motor-related brain regions, suggesting its potential as an early indicator of brain structural changes in older adults with MCI. Increased GMV in the left inferior temporal cortex in the low ASMI group may indicate compensatory neuroplasticity. These findings underscore the complex interactions between physical function, muscle mass, and brain structure in MCI patients.

P-0300

Drugs targeting inflammation experimentally might reduce Alzheimer's disease in humans

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Clinically, Alzheimer's Disease and Related Dementia (ADRD) affect 7 million people in the US and nearly 8 million people in Europe. Increasing evidence suggests a central role of inflammatory processes in pathophysiology of ADRD. Investigating the effect of anti-inflammatory medication use on dementia risk provides insight in possible beneficial effects of anti-inflammatory medication in the prevention of ADRD. We focused on FDA-approved drugs which reduce inflammation in humans, prescribed for inflammatory diseases. To test our hypothesis that anti-inflammatory drugs were protective for ADRD, we examined 1 year of cross-sectional Medicare fee-for-service claims data of 1 million beneficiaries > 66 years. We performed multivariable analysis adjusted for demographics, ADRD risk factors and inflammatory conditions to evaluate the association between ADRD prevalence and anti-inflammatory drug exposure. Our principal outcome was ADRD as defined by a modified Bynum algorithm (unavailable Amyloid documentation in our dataset). 755 152 (80.9%) beneficiaries (59.0% women) were exposed to the drugs of interest. The mean age of exposed and unexposed beneficiaries was 75 years (SD 7.7 vs 7.2). The multivariable analysis revealed a significantly lower ADRD prevalence in anti-inflammatory exposed (> 1 anti-inflammatory drug) vs unexposed beneficiaries (if exposure to, Incident rate ratio 0.8 with 95% CI 0.7–0.8).

By leveraging real-world data with Medicare fee-for-service claims, anti inflammatory drug exposure was associated with a lower risk of ADRD in US individuals > 65 years.

Further studies are warranted to determine whether the observed association between specific anti inflammatory drug exposure and protection against ADRD in humans is confirmed longitudinally.

P-0301

Checkmate for aging: how chess enhances cognitive, emotional, and social well-being in seniors

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Introduction: As society ages, interest is growing in activities that support older adults' health and well-being. Chess, which requires concentration and memory, has emerged as a potential tool to improve cognitive functions and mental health in seniors. This review examines studies on the impact of chess on older adults, focusing on cognitive, emotional, and social benefits.

Methods: The study included 12 seniors: 6 beginners learning chess under the guidance of a student and 6 experienced players. Participants' quality of life was assessed using the shortened Geriatric Depression Scale, the Montreal Cognitive Assessment, and the Satisfaction with Life Scale, both at the beginning and after six months of weekly 2.5-h sessions.

Results: Ten seniors completed the study, attending at least 20 sessions. Nine showed improvements in all tests compared to their pre-intervention results. The greatest engagement and most noticeable effects were observed in the beginner group. In this group, the average improvement in the Satisfaction with Life Scale (SWLS) was 4 points, while the Montreal Cognitive Assessment score improved by 3.4 points. Additionally, two seniors who had mild depression before the study showed no signs of this issue post-program.

Key conclusions: Chess offers cognitive, emotional, and social benefits for seniors, including improved memory, reduced depressive symptoms, and enhanced social interaction. While promising, the current findings are primarily based on preliminary studies, indicating the need for more robust research to confirm these effects and establish best practices for incorporating chess into senior programs.

P-0302

Quality of care in dementias through interdisciplinary team primary care and geriatric department

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Introduction: Dementias are a social and health priority for the elderly due to their high prevalence, being the main cause of irreversible functional impairment and disability, and their impact on affected individuals, families, and caregivers. They also overload health and social systems. The fragmented social and health environment results in late diagnosis and underdiagnosis, and stigmatization that delays diagnosis.

Objective: Reduce fragmentation in the approach to elderly people with dementia by facilitating professional training from preventive measures to possible treatments, controlling behavioral and psychological symptoms, and establishing care and end-of-life plans.

Material and methods: Consensus protocol between Primary Care (PC) and Specialized Care (SC-G), based on Comprehensive Geriatric

Assessment. Inter-level coordination at all stages of the disease. Advanced decision planning and/or advance directives.

Phases: Early diagnosis, continuous follow-up, agile referral criteria, simplified screening tools, and monitoring cognition, functionality, and psycho-behavioral symptoms.

Results

Prevention levels: Primary prevention: Lifestyle and dietary habits, cognitive training, cardiovascular risk factor control, training, and active aging promotion. Prodromal symptoms checklist and screening tools.

Secondary prevention: In incipient cognitive impairment/preclinical disease. Avoid duplication in procedures and reduce waiting times.

Referral criteria: Telematic consultations to prioritize initial consultations and reduce unnecessary follow-ups.

Pharmacological monitoring: Treatment initiation and withdrawal criteria.

Individualized approach to BPSD (Behavioral and Psychological Symptoms of Dementia) in the person's natural environment.

Conclusions: Primary Care (PC): Prevention, early detection, basic tests, continuity of care, and follow-up until end of life.

Specialized Care-Geriatrics: Specific care, neuroimaging tests, diagnostic confirmation, continuity of care, and support to Primary Care teams.

P-0303

Quality of care in dementias through interdisciplinary team primary care an geriatric department

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Introduction: Dementias are a social and health priority for the elderly due to their high prevalence, being the main cause of irreversible functional impairment and disability, and their impact on affected individuals, families, and caregivers. They also overload health and social systems. The fragmented social and health environment results in late diagnosis and underdiagnosis, and stigmatization that delays diagnosis.

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Conclusions: Primary Care (PC): Prevention, early detection, basic tests, continuity of care, and follow-up until end of life.

Specialized care-geriatrics: Specific care, neuroimaging tests, diagnostic confirmation, continuity of care, and support to Primary Care teams.

P-0304

Delirium and cognitive decline in an older adult: varicella zoster virus or Lewy body dementia?

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Introduction: Acute behavioral deterioration in older adults represents a diagnostic challenge, especially in patients with underlying cognitive impairment. We present the case-report of an 82-year-old woman with a history of hearing loss, hypothyroidism, and suspected dementia, who developed severe agitation and complex visual hallucinations.

Clinical history: Previously independent patient. Since 2 years ago, mild cognitive symptoms, fluctuating and initially attributable to her hypoaacusis, are evidenced. She is admitted to the hospital and the family reports that 2 months ago she began to speak alone and to present isolated delirious ideas. The picture worsens with visual hallucinations, delusions of persecution and heteroaggressiveness. She was found with intense psychotic symptoms and self-care neglect.

Functional assessment: Abrupt deterioration in functionality. She went from being independent for basic activities of daily living to requiring constant supervision.

Physical examination and management of complementary tests: Disoriented patient, with complex visual hallucinations, inattention, preserved gait and no clear neurological focalities. Cranial tomography shows moderate atrophy and ischemic lesions. Cerebral spinal fluid positive for Varicella-Zoster.

Treatment and evolution: We started treatment with intravenous acyclovir with partial improvement. Psychopharmacological treatment was adjusted. Herpetic meningoencephalitis on underlying Lewy body dementia is suspected.

Conclusion: This case highlights the importance of a comprehensive geriatric approach to acute behavioral changes. Varicella zoster virus infection can manifest as psychotic delirium in elderly patients. Early diagnosis and treatment improves prognosis and allows individualized management in patients with cognitive comorbidity.

P-0305

Perceived quality of life over time in a dementia village: longitudinal findings from “Il Paese Ritrovato”

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Introduction: Transitioning to a protected care setting may reduce autonomy in people with dementia. Literature emphasizes that maintaining engagement in decision-making and daily routines is crucial to preserving autonomy and quality of life (QoL). This study evaluates the evolution of perceived QoL over time among residents of the Alzheimer village “Il Paese Ritrovato” using the Quality_VIA structured interview.

Methods: We performed a retrospective analysis of repeated Quality_VIA interviews administered every six months from 2019 to 2024. Residents with MMSE scores below 13 were excluded due to limited ability to self-report. A total of 155 assessments were collected and integrated with clinical and psychosocial data from the residents’ health records. Quality_VIA covers multiple domains of perceived well-being including environment, relationships, autonomy, and activity engagement.

Results: Sixty residents were included (mean age 83.2 ± 7.1 years; 73.3% female; mean education 9.2 years). Baseline MMSE averaged 19.9/30. The initial Quality_VIA score indicated high perceived QoL (mean = 101.4/136), particularly in domains such as staff relationships, environmental satisfaction, and fulfilment of basic needs. A linear mixed-effects model showed no significant change in QoL over time ($p = 0.229$), suggesting overall stability despite disease progression.

Key conclusions: “Il Paese Ritrovato” supports a model of dementia care focused on autonomy, meaningful activity, and social inclusion. Despite the natural progression of cognitive decline, residents consistently report high QoL, highlighting the potential of village-style settings and person-centred approaches to preserve well-being over time.

P-0306

OPEN MIND: Optimising pharmaceutical care by enhancing medicines management in dementia

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Introduction: People living with dementia (PlwD) frequently report difficulties managing medicines at home but support options are generally limited. Barriers to medicines management in this group are well described, but there is limited research on interventions to optimise pharmaceutical care.

The aim of OPEN MIND is to develop interventions to improve pharmaceutical care for PlwD in their own homes, who have no formal care support, by enhancing their experience of the medicine journey from prescribing, to administering, and disposal.

Methods: This project will be undertaken in two parts:

1. A scoping review is underway to identify empirical evaluations of interventions or assistive technologies to improve pharmaceutical care for PlwD, understand how these were evaluated, their outcomes, and how PlwD were involved with intervention development. PRISMA-ScR and the JBI manual were used to design the review.
2. A group of PlwD will be established to review and add to the interpretation of the findings of the scoping exercise and develop a

plan to co-design and test an intervention or technology to improve pharmaceutical care that could be implemented in clinical practice.

Results: Preliminary database searches in Medline, Embase, Cinahl, AGM Digital, and Cochrane Library identified 16,160 results published between Jan 2015 and March 2025.

Conclusions: Our project will provide an overview of interventions that have been trialled to improve pharmaceutical care for PlwD and provide an insight into what has been successful, and barriers to implementation. This will inform a co-designed intervention for people to maintain medication independence at home.

Best poster

Cognition and dementia

P-0307

Brain-derived tau as a marker for Alzheimer’s disease-related neurodegeneration in Alzheimer’s disease and dementia with Lewy bodies

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Introduction: Total tau-protein in blood correlates poorly with cerebrospinal fluid (CSF) tau concentrations. In contrast, the novel blood-based brain-derived tau (BD-tau) correlates well with CSF tau and is a promising new biomarker. Plasma phosphorylated tau (p-tau217) shows high performance in identifying AD pathology. Alzheimer pathology is common in dementia with Lewy bodies (DLB) and has important clinical impact. We wanted to determine, for the first time, the serum concentration of BD-tau in DLB.

Methods: 90 patients with AD and 58 patients with DLB were included from the longitudinal DemWest cohort study. Controls were cognitively normal individuals without AD pathology. BD-tau and p-tau217 were both analyzed at Sahlgrenska University Hospital.

As BD-tau and p-tau217 concentrations were not normally distributed, non-parametric statistical tests were used (Mann–Whitney, Kruskal–Wallis). Groups were compared utilizing the chi-square test, the Mann Withney test, the Kruskal-Wallis test and the Wilcoxon signed rank test, as deemed appropriate.

Results: BD-tau and p-tau217 were both significantly higher in AD and DLB than to healthy controls. BD-tau were similar in both AD and DLB in contrast to p-tau217 who were notably higher in AD compared to DLB.

Conclusions: BD-tau levels were higher in AD and DLB patients compared to healthy controls, with no significant differences observed between the two diagnoses.

P-tau217 levels were more elevated in the AD group compared to the DLB group.

Further studies are necessary to determine whether BD-tau reflects the intensity of neurodegeneration in individual patients, and to what degree BD-tau concentrations in DLB reflect comorbid AD pathology.

Poster

Cognition and dementia

P-0308

Improving patient and public involvement (PPI) in dementia research: building conditions for impact

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Dementia presents a significant challenge to healthy ageing, and inclusive research is essential to address it. Involving people with lived experience of dementia enhances research relevance and impact. However, standard involvement practices may not be well-suited to their needs. This project aimed to understand what supports meaningful involvement and how researchers can better engage people living with dementia.

Method: We collaborated with experts by experience (people living with Dementia) and dementia researchers to explore current PPI activities within UK-funded dementia research. Mixed method data collection included an online questionnaire, structured conversations and web searches. Data was organised in MAXQDA and visually mapped in MindGenius, identifying patterns and gaps.

Results: Thirty-eight participants, including researchers, healthcare professionals, funders, and experts by experience, contributed. Findings highlighted the need to tailor involvement to individuals' capabilities and preferences, avoiding assumptions about ability. Creative methods were particularly useful for engaging non-verbal individuals and supporting expression. Participants emphasised the value of relational, rather than task-based, approaches and stressed the importance of being open to learning from lived experience. Barriers included inflexible funding mechanisms, limited resources, and poor understanding of involvement principles. They emphasised the need for clearer funder guidance, ethical frameworks, and safe, inclusive spaces for co-learning.

Key conclusions: Promoting good practice in PPI for people with dementia is critical to enhancing both research and impact. This work seeks to highlight examples of relational approaches that foster co-learning and positive change, and addresses structural barriers, providing supportive frameworks to achieve impactful and inclusive dementia research.

P-0309

The role of age and frailty in mental health among older adults

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Introduction: Mental health is crucial in aging, influencing disability, healthcare costs, and mortality. While chronological age is traditionally linked to mental decline, frailty—a marker of bio-logical age—may be a stronger predictor. This study examines the impact of chronological age and frailty on mental health conditions in older adults.

Methods: We conducted a cross-sectional study of 219 patients aged 65 or older from a geriatric hospital consultation. Among the 50 variables collected, six pertained to mental health: cognitive impairment level and the presence of mood, sleep, behavioral, and psychotic disturbances. Frailty was assessed using the Clinical Frailty Scale (CFS). After descriptive analysis, regression analyses explored associations between mental health and sex age, and frailty.

Results: Participants had a mean age of 82.65 (+ -0.98) years, a CFS score of 4.85 (+ -0.22), and a CIRS-G score of 12.9 (+ -0.68). The most prevalent mental health condition was cognitive impairment (53.9% [47.3–60.5]), followed by mood (44.3%), sleep (42.5%), behavioral (26.0%), and psychotic (24.7%) disturbances. Frailty was the only factor significantly associated with all mental disturbances and strongly predicted cognitive impairment ($B = 0.858$, $p < 0.001$, $R^2 0.546$), behavioral disturbances ($\text{Exp}[B] = 4.238$, $p < 0.001$, $R^2 0.519$), and psychotic disturbances ($\text{Exp}[B] = 3.799$, $p < 0.001$, $R^2 0.480$). However, chronological age had no significant impact and was inversely related to mood and psychotic disturbances.

Key conclusions: Attributing mental health disorders solely to chronological age may reflect ageist biases. Incorporating frailty assessment may enhance early diagnosis and individualized mental health management in older adults.

Short poster presentation

Cognition and dementia

P-0310

Comparison of cognitive screening instruments in the SHARE Harmonized Cognitive Assessment Protocol (SHARE-HCAP)

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Background: There is no established cognitive screening instrument (CSI) available in the Survey of Health, Ageing and Retirement in Europe (SHARE). One suggestion is a brief 3-item CSI, the SHARE-Cog, including 10-word recall tasks (immediate and delayed) and semantic verbal fluency (animal naming).

Methods: Ten short CSIs were operationalized in the SHARE wave 9 (2021/22): the 10-point Cognitive Screener, the Langa–Weir criteria, Mini-Cog, Six-Item Screener, 20-word recall, the Cognitive Impairment Index, the recently-validated SHARE cognitive instrument (SHARE-Cog) and CSIs following similar item scoring systems as the Standardised Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MoCA), and Quick Mild Cognitive Impairment (Qmci) screen. Approximately five months later a probabilistic cognitive status was identified using more in-depth participant and informant questionnaires in the SHARE Harmonized Cognitive Assessment Protocol (SHARE-HCAP) study. Diagnostic accuracy was measured using Area Under the Receiver Operating Characteristic curve (AUC).

Results: A total of 2,154 participants were included, mean age 76.24 (SD: 7.09); 53% were female. Participants were categorized as: probable dementia ($n = 172$), mild cognitive impairment (MCI, $n = 548$) and normal cognition (NC, $n = 1434$). For dementia all CSI had good diagnostic accuracy with AUC values between 0.81 to 0.88, with the most accurate being the SHARE-Cog and the batteries resembling the Qmci screen and MoCA (pairwise p -values > 0.05). For cognitive impairment (dementia + MCI) AUC varied between 0.68 and 0.77.

Conclusion: Multiple short cognitive screens were developed using SHARE-HCAP study data. The SHARE-Cog had comparable good–excellent accuracy for cognitive impairment and is a valid CSI for use in SHARE.

Poster

Cognition and dementia

P-0311

Evaluation of a decision tree for screening major neurocognitive disorders and delirium

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Introduction: This study evaluates a decision tree for detecting major neurocognitive disorders (MND), delirium and the association of these two conditions in older adults. It combines four validated tests, including delirium assessment, to address the need for rapid and effective screening algorithm. The primary objective is to assess its efficacy and feasibility in diagnosing MND, delirium and their association in community and hospital settings.

Methods: A diagnostic validation study was conducted on patients > 70 years, recruited from primary care and geriatric hospitalization units. The algorithm integrates four validated tools: CODEX as the initial screening tool, CAM to rule out delirium if CODEX was abnormal, MoCA for MND screening in the absence of delirium, and IQCODE-R to search for MND in the presence of delirium. Outcome was the agreement between the diagnoses provided by the decision tree and those issued from DSM-V diagnosis criteria (reference).

Results: We included 130 patients with a mean age of 82.7 years. The algorithm's average completion time was 12.6 min, with a maximum of 18 min. CODEX was abnormal in 88 patients (68%), while CAM identified delirium in 38 patients (43%). Among patients without delirium, MoCA screened MND in 42 cases (84%). IQCODE-R identified MND in 27 cases (71%) among those with delirium. Cohen's kappa coefficient was 0.89 indicating an excellent agreement.

Key conclusions: This clinically based decision tree is a simple, rapid, reliable and effective screening tool for MND and delirium.

Further research is needed to evaluate its application in routine practice.

P-0312

Repetitive transcranial magnetic stimulation (rTMS), a promising therapeutic approach in the management of Alzheimer's disease: a scoping review

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Introduction: Repetitive transcranial magnetic stimulation (rTMS) is a non-invasive method used to treat depression, Parkinson's disease, and neuropathic pain. Research on rTMS in Alzheimer's disease (AD) is rapidly expanding. This scoping review aims to analyze existing literature on rTMS for AD in patients aged over 70.

Methods: We searched «Alzheimer» AND «Transcranial Magnetic Stimulation» on PubMed and the Cochrane Database of Controlled Clinical Trials (CENTRAL) from inception to 1st August 2024. Included studies focused on patients diagnosed with AD per DSM5 criteria, assessed via internationally validated cognitive scales, aged > 70 years, and treated with rTMS. Two authors independently conducted study selection. The scoping review adhered to the PRISMA 2018 extension guidelines for scoping reviews.

Results: From 756 initially identified articles, we included 24 studies comprising 16 randomized controlled trials conducted on 736 patients. In 8 studies, rTMS was combined with cognitive training. The most frequent stimulation sites associated with benefits in AD were the dorsolateral prefrontal cortex, precuneus and left parietal cortex. Intensity was individually calibrated based on the patient's motor threshold (MT). Stimulation intensity varied between 90 and 120% of MT depending on the target region. High-frequency rTMS protocols (10 Hertz) and protocols involving more than 20 sessions appear most effective for slowing cognitive decline.

Key conclusion: rTMS appears to be a promising therapeutic approach in the management of Alzheimer's disease. This scoping review consolidates information on how it is implemented in the literature, paving the way for larger-scale studies.

Short poster presentation

Cognition and dementia

P-0313

Change in sleeping duration, cognitive decline and incident dementia

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Introduction: This study investigates associations between changes in nighttime sleep duration and cognitive decline and risk of incident dementia.

Methods: A total of 3057 participants from the Swedish aging study “Gott äldre i Skåne” (Mage = 68.4) with normal baseline sleep duration (6–8 h) were followed over time (Myers = 4.97). Self-reported change in sleep duration was considered shortened or prolonged if the participant had lost or gained over 1 h since the previous study visit. Cognitive decline was assessed using an aggregated measure of global cognition. Mixed linear models examined the effect of sleep change on cognitive trajectories, adjusting for multiple health related factors, including time spent in bed without sleeping. Cox proportional hazard models estimated the risk of all cause dementia.

Results: Prolonged sleep (> 1 h increase) and shortened sleep (< 1 decrease) throughout the study was associated with significant cognitive decline in fully adjusted models. Moreover, shortened sleep associations were only significant when adjusting for time spent in bed. Results also show sleep change preceding cognitive decline. There was 113% increased risk of dementia (HR: 2.13, 95% Confidence Intervals (CI): 1.67–2.71) for prolonged sleep and a 53% increased risk for shortened sleep (HR: 1.53, 95% CI: 1.05–2.22).

Key conclusions: Longitudinal changes in sleep duration, particularly prolonging sleep, were associated with cognitive decline and increased dementia risk. Findings highlight the importance of controlling for time spent in bed without sleeping as individuals may overestimate sleep duration. Individual changes in sleep duration may serve as a risk marker for cognitive decline.

Poster

Cognition and dementia

P-0314

The role of cyproterone acetate in addressing sexual disinhibition in elderly individuals with dementia

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Introduction: Sexual disinhibition in elderly individuals with dementia poses significant challenges for caregivers and lacks established treatment options. This study explores the efficacy of low-dose cyproterone acetate (CPA), an antiandrogen, in managing inappropriate sexual behaviors in patients with moderate-to-severe dementia. CPA inhibits androgen action and has shown promise in reducing sexual disinhibition, though further research is needed to confirm its safety and effectiveness [1].

Methods: A retrospective case series study was conducted at the geriatric outpatient clinic of Hospital Universitario Infanta Sofía. 7 male patients aged 85–92 with moderate-to-severe dementia (assessed using the Global Deterioration Scale, GDS) and exhibiting inappropriate sexual behaviors were treated with CPA (50 mg daily). Functional status was evaluated using the Barthel Index, and treatment outcomes were assessed based on behavioral improvements and side effects.

Results: All patients showed favorable responses to CPA, with significant reductions in sexual disinhibition and associated problematic behaviors. Improvements were observed in quality of life for both patients and caregivers, reducing caregiving burden. However, one patient experienced increased disinhibition after discontinuation of CPA, highlighting the need for continued treatment in some cases.

Key conclusions: CPA is an effective pharmacological intervention for managing sexual disinhibition in elderly patients with dementia. While the results are promising, further research is needed to establish standardized guidelines and evaluate long-term safety. A holistic approach, combining pharmacological and non-pharmacological strategies, is recommended for comprehensive management of behavioral disturbances in dementia.

P-0315

Updating Australia’s clinical practice guidelines for people living with dementia

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Introduction: A multidisciplinary team of clinicians, researchers, people living with dementia, carers and organisations that support people with dementia are updating Australia’s 2016 Dementia Guidelines.

Methods: We are using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) process. Where possible, we are leveraging existing evidence synthesis (Adolopment) including from the Scottish Intercollegiate Guidelines Network (SIGN) Guidelines and the Italian Guideline on Diagnosis and Treatment of Dementia and Mild Cognitive Impairment. The diverse Guideline Development Group includes Aboriginal and Torres Strait Islander peoples, people from rural and remote areas, LGBTQIA + people, people living with disability and those from culturally and linguistically diverse backgrounds. Guideline development is supported by a Living Experience Advisory Group. Our integrated knowledge translation and implementation team is consulting with priority populations and external interest holder organisations to design resources to assist guideline implementation.

Results: A series of surveys and workshops were conducted with interest holders to establish the scope and prioritise 12 clinical questions for updating. Consultation occurred with over 45 interest holder organisations. The clinical questions relate to risk reduction, diagnosis and therapies (e.g. screening tools, biomarkers, anti-amyloid therapies, driving) and post-diagnostic care (e.g. non-pharmacological therapies for changed behaviours, pain management, end-of-life care). Guideline development group meetings are being conducted from May to December 2025.

Key conclusions: The guideline format will allow for the rapidly changing landscape of dementia prevention, diagnosis and care, with the potential for transition to living guidelines in future iterations.

Future collaboration and evidence sharing is welcomed to support guideline development.

Short poster presentation

Cognition and dementia

P-0316

Using scores from the 4AT delirium detection tool as an indicator of possible dementia: a study of 75,221 older adult hospital admissions

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Introduction: Overall dementia diagnosis rates are substantially below true rates. Hospital admissions of older people involve cognitive and functional assessments relevant to dementia diagnosis. These assessments could be harnessed in dementia diagnostic pathways. Yet relationships of inpatient delirium and/or cognitive tests with known dementia are unclear. The 4AT (www.the4AT.com) assesses for delirium (scores 4–12), and cognitive impairment via embedded cognitive tests (scores 1–3). We investigated relationships between 4AT scores and known clinical dementia diagnosis.

Methods: We included participants aged ≥ 65 years admitted as medical emergencies to three hospitals in Scotland, UK, from 01/04/2016 to 01/04/2020, who had the 4AT performed on admission. Clinical dementia diagnosis was ascertained from linked primary care, hospital discharge, and community prescribing data.

Results: Of 75,221 admissions, 62,188 (82.7%; 33,625 unique patients; mean age 80.2 years; 55.8% female) had a 4AT on admission. Of these, 9948 (16.0%) had a recorded dementia diagnosis at the time of admission, with a further 1197 (1.9%) receiving a new diagnosis at discharge. Of admissions with dementia, 9669/11145 (86.8%) had 4AT score ≥ 1 on admission, compared to 14,994/51,043 (29.4%) without dementia.

4AT ≥ 1 had a sensitivity of 0.87 (95%CI 0.86–0.87) and specificity of 0.71 (0.70–0.71) in relation to clinical dementia diagnosis. 4AT ≥ 4 showed sensitivity of 0.50 (0.50–0.51) and a specificity of 0.88 (0.88–0.88).

Conclusions: 4AT scores were associated with clinically diagnosed dementia. These results suggest that routinely collected 4AT scores could be leveraged alongside other clinical indicators to identify patients with possible undiagnosed dementia requiring further inpatient diagnostic assessment and/or post-discharge specialist follow-up.

Poster

Cognition and dementia

P-0317

The influence of errorless learning method in cognitive rehabilitation on cognitive performance of stroke patients

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Purpose of the study: The aim of the study was to describe the application and effectiveness of errorless learning in cognitive performance of stroke patients.

Methods: The study included 40 people after a stroke that occurred no longer than 3 months from the date of the first examination. The study used methods such as an original rehabilitation plan created based on the errorless learning method and the ACE-III scale. The research group that took part in self-training sessions based on the error-free learning method consisted of 20 people. The exercises lasted 2 months and took place twice a week, and a single session lasted 30 min. The survey took place at the beginning of the project and after 2 months.

Results: Descriptive statistics showed significant results in the sub-scales of the ACE-III test, such as verbal fluency, language functions, visual-spatial functions and attention. Nonparametric analyses using the Mann–Whitney test showed significantly higher results in the study group in terms of attention and verbal fluency.

Conclusions: The original exercise plan allows the program to be tailored to the specific needs of the test participants, enabling intensive training of a number of cognitive functions. Based on preliminary reports, a beneficial effect of rehabilitation on verbal fluency and attention of the subjects can be observed.

Short poster presentation

Cognition and dementia

P-0318

post-intervention effects of a 5-year exercise intervention on odour identification performance in older adults: a generation 100 substudy

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Introduction: Impaired odor identification (OI) is considered an early marker of Alzheimer's disease, making it essential to identify modifiable factors that could mitigate OI decline. In this study, we investigated the post-intervention effects five years after a 5-year exercise intervention on OI in older adults.

Methods: A total of 388 older adults (born 1936–42) from the Generation 100 randomized controlled trial were randomly assigned

2:1:1 to a control group following national physical activity guidelines (≥ 30 min physical activity almost daily) or two weekly sessions of moderate-intensity continuous training (MICT) or high-intensity interval training (HIIT) for 5 years. Post-intervention follow-up was conducted 10 years after baseline. The Sniffin' Sticks Odour Identification Test was used to assess OI at 10-year, while peak oxygen uptake (VO₂peak) was measured at baseline and 10-year. General linear models assessed group differences in OI and associations between VO₂peak and OI.

Results: There were no group differences in OI at 10-year. Further, no associations were found between baseline VO₂peak, 10-year VO₂peak, or change in VO₂peak from baseline to 10-year with OI across all participants. The mean score of correctly identified odours was 11.0 ± 2.7 . Three odours (fish, peppermint, orange) were correctly identified by more than 85% of the participants. The two least correctly identified odours were lemon (48.2%) and cinnamon (45.1%).

Key conclusions: Neither 5 years of MICT nor HIIT benefited OI performance five years later compared to following national physical activity guidelines, suggesting that structured exercise and regular physical activity result in similar OI performance in older adults.

Poster

Cognition and dementia

P-0319

HIV infection accelerates age-associated cognitive impairment in older adults

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Introduction: Globally in 2023, out of the 39.9 million people living with HIV, 25% were ≥ 50 years old. Previous studies have indicated that HIV infection has the propensity to increase age-associated cognitive decline. Hence, the objective of the study was to determine the impact of HIV infection on cognitive function in older adults living with HIV (OALWH).

Methods: 60 HIV + subjects (mean age = 59.52) and 64 HIV- subjects (mean age = 68.3) were compared using Student's t-tests for continuous variables and Chi-squared tests of independence for categorical variables. Screening for cognitive impairment was performed by Montreal Cognitive Assessment (MoCA) and depression scale was assessed using Center for Epidemiology Studies Depression Scale (CES-D). Multiple linear regression was performed adjusting for several variables including CD4 count.

Results: 30 HIV + subjects (50%) had a MOCA score < 26 vs. 12 (19%) in the HIV- group. Adjusting for age, subjects who were HIV + had 7.31 times higher odds of cognitive impairment (95% CI: 2.70–22.21, $p = < 0.001$). Also, when controlling for age, MoCA scores were affected by HIV + status with a 2.81 (95% CI: -4.15 , -1.47 $p < 0.001$) point decrease and by higher CES-D scores with a 0.09 (95% CI: -0.17 , -0.01 , $p = 0.028$) point decrease. When adjusting for age and log CD4 count, a CES-D score ≥ 16 correlated to a 2.11-point decrease in MoCA. (95% CI: -4.18 , -0.04 , $p = 0.046$).

Conclusions: Our data indicate that HIV infection can accelerate and exacerbate age-associated cognitive impairment in OALWH, raising

concerns regarding increased incidence of dementia in the following years.

P-0320

Peripheral blood biomarkers and patient profiles for non-oncological pain detection in palliative care

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This study investigates the use of peripheral blood biomarkers for identifying and characterizing pain in patients with advanced dementia under palliative care, a population where pain is often underdiagnosed due to compromised self-reporting. Fifty-three patients with non-oncological diseases were analyzed in a cross-sectional study using medical and nursing records. Thirteen biomarkers related to monocytes and platelets were assessed alongside patient-specific characteristics such as renal function, nutritional status, and age.

Key findings revealed significant relationships between chronic pain and advanced age, dementia, reduced glomerular filtration rate (GFR), and malnutrition, measured through the Mini Nutritional Assessment (MNA). Biomarkers such as total monocytes, classical monocytes, CD206 expression in monocytes, and CD163/CD206 ratio emerged as potential predictors of pain. Statistical analyses highlighted the challenges of multicollinearity among variables such as age, GFR, and nutritional status. Classification models indicated that all patients over 65 years reported pain, with monocyte profiles further distinguishing pain severity.

This study corroborates prior evidence linking chronic pain to aging, nutritional deficits, and renal impairment while identifying novel peripheral blood biomarkers for pain assessment in non-communicative patients. Limitations include the small sample size, cross-sectional design, and lack of exploration into treatment history and pain duration. Future research with larger cohorts is needed to validate these findings and refine predictive models. This work emphasizes the potential of biomarkers to improve pain detection and management in dementia patients, contributing to personalized and effective palliative care strategies.

Short poster presentation

Cognition and dementia

P-0321

Predictors of functional decline in community-dwelling older people with dementia: systematic review and meta-analysis

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Introduction: Dementia impairs daily functioning, but its progression varies widely among individuals. Identifying key predictors of activities of daily living (ADL) decline in older adults with dementia could help explain this variability. We aimed to identify independent predictors of ADL decline in community-dwelling older adults with dementia.

Methods: A systematic review was conducted using PubMed, EMBASE, Cochrane CENTRAL, CINAHL, and PsycINFO, covering all studies from inception to February 2024. Eligible studies had a longitudinal design, included individuals aged 65 or older, were community-dwelling, and had a formal dementia diagnosis. Two independent authors performed title/abstract screening, full-text screening, data extraction, and assessed quality with the Quality in Prognosis Studies tool. The protocol was preregistered on PROSPERO: CRD42024502839.

Results: A total of 5,939 records were screened, with 93 undergoing full-text review. Eighteen studies from 12 datasets, encompassing 7,965 participants, met inclusion criteria. Ten datasets focused exclusively on Alzheimer's disease. The most frequently studied predictors were age (15 studies), global cognitive function (14), gender (12), and education (10). Fewer studies examined multimorbidity (6) or polypharmacy (3), and none investigated frailty. Meta-analysis found no significant effect of age (SMD: 0.0, 95% CI: -0.1 to 0.1) or gender (SMD: 0.2, 95% CI: -0.3 to 0.7) on ADL decline. All but one study had high risk of bias due to selection and attrition.

Key conclusions: Age and gender may not significantly influence ADL decline in community-dwelling older adults with dementia. Evidence remains limited on the impact of common geriatric conditions, including multimorbidity, polypharmacy, and frailty.

Poster

Cognition and dementia

P-0322

The impact of sleep disorders on cognitive decline: a multidisciplinary approach

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Introduction: Sleep disorders are common in patients with cognitive decline and may accelerate the progression of neurodegenerative diseases. This study analyzes the relationship between sleep disorders and cognitive decline in a cohort of older adults.

Methods: A total of 150 patients aged 65 years or older were evaluated between January 2024 and December 2024. Data included clinical history, sleep quality questionnaires (PSQI), and polysomnographic studies in selected cases. The association between sleep parameters and cognitive performance was explored using standardized neuropsychological tests.

Results: Sixty-five percent of patients showed significant alterations in sleep quality, with obstructive sleep apnea (30%) and chronic insomnia (25%) being the most prevalent disorders. Patients with sleep disorders performed worse on memory and executive function tests. Multidisciplinary interventions, including cognitive-behavioral therapy and respiratory management, improved sleep quality and cognitive performance in 70% of cases.

Conclusions: Sleep disorders significantly contribute to cognitive decline in older adults. Early detection and multidisciplinary treatment are essential to mitigate their impact and optimize the quality of life for these patients.

P-0323

Memory clinic: retrospective study of Alzheimer's disease diagnosis via cerebrospinal fluid analysis

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Introduction: Dementia is one of the leading causes of disability in older adults, significantly impairing the quality of life of both patients and caregivers. The application of a Comprehensive Geriatric Assessment (CGA) enables the identification of medical, functional, cognitive, nutritional, and psychosocial factors that influence the progression and management of dementia-related conditions.

Methods: A prospective observational study was conducted involving 150 patients aged ≥ 75 years, referred to a Geriatrics outpatient clinic for suspected dementia. Initial evaluation included clinical history, neuropsychological testing, and functional assessment scales. Complementary diagnostic tests (brain CT or MRI, and cerebrospinal fluid biomarkers: beta-amyloid, total tau, phosphorylated tau) were performed. All patients underwent CGA, covering medical, cognitive, functional, nutritional, frailty, and social domains, with special attention to identifying modifiable factors.

Results: Final diagnoses were: 58% Alzheimer's disease, 28% mixed dementia (vascular + degenerative), and 14% other dementias (Lewy body, frontotemporal, or secondary causes). The CGA uncovered previously undiagnosed comorbidities in 36% of cases and led to therapeutic adjustments in 72%. Reversible factors such as malnutrition and polypharmacy were identified in one-third of patients, contributing to notable improvements in function and quality of life.

Conclusions: Comprehensive Geriatric Assessment proves to be a key tool in the diagnosis and management of dementia, supporting a multidimensional and patient-centered approach. Its routine integration into geriatric clinical practice should be encouraged to enhance care outcomes and promote active aging in older adults with cognitive impairment.

P-0324

Memory clinic: retrospective study of Alzheimer's disease diagnosis via cerebrospinal fluid analysis

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Introduction: The memory clinic is a key resource in evaluating cognitive disorders. This study examines the utility of cerebrospinal fluid (CSF) as an advanced diagnostic tool for Alzheimer's disease (AD) and its relationship with cerebral vascular alterations.

Methods: Between January and December 2024, a retrospective analysis of 107 patients evaluated in a memory clinic was conducted. Lumbar punctures were performed on 87% of patients, and

neuroimaging studies were analyzed to identify small vessel lesions. Clinical data, CSF biomarkers, and radiological findings were collected.

Results: Among the patients evaluated, 87% were diagnosed with AD through CSF analysis, which showed typical alterations of associated biomarkers. Neuroimaging revealed small vessel lesions in 75%, suggesting a significant impact of vascular pathology on cognitive decline. The mean age was 76 years, with a female predominance of 55%. Early interventions were initiated in 60% of cases, focusing on cognitive management and progression prevention.

Conclusions: The combined use of CSF biomarkers and neuroimaging is essential for accurate and early diagnosis of AD. This approach allows for the identification of contributory vascular factors and facilitates multidisciplinary interventions aimed at improving patients' quality of life.

P-0325

Dementia diagnostics: many older patients opt-out or prefer primary care

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Introduction: Dementia is a clinical diagnosis that a general practitioner (GP) or a medical specialist can make. The diagnostic process often begins with a GP consultation, during which the GP and patient decide whether to pursue further diagnostics. This study explores how many older patients with memory complaints wish to undergo diagnostics and their preferences for the location of these diagnostics.

Method: Retrospective study within the ongoing PRIMED study, a randomized clinical trial comparing long-term outcomes and cost-effectiveness of dementia diagnostics in primary care versus memory clinics. We identified patients aged 70 + who consulted their GP for memory complaints (ICPC-code P20) using electronic medical records from 20 general practices between July 2023 and January 2024. We assessed the number of patients asked to participate in PRIMED and examined reasons for non-participation.

Results: 219 patients visited their GP for memory complaints. Of these, 43 patients (19.6%) were invited to participate in PRIMED. Among the 176 patients not asked, 57 (32.4%) did not want further diagnostics. Of the 43 patients asked, four (9.3%) agreed to participate in PRIMED, fifteen (35%) chose not to participate because they preferred diagnostics in primary care, and fourteen (32.5%) declined because they did not want diagnostics at this moment.

Conclusion: Approximately one-third of older patients who visit their GP for memory complaints do not want further diagnostics at that time. Furthermore, one-third of patients open to further diagnostics prefer to remain in primary care. This underscores the importance of dementia diagnostics at the preferred time and location.

P-0326

Relationship between hearing loss and cognitive function in older adults: a scoping review

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Background: Hearing loss and cognitive decline are conditions that have higher incidences as people age. However, reviews regarding the

specifics of preventive measures such as screening among the general or at-risk population remains a developing field. The aim of this study was to identify the value of hearing screening with respect to cognition-related outcomes.

Methods: This study followed the recent recommendations for conducting scoping reviews and is reported in accordance with PRISMA-ScR guidelines. We systematically searched the electronic databases such as PubMed and Web of Science. Studies published in English within the previous 10 years (2014–2024) were included. Screening of studies and data extraction were independently conducted by two reviewers.

Results: Thirteen included studies generally used well-known multi-domain cognitive assessments such as Mini Mental State Examination ($n = 8$) and Montreal Cognitive Assessment ($n = 3$). Several studies suggested that hearing loss may impact cognitive test performance, particularly in tests involving auditory comprehension or verbal memory. Several studies also reported that identification and treatment of hearing loss was associated with improved cognitive performance or reduced decline over time. Limited evidence was found on the effect of timing of screening. The findings of this review suggest that few studies have adequately assessed the effects of early intervention for hearing loss, identified through routine screening, and impacts on cognitive decline.

Key conclusions: There is a need for further research to determine whether routine screening and treatment for hearing loss significantly alters cognitive trajectories in general and at-risk populations and to quantify the value of such screening.

P-0327

Caregiver burden: a silent challenge in cognitive decline

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Introduction: Caring for elderly patients with cognitive disorders is a critical task. The caregiver may experience overload, which varies according to the characteristics of the patient, such as the degree of cognitive impairment, presence of depression, and functional status. This overload impacts the quality of care provided. This study aims to characterize caregivers and assess their level of burden using the Zarit Scale (ZS), trying to identify potential areas for intervention.

Objectives

- Identify the level of burden experienced by caregivers of patients with cognitive decline.
- Define the factors triggering this overload based on the characteristics of patients.

Methodology: This was a cross-sectional, descriptive study. Caregivers of patients with neurocognitive disorders were identified, and the Zarit Scale (ZS) was applied to measure caregiver burden. Demographic and clinical data of the patients were collected, including functional status (Barthel Index (BI), Lawton Index (LI)), depression presence (Yesavage Scale (YS)), and global deterioration scale (GDS-FAST) in Alzheimer's patients. Data were collected between September 2024 and February 2025 and analyzed using SPSSv25.

Results: The study included 38 patients, with a mean age of 85.13 years (± 5.4). Most primary caregivers were women (41.8%). High

prevalence of behavioral disorders (57,9%) and depression (31,6%) were observed. Patients had a mean BI of $77,6 \pm 25,4$ and a LI of $2,37 \pm 2,89$. GDS-FAST: $3,53 \pm 1,16$. The ZS showed intense burden in 21,1% of caregivers. Statistically significant relationship was found between depression (YS) and caregiver burden (ZS) ($p = 0,036$), as well as between GDS-FAST and caregiver burden ($p = 0,005$).

Conclusions: Care for patients with cognitive disorders predominantly falls on family members, with depression and worsening cognitive decline being key factors contributing to caregiver burden.

P-0328

About a tricky case of paroxysmal memory disorders in an elderly former lecturer

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Introduction: An 81 year-old woman, formerly a history & geography lecturer, presented as an outpatient with short- duration memory losses & stereotypic movement disorders.

Methods: Her 2-year-long medical history begun with unexplained falls and complex visual hallucinations. Meanwhile motor symptoms were further noticed by her surroundings such as paroxysmic events: dystonia combined with a frightened look, and memory loss, occurring night and day. These repeated seizures over short time periods led to fatigue and delirium. Post-critical confusion was also pointed out. Associated medical conditions included recently diagnosed primary high blood pressure efficiently controlled with indapamide, preserved ejection fraction during cardiologic assessment (normal besides). Though, exertional dyspnea was noticed, which may most likely be linked to exercise deconditioning. Sleep apnea were recently diagnosed, and treated with PCC with no obvious improvement on the neurologic symptoms.

Results: Electroencephalography revealed abnormal temporal waveforms that we describe, along with the clinical picture on several video-EEG. Some balance had to be found within a range of antiepileptic medications, leading to some spectacular effects; while mood control was obtained with neuroleptic medication. Neurodegenerative diseases such as Alzheimer disease are discussed given imaging and cerebrospinal fluid results; synucleinopathies were considered. Neopterin was elevated. Clinical course may be heavily curved by specific aspects of epilepsy such as transient epileptic amnesia.

Conclusion: Timely analysis, thorough clinical and neuropsychological examination and overall sense led us beyond classic nosological frameworks.

Short poster presentation

Cognition and dementia

P-0329

A cross sectional questionnaire study to explore Jordanian community pharmacist's knowledge on anticholinergic burden and their role in anticholinergic burden management among people with dementia

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Introduction: Many studies showed that people with dementia (PwD) have high anticholinergic burden (ACB) [1]. A lack of knowledge regarding dementia and anticholinergic medications use among older people and PwD has been reported among healthcare professionals [2]. This study aimed to explore Jordanian community pharmacists' (CPs) knowledge of ACB and their perceptions of the role they could play in the management of ACB amongst PwD in Jordan.

Methods: This study followed a cross-sectional survey design. The electronic questionnaire was distributed between October and December 2024. The calculated sample size was 356 using Rasoft© software. The questionnaire was piloted with eight CPs without additional amendments. The ethics committee et al.-Zaytoonah University of Jordan, granted ethical approval. Data was imported to SPSS V26 for statistical analysis.

Results: In total, 532 responses were collected. Around two third of the participants have experience as a community pharmacy for less than 10 years (76.3%). Around two third of the participants (66.7%) encountered PwD in their community pharmacy. More than half of the responders who encountered PwD identified decline in physical function (56.9%) as ACB related adverse events. Around 96% of those participants believe that discussing a patient's ACB score with them, or their designated carer/family member is relevant to their role as a CP. CPs who have higher qualifications ($P > 0.01$) identified more ACB related adverse events.

Key conclusions: This study showed a lack of knowledge among CPs in Jordan. Future qualitative studies should explore how CPs could contribute to the management of ACB in PwD.

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Poster

Cognition and dementia

P-0330

The role of brain and inflammatory biomarker profiles in neurocognitive disorders

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Introduction: Neurocognitive disorders (NCDs) such as mild cognitive impairment (MCI) and early-stage dementia (ESD) involve progressive cognitive decline driven by neurodegeneration and inflammation. This study explored associations between cognitive function, plasma biomarkers, clinical and demographic factors in NCDs.

Methods: 89 adults aged over 60 (cognitively healthy (HC) = 32, MCI = 32, ESD = 25) underwent cognitive testing (CERAD-NB, including MMSE, plus 5 additional tests). Plasma brain biomarkers (GFAP, NfL, pTau181, pTau217, A β 40, A β 42) and 14 cytokines were measured. Metadata including age, gender, education, Healthy Food Diversity (HFD) index, and medication use were included in deconfounding analysis.

Results: Cognitive domains were significantly different across groups, especially global cognition and episodic memory ($p < 0.001$). After deconfounding for age, education, HFD index, and medications, these group differences remained significant ($p < 0.05$). GFAP, NfL, and both pTau levels differed by group ($p < 0.05$) and correlated negatively with cognitive tests. Although GFAP, NfL were affected by age, deconfounding confirmed their primary relation to disease progression. The A β 42/40 ratio distinguished HC from MCI and ESD, correlated positively with cognitive tests, and remained robust after age adjustment. Elevated IL-10, IL-6, and TNF- α levels were observed in ESD and/or MCI vs HC ($p < 0.05$). IL-10 and TNF- α remained significantly associated with disease stage after deconfounding, and both showed negative correlations with multiple cognitive tests ($p < 0.05$). IL-6 was negatively associated with MMSE, executive function, and the A β 42/40 ratio ($p < 0.05$).

Conclusion: Cognitive impairment in NCDs is associated with elevated brain and inflammatory biomarkers. These associations persist after deconfounding, supporting their potential role in monitoring and tracking disease progression.

P-0331

Impact of frailty on cognitive decline from mild dementia

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Introduction: Anti-amyloid antibodies are changing the treatment landscape in Alzheimer's disease (AD). To evaluate treatment effectiveness there is a great need for both better predictions of cognitive decline in individual patients and determination of the impact of non-AD pathology on decline. Previous studies indicate that an individual frailty level influences the severity of cognitive impairment independent of neuropathological burden and increases the risk of progression from mild cognitive impairment.

Methods: The Dementia Study of Western Norway recruited persons with mild dementia, who were followed annually until death. 228 subjects with dementia with Lewy bodies ($n = 78$), AD ($n = 109$), other dementia ($n = 41$) will be included. Frailty will be evaluated with a frailty index. Linear mixed models will be used to study the impact of the frailty index as a continuous variable on MMSE and Clinical Dementia Rating scale sum of boxes as measures of severity over the first five years.

Results: In previous analyses of a subset of this cohort, more DLB (37%) than AD (19%) patients were considered as frail ($p < 0.001$) using a 0.25 cut-off value of the frailty index. We will present updated percentages, as well as the effect on decline at the conference.

Key conclusions: More knowledge is needed on the impact of frailty on cognitive decline to aid clinicians and patients in shared decision making about the new treatments. Longitudinal analyses of the impact of frailty on decline is likely to inform on this important issue.

P-0332

Correlation of vitamin B12 levels with cognitive, sleep and mood disorders in a geriatric population

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Introduction: Vitamin B12 deficiency has been associated with neuropsychiatric symptoms. In the elderly, deficiency is frequently observed. In a population of individuals aged > 65 years, attending a geriatric outpatient clinic, we examined serum B12 levels and their potential correlation with cognitive disorders, insomnia, and depressive mood.

Methods: A total of 400 patients aged > 65 years were assessed using the MMSE (Mini-Mental State Examination) for cognitive impairment, the GDS (Geriatric Depression Scale) for depression, and the ISI (Insomnia Severity Index) for insomnia. The patients were mainly ambulatory and presented for a comprehensive evaluation.

Results: In patients with B12 levels < 220 pg/ml, the mean MMSE score was 26.4, whereas in those with levels between 220 pg/ml and 500 pg/ml, the mean score was 27.2 ($p > 0.05$).

The mean GDS score was 7.75 in patients with B12 levels < 220 pg/ml and 8.14 in those with levels between 220 pg/ml and 500 pg/ml ($p > 0.05$).

The mean ISI score was 7 for patients with B12 levels < 220 pg/ml and 5.7 for those with levels up to 500 pg/ml ($p > 0.05$).

Key Conclusions: Among geriatric outpatients aged $65 +$, there was no statistically significant difference in MMSE scores in relation to B12 levels. The same was observed for the GDS and ISI scores. This may be attributed to the relatively homogeneous sample of older but self-sufficient individuals. Further studies in a larger population are warranted, particularly focusing on extreme age subgroups (> 80 years) and analyzing individual factors within the assessment scales.

P-0333

Relationship between serum neurofilament light chain (NfL) levels and key clinical parameters in a cohort of patients with and without cognitive disorders

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Objective: This study explores the relationship between serum neurofilament light chain (NfL) levels and key clinical parameters—Mini-Mental State Examination (MMS) scores, renal function, age and diagnosis—in a cohort of 103 patients evaluated at a geriatric day hospital for memory care.

Methods: Serum NfL concentrations were analyzed in relation to demographic and clinical data, including diagnostic classifications. Correlation analyses and group comparisons were conducted using scatterplots and boxplots.

Results: Serum NfL levels demonstrated a moderate positive correlation with age ($r \approx 0.39$), suggesting NfL increases with advancing age. A moderate negative correlation with renal function ($r \approx -0.53$) indicates that decreased kidney performance may contribute to elevated NfL values. An inverse relationship between MMS scores and NfL was observed, with lower cognitive scores generally associated with higher NfL levels, though the strength of this association varied across diagnostic groups.

Patients diagnosed with Alzheimer's Disease (AD) or Mixed dementia had significantly higher serum NFL levels compared to those with Normal cognition or Vascular diagnoses.

Conclusion: Serum NFL correlates with age, renal function, and cognitive status and is elevated in neurodegenerative conditions such as AD and mixed dementia. While it shows potential as a clinical biomarker, interpretation should account for age and renal function.

P-0334

Exploring spatial orientation impairments in persons with Lewy body dementia and Alzheimer's dementia

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Introduction: Impairments in spatial orientation are common in both Alzheimer's dementia (AD) and Lewy Body dementia (LBD), yet less studied in LBD. We aimed to compare various assessments of spatial orientation between individuals with AD and LBD to better understand these differences in characteristics.

Methods: We included 51 persons with AD (mean (SD) age 68.3 (6.7) years, MMSE score 23.8 (5.1) and 51% women) and 36 persons with LBD (70.4 (4.7) years, MMSE score 23.4 (3.6), 36.1% women) from the memory clinic at Oslo University Hospital. Spatial orientation was examined using the performance-based Floor Maze test (FMT), the self- and proxy reported versions of the Spatial Orientation Screening (SOS) and Questionnaire on Everyday Navigational Assessment (QuENA) and self-reported Spatial anxiety from the Wayfinding questionnaire. Higher values indicate worse performance on all outcomes.

Results: There were no significant differences between persons with AD and LBD regarding age, sex or MMSE. In total, 22% reported having been lost in familiar surroundings (AD 25%, LBD 18%, $p > 0.05$). Persons with LBD were slower on the FMT ($p = 0.012$). This association remained significant when adjusting for age, sex, MMSE and Timed-Up-and-Go. There were no significant differences on the self- and proxy reported versions of the SOS and QuENA questionnaires, nor in the Spatial Anxiety questionnaire.

Key conclusions: Persons with LBD had worse results on the performance-based FMT, while there were no differences in the self- or proxy-reported questionnaires. Clinicians should address spatial orientation in both AD and LBD patients to ensure safe mobility in society.

Poster

Cognition and dementia

P-0335

Improving pain assessment and management in older adults with cognitive impairment and/or delirium: a two-cycle audit

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Introduction: Pain in older adults with cognitive impairment (CI) and/or delirium is frequently under-recognised and under-treated. This audit assessed adherence to UK National Guidelines on pain management before and after implementing targeted educational interventions in care-of-the-elderly wards.

Methods: Cycle 1 was a retrospective review of 141 patients aged > 65 admitted between August–November 2024. Data collected included CI/delirium status, pain assessment documentation, and regular analgesia use (paracetamol [PCM], opioids, or combinations). Following Cycle 1, educational interventions were delivered through multidisciplinary teaching sessions, governance meetings, and nurse-led communication, promoting use of behavioural pain scales (e.g., Numerical Rating Scale) as the “fifth vital sign.”

Cycle 2 reviewed 71 patients post-intervention.

Results: In Cycle 1, 75% of patients had CI and 65% had delirium. Pain assessments were documented in 32.6%, with 50% receiving regular analgesia (80% PCM monotherapy). Patients with CI and/or delirium were 30% less likely to receive regular analgesia ($p < 0.05$). In Cycle 2, documented pain assessments improved significantly to 93% ($p < 0.01$); however, only 29.6% were prescribed regular analgesia.

Conclusion: Educational interventions significantly improved pain assessment compliance. However, low analgesia prescribing persisted, possibly reflecting under-recognition of pain or reliance on low pain scores. Sustained improvement may require recurring training and integration of validated pain assessment tools into electronic health records. These findings support UK guideline recommendations for multidimensional pain evaluation in cognitively impaired older adults [1–3].

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P-0337

Comprehensive geriatric assessment in nursing: detecting cognitive decline and frailty, and proposing personalized interventions

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Introduction: Population aging is a global phenomenon, characterized by increased life expectancy and a rising prevalence of chronic and neurodegenerative diseases. In Andorra, the aging index is 121.84%, with a life expectancy of 83.5 years. These demographics highlight the urgent need for interventions targeting cognitive and physical decline to improve the quality of life for older adults.

Objective: This study evaluates the efficacy and safety of a combined intervention integrating cognitive stimulation and multicomponent

physical exercise for older adults with mild cognitive impairment (MCI). The aim is to maintain or improve cognitive, functional, and emotional capacities through a comprehensive, person-centered approach in geriatric nursing.

Method: Geriatric nursing assessments were used to identify individuals with suspected MCI and/or frailty, who were subsequently referred for diagnostic confirmation and potential enrollment in a 12-week personalized intervention program. The program combined cognitive stimulation with tailored physical exercise. A total of 36 participants (mean age: 80.91 ± 5.35 years; 75% female) participated.

Results: No significant changes in cognitive function were observed. However, improvements were noted in global functional capacity, handgrip strength, emotional well-being (notably reduced depressive symptoms), and perceived quality of life.

Conclusion: This intervention, coordinated by geriatric nursing in collaboration with neuropsychology and physical training, effectively identified frailty and mild cognitive impairment. The findings highlight the pivotal role of nursing in delivering personalized, interdisciplinary care to improve outcomes in older adults.

P-0338

Management of vascular risk factors and its association with cognition among older adults

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Introduction: Vascular risk factors are linked to cognitive decline. This study evaluates the management of vascular risks (hypertension, diabetes, dyslipidemia), and their association with cognition over the two-year FINGER multidomain lifestyle intervention.

Methods: Participants ($n = 1260$, aged 60–77, at risk of dementia) were randomized 1:1 to the intervention (exercise, diet, cognitive training, and vascular risk management) or control groups. Cognition was assessed using a Neuropsychological Test Battery (NTB). Vascular risk management was based on national guidelines and the participants were grouped into: 1) no risk factor; 2) risk factor present (diagnosis, medication or abnormal values) but well-managed, and 3) risk factor present but inadequately managed.

Results: According to preliminary analyses, 924 participants had hypertension at baseline, and 69% of them were inadequately managed. 1218 participants had dyslipidemia, with 74% inadequately managed, and 261 participants had diabetes, with 21% being inadequately managed. There were no associations between risk management at baseline and cognition. After separating previously undiagnosed participants from the inadequately managed groups, undiagnosed hypertension ($n = 40$) and dyslipidemia ($n = 228$) were associated with less improvement in cognition compared to other groups. Intervention benefit on cognition did not differ by baseline vascular risk management.

Key conclusions: Vascular risk factors were common, and their management was suboptimal. The lack of significant associations between well and inadequately managed groups may be due to limited variability of both vascular risk factors and cognition, or factors such as disease duration.

P-0339

Can dementia home care become knowledge based?—A case example of quality improvements that sustained over a decade

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Introduction: In Sweden, persons with dementia are mostly cared for by home care staff with dementia training. Challenges include time limited care sessions and high staff turnovers. In 2015, a larger home care participatory action research project aimed to enable alignment with National dementia guidelines by support of university scholars as knowledge translators. Here, one of the five care teams and their four person-centered innovations, that all have sustained over a decade, is described.

Methods: The scholar collected ethnographic data like fieldnotes, observations, Likert scale- and interview evaluations from the process and used descriptive narration to depict the activities the eight care staff in the team invented. Analyses followed tenets of interpretive description by Thorne, meaning the scholar both kept an interpreting stance and posed questions about the collected field note-, factual- and evaluation data from an insider view.

Results: The process the team pursued included identifying needs; searching the literature; planning an intervention; testing and refining it. Actions included a collective contact-book for memory support; a checklist used for newcomers; a flyer presenting the staff-team and bi-weekly meetings serving both physical and social purposes. Since the implementation, staff regularly share their sustainable, innovative work.

Key conclusions: Leaning on Stake's idea "to use the peculiarities of a particular case to illuminate phenomena and magnify understanding of knowledge translation" the study illustrates how enabling staff to share stories, gain knowledge and design solutions that can be incorporated in a tight job-schedule, is beneficial for both staff and the persons with dementia.

P-0340

Time to wake up: A β and memory performance in older adults

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Introduction: Sleep disruption influences Alzheimer's disease (AD) pathogenesis through amyloid- β (A β) accumulation. However, the specific role of morning wake transition patterns in AD biomarkers and cognitive function remains unexplored.

Methods: A total of 97 community-dwelling older adults (mean age 74.4 ± 5.8 years, 46.4% women) underwent a 14-day wrist actigraphy assessment to measure the time to wake up (TWU), defined as the transition period between the initial wake time and the final rise time. Participants completed comprehensive cognitive assessments and A β -PET imaging. Logistic regression was used to examine associations

between dichotomized TWU (≤ 6.23 min/ > 6.23 min), A β status (A β + /A β –, determined by standardized visual assessment), inflammatory markers, and cognitive performance, adjusting for age, depression scores, and sleep duration.

Results: After full adjustment, extended TWU was significantly associated with higher A β deposition (OR = 4.05, 95%CI: 1.07–15.38), reduced TNF- α levels (OR = 0.18, 95%CI: 0.04–0.80), and poorer word list memory performance (OR = 2.63, 95%CI: 1.22–5.67). Participants with prolonged TWU demonstrated significantly higher rates of A β positivity (13.4% vs 5.2%, $p = 0.039$) compared to those with shorter wake transitions, despite comparable total sleep duration between groups (429.2 ± 60.0 vs 443.3 ± 66.3 min, $p = 0.520$).

Conclusions: Extended morning wake transition duration is independently associated with increased A β burden and memory impairment in older adults. These findings highlight the potential importance of morning wake patterns in AD pathophysiology and suggest that the transition from sleep to wakefulness may represent a critical period affecting both amyloid accumulation and cognitive function. Future longitudinal observational studies are needed to verify these associations over time.

P-0341

Parkinson's disease and Legal Capacity

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Objectives: One recent area of study in Parkinson Disease (PD) concerns financial capacity (FC) and medical decision-making capacity. Patients frequently make ongoing treatment and clinical trial research participation decisions and obtaining informed consent to treatment is an important medical-legal and clinical aspect of neurological practice. There are limited studies in this field.

Methods: Pubmed database has been used.

Results: Regarding treatment decisions, PD patients with dementia (PDD) have been found impaired on the three clinical standards of understanding, reasoning and appreciation. They showed better understanding of the treatment situation relative to mild Alzheimer disease patients, but more difficulty for simple decisional choices. Financial incapacity was also found in PDD. Due to executive dysfunction, which constitutes a major neurocognitive factor for incompetency in PD, even patients with cognitive impairment without dementia show impaired ability to make treatment choices, through deficits in encoding and organization of new medical information, as well as not reasoning with or personally appreciating that information. Furthermore, depression, which affects cognitive functions, is common in PD and this further complicates the assessment of capacities. In fact, PD patients' cognitive functioning and financial capacity can be negatively influenced by apathy more than depression.

Conclusions: There are limited studies regarding legal capacity assessment in PD, since deficits in capacities are often related to progressive motor dysfunction. There is need for studies regarding the relationship of specific brain areas linked to apathy and components of legal capacities in PD. Inquiries about the patient's wishes early in the course of PD, before cognitive impairment arises, are also recommended. Finally, clinicians and researchers should carefully assess decisional capacity in PD patients with cognitive impairment.

P-0342

Establishing a Brain Health Clinic to support dementia prevention: Implementation and initial feedback

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Introduction: The 2024 Lancet Commission on Dementia Prevention, Intervention and Care identifies 14 potentially modifiable risk factors that could reduce the risk of developing dementia by up to 45%. We set out to implement a community-based brain health clinic aligned with Lancet recommendations, assessing individual dementia risk, and exploring participant experiences.

Methods: A scoping review of published brain health protocols and policy documents was carried out and a ReMindUK brain health clinic protocol was devised offering risk assessment and communication, and personalised advice on risk reduction. We assessed established risk factors including: cardio-metabolic risk, anticholinergic burden, hearing/visual impairment, and lifestyle factors, alongside cognitive evaluation and a dementia risk profiling using LIBRA or UKBDRS tools. Each attendee received a personalised, goal-orientated, brain health prescription and a summary letter for their GP. Participant feedback was collected to evaluate perceived value and behaviour change potential.

Results: Feedback was overwhelmingly positive. Participants highly valued personalised risk assessments and reported that the brain health prescription was a helpful and motivating tool. All respondents stated they would recommend the clinic to others and expressed a desire for follow-up appointments. However, there was variability in the reported likelihood of implementing lifestyle changes following the visit.

Key conclusions: Our findings support the feasibility and acceptability of a preventative brain health clinic. While personalised interventions were well-received, future research should evaluate long-term behavioural outcomes, identify barriers to change, and assess the role of follow-up support, such as motivational interviewing or health coaching, in promoting sustained improvements in brain health.

Short poster presentation

Cognition and dementia

P-0343

Donanemab in early symptomatic Alzheimer's disease: additional Insights from TRAILBLAZER-ALZ 2 and prediction of efficacy in donanemab-treated participants

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Introduction: Donanemab slowed disease progression in participants with less advanced Alzheimer's disease (AD) (TRAILBLAZER-ALZ

2). This post-hoc analyses explored the impact of baseline tau PET level (Positron Emission Tomography), clinical stage, age, and plasma P-tau217 as predictors of donanemab treatment.

Methods: Mixed-model repeated measures (MMRM) using tau PET standardized uptake value ratio (SUVR) assessed the treatment effects on the Integrated Alzheimer's Disease Rating Scale (iADRS) and the Clinical Dementia Rating-Sum of Boxes (CDR-SB) domains. Efficacy impact was modeled by staging patients relative to their longitudinal trajectories of clinical scores over an estimated duration of disease using a latent-temporal mixed-effects model.

Results: A significant difference from placebo in iADRS and CDR-SB observed based on baseline tau levels, with greater percent slowing of clinical decline at week-76 in patients with lower baseline tau PET or P-tau217 levels. For patients < 75 years, the treatment effect was similar in the low and high P-tau217 groups, but the low P-tau217 group showed a greater slowdown. For people ≥ 75 years, the treatment effect and slowdown were greater in participants with low P-tau217 levels than in those with high P-tau217 levels. The latent-time model suggested that donanemab slowed disease progression to a greater extent in patients at earlier stages of the disease.

Conclusions: Results suggest that donanemab provides benefit to early symptomatic AD patients, regardless of clinical or pathological disease stage, with higher efficacy in the earliest stages of the disease, as defined clinically or by pathological markers such as tau PET or plasma P-tau217.

P-0345

Potential clinical impact assessment of pharmaceutical consultations in a memory hospital day care

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Introduction: Mild cognitive impairment affects 10–15% of people over 65 and could be caused by medications. Integrating a clinical pharmacist in patient care pathway could help to prevent drug-related harm, especially cognitive iatrogenesis.

Memory hospital day care unit allow patients to consult multiple healthcare professionals including a clinical pharmacist.

The objective was to assess the potential clinical impact of pharmaceutical consultations for patients with cognitive disorders.

Methods: This prospective observational study was conducted from December 2023 to June 2024. Patients diagnosed with cognitive disorders during a geriatric consultation were included in the memory hospital day care program, including a neuropsychologist, speech therapist, pharmacist, and geriatrician.

Pharmacist impact was measured through pharmaceutical interventions (PIs) based on STOPP/START criteria, anticholinergic burden scales, and GerontoNet ADR Risk tool. Adherence was assessed using Ameli scale. Time for each consultation step was recorded: preparation, interview, transmission, and report writing.

Results: Fifty-six consultations were conducted (26 men, 30 women; mean age 81.3 ± 7.1). An average of 1.2 PIs per patient was recorded, totaling 67 interventions: 32.8% STOPP/START criteria, 25.4% dose adjustments, and 26.9% treatment changes. Polymedicated patients (> 5 drugs) had more PIs (1.56 vs. 0.71, $p < 0.05$). Among those on anticholinergics, 25% saw a reduced burden. Average

adherence was 1.1 indicating good overall adherence, and consultations lasted 87.2 min (range 55–165).

Conclusion: Pharmaceutical consultations in memory hospital day care unit optimize medications prescriptions, reduce anticholinergic burden, and help prevent cognitive decline, especially in polymedicated patients. Time investment remains significant, emphasizing the need for prioritizing high-risk patients.

Poster

Comprehensive geriatric assessment

P-0346

Impact of deprescribing timing on medicines optimisation in older cancer patients receiving hospice care at the end of life: a comparative cohort study

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Introduction: Deprescribing, the systematic discontinuation of potentially inappropriate medications, is essential for optimising end-of-life care in older cancer patients, particularly in hospice settings [1]. While the benefits of deprescribing are known, its timing and impact on patient outcomes such as survival, remain underexplored. This study examined how deprescribing timing influences medication appropriateness and survival time in older hospice cancer patients.

Methods: This observational, retrospective cohort study included decedents aged 65 years and older who received palliative care consults in hospice settings between January 1 and December 31, 2022. Data collected included Palliative Performance Scale (PPS) scores and prescribed medications. Patients were categorised into early deprescribing (interventions initiated more than 30 days but less than 180 days before death) and late deprescribing (within 30 days of death) groups. Unexpected deaths were excluded. Medication appropriateness was assessed using the OncPal deprescribing guideline. Ethical approval was obtained from King Hussein Cancer Center (reference 23KHCC067).

Results: Among 155 decedents, early deprescribing was associated with longer median survival time (81 versus 17 days; $P < 0.001$). Both early and late interventions significantly reduced number of preventive medications (4.6 to 1.6, 4.8 to 1.5, respectively; $P < 0.001$) and increased number of symptom control medications (3.6 to 6.0 and 3.7 to 5.5, respectively; $P < 0.001$). Late deprescribing was more common in patients with lower PPS scores ($\leq 30\%$) and haematologic cancers.

Conclusion: Early deprescribing in hospice care positively impacts survival time and symptom management, emphasising the importance of timing in medicines optimisation to improve comfort in end-of-life care.

Reference

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Short poster presentation

Comprehensive geriatric assessment

P-0347

Atrial fibrillation doesn't come alone: the geriatric syndromes behind the arrhythmia

huzeyfe arıcı (1), serdar özkök (1), neslihan hazel önür (1), denizler sezer (1), tuğba erdoğan (1), emine aşçı civelek (1), özge can ceylan (1), ezgi pınar (1), zeynep fetullahoğlu (1), zelay şahin turnova (1), şebnem sızdika güven (1), deniz seyithanoğlu (1), mehmet akif karan (1), gülistan bahat (1)

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Background and Aim: Atrial fibrillation (AF) is a frequent arrhythmia in older adults and geriatric syndromes are prevalent in this population and may influence AF outcomes. This study aimed to uncover the independent associations between atrial fibrillation and key geriatric syndromes in a real-world outpatient population.

Methods: This cross-sectional retrospective study included patients aged ≥ 65 years who underwent comprehensive geriatric assessment in a tertiary outpatient clinic between 2012 and 2024. Uni and multivariate analysis were performed to study the associations between AF and geriatric syndromes.

Results: In 1251 patients the mean age was 75.7 ± 6.8 years, and 68.5% were female. AF prevalence was 6.3% ($n = 145$). Patients with AF (those who have a current diagnosis of AF or newly detected AF during routine annual ECG screening) were older (mean age 77.9 ± 7.4) and predominantly female (73.1%). AF was significantly more prevalent in patients with frailty ($p < 0.001$), polypharmacy ($p < 0.001$) ($= > 5$ drugs), and disability [$(p = 0.001)$ (not being fully independent on Katz Daily Live Activities and Lawton Instrumental Activities of Daily Living)]. In multivariate analysis, advanced age (OR: 1.041, 95% CI: 1.011–1.072, $p = 0.007$), frailty (OR: 2.029, CI: 1.337–3.080, $p < 0.001$), and polypharmacy (OR: 2.961, CI: 1.789–4.900, $p < 0.001$) were independently associated with AF.

Conclusion: Atrial fibrillation in older adults isn't an isolated cardiac event but a red flag signaling broader geriatric vulnerability. Our findings reveal that frailty and polypharmacy have key associations with AF. These results underscore the critical need to shift from rhythm-focused care to a holistic, geriatric-centered approach in managing older adults with AF.

Poster

Comprehensive geriatric assessment

P-0348

Geriatric syndromes and comorbidities according to the age groups: a multicenter preliminary analysis of outpatients in Türkiye

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Introduction: Geriatric syndromes are clinical conditions that do not fit into unique diseases among vulnerable older adults. Falls, urinary incontinence, dementia, depression, and polypharmacy (use of ≥ 5 medications) are the most commonly observed geriatric syndromes in clinical practice. Geriatric syndromes pose a significant risk factor for adverse health outcomes such as morbidity, prolonged hospital stays, and even mortality.

Methods: This study included patients aged over 60 who were admitted to geriatric outpatient clinics across five centers between 2014 and 2025 and underwent comprehensive geriatric assessments. We analyzed the frequency of comorbidities and five defined geriatric syndromes, focusing on their co-occurrence and associated risk factors.

Results: A total of 7,324 patients participated in the study. The prevalence rates for various syndromes were as follows: urinary incontinence 50.4%, falls 35.1%, depression 35.6%, dementia 23.6%, and polypharmacy 55.2%. The rate of hypertension was 67.5%, diabetes mellitus 30.5%, atherosclerotic coronary artery disease 20.4%, cerebrovascular disease 7.2%, and congestive heart failure 8.0%. The frequency and co-occurrence of geriatric syndromes increased with age, except depression. While 10.5% of all participants had no geriatric syndromes, only 4.8% of those over 90 had no. The presence of congestive heart failure and cerebrovascular disease nearly doubled the risk of having more than two co-occurring geriatric syndromes.

Key conclusions: The prevalence and combination of geriatric syndromes increase with age and the presence of comorbidities. Therefore, it is imperative for each older adult to have regular screening through a comprehensive geriatric assessment.

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Poster

Comprehensive geriatric assessment

P-0349

CGAme: a QI initiative to enhance comprehensive geriatric assessment completion

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Introduction: Comprehensive Geriatric Assessment (CGA) is a structured, multi-dimensional assessment for frail older population, guiding care across clinical, functional, psychosocial and advanced care domains. CGA completion rates on electronic patient records

were suboptimal in our high turnover multiprofessional frailty unit, prompting an intervention to improve compliance.

Methods: A two-cycle prospective audit was conducted in the frailty unit at Gloucestershire Royal Hospital, England, assessing CGA completion across 13 key parameters (weight, Clinical Frailty Score, ReSPECT form, lying-standing blood pressure). Patients meeting all criteria were classified as having a completed CGA. We compared completion rates in two cohorts: February 12–17, 2024 ($n = 34$) and October 21–26, 2024 ($n = 35$). Our intention was to develop an efficient electronic documentation system ensuring consistency and reducing decision fatigue within the team.

Between cycles, we introduced educational sessions focussing on understanding CGA and implemented “CGAme”—an acronym-based tool to reinforce CGA completion during ward rounds. It enabled clinicians to use a single click to list all 13 domains and tick them when completed during the patient’s hospital stay.

Results: Initially, 0% of patients had a fully completed CGA. Post intervention, CGA completion increased to 34% (12/35 patients). Staff reported improved awareness and integration of CGA into daily practice.

Key conclusions: This initiative significantly improved CGA completion, highlighting the impact of targeted education and technology through structured tools. Enhancing CGA compliance supports medication optimization, reduces readmissions and promotes thorough holistic geriatric care. Future efforts will focus on sustaining improvements through continued staff engagement.

P-0350

Comprehensive geriatric assessment in older adults with mental illness in a specialized facility: preliminary findings from the long-term care interventions for frail older adults with mental illness (LIFT ME) research program

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Introduction: Older adults with mental illness in long-term care facilities present with complex medical, functional, and psychosocial needs. Understanding their health status through a Comprehensive Geriatric Assessment (CGA) is crucial for optimizing care strategies.

Methods: This descriptive cross-sectional study involved older adults in a mental health facility in the Philippines. Data collection included interviews, chart reviews, and physical assessments. The CGA utilized validated tools: Mini Nutritional Assessment (MNA), Functional Reach Test (FRT), Timed Up and Go Test (TUGT), Revised Japanese Cardiovascular Health Study (J-CHS) Frailty Scale, and hydraulic hand dynamometer. Demographics, medical/psychiatric diagnoses and social factors were analyzed.

Results: Among 124 participants (43% males, 57% females), common psychiatric diagnoses included schizophrenia (77%), psychosis (10%), and bipolar disorder (7%). Dementia (43%) and depression (44%) were also prevalent. MNA identified 11% as well-nourished, 66% at risk, and 11% malnourished. BMI showed 8% underweight, 51% normal, 27% overweight, and 10% obese. Polypharmacy was common (68%). Visual (65%) and hearing impairments (23%) were noted. Despite 76% demonstrating high functionality in basic activities, 82% of males and 90% of females have below-average grip strength. Fall risk was high (47%), with an average FRT score of 14.1 cm and mean TUGT score of 16.3 s. The revised J-CHS Frailty Scale classified 7% as robust, 82% prefrail, and 5% frail.

Key conclusions: The CGA highlighted significant comorbidities, fall risk, and frailty, emphasizing the need for targeted interventions to improve care and well-being of this vulnerable population.

P-0351

The multidimensional evaluation sheds light on ageing from biological mechanisms to outcome prediction: the Kairos cohort

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Introduction: Within the “know-do gap”, the complex nature of intrinsic capacity is too slowly integrated in healthcare and research. Therefore, care is fragmented, inconsistent terminology hinders accurate diagnosis, precision medicine is prevented and disability increases.

Methods: Following the successful evaluation of the European MPI_Age study, the CGA-based Multidimensional Prognostic Index (MPI), delivering a 0(full robustness)-1(severe frailty) continuous value based on domains typically excluded in routine diagnostics, was adopted in longitudinal studies conducted by geriatricians with scientists and physicians at CECAD and University Hospital of Cologne.

Results: From 2016 to 2025, over 4.500 adults older than 60 years were included in the ongoing KAIROS (Köln Ageing Individual Robustness Swing) cohort. Knowledge on superiority of the multidimensional- compared to organ-centred approach as well as on physiological relevance of putative ageing mechanisms was gained. An analysis of complete datasets from 3.222 people showed 1) progressively worsening prognosis/frailty from community dwellers > General Practice < long-term care facilities < emergency room < Cardiology < infectious diseases < high-performance medicine < Nephrology < Geriatric Setting < Intensive Care Unit; 2) highest prediction power for mortality at one year independent of chronological age and sex assigned at birth ($p < 0.0001$).

Conclusions: In light of the imminent quadruplication of the old-old and oldest-old population, as well as of the significant shortage of the healthcare workforce, agile, including digitally-assisted CGA therapeutics should be adopted across settings to maintain functions, well-being and quality of life and avoid futile and iatrogenic clinical decision making. Structured implementation of CGA guidelines at the European level is urgent and highly recommended.

P-0352

Challenges and Perspectives: Assessing Quality of Life in Elderly Patients

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Introduction: The elderly face increasing health and well-being challenges due to rising comorbidities and functional limitations. This study explores factors influencing quality of life (QoL) in elderly patients.

Patients and methods: QoL was assessed using the SF-12 instrument, adapted to the Tunisian context. Scores for the Physical Component Summary (PCS-12) and Mental Component Summary (MCS-12) scales were calculated. According to Tunisian norms, a score is considered low if below 50.11 ± 8.53 for PCS and 47.96 ± 9.82 for MCS.

Results: The study included 52 elderly patients (23 men, and 29 women) with a mean age of 74 ± 9.87 years. Half of the patients lived in urban areas with their families (51.9%), while 42.3% were illiterate. Most had a low socioeconomic status (65.4%). The majority were non-smokers (69.2%), with 23.1% being former smokers. Comorbidities were common, with 73% of patients having at least three conditions, including hypertension (57.7%), diabetes and dyslipidemia (51.9% each), cardiac disease (48.5%), osteoarthritis (36.5%) and chronic kidney disease (32.7%). Chronic pain and insomnia were prevalent (75% and 69.2%, respectively). Mean PCS and MCS scores were 33.19 ± 9.87 and 40.36 ± 11.89 with low scores in most cases (94.2% for PCS; 69.2% for MCS). Both scores were associated with rural origin, hypertension, obesity, dyslipidemia, cardiac disease, and osteoarthritis ($p < 0.05$).

Conclusion: This study highlights challenges faced by elderly patients, including comorbidities, chronic pain, and insomnia, exacerbated by low socioeconomic status and illiteracy. A comprehensive approach is needed to improve both physical and mental health in this population.

P-0353

Cognitive decline identified at a frailty assessment unit

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Introduction: The Rapid Access Frailty Unit (RAFU) has been running daily clinics since 2020. Referrals are accepted as part of an admission avoidance strategy or as a crisis intervention point for frail patients living in the community or attending our ED. There are no other formal memory clinics locally that specifically diagnose and manage cognitive issues.

Despite the potential impact of frailty on cognitive function, the role of CGA and medical frailty review in cognitive assessment remains underexplored in clinical settings. As part of the CGA assessment, we examined the prevalence of dementia identified within this group in the setting of a medical frailty clinic.

Method: All Data pertaining to our frailty clinics are recorded on an excel database. We performed a retrospective review of this data from 2022 to 2024 to examine specifically where cognitive assessment and Montreal Cognitive Assessment Score formed part of the assessment in addition to a CGA being performed.

Results: 2022 to 2024 a total of 1325 patients attending the frailty clinic and had CGA performed. The average ages < 70 yrs (38pts), < 75 yrs (70pts) < 85 yrs (119pts), < 90 yrs (92pts), < 95 yrs (27pts). The clinical frailty scales in the group as follows; CFS was < 3 (56 pts), 3 (281pts), 4 (351 pts), 5 (338pts), 6 (280pts), 7 (138pts).

Of the 1325 CGA performed 487 (37%) (127 /2022, 116 /2023, and 244/ 2024) of the patients were noted to have cognitive impairment. MOCA was performed on 203 of these as part of the CGA assessment. That is 41.6% of the patients with cognitive impairment.

Conclusion: A third of the patients that had a CGA was Identification of have cognitive impairment. This was associated with a high physical frailty score. This allows for optimizing medical and cognitive care with emphasis on care planning and admission avoidance.

P-0354

Caring for ageing disabled people: a comfort room in a geriatric day hospital

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Introduction: The increasing life expectancy of ageing disabled people (ADP) raises the issue of their ageing, especially as it occurs earlier. Access to care is often difficult due to the lack of specialist consultations, delaying diagnosis and treatment.

In order to reduce these inequalities in access to care, the geriatric day hospital at the CHRU in Nancy has developed a specific care pathway for ADP in partnership with local medico-social structures and associations.

Methods: A literature review was carried out to determine the main pathologies associated with the ageing of disabled people, focusing initially on people with Down's syndrome. The specific needs of ADP were gathered during meetings with partner structures and associations.

We reorganised the geriatric day hospital to provide access to the main specialists, such as pulmonology, cardiology, ophthalmology and gynaecology, in the same place and within a limited timeframe. As the care provided by these specialities can be intrusive and anxiety-provoking, we considered creating a comfort room to accommodate ADP. This comfort room offers a soothing, familiar setting with furniture similar to a standard living room, and controlled sensory stimulation (light and sound). This poster will show the transformation of the hospital room into a comfort room with photos.

Conclusions: The ageing of disabled people raises questions about access to care and multidisciplinary working. It invites us to rethink the hospital environment with a view to humanising care (Romain Jacob Charter).

P-0355

Geriatricians' role and HIV specialists' attitudes in the care of older adults with HIV: Insights from Mexico, Canada, Italy, and Spain

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Introduction: Despite a higher burden of comorbidities, frailty, and geriatric syndromes in older adults with HIV current care models rarely incorporate geriatric expertise. The objective of this study was to assess the Geriatricians' Role and HIV Specialists' Attitudes in the Care of Older Adults with HIV knowledge in different countries.

Methods: A cross-sectional, descriptive survey study was conducted using two structured questionnaires—one for geriatricians and one for HIV specialists—distributed via national scientific societies in Spain, Italy, Mexico, and Canada. The surveys addressed knowledge, clinical experience, and attitudes regarding the management of OAWH.

Results: 348 responses to surveys were collected (200 from geriatricians, 148 from HIV specialists). 42% of geriatricians were aware of the age threshold defining OAWH, and 73% had seen one or no OAWH in the previous year. 60% reported lacking confidence in managing these patients. Among HIV specialists, 98.5% recognized the need for a differentiated approach to OAWH, and 90.5% routinely addressed comorbidities. Only 38% performed standardized frailty screening. Both groups agreed on the importance of frailty and geriatric syndromes in this population and supported reconsidering the current care model, though views on the geriatrician's role in multidisciplinary management were inconsistent.

Conclusions: Despite shared recognition of the complexity of OAWH care, there is limited integration of geriatrics into current HIV care models. Strengthening interdisciplinary collaboration and improving geriatric training on HIV-related issues are essential to address the evolving needs of this aging population.

P-0356

Pre-Operative and multidisciplinary geriatric assessment in elderly patients referred for hip arthroplasty

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Introduction: The incidence and prevalence of hip osteoarthritis are rising. Patients are getting older and presenting more comorbidities. One of the most important risk factors for osteoarthritis is ageing. In Belgium, like in other countries, the government is aiming to shorten the stay of hospitalization. This could be difficult for some geriatric patients.

Methods: We developed an extended program for elderly patients planned for hip arthroplasty that consisted of a combination of full multidisciplinary assessment, extensive blood panel, urinalysis, MRSA screening, chest and hip radiographs, ECG or transthoracic echocardiography and pre-anesthesia evaluation. All exams were performed in one day at our geriatric day hospital. As part of peri-operative blood management administration of intravenous iron was also possible that day.

We intended multiple goals: 1 Working senior-friendly. 2 Identify new somatic problems. 3. Medication review. 4 Estimate success of surgery. 5 Set realistic goals of rehabilitation.

Results: Patients were referred by the orthopedic surgeon to our day hospital if aged above 80 or younger and multiple comorbidities. In the period 2023–2024 89 patients were included. Mean age was 82 (71–92). 62 patients were female. We identified new somatic problems in 47 patients. 9 patients received intravenous iron. We cancelled 3 surgeries because of serious medical reasons.

Conclusions: Our program seems to be senior friendly. We identified medical problems before surgery and could optimize preoperative blood management. Also we were able to make rehabilitation goals and organize hospitalization after surgery.

P-0357

Enhancing geriatric health monitoring through a data-driven composite score approach

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Introduction: Approximating overall geriatric health is inherently challenging due to its multidimensional nature. Current assessment scales are complex, time-consuming, and rater-dependent. Thus, objective and comparable assessment standards are missing for patient-centered clinical monitoring. This study examines the viability of incorporating multi-source health data and sensor-based algorithms to fill this gap in geriatric care.

Methods: Clinical, clinician-ranked, and digital mobility data from 90 participants aged ≥ 60 years were used to develop a composite geriatric health monitoring score. Weighted and bias-corrected patient-reported overall health score served as a ground truth. Predictors were chosen via majority rule feature selection and confirmed through factor analysis. Data-driven weighting and aggregation were performed with fivefold cross-validated Extreme Gradient Boosting (XGBoost) and confirmatory factor analysis to validate underlying constructs.

Results: XGBoost performance was strong (MAE = 4.16) using 15 features, including weight, medication, assistive care acts, and average steps when turning. Two latent constructs were retained, with a good comparative fit index (0.98). Internal consistency ($\alpha = 0.67$; $\omega = 0.68$) and composite reliability (0.80) were acceptable. Discriminant validity was confirmed via the Fornell-Larcker criteria. The score showed moderate skewness (1.02), reflecting fewer high-health patients and strong sensitivity to treatment.

Conclusion: Our data-driven approach produced an interpretable composite score that reflects multidimensional health in older adults. Mobility, independence, and treatment are primarily responsible for the score's monitoring performance, which will be further evaluated upon recruitment completion. Its application could assist in personalized patient tracking and flagging early signs of deterioration.

Poster

Comprehensive geriatric assessment

P-0358

Higher scores of the individual self-screening instrument for geriatric health testing (INSIGHT) is associated with mortality risk among older adults

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Introduction: Comprehensive geriatric assessment (CGA) is time-consuming and requires trained professionals. To address this, the INSIGHT questionnaire—a self-reported screening tool consisting of 25 questions across 13 CGA domains—was designed for quick identification of geriatric health issues. Preliminary validation demonstrated its reliability and accuracy compared to CGA results. This study aimed to correlate INSIGHT scores with mortality risk and establish cut-off thresholds.

Methods: A prospective observational study was conducted from June 2020 to January 2021 at a tertiary-care geriatric clinic. Eligible first-visiting outpatients aged ≥ 65 years who could complete the INSIGHT questionnaire were recruited, while those in long-term care or with conditions impairing participation were excluded. Baseline demographics, Clinical Frailty Scale and INSIGHT scores were collected, with survival status tracked via telephone at 12 and 24 months. Statistical analyses included logistic regression, ROC curve, Youden indices, and Kaplan–Meier survival analysis.

Results: Among 211 participants followed (mean age 79.8 years; 62.1% female), mortality was 8.5% at 12 months and 16.6% at 24 months. A higher INSIGHT score significantly increased mortality risk (OR = 1.10, $p < 0.001$), with an ROC value of 0.747 ($p < 0.001$). Based on Youden indices, the corresponding INSIGHT score ≥ 15 showed high sensitivity (> 0.9) and negative predictive value (0.966). Thresholds for mortality risk stratification were thus identified: low (≤ 15), medium, and high (≥ 30). Kaplan–Meier analysis showed significant survival differences across risk groups (96.6% vs. 79.8% vs. 58.8%, $p < 0.001$).

Key conclusions: The INSIGHT questionnaire effectively identifies older adults at risk of adverse outcomes, potentially reducing reliance on CGA. Further validation in different outcomes and settings is recommended.

P-0359

Impact of infections on the progression of ankylosing spondylitis in elderly patients

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Introduction: Ankylosing spondylitis (AS) is a chronic inflammatory disease primarily affecting the spine and sacroiliac joints. Infections can act as triggers for immune activation, potentially accelerating disease progression, especially in elderly patients who often have compromised immune responses. However, the impact of infections on AS progression in this population remains insufficiently studied.

Objective: To evaluate the influence of infections on disease activity, functional impairment, and inflammatory markers in elderly AS patients.

Materials and methods: A prospective observational study was conducted on 73 elderly AS patients (≥ 65 years old; 69.8 ± 2.1 years) diagnosed based on ASAS criteria. Patients were divided into two groups: Group 1 ($n = 41$) with a history of recurrent infections (respiratory, urinary, or gastrointestinal) in the past 12 months, and Group 2 ($n = 32$) without infections. Disease activity was assessed using BASDAI, ASDAS-CRP, and BASFI scores. Inflammatory markers (CRP, ESR) were measured.

Results

- Higher BASDAI (5.6 ± 1.2 vs. 4.1 ± 1.0 , $p = 0.003$) and ASDAS-CRP (3.4 ± 0.8 vs. 2.7 ± 0.6 , $p = 0.004$) in infected patients.
- Increased levels of CRP (15.2 ± 6.1 mg/L vs. 8.7 ± 4.2 mg/L, $p = 0.002$) and IL-6 (28.5 ± 9.3 pg/mL vs. 19.1 ± 7.2 pg/mL, $p = 0.005$).
- Higher functional impairment (BASFI 5.8 ± 1.5 vs. 4.3 ± 1.3 , $p = 0.006$) in infected patients.
- More frequent disease flares requiring NSAIDs or biologics in Group 1 ($p = 0.01$).

Conclusions: Recurrent infections in elderly AS patients are associated with increased disease activity, systemic inflammation, and functional deterioration. Infection prevention strategies, including vaccination and optimized antimicrobial therapy, may reduce AS progression and improve patient outcomes in this vulnerable population.

P-0360

Implementation of ICOPE program in France: last news

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Introduction: The ICOPE program “Integrated care for the elderly” is a WHO program aimed at preventing dependency. Its objective is to preserve the functions of seniors in order to maintain their autonomy. The target population is people aged 60 and over, who are independent and living at home. The G rontop le of the Toulouse University Hospital, designated a WHO collaborating center since 2017, initiated the implementation of this prevention program in Occitanie as soon as the ICOPE practical guide was published in 2019, with the support of the Occitanie Health Regional Agency. Subsequently, its implementation was extended to the national level as part of a national experimentation—Article 51. We would like to present the progress of the implementation of the ICOPE program in France.

Methods: The implementation of the ICOPE program in France is structured around four axes: 1/The ICOPE Monitor platform composed of two distinct elements: a/Digital tools to facilitate assessments, data collection and participant monitoring: these are mainly 2 tools for carrying out the screening (Step 1 of ICOPE). The ICOPE Monitor application and web page. These two tools can be used in professional mode and in self-assessment. Both are connected to a secure database. This database is accessible only to healthcare professionals allowing them to monitor their patients remotely and record information on their ICOPE pathway. Work is underway on the interoperability between the ICOPE Monitor digital tools and the French Digital Health Space (ENS). b/The ICOPE remote monitoring team composed of healthcare professionals specialized in geriatrics, including nurses. This well-identified and organized team at the Gerontopole de Toulouse follows seniors using digital tools in self-assessment mode and manages their alerts for the entire Occitanie region. 2/The development of specific training in the ICOPE approach for health professionals thanks to an e-learning platform. 3/Information and communication tools for use by seniors: ICOPE website (www.icope.fr), flyers, posters, videos, etc. 4/Developing partnerships involving public and private institutions.

Results: As of 10/11/2024, 64,283 seniors have joined the ICOPE program in France, including 39,094 (61%) in the Occitanie region. They have benefited from 107,309 screening tests (ICOPE Step 1) and 9,014 in-depth assessments (ICOPE Step 2) and personalized care plans (ICOPE Step 3). To date, 6,592 healthcare professionals have been trained in the ICOPE program through the e-learning platform

and more than 13,000 healthcare professionals use the ICOPE Monitor digital tools to monitor their patients' ICOPE pathway.

Conclusion: The ICOPE prevention program is a way to optimize the integrated care of seniors through the implementation of earlier and better targeted interventions. The number of ICOPE participants is increasing steadily. In 2024, we registered approximately 2,000 new beneficiaries per month. The ICOPE program, is a public health approach for seniors which can fundamentally reform our health system suggesting more space for prevention, an improvement in the city/hospital link and a coordinated care exercise.

P-0361

Comprehensive geriatric assessment and evaluation in older adults receiving primary healthcare

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Introduction: Aging is defined as a normal and physiological process that brings about a considerable number of changes. Moreover, a significant proportion of patients receiving primary health care are older adults who require continuous monitoring and management.

Aim: The objectives of this research are threefold: first, to ascertain the public's knowledge of geriatric health issues; second, to examine the role of nurses in primary care; and third, to conduct comprehensive geriatric assessments.

Methodology: A descriptive study was established for purpose of achieving the study's objectives. This study involved examining 192 older adults. The data was collected using two Google Forms-formatted surveys as a structured interview. The data was collected at the Health Center between 2023 and 2024 and presented as a percentage.

Results: Among the 192 patients, there were 60.9% males and 39.1% females. The mean age of the patients was 71.2 ± 9.18 St.D. Approximately, 23.43% of patients had three or more cardiovascular disorders, while the majority of patients 30.2% individuals-presented with type II diabetes. According to the results of the comprehensive assessment, patients who have recently experienced a reduction in their spirituality seem to be more prevalent. Moreover, the majority of patients have reported experiencing vision-related issues. This constellation of medical problems points to a complicated interaction between the patient's psychological and physical conditions.

Conclusions: A comprehensive geriatric assessment, inclusive of its various components, is imperative to facilitate enhanced health and quality of life for the elderly. Consequently, this may necessitate a multifaceted approach, inclusive of addressing their spiritual and vision-related concerns.

Key words: assessment, older adults, geriatric, evaluation, healthcare.

P-0362

Geriatrics close to home: a collaborative community-based comprehensive geriatric assessment model

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Background: Older adults with complex health needs often face challenges accessing centralized specialist care. To improve

accessibility and continuity, we developed "Geriatrics Close to Home"—a model that delivers Comprehensive Geriatric Assessment (CGA) directly within patients' neighborhood family medicine clinics.

Program description: In this program, geriatricians conduct CGAs within the patient's own primary care clinic, in collaboration with the family physician, nurse, and social worker. When relevant, pharmacists and occupational therapists are also involved. This community-based setting makes the service more accessible for frail older adults, eliminating the need to travel to distant specialty centers.

Patients were referred if they had experienced a recent hospitalization, a fall within the past year, or showed early signs of geriatric decline as identified by their family physician. Importantly, care plans were developed together with the patient's own family physician, a factor previously shown to increase adherence to recommendations and support long-term implementation.

Outcomes—raw data: Over 300 patients were assessed in the past year. Comparing data from the six months before and after the CGA, we observed a 25% reduction in total hospitalizations, a 36% reduction in the number of patients hospitalized, and a decrease in medication dispensing.

Conclusion: "Geriatrics Close to Home" offers an accessible, collaborative model that strengthens continuity of care and improves outcomes for older adults. Involving the family physician in the assessment process enhances real-world implementation of recommendations and supports sustainable care delivery.

P-0363

Stories that heal: integrating bibliotherapy into clinical consultations

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Introduction: Bibliotherapy, the therapeutic use of reading materials, is gaining attention as a tool for emotional and psychological support. Narrative Medicine complements this by emphasizing the power of storytelling in healthcare, fostering empathy and connection between clinicians and patients. These approaches, rooted in the humanities, support holistic care by promoting reflection, insight, and resilience.

Methods: We designed an innovative model of cultural prescription integrated into primary care settings. Books, film excerpts, and other cultural materials are organized by thematic relevance to specific pathologies (e.g., anxiety, grief, chronic pain). During consultations, physicians or nurses may suggest selected materials to patients. This "therapeutic object" serves as a cultural complement to conventional care. Patients are then invited to write about the personal impact of the material. These anonymous reflections are shared with future participants, thus creating a living archive of cultural responses and promoting a therapeutic feedback loop.

Results: Although the project is ongoing, preliminary qualitative feedback indicates a positive impact on patient well-being, emotional insight, and the patient-provider relationship. Participants have reported increased motivation, a sense of being heard, and improved self-awareness.

Conclusions: In a healthcare system often dominated by metrics and time constraints, this project restores space for the subjective, the poetic, and the human. Bibliotherapy, framed within narrative medicine, becomes more than a tool—it is a cultural prescription that encourages meaning-making and connection. In the words of one patient: “For the first time, I felt like my story mattered.”

P-0364

Geriatric patients living with HIV/AIDS: a prospective multidimensional assessment of an ageing cohort (GEPP0)

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Introduction: Thanks to antiretroviral therapy (ART), people with HIV (PWH) are living longer. This study aimed to compare aging trajectories of older PWH and people without HIV (PWoH) using a comprehensive geriatric assessment (CGA).

Methods: This longitudinal study is part of the GEPP0 cohort, an Italian prospective multicenter study focusing on individuals over 65. Participants underwent two CGA evaluations, and results were compared over time.

Results: The study included 43 PWH and 42 PWoH. At baseline, PWH had a higher Cumulative Illness Rating Scale-Comorbidity Index (CIRS-CI), used more medications, lived alone more frequently, and showed worse cognitive performance. At follow-up, PWH still had higher CIRS-CI, worse Advanced Instrumental Activities of Daily Living (AIADL), poorer sleep quality, and declining nutritional status. Over time, both groups showed increased CIRS-CI. However, only PWH had significant declines in AIADL and physical performance. Worsening handgrip strength and Pittsburgh Sleep Quality Index (PSQI) were observed, with regression analysis revealing strong associations between HIV positivity and both measures. Additionally, poor handgrip strength was linked to worse baseline nutrition.

Conclusions: Older PWH experience distinct and more rapid aging trajectories than PWoH, particularly in physical strength and sleep quality. Factors such as comorbidities, polypharmacy, living conditions, and HIV status may elevate their risk for geriatric syndromes. Early, targeted interventions focusing on physical function, cognition, and lifestyle could help reduce aging-related decline and improve quality of life in this population.

P-0365

Geriatric Assessment use to frailty prediction in older CKD patients

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Background and Aims: Frailty is common among chronic kidney disease (CKD) patients. The 2024 KDIGO guidelines recommend

identifying frailty as a key factor in CKD management. The Comprehensive Geriatric Assessment (CGA) is the gold-standard methodology used by geriatricians to define frailty. Our aim was to identify predictors of frailty in CKD patients, using CGA methodology.

Method: We evaluated 204 patients aged ≥ 65 years in 2024: 111 with CKD stages 3 to 5, 71 on dialysis, and 22 receiving conservative care in a single nephrology unit. A multidisciplinary team, including a nephrologist specialized in geriatrics, conducted the CGA. Data collection included demographics and clinical parameters, as well as assessments of activities of daily living (ADL), cognitive function, nutritional status, mobility, and social support. Statistical analysis was performed using SPSS v.29.

Results: Among the 204 patients, the mean age was 79.1 (± 7.2) years, 58.2% were male, 32.7% were widowed, and 28% were institutionalized, 52.5% had diabetes, and 27.7% had heart failure. Overall, 25% of patients were classified as frail based on the CGA. Frailty prevalence varied depending on the assessment tool used: 26.5% according to the Fried Index ($FI > 3$), 23.5% according to the Edmonton Frailty Scale ($EFS > 8$), and 58.3% according to the Clinical Frailty Scale ($CFS > 5$). Frailty prevalence also differed across CKD stages (Table 1).

Logistic regression identified four significant predictors of frailty: activities of daily livings [(Barthel Index ($\text{Exp}(B) = 0.191$, $p < 0.001$), Lawton and Brody Scale ($\text{Exp}(B) = 0.145$, $p = 0.001$), mobility [Short Physical Performance Battery (SPPB) ($\text{Exp}(B) = 0.575$, $p = 0.001$)] and depression ($\text{Exp}(B) = 21.057$, $p = 0.013$). The model showed an excellent fit (Nagelkerke's $R^2 = 0.835$, 92.3% accuracy).

Conclusion: Frailty identification has a significant impact on CKD management. Simple, time-efficient tools should be integrated into routine care to facilitate early detection and intervention. The EFS may be particularly useful due to its shorter administration time while maintaining alignment with CGA results. Identifying frailty syndromes such as impaired mobility (SPPB) and depression could help target modifiable risk factors and improve patient outcomes. Conversely, declines in ADL function, while strong frailty predictors, may indicate a stage too advanced for effective intervention.

To our knowledge, this is the first study to evaluate frailty across the full CKD continuum, from early to advanced stages, and to identify predictors that may be relevant across all CKD stages.

P-0366

Functionality in older CKD patients

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Introduction: In 2016 a joint task force between European Renal Association and EUGMS published clinical guidelines on management of older patients with chronic kidney disease (CKD). Assessment of functional status was considered a critically important outcome in this population, at the same level as survival or CKD progression.

Methods: We conducted a multicenter cross-sectional study across five nephrology outpatient departments in 2024. All patients underwent a comprehensive geriatric assessment. Functionality was evaluated using the Barthel index for basic activities of daily living (BADL) and the Lawton scale for instrumental activities of daily living (IADL). A Barthel score below 60 was considered indicative of dependence in BADL, while a Lawton score below 4 indicated dependence in IADL. We performed a descriptive analysis of the

data. Results were presented as frequencies and percentages, means $\pm$ standard deviations, or medians (25th to 75th percentiles), as appropriate. We compared BALD and IALD dependent with independent patients separately, using chi-square test, t-student and Wilcoxon signed-rank test as appropriate. All statistical analyses were conducted using SPSS software (version 30.0; IBM Corp.).

Results: We evaluated 284 patients: 153 (53.9%) had CKD stage 3–5, 84 (29.5%) were on dialysis, and 47 (16.4%) were receiving palliative care. The mean age was 79.5 ± 7.5 years, and 159 (56.0%) were male. More than half of the patients had a caregiver (56.0%; 159), and 79 (27.8%) were institutionalized. We identified 229 patients with functional impairment. According to the Barthel Index, 55 individuals (18.8%) were classified as functionally dependent, whereas 115 patients (39.4%) were considered dependent according to the Lawton scale. Consistent trends were observed across both instruments regarding demographic and clinical correlates of dependency. While both scales demonstrated a strong association, the Lawton Scale appeared more sensitive in detecting early stages of functional decline, whereas the Barthel Index identified individuals with more severe impairment. Functional dependency—as measured by either scale—was significantly associated with advanced age, reduced physical performance (measured by the SPPB), greater clinical frailty (Clinical Frailty Scale), institutionalization, presence of sarcopenia, poor nutritional status, and advanced CKD stage, particularly among patients receiving conservative kidney care. Multivariate logistic regression models revealed that clinical frailty and physical performance were the strongest independent predictors of functional dependency in both models. For the Barthel Index, nutritional status and treatment modality also emerged as significant contributors. Both models demonstrated robust predictive capacity, with overall correct classification rates of 93.8% for Barthel and 90.2% for Lawton.

Discussion: These findings highlight the value of combining BADL and IADL measures in a multidimensional functional assessment. The simultaneous use of the Barthel and Lawton scales provides a more comprehensive view of patient function, enabling earlier identification of vulnerability and supporting targeted interventions — particularly in older, frail, or institutionalized individuals.

P-0367

Prognostic value of frailty in older kidney transplant candidates—a multicenter study

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Background: An increasing number of older patients are candidates to kidney transplantation (KT). International guidelines recommend frailty assessment during pre-KT evaluation. Comprehensive

Geriatric Assessment (CGA) is the gold-standard for measuring frailty, but its prognostic value in KT remains unclear.

Objectives: To determine frailty assessed by CGA associated with (1) waitlist outcomes and (2) first-year post-KT complications.

Methods: A multicentre cohort study was conducted in three transplant centres implementing systematic CGA for pre-KT candidates aged 70 and older.

Endpoints:

- Frailty was assessed using by CGA (defined as impairment in at least 2 of the following domains: locomotion, cognition, nutrition, mood and dependency) and by Fried's Physical Frailty Phenotype.
- Waitlist outcomes: death on waiting list, delisting due to medical deterioration.
- Post-KT complications: death, graft loss or prolonged hospitalisation (> 50 days) in the first year post-KT.

Association between frailty criteria and waitlist outcomes were analysed using multivariate Fine & Gray models.

Results: 224 patients were waitlisted with a median (IQR) age of 74 (71–76) years. 11% were frail according to Fried phenotype and 29% according to CGA domains.

During the follow-up: 117 received a KT and 36 were delisted or died on waiting list.

Waitlist outcomes were associated with frailty based on Fried phenotype (SHR 5.8 [1.7–19.8], $p = 0.006$) and CGA domains (SHR 2.5 [1.2–5.1], $p = 0.01$), independently of comorbidities.

First year post-KT complications were associated with frailty based on CGA domains (OR 3.4 [1.2–9.8], $p = 0.02$), independently of comorbidities but not with frailty based on Fried's criteria.

Conclusions: CGA performed during listing evaluation is predictive of both failure waitlist outcomes and post-KT complications.

P-0368

An audit of hospital inpatient decisions around resuscitation and completion of the universal care plan (UCP)

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Introduction: The UCP document allows London residents to have wishes digitally shared with healthcare teams across the Capital. They capture individual's wishes, guide healthcare providers, direct the delivery of care and reduce hospital admissions. The plan is visible to General Practitioners, community teams, London Ambulance Service and hospitals. The resuscitation status can be printed for the patient.

Method: An audit was conducted on the Older Adult Wards (age > 75 years) at Lewisham Hospital, in London. The London Care Record (LCR) was reviewed for resuscitation decision and evidence of a UCP. 130 inpatient records were reviewed on a single day.

Results: Only 18% (24/130) had evidence of a UCP in their computerised records. Only 5 were fully completed, although all contained an advanced decision regarding resuscitation status. Of the 130 inpatients, all had an inpatient recorded conversation regarding treatment escalation and resuscitation. 33% were documented to be 'For resuscitation' and 67% had 'Do Not Attempt Resuscitation' (DNAR) order.

Conclusion: Recording wishes, around advanced care planning in a structured format, helps prompt action during an emergency. It must remain a voluntary process, but this audit shows that older adults are engaged and willing to participate in decisions. 56,974 (~ 5%) of > 65 yrs London residents now have a recorded UCP. It is hoped that the Proactive Ageing Well Service (PAWs) in Lewisham will enhance UCP completion through their Comprehensive Geriatric

Assessments and the rapport built through this encounter. Of the first 50 patients reviewed by PAWs, in the community, 84% have completed a UCP.

P-0369

Proactive identification and management of frailty in lewisham: early outcomes of a community comprehensive geriatric assessment

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Introduction: The Proactive Ageing Wells Service (PAWs) was established in November 2024 to identify and improve health, social and psychological community care for > 65-year-olds, to maintain their independence. The Urgent Community Response Team had identified the need for a proactive, personalised approach, particularly for housebound individuals.

Method: A first cohort of 50 patients was identified through the Lewisham population health database. These patients were invited to receive a Comprehensive Geriatric Assessment (CGA) in their home.

Results: 43 received a full CGA (3 no contact, 3 declined, 1 died). There were 5 referrals to the Urgent Community response team, due to acute illness and one was subsequently admitted to hospital. The Rockwood score ranged from 4–8 (77% 5–7). Medication assessments led to changes, particularly in relation to antihypertensive medication. 3 patients were referred onto the virtual ward for blood pressure > 200 mmHg systolic. Falls assessments led to 7 subsequent referrals to the Community Falls Team for intervention, including DEXA scans. Universal Care Plans, including advanced decisions for care and resuscitation, were completed in 84% of patients. Only 2 patients declined a resuscitation discussion.

Conclusions: This exciting service offers a full holistic assessment in the community to proactively manage the local > 65 yr population. Onward referrals to local health, psychological and social services enable patients to receive a direction for care and subsequent reduction in primary care service use. A control sample of 50 patients will be reviewed alongside the intervention group, hoping to show positive benefits, including a reduction in hospital attendance.

P-0370

Ultrasound-derived muscle thickness as an early marker of physical performance and muscle mass in acutely hospitalized geriatric patients

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Introduction: Ultrasound-derived muscle thickness (US-Tm) is a promising bedside tool for muscle assessment in older adults, yet its clinical utility in acutely hospitalized geriatric patients remains unclear. This study aimed to explore the association between US-Tm and two key outcomes: gait speed (GST) and skeletal muscle index (SMI) in geriatric patients at hospital admission.

Methods: This cross-sectional study included 263 patients (mean age 84.0 ± 6.1 years; 45.3% women; median Barthel Index [BI]: 71 [55–85]) from a geriatric ward within 48 h of admission. US-Tm of vastus lateralis (VL) was assessed using B-mode ultrasound based on three longitudinal images. GST and SMI were assessed using the 4-m gait speed test and bioelectrical impedance analysis. Multiple linear regression models adjusted for age, sex, BMI, C-reactive protein, and BI were used to explore associations. Regression coefficients (β) represent the change in each outcome per 1 mm increase in US-Tm.

Results: US-Tm of VL was successfully obtained in 243 participants (92.4%) with excellent intra-rater reliability (ICC = 0.935). Mean US-Tm was 16.5 ± 3.0 mm. GST and SMI were 0.49 [0.34–0.62] m/s and 6.9 ± 1.2 kg/m², respectively. Each 1 mm increase in US-Tm was associated with a 0.012 m/s higher GST and a 0.15 kg/m² higher SMI ($p < 0.005$).

Key conclusions: US-Tm was independently associated with GST and SMI. These findings support its use as a feasible, portable, and non-invasive marker of physical performance and muscle mass in geriatric patients, with potential for early identification of at-risk individuals.

P-0371

Association analysis of combined detection of IFN- γ and IL-2 with the outcomes in elderly patients with active tuberculosis

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Objective: This study aimed to explore the applied value of combined detection of IFN- γ and IL-2 in predicting outcomes in elderly patients with active tuberculosis and to analyze its clinical relevance.

Methods: A retrospective cohort study design was employed to screen elderly patients with active tuberculosis admitted to the People's Hospital of Tongliang District, Chongqing, between June 2022 and August 2024. Based on the outcomes of their conditions 6–12 months after treatment, patients with active tuberculosis were included in study group ($n = 43$), while successfully treated patients were classified into control group ($n = 105$). Compared the clinical data between the two groups and logistic regression analysis was conducted.

Results: The levels of IFN- γ and IL-2 in the two groups were (58.6 ± 10.5) pg/mL vs (35.2 ± 12.5) pg/mL and (14.7 ± 4.8) pg/mL vs (8.4 ± 3.5) pg/mL, with statistically significant differences ($P < 0.05$). A positive correlation between IFN- γ and IL-2 was observed ($r = 0.602$, $P < 0.01$). IFN- γ and IL-2 predicted disease outcomes with the AUC of 0.87 (95% CI, 0.80–0.94), sensitivity of 85.6%, specificity of 78.1% and a cut-off value of 45.5 pg/mL. Univariate logistic regression analysis indicated that IFN- γ [OR = 1.04 (95% CI, 1.02–1.06), $P = 0.01$] and IL-2 [OR = 1.12 (95% CI, 1.05–1.18), $P = 0.01$] were independent risk factors influencing outcomes of active tuberculosis.

Conclusion: The combined detection of IFN- γ and IL-2 served as an effective method for assessing outcomes in elderly patients with active tuberculosis.

P-0372

Towards improved integrated health care for frail elderly with complex care needs in Norway

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Introduction: Akershus University Hospital and five municipalities have developed an integrated care model (IHC-model), which involves a patient-centered and interdisciplinary coordination of care across hospital and primary care levels. An important question is to assess to what extent the IHC-model improves patient outcomes and contributes to more coordinated and effective healthcare. The current study focuses on the extent the IHC-model affects quality of life and self-management.

Methods: The model targets home-dwelling patients over 65 years with a high consumption of healthcare services. The IHC-team consist of a nurse and a geriatrician from the hospital as well as a nurse and the general physician from the municipality. Together with the patient they create an individual pro-active care plan based on a comprehensive geriatric assessment.

We use a quasi-experimental longitudinal design, with data collection at baseline and at 6- and 12-months follow-up. Data on patient outcomes include frailty assessments, health-related quality of life, goal achievement and experiences with healthcare services.

Results: Average age of patients receiving IHC-services is 80 years and 55% are men. Clinical frailty scale median 5.1 versus Frailty index mean score 0.42. 75% had moderate or large problems in all five areas in EQ5D.

Key conclusions: The IHC-services are offered to an elderly population with a significant degree of frailty. Subsequent follow up will show if patient goals are achieved or not seen in context with frailty and health related quality of life.

P-0373

Feasibility study for an intervention using changes in usual activities to predict decline in older adults with multiple long-term conditions

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Introduction: Multiple long-term conditions (MLTCs) are rising globally, which increase with age and are associated with increased hospitalisations. Identifying early signs of decline, such as reduced usual activity, could help improve patient outcomes. Prior research demonstrated the prognostic significance of reduced activity.

Aim: This explores the feasibility of an intervention designed to identify changes in activity as indicators of early decline in older adults with MLTCs.

Methods: A feasibility study, involving six weeks of home-based user testing. Upon study completion, qualitative interviews were conducted. A mixed-methods analysis was employed to evaluate the intervention's acceptability and fidelity. Additionally, focus groups with healthcare professionals and commissioners gathered perspectives on its clinical feasibility.

Results: Twenty participants with MLTCs and diverse backgrounds were included (mean age 76.2, SD 8.8; 30% female; 60% White British; 30% from areas in the lower deciles of Index of Multiple Deprivation [IMD 1–3]). Many had no or limited digital experience. All data have been collected and are under analysis, with completion expected by May 2025.

Preliminary findings suggest varied acceptability among participants, with emerging patterns indicating that healthier individuals perceived it as less valuable. The analysis explores the agreement between passive (step counts) and active (questionnaire) data collection methods, assessing their interchangeability and its implications for feasibility and scalability.

Conclusion: This study demonstrates the feasibility and acceptability of monitoring activity changes as a proactive approach to detecting early decline in older adults with MLTCs. It provides recommendations for intervention optimisation and considerations for design of a future trial.

P-0374

Role of community health posts in frailty screening and social prescribing

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Introduction: Ageing population is a global challenge, particularly in developed countries. The prevalence of chronic diseases increases with the ageing population, causing significant health and economic implications. Thus, preventive health measures and access to health services are important to live long and well.

Objectives: To evaluate the role of community health posts (CHPs) in screening for frailty and other geriatric syndromes, and intervening with social prescribing.

Methods: CHPs are nodes in the community anchored by care managers (CMs). They are sited in Active Ageing Centres in the Queenstown district in Singapore. CMs perform health assessments, including a comprehensive geriatric assessment, as well as health coaching to empower patients to manage their own health. CMs also advise patients on the following—(a) preventive health measures including vaccinations and age-appropriate malignancy screening, (b) community services including referrals to the geriatric service hub, home-based or centre-based services, (c) care coordination with primary and tertiary care partners, and (d) facilitation of advance care planning (ACP).

Results: 284 participants were screened from Jan 2023 to Dec 2024, with mean age 74, 78.6% females. 26.4% were prefrail and 14.4% frail. 52 were advised on preventive health measures, 54 were referred for community services, 120 had care coordination interventions, and 35 had ACP completed.

Conclusion: CM-anchored CHP is a cost-effective initiative to identify at-risk adults in the community. Social prescribing can occur at CHPs to promote preventive health and connect patients to existing services, thereby fostering integrated care in the community and demedicalising health service provision.

P-0375

Geriatric hospital at home: managing health crises in high-need older adults

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Introduction: Hospital at Home (HaH) is a key multidisciplinary care resource for managing health crises in complex chronic and advanced disease patients. This study aimed to evaluate crisis resolution, 30-day readmission and mortality rates, and short- and long-term outcomes in patients managed by our Geriatric Hospital at Home (Ger-HaH) unit within an integrated urban care setting.

Methods: A retrospective cohort study was conducted including complex chronic and advanced disease patients managed by Ger-HaH, based on Comprehensive Geriatric Assessment, between May 2023 and May 2024. Two strategies were compared: Admission Avoidance (AA) and Early Supported Discharge (ESD). Clinical profiles (functional status, cognitive impairment, frailty, and triggering diagnoses) and outcomes at 30 days, 3 months, and 6 months were analyzed.

Results: A total of 140 patients were included (46.4% AA; 53.6% ESD), with mean ages of 85.2 ($\pm$ 8.03) and 82.7 ($\pm$ 9.3) years, respectively. No significant differences were observed in clinical profiles. Crisis resolution rates (AA 90.7% vs. ESD 81.3%, p = 0.11) and 30-day readmissions (AA 12.5% vs. ESD 21.9%, p = 0.14) were comparable, although 30-day mortality was significantly lower in AA (3.1% vs. 16.22%, p = 0.01). No significant differences were found in readmission and mortality at 3 and 6 months.

Key Conclusions: In populations with high healthcare needs, Ger-HaH represents a safe and effective alternative to conventional hospitalization. Admission Avoidance interventions demonstrated comparable short- and long-term outcomes to Early Supported Discharge.

P-0376

Characteristics, evolution and factors associated with mortality among patients treated in a geriatric day hospital for complex wound care

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Introduction: Patients who attend a Geriatric Day Hospital (GDH) due to complex wounds frequently present geriatric syndromes, which complicate treatment and healing. This study aims to assess the characteristics, evolution and mortality-associated factors in these patients.

Methods: Longitudinal retrospective study including patients aged $\geq$ 65 treated at a GDH for complex wound care (2021–2023). Sociodemographic, clinical, Barthel Index (BI), Mini Nutritional Assessment (MNA), malnutrition (GLIM), polypharmacy, wound evolution and mortality variables were collected. Survival analysis was performed using Kaplan–Meier curves.

Results: Ninety-two patients (41.3% female, mean age 78 ± 6.8) were included. The most frequent diagnoses were vascular amputation (15.2%) and venous wounds (14.1%). Most patients were independent or mildly dependent according to BI (73.9%) and presented polypharmacy (83.5%). Nutritional intervention was provided to 75.6% of patients. Mean baseline and discharge MNA were 21.13 ($\pm$ 3.48) and 24.05 ($\pm$ 3.37), respectively (p = 0.000, Cohen's d = 0.82). Malnutrition (GLIM) was present in 27.9% of patients, of which 58.8% were no longer malnourished at discharge (p = 0.012, Cohen's h = 0.40). Wounds evolved as follows: 54% improved, 21.8% healed, 12.6% stabilized, 11.5% worsened. Global one-year mortality was 10.9%, significantly different according to wound evolution: 40%, 9.1%, 10.4%, and 0% in the groups “worsening”, “stability”, “improvement” and “healing” respectively (p = 0.014). Kaplan–Meier estimated survival between these groups also shows significant differences (log-rank p = 0.005).

Conclusions: The analyzed patients frequently presented malnutrition and polypharmacy. In most cases an improvement in wounds and nutritional status was reported, reflecting the benefit from a multidisciplinary approach. Poor wound evolution could be a prognostic marker for one-year mortality.

P-0377

Frailty and social vulnerability in older adults: the value of social assessment in geriatric care

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Introduction: Within a multidisciplinary approach, social assessment is crucial to understanding an older person's relationship with their environment and the social factors that directly influence their health. Evaluating aspects such as social context, functionality, and the patient usual environment is essential for measuring social risk. Frailty and social vulnerability are prevalent in the geriatric population. Understanding their interplay can address the challenges posed by population aging.

Objective: This study analyzes how frailty levels influence the social situation of older adults using various assessment scales. Based on these findings, individualized preventive, therapeutic, and rehabilitative plans can be designed to maximize functional independence and quality of life for patients seen in our hospital's Geriatric Service.

Methods: A descriptive, retrospective, observational study was conducted on patients assessed in our geriatric outpatient clinic in 2024. Data was collected using multiple validated scales: the TSO Socio-Family Assessment Scale (TSO), the Barthel Index, the Frail-VIG Index, and others, enabling an objective measurement of patients' social vulnerability at a specific time.

Results: Study included 33 patients over 70 years (62.5% women). Of these, 60.6% had no social issues, 39.4% were at social risk, and 18.2% had social vulnerability. Patients with social risk or vulnerability exhibited an intermediate Frail-VIG Index, allowing resource adaptation.

Conclusions: Combining social and frailty assessment scales enables early detection of social vulnerability linked to increased clinical frailty. This identification is crucial for planning interventions that prevent functional decline and anticipate future care needs.

P-0378

Analysis of associations of geriatric syndromes and insomnia in oldest old

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Introduction: Insomnia increases a risk of complications in elderly people. Associations of insomnia and geriatric syndromes (GSs) in institutionalized oldest-old are poorly studied.

Purpose: To estimate the presence and dimension of associations of geriatric syndromes with insomnia in institutionalized oldest-old.

Methods: 430 institutionalized outpatients (98 men) $\geq$ 90 years living in Moscow (90–104 years, median age is 92 years) were included in the study. The comprehensive geriatric assessment involved 13 syndromes: frailty, dependence on basic and instrumental activities of daily living, orthostatic hypotension, malnutrition, chronic pain syndrome, fecal incontinence, urinary incontinence, congestive syndrome, pressure ulcers, hearing deficit, visual deficit, falls (from the previous year). Insomnia Severity Index was used to assess insomnia.

Results: In the comparative analysis, the frequency of the following GSs was higher in presence of insomnia: chronic pain (74% vs 50.5%; $p = 0.001$); falls (41.1% vs 26.1%; $p = 0.030$); congestive syndrome (54.1% vs 38.5%; $p = 0.045$). Univariate regression analysis revealed that chronic pain ($p = 0.001$), falls ($p = 0.032$) and congestive syndrome ($p = 0.046$) increase the chances of having insomnia by 2.78, 1.97 and 1.89 times, respectively. Multifactor analysis with age and sex adjustment showed that only chronic pain is independently associated with insomnia (OR 2.44; 95% CI 1.25–4.76; $p = 0.009$).

Key conclusions: Chronic pain syndrome is independently associated with the presence of insomnia and increases the chances of its occurrence by 2.4 times in institutionalized oldest-old. Therefore, further studies on the adequacy of pain relief in institutionalized oldest-old are needed.

P-0379

Supporting elements in self-assessments for older people living at home: a scoping review

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Introduction: The global population is aging, prompting a shift in health policies towards preventive and resilience-based strategies. In the Netherlands, this shift emphasizes a capability-focused approach that highlights individuals' abilities, skills, and resources. Self-assessment tools have emerged as a valuable means for older adults to articulate their needs and maintain independence. This study explores the key supporting elements in self-assessments that facilitate aging in place.

Methods: A scoping review was conducted following PRISMA-ScR guidelines. Peer-reviewed research and grey literature were systematically analyzed, resulting in the inclusion of fourteen relevant studies. Data extraction was performed using a standardized form, and synthesis was based on predefined screening criteria and the research question.

Results: Key supporting elements in self-assessments for older adults include personalization, ease of use, system credibility, and engagement strategies. While technical and cognitive support features were well-represented, social and emotional support components were less commonly integrated, highlighting an area for further improvement.

Conclusion: Providing clear, supportive, and individualized self-assessment tools empowers older adults to actively manage their health. These tools enhance awareness, safety, and self-confidence, facilitating effective self-management and promoting independent living for as long as possible. Further research should explore the integration of social and emotional support elements to optimize self-assessment effectiveness.

Keywords: self-assessment, aging in place, older adults, independence, resilience, health technology.

Short poster presentation**Comprehensive geriatric assessment**

P-0380

Comprehensive geriatric assessment and admission avoidance by urgent community response virtual ward service in West Berkshire, United Kingdom

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Introduction: Urgent Community Response Virtual Ward (UCRVW) hospital at home service was set up in October 2022 as part of the drive by National Health Service England to increase capacity within the healthcare system. In Berkshire West UCRVW supports a population of 50,000. It's a Consultant Geriatrician led multi-disciplinary service working from 8am-8pm, 7 days a week throughout the year to support a health or care crisis. We provide Comprehensive Geriatric Assessment, use Point of care (POC) blood tests, urgent laboratory tests, ECG, POC ultrasound, deliver intravenous antibiotics, fluids, oxygen, nebulisation and do Advanced Care Planning. We have access to short term care packages to support admission avoidance to acute hospital.

Method: A retrospective audit of patients admitted to the UCR VW from April 2022 to April 2025.

Results: 10,826 patients were admitted (2993 in 2022/2023, 4007 in 2023/2024 & 3826 in 2024/2025) 0.7% more women admitted than men. Majority of patients admitted were over 85 years: 61% in 2022/2023, 56% in 2023/2024 & 2024/2025 while under 65 years were 1–3% of admissions. Average length of stay was 6 days from 2022–2024 and 5 days in 2024/2025. Reasons for referral in descending order of prevalence were decompensation of Frailty, Falls, Delirium and End of life care. 1608 admissions were avoided in 2022/2023, 2017 in 2023/2024 and 1973 in 2024 till January 2025.

Conclusions: The service is successfully providing, holistic, home based, hospital level care to frail and complex patients. We are reducing number of hospital admissions & supporting early discharges by working across primary and secondary care.

Poster

Comprehensive geriatric assessment

P-0381

The impact of childbearing period on the health-related quality of life of Chinese older women

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Introduction: As global populations age, understanding how reproductive history shapes later-life health is increasingly critical—particularly in contexts undergoing rapid demographic and policy shifts. In China, the transition from a one-child to a three-child policy has extended many women's childbearing periods, raising new questions about long-term health outcomes. The impact of reproductive lifespan on women's health in later life has garnered increasing attention, yet empirical evidence remains limited.

Methods: Using cross-sectional data from the 2018 Chinese Lateral Health Influences Tracking Survey, we employed ordinary least squares and instrumental variable methods to identify causal relationships. It further explored the mediating role of emotional support and the moderating role of financial support in this relationship.

Results: A longer childbearing period was significantly associated with lower HRQoL among elderly women (-0.087 , $p < 0.01$). Emotional support from children mediated this effect positively, while financial support served as a moderator. Heterogeneity analysis indicated that the negative association between childbearing period and HRQoL was particularly pronounced in dimensions such as self-care (-0.011 , $p < 0.01$), usual activities (-0.009 , $p < 0.01$), and pain or discomfort (-0.006 , $p < 0.05$). Subgroup analysis shows stronger effects among illiterate and urban-dwelling women.

Key conclusions: This study offered valuable insights for a growing international discourse on gendered life course impacts. The duration of the childbearing period should be regarded as a key determinant in evaluating older women's health, particularly in relation to physical functioning and discomfort. Enhancing emotional connectivity and leveraging digital technologies may help mitigate aging burdens shaped by reproductive histories across diverse cultural contexts.

P-0382

A randomized trial of CGA to prevention of functional decline in older adults with diabetes: protocol and preliminary results of the CARED study

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Background: Although scientific guidelines recommend Comprehensive Geriatric Assessment (CGA) for older adults with type 2 diabetes mellitus (DM2), evidence supporting its effectiveness remains limited. This protocol outlines a randomized controlled trial assessing the impact of CGA-guided care on physical function in older adults with DM2.

Methods: Multicenter, parallel-group, randomized controlled trial conducted in outpatient clinics in Cagliari, Ferrara, and Monza (Italy). Participants aged ≥ 75 years with DM2 and with a Short Physical Performance Battery (SPPB) score ≥ 4 are randomly assigned to intervention (CGA-guided care) or control (usual care) groups. The intervention group receives personalized care based on CGA results. Follow-up visits are scheduled at 6 and 12 months. The primary outcome is the change in SPPB score over the follow-up.

Preliminary results: Currently, 60 participants have been enrolled, with a mean age of 80.3 years, 39% being females. At baseline, the median SPPB score is 9 (IQR 7–9) and the mean handgrip strength is 36.2 kg (SD 16.8). The median Basic Activity of Daily Living (BADL) score is 6 (IQR 6–6), and the median Charlson Comorbidity Index is 5 (IQR 5–6). The median MoCA score is 18.2 (SD 3.3), and mild depressive and anxiety symptoms (median 2, IQR 1–4).

Key Conclusion: Currently, study participants are independent in terms of BADL, though a proportion of them are frail and/or have mild cognitive impairment. This study will contribute to the evidence on CGA-guided care in managing frail older adults with DM2, potentially improving their functional outcomes.

P-0383

Psychotic episode after electrical cardioversion (ECV) in a patient with vascular depression and suicidal attempt: a case report

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Introduction: An 84-year-old male was admitted to the acute care unit after a fall resulting in a traumatic brain injury and a right leg trauma with an abscessed hematoma. He had moderate cognitive impairment (CI) with worsening temporospatial disorientation and the onset of harmful thoughts. Geriatric Comprehensive Assessment (GCA): Barthel Index 100, gait without assistance, married, living alone.

Methods: He had multiple cardiovascular risk factors (CVRf), heart and kidney failure, and non-valvular atrial fibrillation, anticoagulated with ECV in July 2024. He also had a depressive disorder without follow-up. Since July 2024, he frequently visited the emergency service for acute confusional syndrome, falls, and suicidal ideation (SI), with ECV acting as a trigger. Notable polypharmacy with questionable therapeutic adherence.

Results: Screening and comprehensive assessment were performed. Cranial CT showed no acute findings or infectious foci. Blood pressure monitoring showed poor control, and atypical antipsychotics were started in synergy with an antidepressant, with progressive titration and good tolerance. SPECT showed a vascular pattern. No SI or new attempts were noted. Organic screening was made, infectious process was solved. Social vulnerability resources were reinforced. Discharged with follow-up in geriatrics outpatient clinic.

Key conclusions:

- Vascular depression and vascular CI in the elderly pose a diagnostic challenge: heterogeneous presentation and overlapping syndromes. CVRF control is essential.
- SI in the elderly should be assessed comprehensively and promptly. Its onset and associated risks should never be underestimated.
- The GCA, within a thorough medical history, is the most valuable diagnostic, therapeutic, and follow-up tool for this patient profile.

P-0384

Functional performance is integral to clinically useful measurement of risk for developing Alzheimer's dementia

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Predicting an individual's risk to developing Alzheimer's Dementia (AD) is essential for managing disease progression in clinical settings, as well as recruiting adults in prospective medical research. Various algorithms have been created to calculate AD risk based on evidenced modifiable (e.g. smoking) and non-modifiable (e.g. Apolipoprotein E4 carrier) factors which are weighted toward a total score. We evaluated the performance of existing risk algorithms in the contemporary Bio-Hermes-001 cohort, with a third of its participants from populations typically underrepresented in AD research.

We calculated risk according to six previously validated risk algorithms that were published in the last 20 years. We assessed algorithm specificity and calibration in making four distinctions: classifying participants with Healthy Cognition (NHC = 417) from probable AD (NAD = 272); HC from Mild Cognitive Impairment (NMCI = 312), HC from pooled MCI or AD; and MCI from AD.

We found acceptable calibration of all except the oldest algorithm. the algorithm with a functional criterion was clinically useful (> 0.8 Area Under the Curve in HC-AD classification). The two earliest published algorithms were only chance-level accurate, and no algorithm exceeded 0.8 AUC for the other comparisons.

Our findings align with concerns about relevance of previously validated risk algorithms to contemporary populations. Our work further evidences the importance of capturing functional performance in clinically useful risk measurement, thus highlighting the need for robust and efficient measurement of functional independence to estimate AD risk at scale in clinical research and practice.

P-0385

Economic insights of a geriatric assessment for frail heart failure patients in the Heart-Brain Clinic

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Introduction: To address frailty, enhance quality of life, and reduce preventable healthcare use, we conduct geriatric assessments for heart failure (HF) patients in the Heart-Brain Clinic. Its effectiveness has yet to be evaluated. This study explores how geriatric assessments can improve quality of life and costs (as outlined in the program theory), and identifies potential cost savings if outcomes are (fully) achieved.

Methods: For this early economic evaluation, we used a mixed-methods approach. First, we developed the program theory through a literature review and interviews, covering the topics "concurrent health issues", "interventions", "outcomes", "influencing factors".

Second, we estimated current costs of outcomes to depict the room for improvement in costs if all outcomes would be prevented. Current costs were estimated using incidence rates, healthcare resource use, and inflation-adjusted costs.

Results: Various patient-specific interventions were identified and could help reduce depressive symptoms, improve mobility/reduce falls, improve medication adherence, and reduce acute decompensated HF events. Stakeholders expected interventions for mood disorders/loneliness, and impaired mobility to be most effective in improving quality of life and reducing costs. Annual per-patient costs were €1111–€2111 for depression, €2056–€6394 for falls, and €3873–€6707 for HF hospitalizations. No costs were found for medication non-adherence.

Conclusion: This study identifies which data is essential to collect to evaluate the (cost-)effectiveness of geriatric assessments in frail HF patients. By reducing costly depressions, falls, and acute decompensated HF events, geriatric assessment in HF patients could reduce costs.

P-0386

Determinants of daily energy intake among older adults living alone and with others: analysis of the 2023 Korea National Health and Nutrition Examination Survey

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Introduction: This study aimed to identify the factors influencing daily energy intake among older adults aged 65 and over, comparing those living alone (single-person households) with those living with others (multi-person households). Variables included sex, income, education level, type of health insurance, private health insurance coverage, activity limitation, quality of life using HRQoL instrument with 8 items (HINT-8), and presence of chronic diseases.

Methods: Data were obtained from the 2023 Korea National Health and Nutrition Examination Survey (KNHANES), 2nd year of the 9th phase. Among 6,929 total respondents, 1,798 older adults aged 65 or above without missing values were selected for analysis. The sample consisted of 496 individuals in single-person households and 1,303 in multi-person households. Using Python, a complex sample design with weights was applied, and multiple linear regression was performed. The significance level was set at 0.05.

Results: For older adults living alone, factors significantly associated with daily energy intake included sex, income, type of health insurance, private health insurance, activity limitation, quality of life, and current hypertension. In contrast, for those in multi-person households, significant factors included sex, income, education level, type of health insurance, private health insurance, activity limitation, and current prevalence of dyslipidemia and diabetes.

Conclusion: These findings suggest the need for tailored interventions to improve daily energy intake in older adults, taking into account household type and the specific influencing factors associated with each group.

P-0387

Revisiting obesity metrics in older adults: is waist-to-height ratio the missing link?

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Introduction: Body mass index (BMI) is the most commonly used parameter for predicting obesity and its adverse clinical outcomes. However, its use in predicting abdominal obesity is limited. Waist circumference and/or waist-to-hip ratio have been suggested for a more accurate assessment of abdominal obesity. Recently, the waist-to-height ratio has emerged as a novel parameter. This study aimed to evaluate the association of different abdominal obesity parameters, in addition to BMI, with obesity-related disability, frailty, and metabolic diseases.

Methods: Patients evaluated in our geriatric outpatient clinic between November 2012 and June 2024 with complete BMI, waist circumference, and hip circumference data were included. The relationship between obesity-related adverse clinical outcomes and body indices was analyzed using logistic regression models.

Results: A total of 2051 patients (68.4% female, mean age 74.9 years) were included. Disability and frailty were observed in 766 (37.3%) and 366 (17.8%) patients, respectively. Metabolic syndrome-related diseases (having at least two of the diabetes, hypertension, and dyslipidemia) were assessed in 1174 patients and observed in 153 (7.5%). In multivariate logistic regression analyses (adjusted for age, sex, and BMI), waist-to-height ratio remained significantly associated with frailty, disability, and metabolic diseases, while other indices lost significance in some models.

Conclusion: Our study suggests that waist-to-height ratio may serve as a valuable complementary parameter to BMI in predicting obesity-related adverse clinical outcomes, including disability, frailty, and metabolic diseases.

P-0388

Clinical and immunological features of primary Sjögren's syndrome among the elderly

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Background: Sjögren syndrome (SS) is a connective tissue disease characterized by lymphocytic infiltration of exocrine glands, leading to sicca symptoms. While it typically affects middle-aged women, its presentation in elderly patients is still underexplored. This study aimed to analyze the characteristics of primary SS in the elderly population.

Methods: A retrospective study was conducted. Patients aged 65 years and above, diagnosed with primary SS according to ACR/EULAR criteria, in an internal medicine department from January

2010 to March 2025 were included. Clinical presentation, serological markers, and disease outcomes were assessed and compared to younger patients.

Results: A total of 43 patients were included (36 females and 7 males). Elderly-onset Sjögren's syndrome (E-SS) was reported in 23 patients. A delayed diagnosis appeared to be more frequent in E-SS ($p = 0.52$), likely due to overlapping symptoms with aging and comorbidities. Sicca symptoms were comparable between the two groups. E-SS was significantly associated with asthenia ($p = 0.023$), weight loss (0.032) and pulmonary involvement ($p = 0.039$). Regarding biological parameters, E-SS patients had a higher prevalence of lymphopenia ($p = 0.043$) and elevated C-reactive protein levels ($p = 0.026$). No significant differences were observed in serological markers, including antinuclear antibodies, anti-SSA, and anti-SSB. Although, E-SS patients exhibited a higher frequency of lymphomatous transformation ($p = 0.045$) and general health deterioration ($p = 0.03$), overall prognosis remained comparable between the two groups.

Conclusion: E-SS is characterized by more pronounced general signs, pulmonary involvement, elevated inflammatory markers, and a higher risk of lymphoma. The frequent diagnostic delays highlight the critical importance of early detection for better management.

Short poster presentation**Comprehensive geriatric assessment**

P-0389

Care for bariatric patients on complex care

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Introduction: Our aim was to assess the quality of care provided to bariatric patients on complex care wards, to highlight the issues and recognise limitations in care in order to find areas to improve.

Method: Bariatric patients admitted across a 6 month period between August 2024 and January 2025 were included. A bariatric patient is defined as anyone regardless of age who has limitations in health and social care; and has a BMI greater than 40kg/m³, weighs greater than 152kg or exceeds the safe working load/dimensions of the supporting surface. Patients whose weight was secondary to hypervolemia were excluded.

Results: Casenotes for 19 inpatients were identified across the 6 month period. 63% of patients had a clinical frailty score of 5 and above. The focus of our improvement project was around mobilisation, therapy and discharge. 79% of patients were not mobilised from the day of admission. At the point of discharge, 42% of patients deconditioned from their baseline. Once medically optimised for discharge, 53% of patients remained in hospital for over a week, 37% for over a fortnight.

Conclusion: Whilst some of the issues highlighted can be related to all patients; there are some that only apply to bariatric patients such as delays in obtaining bariatric equipment, lack of early mobilisation and weight recording and transport at discharge. We produced a poster highlighting these specific issues with the intention of addressing lack of training around bariatric patients and reducing these barriers that lead to deconditioning and prolonged hospital stays.

Poster

Comprehensive geriatric assessment

P-0390

Exploring the vulnerability of adult and older inmates through a multidomain assessment: preliminary data from the frail in jail study

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Introduction: The concept of frailty, developed in the geriatric field, is now applied to various populations with at-risk conditions. We aimed to assess frailty and overall health status using a multidomain approach in adult and older inmates, a population overlooked in the current literature.

Methods: This ongoing cross-sectional study started in January 2024 at the “Costantino Satta” male penitentiary in Ferrara (Italy) and involves individuals aged 40 +, detained for > 6 months. Through a multidimensional assessment, we collected data on sociodemographic, anthropometry and body composition, Mediterranean diet adherence (MEDAS), medical history, physical performance (4-m-walk test and handgrip), cognitive function (MoCA) and psychological wellbeing (DASS-21). Sarcopenia was assessed based on the EWGSOP2 criteria, frailty according to the Frailty phenotype and malnutrition following the GLIM criteria.

Results: To April 2025, the sample included 147 inmates. Of these, 61.2% were under 55, 25.2% were 55–64, and 13.6% were ≥ 65 years. When evaluating dietary habits, 68.5% of participants showed low adherence to the Mediterranean diet, 31.5% had medium adherence, and none had high adherence. The median MoCA score was 21, with 71.4% of the sample scoring 18–25 and 16.4% with < 18 points. The DASS-21 indicated severe depressive symptoms in 14.3% and severe anxiety in 18.3% of the sample. Undernutrition was detected in 23.1% of participants and probable sarcopenia in 5.5%.

Key conclusion: Adult and older inmates emerge as a vulnerable population where multiple factors may concur to accelerate aging. Applying a multidimensional assessment in this setting might help to detect and manage specific healthcare needs.

P-0391

Obesity paradox revisited: the role of muscle in the link between body composition and depression in aging

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Introduction: Depression is a common geriatric syndrome among older adults and is well known to be associated with adverse outcomes such as reduced quality of life and cognitive decline. Current evidence suggests that sarcopenia and obesity may be associated with depression; however, which body composition phenotype has a stronger association remains unclear. In this study, we aimed to investigate the relationship between different body composition phenotypes and depression in older adults.

Methodology: This cross-sectional study included ≥ 60 years outpatients who underwent comprehensive geriatric assessment between 2012–2024 in a tertiary health center. Depression was assessed using the Yesavage Geriatric Depression Scale, with a score ≥ 14 considered as depression. Hand grip strength was assessed using a hydraulic hand dynamometer. Body composition was evaluated via bioelectrical impedance analysis. For the diagnosis of sarcopenia, we used the definition of EWGSOP2 (low muscle strength and low muscle mass) (1). Obesity was defined as increased body fat percentage (2). For the diagnosis of sarcopenic obesity, we used the definition recommended by the ESPEN/EASO consensus report: low muscle function (strength) + altered body composition (low muscle mass + increased fat percentage) (3, 4). For these definitions we used population and sex-specific thresholds (2, 5). As a result, participants were categorized into four different body phenotypes: non-sarcopenic non-obese (reference group), sarcopenic non-obese, sarcopenic obese and only obese (non-sarcopenic obese). Univariable and multivariable analyses were performed to determine which body composition phenotype was independently associated with depression.

Results: We included 590 participants; the median age was 74 years (60–95), and 405 (68.6%) were female. Of those, 201 (34.1%) were found to have depressive mood. Among these individuals, the distribution of body phenotypes was as follows: normal (non-sarcopenic non-obese) 50.5%, sarcopenic 16.0%, sarcopenic obese 14.0%, and obese 19.5% ($p = 0.007$). The significant difference was primarily due to obese group, in which depressive mood was found to be less prevalent compared to others. Compared to the reference group, only non-sarcopenic obese group was found to have significantly lower odds of depression after adjustment for age, sex, education level, cognitive impairment, frailty, history of falls, and polypharmacy (OR = 0.483, 95% CI: 0.299–0.780, $p = 0.003$).

Key conclusion: Our study expands the scope of the obesity paradox in older adults, suggesting that this entity may only be valid in the presence of adequate muscle reserves. Large-scale longitudinal studies are needed to confirm these findings.

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P-0392

Functional, cognitive and nutritional status of the older population in León, Spain

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The older population is the fastest-growing population group in our region.

Spain has one of the highest life expectancies in the world, but living longer does not indicate a good quality of life or good health.

Objective: To assess the functional, cognitive, and nutritional status of patients who attend the geriatric clinic for various reasons. materials and methods: Patients of both sexes, aged 75years or older, who attended our clinic.

We used the Barthel index for functional assessment, the MiniMental score for cognitive status, the Mini Nutritional Assessment(MNA) and the body mass index(BMI) for nutritional assessment.

Variables: age, sex, weight, height, Barthel score, MNA and BMI. Assessment was performed globally, by sex, age group and place of residence.

Results: Sample:875 patients, 63.2%women, 36.8%men. Mean age:84.2%, 74.4% living at home, 25.6% institutionalized. The majority of the group was aged 85–89. The mean Barthel score:88.2, the minimental score:24.6, the MNA:11.1, the BMI:24.6.

By age and sex, there were no differences in overall health status in the younger age groups.

By sex, women had worse cognition and BMI.

Women: the overall health status was better in the younger age group.

Men: the 80–84 age group had the best overall assessment.

Conclusions

1. The study population had good functional, cognitive and nutritional status.

2. When the sample was separated by sex, there were no differences in the overall assessment or by age group.

3. There were differences in the general condition of patients living at home compared to those living in an institutionalized setting.

P-0393

Quality improvement project to reduce post-contrast acute kidney injury in the elderly frail population in the community

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Introduction: Computed tomography (CT) is a vital diagnostic tool, with over 7 million scans [1] performed in the UK in 2023–24, of which approximately 40% were contrast-enhanced. While contrast media significantly improves diagnostic accuracy, it poses a risk of post-contrast acute kidney injury (PC-AKI), particularly in frail elderly patients with reduced renal reserve. The Community Rapid Response Team at St Woolos Hospital manages frail elderly patients in the community to avoid hospital admissions. This quality improvement project aimed to reduce PC-AKI by identifying renal risk factors and implementing targeted interventions.

Methods: Data from 20 patients admitted since May 2023 were reviewed to identify the prevalence of renal risk factors prior to contrast-enhanced CT (CE-CT). Based on these findings, a renal safety checklist was developed using the 2018 iodinated contrast guidelines from the Royal Australian and New Zealand College of Radiologists [2]. In May 2024, the checklist was incorporated into the

Comprehensive Geriatric Assessment to promote safer imaging practices.

Results: Following the implementation of the checklist, outcomes were evaluated in the next 20 patients who underwent CE-CT. Post-CT renal function monitoring rates rose from 20 to 95% and renal risk checks improved from 45.5% to 93.5%.

Key conclusions: The introduction of a structured renal safety checklist improved risk identification and monitoring practices, thus reducing the likelihood of contrast-related renal injury. This highlights the importance of targeted interventions for enhancing patient safety in community-based elderly care.

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P-0394

Patients and relatives' experiences of participating in an outpatient comprehensive geriatric assessment, during their temporary stay in a community rehabilitation facility—a descriptive qualitative study

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Introduction: Transitions between hospital and home can be exhausting to frail elderly patients who often need extended care and treatment after discharge. A temporary stay in a community rehabilitation facility (CRF) providing 24-h nursing assistance can be a solution. Project GeriKom aimed to optimize the cross-sector transition by offering frail elderly patients an outpatient comprehensive geriatric assessment conducted by an outgoing geriatrician from the hospital working together with a nurse from the CRF. This study reports the frail patients and their relatives' experiences of participation in the interdisciplinary assessment.

Methods: The “rigorous and accelerated data reduction” (RADaR) technique was used for data collection and analysis. Fifteen semi-structured interviews were conducted with patients and their relatives in six CRFs from April to June 2024.

Results: Four themes with inter-relations were found: Becoming personally involved by the geriatrician; Receiving a holistic geriatric assessment; Collaborating with the geriatrician or the general practitioner; Considering the outpatient geriatric assessment to benefit others.

Conclusions: The outpatient comprehensive geriatric assessment had vital importance for the elderly patients and relatives. Key components for success included the physical presence of the geriatrician at the CRF and the active involvement of the patient and relatives when developing a holistic plan for current and future care and treatment. Experiences from this study can be used in future cross-sectional initiatives for frail elderly patients.

P-0395**Beyond falls in polymedicated elderly patients: a case study**

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Introduction: Falls and polypharmacy are common geriatric syndromes that are frequently interconnected, particularly when treatment is not closely monitored.

Methods: Case History: An 84-year-old male was referred from Primary Care due to gait disturbances and recurrent falls. He had been on valproic acid (700 mg daily) for over 20 years to manage epilepsy without a consultant follow up.

Functionally, the patient scored 50/100 on the Barthel Index and 6 points on the Short Physical Performance Battery test (SPPB). He may also be experiencing a neurocognitive disorder.

Results: The patient was hemodynamically stable. Neurological findings included bradykinesia (slow finger tapping), positive retropulsion, right wrist stiffness, reduced movement of the right arm while walking, and slow turning.

Diagnosis and therapeutic plan:

The recurrent falls were attributed to the extrapyramidal side effects of valproic acid. The medication was discontinued, and levetiracetam (250 mg every 12 h) was initiated. Physiotherapy was also prescribed. Follow-up (One Month Later): Improvement was observed in the SPPB test (9 points). No further seizures or falls were reported.

Conclusions:

-Periodic reassessment of antiepileptic treatment is essential in elderly patients.

-Given the potential side effects of valproic acid in older adults, alternative medications such as levetiracetam should be considered.

P-0396

Usefulness of the Brief-Multidimensional Prognostic Index (BRIEF-MPI) for assessing healthcare needs in older people with non-communicable chronic diseases in general practice: findings from the PrimaCare_P3 (Personalized Prevention Program) Study

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Introduction: In Europe about 40% of people ≥ 65 years and older are affected by multiple non-communicable chronic diseases (NCDs). The Comprehensive Geriatric Assessment (CGA) proved to be useful in early identifying healthcare needs of older people with NCDs in order to develop a care plan to meet these needs. Aim of

PrimaCare_P3 study was to assess healthcare needs of older people referring to their general practitioners (GPs), by using the CGA-based Multidimensional Prognostic Index-Brief Version (BRIEF-MPI), to plan a personalised prevention programme (PPP).

Methods: PrimaCare_P3 is a cluster randomised controlled trial including 1,223 participants ≥ 65 years with at least one NCD selected by 30 GPs from four geographical areas and assigned to intervention group (IG = No.612) or usual care control group (CG = No.611). Participants in IG were administered the BRIEF-MPI to explore their functional, cognitive, nutritional, social-habitational conditions, co-morbidity, polytherapy, and vaccination status according to the National Vaccination Prevention Plan (PNPV). Following the BRIEF-MPI assessment, GPs provided a PPP with targeted recommendations and interventions including prescribed specialistic examinations, if needed.

Results: In IG the most impaired domains were polytherapy, i.e. 59% of participants required a deprescribing program according to STOPP-START criteria, 25% showed malnutrition or overweight/obesity, 22% required interventions for cognitive impairment, 18.5% for social isolation/loneliness and 16.5% for functional impairments (ADL/IADLs). Moreover, missing vaccination coverage were reported in 34% (anti-flu), 45% (anti-COVID-19), 74% (anti-pneumococcus), 89% (anti-herpes zoster).

Key conclusions: The findings confirm the usefulness of the CGA-based BRIEF-MPI assessment to identify older people's healthcare needs to develop a PPP to addressing them in general practice.

P-0397

Bringing remote elderly people up to specialized care with limited resources: creating a geriatric day hospital from a new perspective

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Introduction: In times of economic hardness, community dwelling elderly people may struggle to access proper healthcare, moreover in remote areas. We present a three-year-long project of creation of a geriatric day hospital in semi-rural South-East France.

Methods: North Drôme hospitals are a secondary level care facility, serving a population of 170,000 people, in urban, rural and mountain areas. In September 2022, we created a geriatric consultation and a geriatric day hospital nested into a polyvalent, limited-resources, short stay unit. Activity has grown from an interquartile range of 2 to 3 patients last year to a 4-bed day hospital operating at full capacity. The typology of patients, referring & referral partners, spitfalls and ways forward are illustrated by an Ishigawa diagram.

Results: Tough medico-economic negotiations led us to set up an initial team consisting of a full-time occupational therapist and a half-time dietician. The key role of coordinating nurse was fulfilled by detecting abilities in the team. Training nurses & caregivers, draining skilled professional through scientific collaboration led us to open to ICOPE implementing partnerships, and back the creation of a territorial resources center. Very active and long-reaching mobile teams enabled a wide recruitment of patients regardless of distance.

Conclusion: Changing minds and giving sense led to an original solution that could be replicated in other areas that are under-resourced and/or far from referral centers.

Short poster presentation

Comprehensive geriatric assessment

P-0398

Factors associated with informants' perception of patients' loneliness in a geriatric rehabilitation cohort

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Introduction: Effect of loneliness extends beyond social well-being and is closely linked to psychological, cognitive, and medical problems and increased mortality. Geriatric assessments often rely on input from informants (family members, friends, or caregivers), but factors affecting their perception of patients' loneliness are not sufficiently studied. Such assessments may be valuable when patients are unwilling or unable to report loneliness themselves.

Methods: Informant's perception of the patient's loneliness was collected by a nurse during a structured interview at admission to a short-term inpatient geriatric rehabilitation unit. Loneliness was classified as Lonely/Not lonely/Unable to respond or missing data. A comprehensive set of items representing physical, psychological, and cognitive health, as well as comorbidities, was collected using the interRAI Post-Acute Care instrument. We fit multivariable logistic regression models to assess the relationship between known risk factors for loneliness and the informant's perception.

Results: Out of 765 subjects in the dataset, 88 were described as "lonely" and 52 as "not lonely". Mean age of these 140 subjects was 83.8 (SD $\pm$ 6.3) years, 67% were female. Factors that independently associated with informants' perception of loneliness were: living alone, presence of depressive symptoms and/or sleep problems (assessed by a healthcare professional), patient's self-perception of poor health, and history of falls.

Conclusions: A mix of social, medical and psychological factors is associated with informants' perception of loneliness and should be considered when interpreting information about the patient. Informants may be hesitant to give a definite answer about the patient's loneliness.

Poster

Comprehensive geriatric assessment

P-0399

Public healthcare for older people in rural india: facilities, services and perspectives of patients and healthcare providers in primary care settings

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Introduction: Demographic transition in the global south is leading to a rapid rise in the population of older adults, presenting significant challenges to the public health system, particularly in rural areas. Health services research evidence is primarily from the global north. This study aimed to compare the availability of preventive, curative, and rehabilitative healthcare services for older adults in rural India, identify the facilitators and barriers in healthcare provision, and develop a conceptual model of healthcare pathways for older people.

Methods: A qualitative ethnographic study, combined with a facility mapping exercise, was conducted in Tigiria, Odisha. The study involved healthcare providers, program managers, and rural community members aged 60 years and above. Data were collected through facility observation checklists, in-depth interviews (IDIs), focus group discussions (FGDs), and key informant interviews (KIIs). Qualitative thematic analysis was conducted using ATLAS.ti software.

Results: Facility mapping showed variability in availability of healthcare services: basic preventive and curative services were available at the primary healthcare level, specialized geriatric care, including rehabilitation services, were scarce. Facilitators for healthcare access included community engagement and existing informal care networks. Key barriers included resource limitations, gaps in skills of medical staff, and lack of geriatric-specific training. A conceptual model for healthcare pathways was developed, advocating for the adoption of Comprehensive Geriatric Assessment and the use of telemedicine to enhance service delivery.

Key conclusions: Strengthening primary care, improving healthcare infrastructure, and addressing gaps in specialized services were identified as critical to meeting the healthcare needs of India's aging population.

P-0400

Functional aspects of a geriatric nephrology consultation

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Introduction: Chronic kidney disease (CKD) affects approximately more than 20% of people over the age of 60. In primary care patients the prevalence of CKD can reach 35–40%.

Our objective was to analyze the parameters associated with CKD and their possible relationship with the degree of frailty (Frail) and/or functionality (Barthel and Lawton) in geriatric patients referred from Primary Care.

Methods: Descriptive and observational epidemiological study of a case series, including all patients who were referred to the Nephrology Service at HUNSC over an 8-month period.

Results: Analyzing the relationship between frailty and functionality with parameters associated with CKD, we observed that the groups with greater frailty were older and had lower hemoglobin and albumin levels ($p < 0.05$). Likewise, it was observed that frail patients had a higher risk of mortality than non-frail patients ($p < 0.05$).

When comparing the means of parameters associated with CKD in relation to the development or absence of a nephrological event, defined as a progressive decline in eGFR and/or the need for EPO, creatinine, eGFR, hemoglobin, and albumin showed a significant impact on the presence of a nephrological event ($p < 0.05$).

Conclusions:

- The geriatric population represents an important subgroup of patients referred to Nephrology.
- CKD is associated with high levels of frailty and, therefore, a high risk of impaired functionality in older adults.
- In geriatric patients and those with CKD, the implementation of frailty and functionality scales can improve care and the efficiency of the healthcare process.

P-0401

Neuropsychiatric symptoms in nursing home residents: a 2-year follow-up

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Background: With the aging population, the proportion of people with multimorbidity and cognitive impairment increases. Many of these individuals have complex health needs that may require 24-h care. Studies have shown that 70–90% of older adults with a dementia diagnosis experience neuropsychiatric symptoms (NPS) that encompass both behavioral and psychological symptoms throughout the illness. This study aims to examine the presence and progression of NPS and association with physical function in nursing home residents over 2 years.

Methods: This study included 2379 participants living in nursing homes in Trondheim municipality from September 2021 to [56]. Residents were included if they had been assessed using the Neuropsychiatric Inventory (NPI) and had received an ADL-function score. Time trends in sub-symptoms and total NPI score will be examined using a linear mixed model. ADL scores will be included in the analysis to explore associations with physical function.

Results: Analysis of population characteristics, prevalence, incidence, and persistence of NPI and possible interactions with physical function are ongoing and will be presented at the conference.

Conclusion: This study will provide valuable insight into the presence and severity of NPS in a nursing home population and how these symptoms are associated with changes in physical function over time. There is an urgent need to address the coming demographic changes with increased knowledge about the complex symptomatology that nursing home residents often have that can further contribute to increased preventive focus and more proactive care in nursing homes.

P-0402

Essential competencies for comprehensive geriatric assessment in primary health nursing: an e-Delphi study

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Introduction: In the care of the older people, regardless of the care environment, a comprehensive view of the person's situation is important. A comprehensive view of an older people can be obtained through a geriatric assessment (CGA). CGA is a multidimensional and interdisciplinary process designed to assess the medical, psychological, and functional capabilities of older adults. Ensuring nurses are equipped with the necessary competencies is vital to delivering high-quality geriatric care.

Aim: This study aimed to identify and prioritize essential nursing competencies for conducting comprehensive geriatric assessments through an e-Delphi study involving expert consensus.

Methods: A three-round e-Delphi study was conducted with 14 experts in geriatric care, including nursing educators, clinicians, and researchers. In Round 1, participants proposed key competencies required for effective geriatric nursing. In Round 2, panel rated the proposed competencies using a 10-point Likert scale for importance and relevance. In Round 3, consensus was reached on items achieving a minimum of 75% agreement.

Results: A total of 34 competencies were identified and classified into seven domains such as clinical assessment and intervention, communication and interpersonal skills, ethical and legal considerations, professional development and leadership, and cultural competence. The highest-rated competencies emphasized patients' preference, medication review patient participation and teamwork.

Conclusion: The identified competencies provide a framework for developing educational interventions, enhancing geriatric nursing curricula, and guiding professional development initiatives. By integrating these competencies into practice, nurses can better address the complex needs of older adults and improve care outcomes, regardless of the care setting.

Keywords: Comprehensive geriatric assessment, geriatric nursing, e-Delphi study, nursing competencies, older adults, clinical practice, professional development.

P-0403

Oropharyngeal dysphagia. suspicion and home treatment

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Dysphagia. 93% in dementia.

There are no studies or standardized follow-up care for dementia. We do 600 visits-year. We maintain 200 under follow-up. We employ noninvasive measures to prevent complications such as aspiration pneumonia and hospitalizations.

Assessment a semi-structured interview looking for signs of dysphagia.

Our intervention consists of verbal and written information based on noninvasive compensatory measures such as postural modifications,

dietary modifications and environmental modifications, reducing speed, adjusting volume, and adjusting utensils.

Longitudinal observational study with home visits in 2024. Sociodemographic, Barthel Index(BI), dementia stage using GDS(Global Dementia Scale), IF-VIG, FRAIL, abbreviated CHARLSON, geriatric syndromes, hospital admissions and Intervention.

71% dysphagia. age: 87.87 years. 76.2% women.

BI: mean: 24.86. GDS 5: 33.3%.

IF-VIG: mean: 0.52. FRAIL: mean: 3.75.

CHARLSON abbreviated: mean: 3, 4. 73.3% living in a family. 50% paid caregiver.

81.9% HTA, 32.4% DM, 52.4% DLP, 47.6% CKD, 63.8% cardiac, 17.1% oncological, 32.4% digestive, 63.8% neurological.

37.1% instability and falls, 89.5% polypharmacy, 95.2% urinary incontinence, 74.3% fecal, 42.9% depression, 85.7% chronic pain, 83.8% dementia, 61% constipation, 63.8% insomnia, 41% pressure ulcers, 88.6% GLIM criteria. Admissions: 22.9%. 6% could be related to dysphagia.

We are surprised by the low percentage of dysphagia-related admissions in our patients.

This suggests that our interventions are effective, and although this is a basic, descriptive study, we want to share it with colleagues who work with such diverse patients not included in published studies, especially those cared at home by family members and caregivers.

P-0404

Quality of life in older patients with chronic kidney disease: a multicentre cross-sectional study

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Introduction: Older adults living with chronic kidney disease CKD often experience reduced quality of life (QoL), sometimes worse than that reported by cancer patients. Physical limitations, dietary restrictions, and emotional burden can profoundly affect their daily life. This study aimed to identify determinants of impaired health-related quality of life (HRQoL) in older kidney patients across all stages of the disease.

Methods: We conducted a multicentre cross-sectional study in 2024 across five nephrology outpatient departments. Patients were stratified into three groups: stage 3–5 CKD (CKD), hemodialysis (HD), and palliative care (PC). HRQoL was evaluated using the EQ-5D-5L instrument, including five health dimensions and a visual analogue scale (VAS). Multiple linear regression models were developed for the total population and each subgroup to identify variables independently associated with HRQoL.

Results: A total of 278 patients were included (CKD: 155; HD: 78; PC: 45). Mean age was highest in the PC group (86.0 years). Most patients had low education levels and polypharmacy was common. Self-reported HRQoL (VAS) was similar between groups ($p = 0.105$), but the PC group reported more limitations in mobility, self-care, and usual activities. In the overall population, frailty (Edmonton score), and dependency in instrumental activities of daily living (IADLs) were independently associated with lower HRQoL. In the CKD group, nutritional status and hospital admissions were also significant. In the HD group, only physical performance (evaluated by Short Physical Performance Battery (SPPB)) was associated with HRQoL. In the PC group, frailty remained the key predictor.

Conclusion: Frailty, depressive symptoms, functional dependence, and nutritional status are major determinants of HRQoL in older CKD

patients. Person-centered, multidisciplinary strategies targeting these domains may be crucial to preserve or improve quality of life in this vulnerable population.

P-0405

Older people in the healthcare system in the Republic of North Macedonia

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Introduction: The process of aging of the global population brings various challenges and leads to an increased need for primary health care as well as long-term care adequate to the needs of the elderly population.

Methods: A comprehensive analysis of the reported chronic diseases, types of the most common chronic disease and hospitalizations of the older patients > 65 years in the existing capacities—public hospitals. The analysis presents the available official data from the Institute of Public Health of the Republic of North Macedonia for the 2023.

Results: A larger number of elderly people reported having chronic diseases or 59.4% of the respondents. The most common chronic disease among the older patients > 65 years was blood pressure, 29.7%, followed by diabetes at 19.8% and heart disease at 15.8%. The largest number of hospitalizations of the older patients > 65 years occurred in the General State Hospital in Bitola (8.53%), followed by the Clinical Hospital in Štip (6.75%) and the General City Hospital “8 September” in Skopje (5.71%). 713 (1.02%) hospitalizations on the national level were reported in the PHI Specialized Hospital for Geriatric and Palliative Medicine “13 November”. A total of 28% of hospitalizations were performed in the departments of internal medicine, followed by ophthalmology (9.27%) and cardiology (8.61%), surgery (6.64%) and urology (3.96%).

Key conclusions: The rapid ageing of the population requires an active response by the healthcare system on national level, adoption of new policies and the strengthening of the healthcare system in order to meet the growing need.

P-0406

The role of comprehensive geriatric assessment in older patients affected by knee osteoarthritis: an exploratory randomized controlled trial

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Objectives: This study aimed to assess the effectiveness of Comprehensive Geriatric Assessment (CGA) compared to standard of care in improving pain, physical function, and stiffness in older adults with knee osteoarthritis (OA) over six months. Secondary outcomes included multidimensional frailty and quality of life.

Design: An exploratory, multicentre, randomized controlled trial (RCT).

Setting: Five European geriatric centres in Italy, Germany, Türkiye and the Czech Republic.

Participants: Seventy older adults (mean age 76.1 ± 6.8 years; 80% female) with knee OA (Kellgren-Lawrence Grades 1–2) were randomized into two groups: CGA ($n = 35$) or standard of care ($n = 35$).

Intervention: The CGA group underwent a multidimensional geriatric assessment and intervention, identifying impairments and tailoring interventions accordingly, while the control group received standard of care.

Main outcome measures: The primary endpoint was improvement in pain, stiffness, and functional limitations measured using the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) over six months. Secondary outcomes included changes in multidimensional frailty (Multidimensional Prognostic Index, MPI), quality of life (SF-36), and adherence to interventions.

Results: The CGA group showed a non-significant improvement in total WOMAC scores (-4.49 ± 3.40 , $p = 0.19$), with slight reductions in pain (-1.12 ± 0.96) and functional limitations (-3.26 ± 2.21). MPI slightly improved (-0.02 ± 0.04 , $p = 0.69$), but no significant changes were observed in SF-36 scores. No falls, hospitalizations, or severe adverse events were reported.

Conclusions: CGA may offer potential benefits for managing knee OA in older adults, particularly for pain and function, though statistical significance was not achieved. Larger studies with longer follow-up are warranted to confirm these findings.

P-0407

MobiTest study: comparison of mobility tests in geriatrics

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Introduction: Within and across health care systems, different mobility tests are used, and comparability of results is limited. This prospective observational study examines the comparability and psychometric properties of four mobility tests, two proxy rated (Charité Mobility Index (CHARMI), De Morton Mobility Index (DEMMI)) and two performance-based (Short Physical Performance Battery (SPPB), Timed-up-and-go (TUG)) in geriatric patients.

Methods: Over a period of six months, 97 patients were recruited from acute geriatric care and outpatient/inpatient geriatric rehabilitation. Data was collected within four days after admission (T1), before discharge (T2), and as a telephone follow-up after four months (T3). Equipercentile test equating was done to create a common, comparable scale from the different test scales. The quality of conversions was assessed using Spearman and CCC correlation with the DEMMI as a gold standard.

Results: Including T1 and T2 a total of 177 values were available for equivalence analysis. The scales of CHARMI, DEMMI, SPPB, and TUG could be aligned, demonstrating strong correlations. Because of floor effects in the TUG, equivalent values could not be determined for all of the tests. Correlations were best for CHARMI and DEMMI with $qc = 0.92$. SPPB correlated better with both proxy-rated instruments than the TUG (SPPB x DEMMI $r_{qc} = 0.9$, SPPB x TUG $qc = 0.48$). Conversion tables are provided at the conference.

Key conclusions: We present a practical approach to comparing and converting different mobility tests in geriatric medicine. These findings could contribute to harmonization of mobility data and allow comparison of functional status across different systems and instruments.

P-0408

Can we improve communication about medication changes?

A quality improvement project in an older persons assessment unit.

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Introduction: Medication review is an important part of a comprehensive geriatric assessment. However, adherence to medications is only estimated at 45% in the older adult population, which is often linked to poor communication about medications. The aim of our quality improvement project was to improve communication with patients and GPs about medication changes made in our hospital older persons assessment unit.

Methods: Data was collected over 12 months, before and after each intervention, regarding medication changes made and whether this was reviewed/communicated on ward round, and communicated on the discharge letter.

Interventions:

1. Distribute initial audit results and communicate the standards we should be aiming for.
2. Create and circulate a template to be used on ward rounds and discharge letters, specifying medication changes.

Results: After intervention one there was a significant improvement in communication of medications changes on discharge letters (chi squared = 11.689, $p < 0.05$), and of consultant medication reviews on ward rounds (chi squared = 62.836, $p < 0.05$).

After intervention two, there was no significant difference in communication on discharge letters (chi squared = 0.0211, $p = 0.88$). The difference in a documented consultant medication review was maintained (chi squared = 15.038, $p < 0.05$).

Conclusion: Simplifying documentation via IT templates was not successful in improving communication about medication changes when patients leave hospital, suggesting that ease of documentation is not the restricting factor.

Informing our frailty team of our performance and encouraging improvement was more successful, however the impact on junior staff was lost with rotations. We would therefore like to encourage regular communication of, and encouragement towards, performance in providing high quality care to our frail older patients, including communication of medication changes made during hospital admission. We would like to see future collaborative work with our pharmacists to improve on this further.

P-0409

Associations of the neutrophil-to-lymphocyte ratio (NLR), triglyceride-glucose index (TyG), and TyG-derived indices with vitality decline in older adults in China: a study within the integrated care for older people (ICOPE) framework

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Background/objectives: Aging populations have led to numerous health challenges. The World Health Organization (WHO) proposed “Healthy Aging” to promote elderly health by optimizing Intrinsic Capacity (IC) with vitality as a core component of metabolic homeostasis. The relationships between vitality decline and inflammatory-metabolic indicators (the NLR and TyG index) remain to be investigated.

Methods: This study recruited 986 community-dwelling adults ≥ 60 years old at the Beixingjing Street Community from March 25, 2024, to June 17, 2024, in Shanghai, China. Vitality was evaluated using the Mini Nutritional Assessment-Short Form (MNA-SF). The study population was divided into two groups based on vitality decline (scores < 12). Multivariate logistic regression was used to analyze associations between vitality decline and other IC domains as well as between vitality decline and inflammatory (NLR) and metabolic indices (TyG, TyG-WC, TyG-BMI, and TyG-WHtR). Restricted cubic spline (RCS) analyses explored potential nonlinear relationships and threshold effects. Receiver Operating Characteristic (ROC) curve analysis was used to assess the predictive value of different models.

Results: The prevalence of vitality decline was 16.4%. Vitality decline was strongly associated with psychological (OR = 10.785, 95% CI: 6.12–19.007, $p < 0.001$) and locomotor capacity decline (OR = 2.052, 95% CI: 1.134–3.714, $p = 0.018$) in fully adjusted models. An elevated NLR significantly predicted a greater vitality decline (OR = 1.236, 95% CI: 1.002–1.525, $p = 0.048$) with the highest-quartile (Q4) NLR participants showing markedly greater risk than their lowest-quartile (Q1) counterparts (OR = 1.897, 95% CI: 1.008–3.569, $p = 0.047$). Conversely, unit increases in TyG indices demonstrated protective effects as follows: TyG (OR = 0.605, 95% CI: 0.364–1.006, $p = 0.053$), TyG-WC (OR = 0.993, 95% CI: 0.989–0.997, $p < 0.001$), TyG-BMI (OR = 0.951, 95% CI: 0.941–0.961, $p < 0.001$) and TyG-WHtR (OR = 0.118, 95% CI: 0.070–0.200, $p < 0.001$). The highest-quartile (Q4) participants presented a significantly lower risk of vitality decline than the lowest-quartile (Q1) participants as follows: TyG (OR = 0.407, $p = 0.025$), TyG-WC (OR = 0.094, $p < 0.001$), TyG-BMI (OR = 0.066, $p < 0.001$), and TyG-WHtR (OR = 0.085, $p < 0.001$). Linear regression revealed that the NLR was negatively associated with the MNA-SF score ($B = -0.112$, $p = 0.009$), whereas TyG ($B = 0.265$, $p = 0.002$), TyG-WC ($B = 0.006$, $p < 0.001$), TyG-BMI ($B = 0.024$, $p < 0.001$), and TyG-WHtR ($B = 0.945$, $p < 0.001$) were positively associated with the NLR. The RCS revealed significant negative linear relationships between the NLR and MNA-SF score, positive linear relationships between the TyG score, and positive nonlinear relationships between the TyG-derived indices and the MNA-SF score. Threshold effects emerged when NLR = 1.676, TyG = 7.192, TyG-BMI = 171.698, TyG-WC = 541.301, and TyG-WHtR = 3.538. The NLR exhibited the highest predictive performance for vitality decline (AUC = 0.887, sensitivity = 84.2%, specificity = 82.1%).

Conclusions: This study revealed a high prevalence of vitality decline among older Chinese adults, which was strongly associated with a decrease in psychological and locomotor capacity. While the NLR showed a negative linear correlation with vitality, TyG showed a positive linear correlation, whereas TyG-derived parameters showed nonlinear positive associations with a plateau effect. Among all indicators, the NLR had the strongest predictive value for vitality decline.

Poster

COVID-19

P-0410

Has decision-making in do not attempt resuscitation decisions [DNAR] become more proactive since the COVID-19 pandemic?

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(1) SUH

Introduction: Cardio-Pulmonary Resuscitation is an effective treatment for clinically selected patients.

The Pandemic in Ireland was associated with clear National Guidance regarding pro-active DNAR decision-making for patients with COVID-19 [1]. This guidance was triggered by the finding that patients with COVID-19 related cardiorespiratory arrest had poor survival rates and poor functional outcomes. We postulate that there may have been ongoing wider post-pandemic sustained change relating to proactive DNAR decision-making as a consequence of this guidance.

Methods: We examined Cardiac Arrest Crash Calls Rate [CACCR] against total acute adult admissions in our University Hospital in the years before, during and after the pandemic.

Results: The CACCR initially rose by 30% from 0.01023 pre-pandemic in 2018/2019 to a pandemic peak of 0.01449 in 2021 falling to 0.01228 in 2022.

The pandemic ended in May 2023 whereupon the CACCR subsequently fell by 10% from the pre-pandemic baseline to 0.00919 in 2024 in the first full year after the end of the Covid-19 Emergency.

Key conclusion: Attempted Cardio-Pulmonary Resuscitation as measured by CACCR peaked during the pandemic but has significantly fallen from pre-pandemic levels. There is a suggestion that cultural change to more pro-active decision-making relating to DNAR decisions might be a factor. Further research is needed to ascertain if this is a wider and sustained phenomenon and if other factors are influencing this change.

[1] Guidance Regarding Cardiopulmonary Resuscitation and DNAR Decision-Making during the COVID-19 Pandemic Document Reference Number: HSE Guidance CPR-DNAR V1.1

Version Number: V1.1 August 30th 2020.

P-0411

Vitamin D supplementation and better 2-year survival in frail elderly COVID-19 patients: open-label follow-up of the GERIA-COVID quasi-experimental study

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This extension phase of the GERIA-COVID quasi-experimental study aimed at determining whether regular vitamin D3 supplementation prior to COVID-19 was associated with 2-year mortality in frail elderly patients admitted for COVID-19 to the geriatric acute care unit of Angers University Hospital, France, during the first and second waves of the pandemic. Three hundred forty-eight participants were included (median 87 [IQR 82–91] years; 49.7% women; $n = 131$ using vitamin D3 supplements; $n = 217$ in the Control group; total, 52.9% mortality after 2 years). Vitamin D3 supplementation was associated with 2-year mortality (unadjusted Cox model: HR = 0.73, $P = 0.044$; fully adjusted: HR = 0.66, $P = 0.017$).

P-0412

The impact in mental health and quality of life in the post-Covid: quantitative retrospective study

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Introduction: COVID-19 (Coronavirus disease 2019) is a highly infectious disease caused by the severe acute respiratory syndrome coronavirus (SARS-CoV-2; WHO 2020). Despite intense

international efforts to contain its spread, it has resulted in millions of cases, many of which have medium and long-term sequelae. The impact on the quality of life and mental health and the associated sequelae of those who survived, plays an important role in geriatric age.

Methods: Quantitative retrospective study of 85 patients with Sars-cov-2, during their period of hospitalization was carried out and follow-up between April and December 2023.

Results: We found a population with increased use of health resources in the context of unscheduled urgent admissions, since, for patients who were admitted to the Intensive Care Unit (ICU), 96% of these had 2 or more unscheduled urgent admissions within a period of 6 months and 98% increased the need for interventions, whether in external consultations, home care or monitoring by a nursing team. Fatigue, insomnia and pain are the most prevalent symptoms, with fatigue appearing in all patients and pain in around 9 in 10. There was a negative impact on the quality of life due to the persistence and variability of symptoms and psychological suffering that should not be neglected when monitoring mental health after applying the HADS (Hospital Anxiety and Depression Scale).

Conclusions: The Pandemic provided an opportunity to rethink the planning of advanced care health services in which the starting point for any discussion should always be the priorities of patients.

P-0413

long-term SARS-CoV-2 immunity in LTCFs residents: insights from a 4-year follow-up study

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Introduction: COVID-19 pandemic had a significant impact on global health and residents living in Long Term Care Facilities (LTCFs) were most vulnerable population, due to immunosenescence and multimorbidity. We evaluated immune response to vaccination for SARS-CoV-2 in a sample of older residents over a 4 years period.

Methods: We considered LTCFs residents in Southern Italy observed over 4 years (start date 2021), who received primary vaccination and up to 4 boosters. At each visit, blood samples were collected to measure specific serum antibody response (anti-S and anti-N IgG). Trend of antibody titers over time was examined using linear mixed-effects model.

Results: In a sample of 41 LTCFs residents (mean age 81 years, SD 8.7), we observed a robust antibody response after primary vaccination followed by a gradual decline in antibody titer, and then an increase after booster doses. Majority of participants had a natural

exposure to the virus, as evidenced by anti-N antibodies. At linear mixed models, time significantly influenced antibody response: compared to February 2024, the geometric mean of anti-S titers was 3.5 times higher in May 2024, and 2.5 times higher in August 2024. When adjusting for possible explanatory variables (age and comorbidities at baseline, sex, previous SARS-CoV-2 infection, vaccination status), results were not significant.

Key conclusions: Antibody response showed a constant increasing trend in the 4 years after vaccination for SARS-CoV-2. Antibody response due to vaccine, together with the response due to the infection itself, contributed to strengthening the levels of specific immunity in participants over time.

Short poster presentation

COVID-19

P-0414

Inpatient geriatric care structures in Europe—unofficial lack of bed capacity during and post-COVID-19 pandemic (The EAMA Cap-Gap Study)

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Perspective: The aim of this study is to provide an overview on the capacity situation in inpatient geriatric and rehabilitation services during and post the COVID-19-pandemic across Europe.

Methods: All EAMA students of the XI course were asked to develop and distribute an online survey on capacity of inpatient geriatric care in their countries.

Results: The questionnaire was answered by 132 participants from 15 European countries. In 60% (N = 9/15) of the countries the survey was distributed by the national Geriatric Society.

During the pandemic, 51% (N = 67/132) of the participants reported a reduction in bed capacity with 22% (N = 29/132) experiencing a decrease of more than 40% of the available geriatric beds and 33% (N = 43/132) facing reductions lasting longer than four months.

Post-pandemic, 39% (N = 51/132) of the participants stated new bed capacity reductions, mostly due to shortness of nursing staff, hygienic requirements due to COVID-outbreaks or the reallocation of beds to other disciplines.

A waiting list for inpatient treatment was stated by 49% (N = 60/122), though these lists are mostly not officially documented (59%; N = 30/51). Waiting placements are typically institutional and often the registering acute clinic.

Conclusion: We observed bed capacity reduction both during and after the COVID-19-pandemic, with shortness of nursing staff the principal cause post-pandemic. Most capacity reductions are not officially reported, but may be costly, because patients stuck institutionalized prior geriatric treatment. Moving forward, the recruitment of health care professionals and an improved monitoring of bed capacity in inpatient geriatric care is advisable across Europe.

Poster

Delirium

P-0415

Leptin as a predictor of delirium in geriatric inpatients: an observational study

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Introduction: Delirium is a complex, reversible neuropsychiatric with high frequency of occurrence in geriatric age group, and numerous knowledge gaps in the pathogenesis.

Methods: A prospective observational study was conducted in consecutively admitted patients aged ≥ 60 years to the geriatric ward. Patients were assessed for delirium within 24 h of admission and daily thereafter till the time of discharge or death whichever was earlier using the Confusion Assessment Method (CAM) with subsequent division into delirium and non-delirium groups. Serum leptin levels were measured using enzyme-linked immunosorbent assay (ELISA).

Results: The study included 200 patients with mean age 73.1 ± 8.83 years. Prevalence and incidence rates of delirium were found to be 20% and 5%, respectively. The occurrence of delirium was significantly associated with increased mortality (32.5% vs. 8.7%, $P = 0.001$). Serum leptin levels were found to be significantly lower in patients with delirium (2.58 ± 1.01 ng/mL vs. 10.72 ± 1.46 ng/mL, $P = 0.03$). Multivariable regression analysis revealed delirium to significantly correlate positively with age (Odds Ratio [OR]: 1.63 (1.07–2.47), $P = 0.021$) and negatively with leptin levels (OR: 0.94 (0.90–0.99), $P = 0.018$).

Conclusion: Delirium is a frequently occurring condition in hospitalized older adults with high mortality rates. Leptin might serve as a potential predictor of delirium owing to its probable role in the pathophysiological processes of delirium.

Keywords: Delirium, Leptin, Geriatrics.

P-0416

Comprehensive nutritional intervention for delirium prevention and management in geriatric care

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Introduction: Delirium represents a significant healthcare challenge affecting up to 60% of older adults in inpatient settings, associated with increased mortality, prolonged hospitalization, and accelerated cognitive decline. Despite established multifactorial etiology, nutritional contributors to delirium—including dehydration, malnutrition, and micronutrient deficiencies—remain insufficiently addressed in standard care protocols. Evidence suggests that nutritional optimization may represent a potent, yet underutilized non-pharmacological approach to delirium management.

Aim: This quality improvement initiative evaluated the impact of a proactive, multidimensional nutritional intervention program on

delirium outcomes in vulnerable older adults across acute care, post-acute, and long-term care settings.

Methodology: A prospective cohort study was conducted with 86 patients aged ≥ 70 years (mean age 81.2 years) at high risk for delirium. The intervention comprised early nutritional screening, individualized hydration protocols, protein-energy supplementation, micronutrient optimization, texture-modified diets when indicated, and mealtime assistance. Implementation utilized a nurse-led interdisciplinary approach with dietitian oversight. Delirium was assessed daily using validated tools (CAM, 4AT). Primary outcomes included delirium incidence, duration, severity, and functional recovery at discharge.

Results: Following implementation, delirium incidence decreased significantly from baseline (18.6% vs 37.2%, $p < 0.001$). Among patients experiencing delirium, mean duration decreased from 4.2 to 2.3 days ($p = 0.002$) and severity scores improved by 41%. Nutritional parameters improved substantially, with 76% of participants meeting individualized hydration goals and 68% achieving protein targets. Length of stay decreased by 2.1 days ($p = 0.01$), and functional independence measures at discharge improved by 24% compared to historical controls.

Conclusion: Strategic nutritional interventions significantly reduced delirium burden and improved clinical outcomes in older adults across care settings. Findings support integration of comprehensive nutritional approaches into standard delirium prevention protocols, representing a cost-effective, non-pharmacological strategy to improve quality of care for this vulnerable population.

Short poster presentation

Delirium

P-0417

A rehabilitation intervention to improve recovery after an episode of delirium in adults over 65 years (RecoverED): a multi-centre, single arm feasibility study

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Delirium prolongs hospital stays and increases costs, yet post-discharge rehabilitation research is limited. This study assessed the feasibility of a home-based rehabilitation intervention to support recovery after delirium and inform a future randomised controlled trial (RCT). Using a mixed-methods design with an embedded process evaluation (reported separately), it examined feasibility, fidelity, and acceptability. Participants aged 65 + with delirium were recruited from six UK NHS hospitals. Feasibility outcomes included recruitment, retention, adherence rates, and participant acceptability, with data collected through standardised measures.

In total, 419 patients were identified as having delirium and 36 met the full eligibility. Nineteen patient and carer pairs agreed to participate in the study (consent rate 53% (95% CI: 35%, 70%)) with 13 participants going on to start the intervention (68% (95% CI: 43%, 87%)) and 10 participants completing final follow-up (53% (95% CI: 29%, 76%)). Initial assessments occurred an average of 18 days (SD = 13.01) post-discharge, with 77% completed within 14 days. Participants averaged eight sessions (SD = 2.9). 19 participants completed the primary outcome at baseline, while 10 participants completed it at 6-month follow-up. The economic evaluation indicated a total cost of £1,249.29 per participant, covering assessments, intervention sessions, and training costs.

The RecoverED intervention showed feasibility among older adults recovering from delirium, as evidenced by the trial processes for participants who entered the study. However, recruitment challenges indicate a need for better strategies, and further research through a definitive RCT to demonstrate the effectiveness and cost-effectiveness of the intervention.

P-0418

Medication associated with delirium superimposed on dementia (DSD): a systematic review

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Introduction: Several medications are associated with precipitating and predisposing patients to delirium and therefore to “delirium superimposed on dementia” (DSD). This review aimed to summarise medication related information associated with the causation, prevention, and treatment of DSD.

Methods: A Joanna-Briggs-Institute (JBI) guided systematic review across 12 databases was conducted [PROSPERO: CRD42024546118]. A search string, based on inclusion criteria was developed with assistance from a scientific librarian. Title and full-text screening was done independently by two reviewers (COV-DENCE). A bespoke data extraction tool was developed and piloted. A narrative analysis of the results was undertaken and the review was reported using PRISMA guidance. The AGREE II and JBI tools were used to assess study quality.

Results: 49/6771 studies were included, involving 81,199 participants with dementia or its subtypes as either a primary diagnosis or as a comorbidity. The medication classes most frequently cited as causing DSD included antipsychotics ($n = 13$), anticholinergics ($n = 11$), and opioids ($n = 10$). No studies focused on pharmacological prevention. While the only high-quality randomised-controlled treatment trial revealed no clinical or statistical effect of antipsychotics ($p = 0.296$, Chi-square test), the moderate to low-quality studies ($n = 17$) recommended their use in treating DSD. Overall quality grading of the evidence was not possible due to paucity and disparity of published studies.

Key conclusions: Despite brain-health and dementia being a global health priority there is a lack of high-quality evidence of pharmacological contribution to DSD in terms of causation, prevention or treatment to inform clinical practice and patient safety.

Poster

Delirium

P-0419

Ekbom's delusion or delusional infestation: comprehensive assessment in a frail nonagenarian elderly woman

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Introduction: Ekblom syndrome a delusional disorder characterized by the belief of infestation with pathogenic organisms, is associated with hallucinations.

Methods: A 94-year-old woman with arterial hypertension and severe aortic stenosis was admitted to the hospital emergency department due to decompensated heart failure. She was dependent on basic activities of daily living and had moderate cognitive impairment without diagnosis. She exhibited social frailty, living with a son with a psychiatric disorder, poor adherence to treatment and lack of medical follow-up.

Results: The patient was admitted to the Acute Geriatrics Unit, showing a good response to diuretics. Atrial fibrillation was newly detected, anticoagulation was not initiated due to recurrent fall risk. An organic etiology was ruled out by ophthalmology and cranial CT revealed chronic vascular damage. Quetiapine was introduced at an increasing dose, paroxetine was switched to sertraline, and polypharmacy was reviewed.

A multidisciplinary team meeting was held. A social worker addressed home frailty issues, and an occupational therapist worked on fall prevention and gait re-education. The patient showed good progress, with improvement in hallucinations and better engagement in occupational therapy.

Key conclusions: Ekblom syndrome presents a challenge in the comprehensive management of geriatric patients. Psychiatric and cognitive assessment plays a key role in comprehensive evaluation, always distinguishing it from acute confusional syndrome. Proper assessment and follow-up during and after hospitalization are crucial for optimal management. Non-pharmacological and pharmacological interventions are essential in the care of complex, chronically poly-medicated elderly patients to achieve better behavioral management in their habitual residence.

P-0420

Use of antipsychotics in delirium—pilot study to aid development of a protocol for a multinational study

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Introduction: Delirium is a complex, multidimensional neuropsychiatric illness, commonly observed among older hospitalised patients. Antipsychotics have been described as “the gold standard” for treating delirium, despite their potential as a risk factor for causing delirium. The lack of clear evidence translates into a paucity of clear prescribing guidance for practice. This focus group study aims to explore the use of antipsychotics in delirium, both as a treatment and as a potential cause, by gathering insights from healthcare professionals.

Methods: A qualitative focus group pilot study was conducted using a purposive sample of physicians, clinical pharmacists and nurses with a specialisation in geriatrics, psychiatry and intensive care medicine from Landspítali University Hospital, Iceland (n = 9). Data extracted from several previous systematic reviews was collated into an antipsychotic risk stratification table for delirium in adult patients. Two focus groups were carried out to assess the applicability of

information to clinical practice. An inductive thematic analysis of responses was performed.

Results: The analysis identified four main themes: (1) Antipsychotic use in practice, (2) Administration of antipsychotics, (3) Statements in the table and (4) Layout of the table. The risk stratification table was adapted according to the findings from the focus groups. A set of Delphi statements was subsequently developed to inform the protocol of a multinational study.

Key conclusions: The focus group discussions helped improve the Antipsychotic risk stratification table for delirium in adult patients. This will be used in a multinational Delphi Study to aid the development of consensus guideline to inform clinical practice.

P-0421

Association between the presence of delirium and surgical delay in patients with hip fracture at the University Hospital of Getafe

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Introduction: Hip fracture in older adults is associated with high morbidity and mortality, with delirium being one of its most frequent complications. Several factors contribute to its onset, including surgical delay, whose impact remains under investigation.

Objective: To evaluate the association between surgical delay and the risk of developing delirium in hospitalized patients with hip fracture.

Methods: We conducted a retrospective analysis of patients admitted with hip fracture at the University Hospital of Getafe between January 2023 and December 2024. A total of 119 participants were included. Delirium was assessed using the 4AT scale, with a score ≥ 3 indicating delirium. Surgical delay was defined as surgery performed more than 48 h after admission. Logistic regression was used to evaluate the association, adjusted for age and sex.

Results: A trend toward an association between surgical delay and delirium was observed. In the unadjusted model, the odds ratio (OR) was 1.94 (95% CI: 0.90–4.22; $p = 0.0928$), and in the adjusted model, OR was 1.90 (95% CI: 0.85–4.21; $p = 0.1156$). Age showed a borderline association with delirium (OR: 1.07; 95% CI: 1.00–1.14; $p = 0.0535$), suggesting a 7% increase in risk per additional year of age.

Conclusions: Although not statistically significant, our findings suggest that surgical delays beyond 48 h may increase the risk of delirium in patients with hip fracture. A larger sample size may help clarify this relationship.

P-0422

Preoperative and postoperative delirium assessment in hip fracture patients

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Background: Postoperative delirium (POD) is a common and serious complication among hip fracture patients, with an incidence of about 50%. It is associated with prolonged hospitalisation, increased morbidity, functional and cognitive decline, and higher mortality rates.

Early identification and intervention are crucial to prevent adverse outcomes.

Purpose: This audit aimed to assess the effectiveness of current delirium screening and management practices, identify gaps in assessment and documentation, and propose strategies to enhance early detection and intervention to prevent the adverse outcomes of delirium.

Methodology: A retrospective audit was conducted over a three-month period (July–September 2024). The study included 75 patients aged ≥ 65 years who underwent surgical management for hip fractures. Delirium was assessed by using 4AT score preoperatively and postoperatively. Data on numbers of medication use, history of delirium/cognitive impairment, delirium incidence, and discharge outcomes were systematically analysed.

Results: Delirium was identified in 32% ($N = 24$) of patients. Polypharmacy was prevalent, with 55% ($N = 41$) of patients affected. Compliance with 4AT assessments was 93% ($N = 70$) preoperatively and postoperatively. Discharge outcome data revealed that 29% ($N = 22$) of patients had increased care needs (different discharge destination) following discharge from the hospital.

Conclusions: Despite high adherence to 4AT screening, deficiencies in risk stratification and documentation persist. Rather than one-time postoperative 4AT assessment, continuous delirium assessment is needed. The integration of an AI-driven validated intervention tool, enhanced clinician training and standardised delirium prevention strategies are recommended. A follow-up audit incorporating targeted interventions is planned to optimise delirium management and improve patient outcomes.

Short poster presentation

Delirium

P-0423

Neurofilament-Light chain and glial fibrillary acidic protein as blood-based delirium risk markers: a multicohort study

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Introduction: Postoperative delirium (POD) is often under-recognized in clinical practice. Blood-based preoperative biomarkers could facilitate delirium detection and risk stratification. Among these, Neurofilament-Light chain (NfL) and Glial Fibrillary Acidic Protein (GFAP) are emerging as promising candidates. This study explored their role as blood-based risk markers for POD in older patients undergoing hip fracture surgery.

Methods: In this prospective multicohort study, preoperative blood and intraoperative cerebrospinal fluid (CSF) samples were collected from patients aged ≥ 65 years scheduled for hip fracture surgery. POD was assessed daily using the 4AT. NfL and GFAP concentrations were compared between patients who developed POD and those who did not, further stratifying by dementia status. Associations between biomarkers and POD were evaluated using logistic regression models adjusted for age, sex, dementia, frailty, and Interleukin-6.

Results: A total of 143 patients (median age, 85 years; 76.9% female) were included, with POD occurring in 38 (26.6%). Blood NfL and GFAP concentrations were significantly higher in the POD group than in Non-POD (64.55 vs. 44.6 pg/mL and 22 vs. 14.8 pg/mL, $P < 0.001$). CSF NfL was also elevated in POD (2154 vs. 1565 pg/mL, $P = 0.007$), while CSF GFAP did not differ significantly. Blood NfL and GFAP remained independent predictors of POD after full adjustment (Odds Ratio, OR: 3.21, 95% Confidence Interval, CI: 1.26–8.21, and OR: 3.66, 95% CI: 1.38–9.68, respectively).

Key conclusion: Higher preoperative blood levels of NfL and GFAP are independently associated with POD, supporting their potential as non-invasive risk markers in older adults undergoing hip fracture surgery.

Poster

Delirium

P-0424

Why is delirium underdiagnosed? Evaluating clinician awareness and documentation practices

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Introduction: It is well established that delirium is inconsistently recognised and poorly coded as a diagnosis. This quality improvement project aimed to ascertain the reasons for this within a large UK general hospital and resident doctors' understanding of the condition.

Method: Coded diagnoses from the discharge documentation from all patients over 65 admitted from August 2024 to February 2025 were screened and patients with a diagnostic SNOMED code relating to 'delirium' were selected. An electronic search for completed 'delirium assessment', including a 4-AT was carried out. 100 patients were randomly selected for further manual review of the notes to determine whether a 4-AT was calculated.

A staff survey was carried out during departmental teaching about delirium to ascertain: the use of the 4-AT tool, confidence in diagnosing delirium, and awareness of the tools available on the computerised system.

Results: A cohort of 512 patients with delirium associated codes was identified from 3013 admissions (17%). 15(2.9%) had the 'delirium

assessment' completed, increasing to 150(29%) with 4-AT scores recorded in the notes.

The survey demonstrated 12(55%) of resident doctors were unaware of the computerised 'delirium assessment' tool, with 11(50%) recording they either always or often use the 4-AT in their clerking. 10(58.8%) of staff have also used 'confusion' as a diagnosis in patients presenting with delirium symptoms.

Conclusion: Delirium is under-diagnosed. The 4-AT tool is markedly underutilised. There is an urgent need for educational interventions to improve 4-AT completion, and further scope to improve delirium identification using prompts on the clinical system.

P-0425

Oxford and Reading Cognitive Health After Recovery from acute illness and Delirium-Pro prospective Study (ORCHARD-PS): cognition and frailty at 3-month follow-up

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Introduction: Delirium is often precipitated by acute illness and is linked to subsequent cognitive decline but the underlying pathophysiology remains uncertain. ORCHARD-PS aims to examine the multimodal biomarkers associated with delirium and subsequent dementia[1]. We present the cognitive and frailty data from the first 100 participants at baseline and 3-month follow-up.

Methods: Acute medical patients aged > 70 years without advanced dementia, nursing home residence or terminal illness were included following consent/consultee agreement. Delirium was diagnosed using the DSM-V criteria with subsyndromal delirium (SSD) where the full DSM-V criteria were not met. Clinical Frailty Score (> 5 = frail) and Montreal Cognitive Assessment (MoCA) were performed during admission and at follow-up.

Results: Of 100 participants (mean/SD age = 82.1/6.3 years, female = 52, delirium = 28, SSD = 7, dementia = 8), 55 had 3-month follow-up. The frequency of drop out (death = 12, busy with personal/medical appointments = 9, uncontactable = 5, end-of-life = 2, other = 7, unclear = 10) was similar in delirium/SSD vs no delirium [19/35 (54%) vs 26/65 (40%), $p = 0.17$]. Frailty increased overall between baseline and follow-up [30/55 (55%) vs 22/55 (40%), $p = 0.021$] but compared to the no delirium group, the delirium/SSD group had more frailty [baseline: 23/35 (66%) vs 21/65 (32%), $p = 0.001$; 3-month: 13/16 (81%) vs 17/39 (44%), $p = 0.011$]. MoCA was lower in those with delirium but there was no change from baseline to follow-up in either group (delirium/SSD: mean/SD MoCA = 17.2/5.6 vs 18.8/6.6, $p = 0.409$; no delirium: 22.1/6.1 vs 21.1/5.5, $p = 0.261$).

Key Conclusions: Frailty was common in ORCHARD-PS, especially in those with delirium, and increased after acute illness although cognitive scores remained unchanged. Loss to follow-up was common and information from medical records will be required to mitigate selective attrition.

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P-0426

Exploring nursing staff's competency in knowledge, assessment, and response to delirium

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Introduction: Delirium causes a patient's physical and cognitive deterioration, prolongs hospitalization, and increases healthcare costs. This study investigated nursing staff's competency in knowledge, assessment, and response to treating patients with delirium. **Methods:** This study was a cross-sectional and descriptive correlational design. We adopted purposive sampling to recruit 278 nursing staff from the intensive care units (ICUs) of the internal medical, surgical, and psychiatric wards of four hospitals in northern Taiwan as the research subjects through random selection. We used a structured questionnaire to collect information regarding the research subjects' demographic data and the knowledge of delirium, delirium assessment ability, and response to delirium. The data were analyzed using SPSS 25.0 statistical software.

Results: The study results indicate that the nursing staff had good knowledge of delirium but were unfamiliar with the content of the delirium assessment and unclear about its application to the target group. They performed best at the first time emergency response to delirium. However, they did not know how to respond regarding medical treatment. There was a significant positive correlation between the nursing staff's knowledge of delirium and response to delirium ($p < 0.001$). The nursing staff in the ICUs outperformed those in other units in both knowledge and assessment ($p = 0.002$; $p < 0.001$).

Key conclusions: Since departmental attributes influence nursing staff's knowledge of delirium, we recommend that cross-training be provided. Moreover, clinical guidelines for the care of patients with delirium should be developed to enhance the nursing staff's ability to know, assess, and respond to delirium.

P-0427

Risk on wheels: patient transport and the development of delirium in geriatric patients

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Introduction: Hospital transports are considered stressors that can trigger delirious states. The aim of this prospective study was to investigate the impact of secondary medical transports on the incidence of delirium in geriatric patients and identify risk factors that

may contribute to delirium development during transport. Data were prospectively collected from [56] to December 2024 involving 100 patients who were transferred between healthcare facilities.

Methods: Delirium assessments were conducted at three time points: before the transport, upon arrival at the destination, and three days after transport. The Confusion Assessment Method (CAM) was used to measure changes in delirium incidence and intensity. Risk factors such as dementia, pain, anxiety, and chronic or neurological conditions were also assessed for their potential impact on delirium development.

Results: 23% of patients developed delirium after transport, persisting for at least three days. The presence of dementia was strongly associated with an increased risk of delirium, while pain, anxiety, and chronic conditions had no significant impact. No significant change in delirium intensity was observed between assessment time points.

Key conclusions: Secondary medical transports are a significant risk factor for the development of delirium, especially in patients with dementia. These findings highlight the need for closer monitoring of dementia patients during transport. Future studies should explore additional risk factors and their interactions to develop preventive and therapeutic strategies to reduce delirium risk.

P-0428

Impact of anticholinergic burden on delirium and falls in geriatric inpatients: a snapshot analysis

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Introduction: Anticholinergic medications are frequently prescribed to older adults despite associations with adverse outcomes including delirium, falls, cognitive impairment and mortality. The CRIDECO Anticholinergic Load Scale (CRIDECO-ALS) provides a validated method for quantifying this burden. This study examines relationships between anticholinergic burden and clinical outcomes in hospitalized geriatric patients.

Methods: We conducted a cross-sectional analysis of 132 inpatients across five elderly care wards. Data included demographics, falls, delirium status, and medications categorized as: (1) pre-admission, (2) newly initiated, or (3) discontinued during admission. Anticholinergic burden was calculated using CRIDECO-ALS scores. T-tests compared burden between patients with/without falls or delirium ($\alpha = 0.05$).

Results: Mean age was 84.86 years; 48% had cognitive impairment, 39% had delirium and 48% experienced falls. Mean total CRIDECO-ALS score was 2.88. Newly initiated medications had higher burden (1.18) than discontinued drugs (0.16). No significant associations were found between total burden and cognitive impairment ($p = 0.62$), falls ($p = 0.74$) or delirium ($p = 0.28$), nor between newly started drugs and cognitive impairment ($p = 0.54$), falls ($p = 0.7$) or delirium ($p = 0.38$).

Key Conclusions: While no significant associations were detected, the higher burden of newly initiated versus discontinued medications suggests deprescribing opportunities. The modest sample size may limit statistical power. These findings align with previous studies regarding fall risk and mortality, emphasizing the need for larger studies to clarify these critical medication safety issues in vulnerable elders.

P-0429

Mental capacity act (MCA) and deprivation of liberty safeguards (DoLS) completion rates on the complex medical units at the John Radcliffe Hospital

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Introduction: Protecting patients with cognitive impairment is a particular challenge in acute hospital setting [1]. In Britain, the Mental Capacity Act (MCA) and Deprivation of Liberty Safeguards (DoLS) provide legal protection to these vulnerable patients who have restrictions placed while receiving care [2]. This audit evaluated 3 years of MCA and DoLS completion rates across the Complex Medical Units (CMU) at the John Radcliffe Hospital, which typically care for geriatric patients.

Methods: This audit includes patients on CMU wards over 6 cycles: August 2021 ($n = 74$ patients), November 2021 ($n = 72$), October 2022 ($n = 74$), December 2022 ($n = 70$), April 2024 ($n = 74$), December 2024 ($n = 76$). Patients that lacked capacity were identified by AMTS (Abbreviated Mental Test Score) < 8 , or history of cognitive impairment. Eligible patients were assessed on MCA completion and DoLS submission during their admission. Interventions between cycles included education of care teams, clinical note templates, and mandatory board rounds.

Results: Patients with cognitive impairment made up 62.5% ($n = 275$) of this patient group. The AMTS completion rate averaged 70% over 6 cycles, decreasing from 86% (Aug 21) to 71% (Dec 24). The MCA completion rate improved from 16% (Aug 21) to 73% (Dec 24) for eligible inpatients and averaged 48% over 6 cycles. The DoLS submission rate improved from 43% (Aug 21) to 81% (Dec 24) and averaged 60% over 6 cycles.

Conclusions: Legal frameworks protect the rights of vulnerable patients who receive care provided in best interests. This audit demonstrates that improving MCA and DoLS completion requires a concerted multidisciplinary effort.

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Short poster presentation

Delirium

P-0430

Assessing delirium and cognitive function in national hip fracture registries: a scoping review

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Introduction: Delirium and cognitive impairment are common among older adults with hip fracture and are associated with adverse patient outcomes. The Fragility Fracture Network recommends that national hip fracture registries (HFRs) include a measure of cognitive status. However, inconsistency in the methods of delirium and cognitive assessment hinders international comparison and may reduce care quality. The aim of this scoping review was to identify delirium and cognitive assessment items collected by national HFRs and the associated key data reported in the latest annual reports.

Methods: Three databases (Medline Ovid, Embase, CINAHL EBS-COHost) and organisational websites were searched up to 18 November 2024. Two authors independently assessed titles, abstracts, and full texts for eligibility. Prespecified data items were extracted from identified eligible registries. Descriptive analysis was used to summarise findings.

Results: Twenty-two eligible HFRs were identified. Fourteen (64%) collected delirium assessment data, and 18 (82%) collected cognitive assessment data. The 4AT tool was recommended by seven registries (50% of those assessing delirium). Delirium assessment completion rates varied from 47.7% to 95.9% pre-operatively and 34.2% to 95.9% post-operatively. Positive delirium scores ranged from 14.7% to 22% pre-operatively and 5% to 42% post-operatively. Cognitive assessment completion rates were between 58.5% and 100%, with positive scores ranging from 9.9% to 52.4%.

Key conclusions: Most HFRs include delirium and cognitive assessments, but there is significant variability in tools and methods.

Standardising data collection across registries can enhance comparability and improve patient care.

Poster

Delirium

P-0431

Development and validation of the short version of the Delirium Observation Screening Scale (s-DOSS)

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Introduction: Delirium prevention is not always possible and early recognition is essential for timely intervention and reducing adverse outcomes. The 13-item Delirium Observation Screening Scale (DOSS) is a commonly used and well-validated tool, but high workload affects completion rates in daily clinical practice. We developed and validated a shortened version of the DOSS (s-DOSS).

Methods: The s-DOSS was developed in two steps. First, by evaluation of item content validity index (I-CVI) of the original 13-item DOSS using an expert survey with 14 international delirium experts. Second, by evaluation of item correlation, internal consistency, and reliability analysis using 13-item DOSS evaluations of 16,110 hospitalized patients. Decisions about removing items were based on the results of steps 1 and 2. Validation of s-DOSS was conducted through a secondary data analysis of a prospective study, comparing s-DOSS performance to the Confusion Assessment Method (gold standard) in 113 paired patient observations.

Results: Item 'attention to conversation' was removed due to low Pearson correlation (0.367), low item-total correlation (0.313), explaining only 13.5% of total 13-item DOSS score. Items 'remembers events', 'pulls tubes' and 'sudden emotional' were removed for low relevance (I-CVI 0.29–0.64) and low contribution to total 13-item DOSS score (22.9%, 34.1%, and 21%, respectively). The 9-item s-DOSS showed strong reliability (Cronbach's $\alpha = 0.853$), excellent discrimination (Area under ROC-curve = 0.935), and high diagnostic accuracy (92.0%, sensitivity = 90.9%, specificity = 92.2%).

Conclusions: Although further testing is needed, the first validation results suggests the 9-item s-DOSS to be a reliable delirium screening instrument, maintaining its diagnostic accuracy.

Short poster presentation

Delirium

P-0432

Role of delirium room in non-pharmacological care of delirium in geriatric patients: a systematic review & meta-analysis

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Introduction: Delirium is a common neuropsychiatric condition prevalent among older patients, associated with adverse outcomes. With no effective pharmacological treatment, care focuses on multi-component non-pharmacological interventions. Specialized delirium rooms or units have been proposed as a more effective strategy than standard care, yet no systematic review or meta-analysis has examined this approach.

Methods: A systematic search was conducted across databases (MEDLINE, Cochrane, EMBASE) to identify studies involving hospitalized patients over 65 years diagnosed with delirium and treated in specialized rooms or units. Study quality was assessed using Cochrane's risk of bias tools, and a meta-analysis was performed.

Results: Nine studies, including 2,226 participants, were included. Patients in delirium rooms experienced significantly shorter delirium duration ($d -0.55$, $p 0.005$) and higher rates of returning to their previous residence ($d 0.32$, $p 0.01$) compared to controls. There was a trend toward lower mortality ($d -0.6$, $p 0.057$), though differences in psychotropic drug use, physical restraint, hospital stay, fall rates, or functional status at discharge were not significant. Interventions such as enhanced staff education, closer surveillance, and specialized room design were commonly reported. However, the results were limited by the small number of studies, their low quality, and high heterogeneity.

Key conclusions: Specialized delirium rooms or units demonstrate potential benefits for delirium care, particularly in reducing delirium duration and improving discharge outcomes. Further high-quality studies are needed to validate these findings and support broader adoption in clinical practice.

Poster

Delirium

P-0433

A rehabilitation intervention to improve recovery after delirium in older people: mixed methods process evaluation of the recovered multi-site feasibility study

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Introduction: A process evaluation was conducted alongside a multi-site feasibility trial of RecoverED, a multicomponent delirium rehabilitation intervention for older people in post-acute settings. A modified Conceptual Model for Implementation Fidelity was used. Findings on implementation and acceptability are presented.

Design and methods: A mixed-methods design was employed, and participants included older adults with delirium, their carers, and trained healthcare professionals (HCPs) from six NHS hospitals in the UK. Adherence to content, dose, and coverage, as well as moderating factors such as recruitment, context, participant responsiveness, delivery quality, and intervention complexity, were assessed. Data included in-depth interviews, focus groups, trial documentation, and training, and supervision logs. Mixed-methods findings were triangulated.

Results: Nineteen participant-carer pairs were recruited. Post-intervention, five older adults, nine carers, and eight HCPs were interviewed; seven HCPs participated in focus groups. Adherence to content was challenging to evaluate due to the personalised nature of the intervention. Psychosocial support was delivered more frequently than planned. The value of participant-led goals was emphasised, with

high levels of satisfaction, engagement, and perceived value. Implementation followed the intended approach, and participants reported positive experiences. While training was comprehensive, HCPs preferred a more interactive format. Effective coordination required dedicated, co-located teams. Most withdrawals ($N = 10$) were due to complex needs or impairments. No minority ethnic participants were recruited.

Conclusion: The RecoverED intervention was found to be acceptable; however, recruitment challenges suggest that acceptability and fidelity to dose and coverage should be interpreted with caution. Implementation fidelity to the delivery approach was high and well-perceived.

P-0434

Dissecting the genetic and proteomic risk factors for delirium

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Delirium is an acute change in cognition, common in hospitalised older adults, and associated with high healthcare and human cost. In this work we shed light into the currently poorly understood genetic and proteomic background of delirium. We conducted the largest to date multi-ancestry analysis of genetic variants associated with delirium (1,059,130 individuals, 11,931 cases), yielding the Apolipoprotein E (APOE) gene as a strong risk factor with possible population and age-varying effects. A multi-trait analysis of delirium with Alzheimer disease identified 5 delirium genetic risk loci. Investigation of plasma proteins associated with up to 16-years incident delirium (32,652 individuals, 541 cases) revealed known and novel protein biomarkers, implicating brain vulnerability, inflammation and immune response processes. Integrating proteins and APOE genetic risk with demographics significantly improved incident delirium prediction compared to demographics alone. Our results pave the way to better understanding delirium's aetiology and guiding further research on clinically relevant biomarkers.

P-0435

Evaluation of effectiveness of nursing process for delirium in long-term geriatric care facility

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Introduction: Delirium is a frequent and serious condition in geriatric long-term care settings. In this vulnerable population, both symptoms and antipsychotic treatments may increase risks of side effects, falls, injuries, cardiac arrhythmias, and decreased quality of life. Prompt recognition and appropriate interventions, especially non-pharmacological ones, are essential. Nurses play a critical role in early detection and care.

Methods: This study evaluates the effectiveness of an individualized nursing care protocol for delirium management, jointly developed and led by a nurse and psychiatrist. The protocol included standard non-

pharmacological measures and flexible use of quetiapine (12.5–200 mg/day, divided into 3–4 doses). Nurses, trained in symptom monitoring, had the authority to adjust dosing daily based on clinical presentation, aiming for the lowest effective dose. Continuous communication with the psychiatrist was required, with daily or alternate-day reporting until medication was minimized or stopped.

Results: In Dom Sofija nursing home in Bitola, 56 delirium cases were recorded: urinary/respiratory infections (22), pneumonia (5), hypoxia (6), post-operative delirium (11), and undetermined causes (12). Outcomes indicated reduced antipsychotic side effects when nurses were empowered to monitor and manage treatment closely. Nurses more readily identified hyperactive delirium compared to hypoactive forms.

Conclusion: Delirium care in long-term facilities benefits from enhanced nurse training and collaboration with psychiatrists. To improve outcomes globally, greater standardization of nurse education, scope of practice, and healthcare infrastructure is needed, especially in long-term geriatric care.

P-0436

4AT: completed with geriatric admissions & transfers? a clinical audit cycle at model 2 hospital

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Background: With World Delirium Awareness Day occurring on 12 March 2025, a clinical audit was undertaken at a Model 2, 74-bed hospital in County Cork. Globally, delirium is thought to contribute significantly to hospital admissions, prolonged lengths of stay, morbidity, and mortality and has substantial cost implications on healthcare systems.

Method: All Acute Medical Assessment Unit admissions and Inter-Hospital Transfers to ward beds in a Cork Model 2 Hospital were reviewed for the completion of 4AT scores. The review was carried out over a period of two months (January and February 2025). On re-audit; a reminder-intervention was implemented to prompt the scoring tools completion.

Results: A major increase in 4AT scoring completion was noted when doctors were reminded to complete it on first-time patient interactions.

Conclusion: This clinical audit highlights the importance of regular completion of the 4AT screening tool to promptly identify delirium in geriatric patients. The re-audit showed that completion rates significantly improved when doctors were regularly reminded to do so. Early identification of delirium is critical in managing older patients, as it is associated with poorer outcomes and increased mortality if not promptly recognized.

P-0437

An evaluation of management of patients with delirium in a district general hospital

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Introduction: Delirium is a common and debilitating condition, affecting 15–30% of hospitalized patients, particularly the elderly, leading to distressing behavioural changes and difficulty in communication. Effective recognition, assessment, and management are crucial for patient outcomes. The National Institute for Health and Care Excellence (NICE) provides guidelines for the prevention,

diagnosis & management of delirium, emphasizing the importance of timely care to avoid prolonged hospital stays, increased mortality, and the risk of developing dementia.

Method: We conducted a retrospective audit over two weeks in February 2025, reviewing the medical records of 37 patients admitted to care of elderly wards, diagnosed with delirium or exhibiting confusion or agitation. We assessed adherence to NICE guidelines and compared our findings with a similar audit conducted in 2021 following staff education initiatives.

Results: We showed a significant improvement in compliance with NICE standards, including a 97% rate of geriatric consultant review within 24 h, up from 42% in 2021. Management of constipation and nutrition also improved, with 100% compliance, compared to 87% and 85%, respectively, in 2021. The use of pharmacological sedation remained stable, with 22% of patients with challenging behaviour requiring lorazepam; only 27% of these patients received psychiatric input, a gap in multidisciplinary care. This limited psychiatric involvement hindered a definitive assessment of its impact on patient outcomes.

Conclusion: While adherence to core delirium management principles improved, further integration of psychiatric support could enhance patient care and outcomes. Staff education is beneficial in achieving optimal inpatient management of delirium.

P-0438

An investigation of the impact of challenging behaviour in patients with delirium in a District General Hospital

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Introduction: It is widely recognised that older adults experience longer hospital stays which can have a significant impact on both patient outcomes and healthcare resources. In 2022, NHS England saw an average length of stay of 12.5 days for patients over 85 whilst patients aged 16–44 averaged 5.1 days. Delirium is an important condition that frequently affects this population and is associated with longer admission but is often overlooked and poorly managed. The challenging behaviours these patients often exhibit can further make care and management complex.

Method: This study involved 37 patients diagnosed with delirium on the Care of the Elderly ward at a district general hospital. Their medical records were reviewed to identify those documented with distressing or challenging behaviours. We compared length of stay between patients exhibiting these behaviours and those who did not. We also assessed the impact of psychiatric input on the length of stay for patients exhibiting distressing or challenging behaviours.

Results: The average length of stay was 35.9 days, ranging from 4–213 days. Within these patients, 14 were documented to having challenging behaviours, averaging a LOS of 47.5 days compared to those without averaging 30.8 days, indicating an additional 16.7 days of hospitalisation. Amongst distressed patients, those who received psychiatric input had an even higher average LOS of 79.8 days.

Conclusion: Challenging behaviour meant a longer average LOS for patients. Amongst these patients, those requiring psychiatry input had significantly longer hospitalizations, likely due to the complexity of their cases requiring specialist input.

P-0439

Retrospective analysis—assumed prevalence of delirium in geriatric patients based on psychotropic drug consumption

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Introduction: Delirium is a common, often underdiagnosed condition in hospitalised elderly patients, with limited documentation in patient charts complicating prevalence assessments. This study aims to explore delirium prevalence in elderly patients based on psychotropic drug usage, as these medications may indicate delirium indirectly.

Methods: A retrospective analysis was conducted on data from three hospital units: the Internal Medicine Unit (IMU) treated 731 geriatric patients from October 1, 2023, to October 17, 2024, Geriatric Long Term Medical Unit (GLTMU): 54 patients and the Psychiatric-Geriatric Long Term Medical Unit (PLTMU): 42 patients in the same period. Drug consumption data, including quetiapine, haloperidol, and diazepam, were analysed in milligrams (mg) per day per patient.

Results: In the IMU: average hospitalisation: 7.76 days. The psychotropic drug consumption per patient per day: 22.404 mg, haloperidol 0.212 mg, diazepam 1.062 mg. In the GLTMU: average hospitalisation: 229.81 days; quetiapine 55.178 mg, haloperidol 0.216 mg, diazepam 1.023 mg. In the PLTMU: average hospitalisation: 382 days; quetiapine 79.770 mg, haloperidol 0.218 mg, diazepam 0.125 mg.

Key conclusions: The highest consumption of psychotropic drugs, especially quetiapine, was seen in long-term care units, indicating a potential prevalence of delirium or mental disorders. Haloperidol was used consistently across units, suggesting selective, as-needed administration. The low use of diazepam, particularly in the PLTMU, may reflect caution in prescribing benzodiazepines to cognitively impaired patients.

P-0440

Medication-induced delirium: a quantitative analysis of the WHO pharmacovigilance database

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Introduction: Medication is considered both a predisposing and a precipitating factor for delirium, yet limited specific prescribing guidance is available.

The study aimed to quantitatively analyse the association between delirium and prescribed medication adverse events (ADEs) in patients of all ages.

Method: Listed ADEs for all patients with delirium were extracted from the WHO pharmacovigilance database (VigiBase (1968–2023)). Proportional Reporting Ratio (PRR) and Odds Ratio (OR) to identify drugs with increased risk of causing delirium were calculated using a disproportionality analysis. Values of OR025 and PRR025 (lower end of the OR and PRR 95% credibility interval) > 1 were considered statistically significant. Analysis was conducted using Jupyter notebook, running Python with the Modin/Ray pandas data analysis library.

Result: A total of 207,222 individual patient reports were retrieved with 4,221 drugs reported as “suspect” for delirium associated ADEs. 682 (16.2%) of which were statistically significant across both measures [PRR and OR]. Of all individual patient reports, 113,953 (55.0%) were categorised as serious; 40,062 (19.3%) led to hospitalization and 15,517 (7.5%) to death or were life-threatening. The drugs most frequently reported as “suspect” was the covid-19 vaccine (n = 12,827 (4.5%)), followed by pimavanserin (n = 9,533 (3.4%)) and carbidopa:levodopa (n = 5,922 (2.1%)). Of the delirium-associated symptoms, “hallucination” (n = 122,441 (43.3%)) was reported most frequently, followed by “delirium” (n = 48,768 (17.2%)) and “encephalopathy” (n = 36,330 (12.8%)).

Conclusion: These results will assist clinicians in identifying potential ADEs associated with delirium and will contribute vital real-world evidence to inform the future development of prescribing guidance.

Diabetes

P-0441

Impact of medical nutrition therapy on diabetes management in older adults

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(1) HMC

Introduction: Diabetes mellitus presents unique challenges in older adults due to age-related physiological changes, comorbidities, and varied functional status. Medical Nutrition Therapy (MNT) is a cornerstone of diabetes management, yet evidence-based approaches specific to older populations remain underutilized in clinical practice.

Aim: This quality improvement project evaluated the effectiveness of a structured, age-appropriate MNT intervention on glycemic control, medication requirements, and quality of life in adults aged ≥ 65 years with type 2 diabetes in an outpatient setting.

Methodology: A prospective intervention study was conducted with 48 older adults (mean age 72.3 years) with suboptimal glycemic control (HbA1c > 7.5%). Participants received individualized MNT from clinical dietitians using a geriatric-specific protocol addressing nutritional needs, medication timing, cognitive function, and social determinants. Interventions included meal planning, simplified carbohydrate counting, and family education. Clinical outcomes were measured at baseline and at 3-month follow-up. Primary outcomes included changes in HbA1c, hypoglycemic events, and medication requirements.

Results: Following the 3-month MNT intervention, mean HbA1c decreased significantly from 8.4% to 7.6% (p < 0.01). Hypoglycemic events decreased by 38%, and 42% of participants achieved medication reduction. Participants demonstrated improved nutritional knowledge (32% increase in assessment scores) and dietary adherence (56% improvement in self-reported compliance). Secondary outcomes showed modest improvements in blood pressure control and weight management. Quality of life scores improved in 68% of participants.

Conclusion: Structured MNT interventions tailored to older adults' specific needs significantly improved diabetes management outcomes. Results highlight the importance of age-appropriate nutritional strategies that consider cognitive function, polypharmacy, and social support systems. Integration of specialized MNT protocols into standard geriatric diabetes care may reduce complications and healthcare utilization while enhancing quality of life in this vulnerable population.

P-0442**An insight into patient education and awareness in relation to use of SGLT-2 inhibitors**

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Introduction: Sodium glucose cotransporter-2 (SGLT-2) inhibitors are increasingly used due to their benefits in type 2 diabetes (T2DM), chronic kidney disease (CKD), and congestive heart failure (CHF). However, they pose risks such as urogenital infections and the rare complication of euglycaemic diabetic ketoacidosis [1]. Patient awareness of these risks is crucial for safe use.

Methods: A list of 50 patients initiated on SGLT-2 inhibitors (2023–2024) was compiled. A telephone survey included four questions: awareness of increased urinary tract infection (UTI) risk, UTI symptoms, sick day rules, and the need for drug omission before procedures. The survey also provided patient education and counseling.

Results: Among the 50 patients, 72% (n = 36) were male, with 62% (n = 31) aged 60–80 years. While 58% (n = 29) recognized UTI symptoms, only 28% (n = 14) were aware of the increased UTI risk. Most informed patients were aged 40–60 years. Additionally, only 20% (n = 10) of patients knew that they should seek medical advice if symptoms of UTI persisted. Awareness of pre-procedure drug omission and sick day rules was extremely low (6%, n = 3 each).

Key conclusions: Patient awareness of SGLT-2 inhibitor risks is limited, particularly among older adults. Despite their benefits, safe use requires better education, as highlighted in a similar UK study [2]. While SGLT-2 inhibitors are vital for managing T2DM, CHF, and CKD, they must be prescribed cautiously, especially in frail elderly patients, where the prevalence of adverse events is higher. This quality improvement survey underscores the need for stronger patient education and counseling to ensure safe, effective treatment.

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P-0443**Social prescription in the prevention of diabetic foot syndrome—how to walk on your own feet**

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Background: Diabetic foot syndrome (DFS) is defined as foot disease in a patient with current or previously diagnosed diabetes mellitus (DM). DM screening and patient dispensary is well established in Slovakia, but the management of DFS prevention remains a major challenge for all specialists involved.

Scientific studies prove that not only clinical variables but also socio-demographic factors are important in the process of DFS: 1.

advancing age, 2. low socio-economic status, 3. sedentary physical activity and 4. longer duration of DM.

Methods: The Institute of Health Analyses, Ministry of Health, in cooperation with the Slovak Medical University analyse DFS in patients with DM in Slovakia.

Results: In 2015, 358,835 patients with DM were dispensarized (22,675 newly diagnosed), which increased to 464,535 in 2023 (13,931 newly diagnosed).

The total number of cases of DFS has a decreasing trend, 5,983 cases in 2023, compared to 6,450 in 2018.

We bring inspiring examples of social prescription in prevention of DFS from practice in the communities of Bratislava III and IV districts in: 1. diet adherence, 2. physical activity, 3. lower limb care, as well as 4. adherence to treatment.

Conclusion: The level of knowledge and innovations in treatment made in the overall quality of diabetes care are promising, but they have yet to become truly accessible to patients with the adverse social characteristics. The community has the potential to be an effective mediator between evidence-based medicine and diabetics. The patient associations also play an important role in guiding the patient and family.

P-0444**Real-world outcomes of continuous glucose monitoring in older adults living with type 2 diabetes mellitus on insulin therapy**

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Background: In Ireland, 10% of adults over 50 years, and 16% of adults over 80 years live with Type 2 Diabetes Mellitus (T2DM) [1]. Managing T2DM accounts for 12–14% of the annual health budget[2]. Continuous Glucose Monitors (CGM) have demonstrated improvements in glycaemic control and may reduce complications without increasing hypoglycaemia risk [3]. However, CGMs are not reimbursed for either insulin-dependent or non-insulin-dependent individuals living with T2DM in Ireland, despite increased risks of polypharmacy and hypoglycaemia in those over 65 [4]. We aimed to review CGM use and outcomes in a population of over 65 living with T2DM.

Methods: A retrospective audit was conducted on 45 patients aged > 65 years using CGM and attending a model 4 hospital from May 2019–January 2025. HbA1c levels were measured before and after CGM use, and frailty was assessed using the Clinical Frailty Scale (≥ 4 consistent with frailty) [5].

Results: The mean age was 74, with an average duration of T2DM of 22.8 years. 100% of patients were on insulin. The mean HbA1c before CGM use was 71.8 mmol/mol (± 14.5), and after CGM use was 67.4 mmol/mol (± 14.9), resulting in a mean difference of 4.4 mmol/mol (95% CI -8.5, -0.2; p = 0.04). There was no significant increase in time spent in hypoglycaemia between the two groups. Additionally, 55.55% of patients were classified as frail.

Conclusion: CGM use in patients over 65 resulted in a significant reduction in HbA1c without an increased risk of hypoglycaemia showing that CGM works in this cohort. Reimbursing CGMs for this cohort could enhance diabetes management and reduce complications.

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P-0445

Evaluation of the prescription of diabetes medications in hospitalized diabetic adults aged 75 or over between 2015 and 2020

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Introduction: Diabetes in older patients is mostly monitored by their general practitioner. Hospitalization may be an opportunity to review their antidiabetic medications. The primary objective was to describe hospital prescriptions of hypoglycemic and non-hypoglycemic diabetes medications in patients aged 75 or over with type 2 diabetes.

Methods: This was a single-center, observational, retrospective study of data in the electronic health data warehouse at Lille University Medical Center, France. All hospital stays of 48 h or more by patients aged 75 or over with type 2 diabetes between January 1st, 2015, and December 31st, 2020, were included.

Results: 10 682 hospital stays by 5682 patients aged 75 or over with diabetes were analyzed. Hypoglycemic medication was administered in 7617 (71.3%) stays. Repaglinide and sulfonylureas were administered in 1962 (18.4%) stays and 860 stays (8.1%), respectively. Rapid-acting insulin was combined with repaglinide in 1032 (9.7%) stays, slow- and rapid-acting insulins were combined with repaglinide in 496 (4.6%) stays; and rapid-acting insulin was combined with sulfonylureas in 346 (3.2%) stays. HbA1c was measured during 4935 (46.2%) stays; HbA1c level was less than or equal to 7% in 1512

(47%) of these stays with prescription of oral hypoglycemic medication and in 1545 (29.1%) of these stays with prescription of insulin. **Key conclusions:** Our results revealed several issues: (i) a high level of exposure to hypoglycemic medications (especially in patients with inappropriate glycemic control, i.e. an HbA1c level below the target value), (ii) the prescription of non-recommended drug combinations, and (iii) a low proportion of stays with an HbA1c measurement.

P-0446

The use of a continuous glucose monitoring device in a population of over 65-year-olds living with diabetes in Ireland

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Background: The prevalence of diabetes mellitus, dementia and frailty are increasing worldwide. Continuous glucose monitoring (CGM) is associated with improved quality of life, improved glycaemic control and reduced hypoglycaemia. We aimed to audit CGM use and outcomes in older adults attending a model 4 hospital. **Methods:** People with diabetes over the age of 65 years using CGM and on insulin were included. Clinical information, glycated haemoglobin (HbA1c), CGM metrics were gathered retrospectively from electronic patient records between December 2020–2024. Frailty was assessed using the clinical frailty scale (≥ 4 consistent with frailty). Statistical analysis was performed using SPSSv.27. Follow-up fortnightly glycaemic metrics were compared to baseline.

Results: One-hundred and twenty-three people were included. The mean age 73.3 (± 6.2) years (range:65–92), 48% ($n = 59$) were female, 76 (61.8%) had type 1 diabetes, 45 (36.6%) had type 2 diabetes, mean duration of diabetes was 31.3(± 15.4) years and mean HbA1c was 67.4mmol/mol (± 13.7). Two people were Nursing Home Residents. 32.5% were considered frail. From CGM onset to follow up there was a statistically significant improvement in HbA1c (67.4 mmol/mol ± 13.7 versus 64.9 mmol/mol ± 13.2 , $p = 0.01$). There was no significant change in time spent in hypoglycaemia demonstrated. There was no other clinically significant change in other CGM metrics.

Conclusions: Our study shows that CGM use in older Irish adults lowered HbA1c, similarly to research done among younger adults. CGM is an effective tool in a real world older adult population. Further research is needed into the impact of CGM on patient in older adults and for those who care for them.

P-0447

Re-evaluating diabetes targets in older adults—does frailty matter?

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Introduction: Managing type 2 diabetes in older adults requires balancing glycaemic control with the risks of hypoglycaemia and overtreatment. Overly strict glucose control has been linked to higher mortality, with inappropriate medication use contributing to hypoglycaemic events. NICE guidelines recommend an HbA1c target of ≤ 53 mmol/mol (7%) for those on hypoglycaemic agents, with less ambitious targets for frail individuals. This audit evaluates glycaemic control in older adults, focusing on the prevalence of varying glycaemic levels, the relationship between HbA1c and frailty, and the medication burden in frail individuals.

Method: A registry of 57 patients aged 65 and over at Chelsea and Westminster Hospital was established. Patients were stratified by frailty (Clinical Frailty Scale (CFS): mild, moderate, and severe). The average HbA1c for each group was calculated, and relationships between frailty, polypharmacy, and hypoglycaemic events were examined.

Results: Among 34 patients with HbA1c data, 43.5% did not meet the target of ≤ 53 mmol/mol. The moderate frailty group (CFS 5–6) had the highest average HbA1c at 64.1 mmol/mol, with 47.06% failing to meet the target. The severe frailty group (CFS 7–9) had 66.67% meeting the target of ≤ 53 mmol/mol suggesting that the current approach to glucose control may be too stringent. Additionally, 55.56% of this group were prescribed medications associated with higher hypoglycaemia risk.

Conclusion: This audit emphasises the need for a more personalised approach to diabetes management in both the fitter older adult as well as frail populations; reducing medication burdens and preventing complications from hypoglycaemic agents.

Short poster presentation

Diabetes

P-0448

Gender-Specific differences in functional mobility and sarcopenia risk among geriatric diabetes patients

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Introduction: While diabetes mellitus (DM) is known to accelerate functional decline in older adults, gender-specific differences in functional outcomes remain poorly characterized. This study investigates gender disparities in mobility, muscle strength, and sarcopenia risk among geriatric DM patients compared to their non-diabetic counterparts.

Methods: We conducted a retrospective analysis of 3,220 geriatric patients (aged ≥ 65 years) evaluated at our university hospital between January 2023–January 2025. Patients were classified as DM ($n = 1,394$, 43.29%) or non-DM ($n = 1,801$, 55.93%). Functional assessments included 4-m walk test (4MWT), timed up-and-go test (TUG), sit-to-stand test (STST), and handgrip strength. Sarcopenia risk was evaluated using SARC-F. Statistical comparisons were performed using t-tests and chi-square tests.

Results: Female DM patients demonstrated significantly higher sarcopenia risk (31.46%) compared to male DM patients (14.07%) ($p < 0.001$). Despite this striking gender difference, the prevalence of reduced handgrip strength was nearly identical between genders (females: 33.62%, males: 33.47%), suggesting possible differences in

muscle quality rather than quantity. The 4MWT revealed significantly worse mobility in female DM patients compared to female non-DM counterparts (37.73% vs. 31.00% with slow gait, $p < 0.01$), while no significant difference was observed between male DM and non-DM groups (20.04% vs. 21.06%, $p = 0.74$). Interestingly, neither TUG nor STST tests showed significant differences between DM and non-DM groups regardless of gender, indicating that DM may affect straight-line walking before impacting more complex mobility tasks.

Key conclusions: Our findings reveal important gender disparities in diabetes-related functional decline, with female DM patients showing significantly higher sarcopenia risk and worse gait performance than males with similar disease status. This suggests that female geriatric patients with diabetes may require more intensive monitoring and earlier intervention strategies to preserve functional capacity. The discrepancy between different functional tests highlights the importance of comprehensive geriatric assessment to detect subtle changes in physical performance.

Poster

Diabetes

P-0449

Association between traditional and new anthropometric indices with poor glycemic control in Spanish elderly diabetic men

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Introduction: The control of blood glucose values is key to avoid micro and macrovascular complications in diabetic patients. Recently, new anthropometric indices combining traditional measures (height, weight and waist circumference) have been proposed as alternatives to body mass index (BMI). The aim was to study the association between poor glycemic control with traditional and new anthropometric indices in Spanish elderly diabetic men.

Methods: This cross-sectional study investigated a consecutive sample of 163 elderly diabetic men (age mean 71.13 ± 4.64), who had lived in Cáceres (Spain). Nine anthropometric indexes, including BMI, body shape index (ABSI), abdominal volume index (AVI), body adiposity index (BAI), body roundness index (BRI), conicity index (CI), WHI, waist-to-hip ratio (WHR) waist-to-height ratio (WHtR) and waist-adjusted-waist index (WWI) were investigated. Poor glycemic control was defined as HbA1c blood levels $\geq 7\%$.

Results: Of all participants, 30 (18.4%) subjects had HbA1c $\geq 7\%$. Between adiposity indexes studied, only BRI ($r = 0.153$; $p = 0.049$) and WHI ($r = 0.154$; $p = 0.048$) correlated with HbA1c. Moreover, BRI (7.42 ± 1.60 vs 6.56 ± 2.02 ; $p = 0.030$) and WHI (41.18 ± 4.72 vs 38.49 ± 5.61) values were significantly higher in the HbA1c $\geq 7\%$ group compared to the HbA1c $< 7\%$. According to the ROC analyses, BRI and WHI provided the largest area under the curve (AUC = 0.634; $p = 0.024$ and 0.632; $p = 0.027$ respectively), and WWI showed the lowest value (AUC = 0.488; $p = 0.842$).

Conclusions: BRI and WHI were the best adiposity indices to detect poor glycemic control in elderly diabetic men.

P-0450

The Involvement of is-CGM (intermittently scanned continuous glucose monitoring) influences the insulin treatment in senior patients hospitalized at geriatric department—a pilot study

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Background: Insulin treatment is connected to risk of hypoglycaemia. Food irregularities, cognitive deficit and decreased hypoglycaemic awareness could cause subclinical course of hypoglycaemic episodes, especially in senior patients.

Aim: We compared two weeks of is-CGM (Intermittently Scanned Continuous Glucose Monitoring) in geriatric patients hospitalized at Centre of follow-up care. We observed differences in insulin dose at the start and at the end of study.

Methods: We involved 17 Type 2 diabetic (T2D) patients (7 women, mean age 76.1 ± 5.3 years, mean duration of T2D 17.9 ± 11.8 years) on insulin treatment (at least 1 dose daily). The metabolic control was acceptable (HbA1c 58.8 ± 18.2 mmol/mol), the recent Mini Mental State examination discovered light to moderate cognitive deficit (MMSE 22.8 ± 6.3 pts). We provided 2 weeks of is-CGM measurement.

Results: We observed changes in insulin treatment. In the group of 5 patients the insulin dose rose significantly (from 28.4 to 40.4 IU/day) with improvement in Time in range parameter (TIR), in the group of 5 patients the measurement didn't influence the insulin treatment and in the group of 7 patients the insulin dose dropped significantly (from 32.9 to 11.7 IU/day) without change in TIR. The time spent in hypoglycaemia decreased significantly in this group. Insulin treatment was completely stopped in 3 patients.

Conclusion: The is-CGM monitoring in frailty geriatric patients directly caused the significant reduction in daily insulin dose and decrease in time spent in hypoglycaemia that could prevent the continuation of cognitive function loss in frailty geriatric patients.

P-0451

Optimizing HOMA-IR cutoffs: a case–control analysis of geriatric T2DM in North India

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Background: Aging and Type 2 diabetes mellitus (T2DM) are both associated with insulin resistance. The homeostasis model assessment for insulin resistance (HOMA-IR) has emerged as a potential marker for identifying insulin resistance. The aim of this study is to determine the optimal cutoff value of HOMA-IR and its diagnostic utility in diagnosing T2DM in the North Indian geriatric population.

Methods: A case–control design was conducted with 200 subjects, including 100 controls and 100 patients diagnosed with T2DM. Serum insulin was measured using the enzyme-linked immunosorbent assay (ELISA) method. HOMA-IR and the homeostatic model assessment of beta-cell function were calculated using Matthews et al.'s formula. Receiver operating characteristic (ROC) curve analysis was conducted to evaluate the performance of HOMA-IR, and the Youden Index was applied to determine its optimal cutoff value.

Results: The mean age was comparable between controls (70.2 ± 5.21 years) and cases (70.82 ± 6.17 years; $p = 0.444$), and

the gender distribution was similar (controls: 55/45, cases: 58/42). Fasting insulin was significantly elevated in diabetic patients (25.64 ± 12.21 μ IU/mL) compared to controls (14.1 ± 9.79 μ IU/mL, $p < 0.001$). HOMA-IR was markedly higher in cases (11.56 ± 7.27) than controls (3.31 ± 2.35 , $p < 0.001$), while HOMA-B was reduced in diabetic subjects ($85.79 \pm 43.27\%$ vs. $165.99 \pm 111.98\%$, $p < 0.001$). ROC analysis produced an AUC of 0.92 (95% CI: 0.87–0.95, $p < 0.001$). At a threshold of > 4.44816 , HOMA-IR demonstrated a sensitivity of 91.0% (95% CI: 83.6–95.8), specificity of 83.0% (95% CI: 74.2–89.8), with a positive likelihood ratio of 5.35 and a negative likelihood ratio of 0.11.

Conclusion: HOMA-IR is a robust diagnostic tool for geriatric T2DM, offering high diagnostic accuracy that may facilitate early detection and improved management in this vulnerable population.

AUC for HOMA-IR = 0.92 (0.87–0.95) $P < 0.001$

HOMA-IR > 4.45

Criterion Sensitivity 95% CI Specificity 95% CI + LR -LR

> 4.44816 91.00 83.6–95.8 83.00 74.2–89.8 5.35 0.11

Parameters

Control (n = 100) Case (n = 100) P-value

Age (Years) 70.2 ± 5.21 70.82 ± 6.17 0.444

Gender (Male/Female) 55/45 58/42 0.669

Fasting insulin (μ IU/mL) 14.1 ± 9.79 25.64 ± 12.21 < 0.001

HOMA-IR 3.31 ± 2.35 11.56 ± 7.27 < 0.001

HOMA-B (%) 165.99 ± 111.98 85.79 ± 43.27 < 0.001

Poster

Education and training

P-0452

Simulation as a teaching model in geriatric medicine

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Background: A simulation-based training course was designed to support the development of primary health care physicians in older adults' assessment. The course aims to train candidates based on an overview of geriatric skills and gerontology, to raise awareness of the physiological changes related to ageing, and to cover the most common medical conditions of older adults in Qatar, training them in managing, escalating, and following up with these cases.

Methods: The simulation training is part of the geriatric medicine for non-geriatricians' post-graduate course and it covers four main geriatric giants: mobility impairments, post falls assessment, dementia and delirium, and skin integrity. Various National guidance on these topics was used to develop the content. This teaching model enabled participants to practice real-life scenarios in a safe environment, reflect on their performance and receive feedback from their peers. The organizer utilizes a well-established training facility, the Itqan center.

Findings: The course successfully delivers the content in alignment with the agreed upon objectives by the scientific committee. Post-course evaluations showed positive feedback, with all the participants reporting benefit from this style of learning. They all thought their participation would significantly affect their clinical practice and aid their ability to care for their older adult patients.

Conclusion: The organizers aim to strengthen the simulation training in geriatric medicine by collaborating with Itqan center trainers.

Falls scenarios: [Manikins].

Scenario 1: The participant is asked to assess a patient who has a fall and a head injury.

Aims: To enhance their skills in assessing a patient's neurological status after a fall and management of a patient with a deteriorating score on the Glasgow Coma Scale (Teasdale and Jennett 1974).

Scenario 2: The participant is asked to assess a patient who has fallen at home and sustained a fractured neck of femur.

Aims: To support the development of the candidate's skills at identifying injuries after a fall and increase awareness of different manual handling techniques (Healey et al. 2011). We encourage participants to communicate empathetically with the patient and consider comfort measures that can be taken to improve the patient's experience.

Scenario 3: The participant is asked to assess a patient who has fallen at home because of bradycardia.

Aims: To assess the nurse's skills at recognizing that acute illness can cause a fall. To highlight arrhythmias as a possible life-threatening cause of a fall and practice emergency care in a peri-arrest situation including escalating for senior support (Cronin and Kenny 2010).

Mobility impairment scenarios: [Real patients volunteered to attend]

Scenario 1: Assessing a patient with a history of falls in the PHCC clinic.

Scenario 2: To assess candidates' ability to perform fall assessment in the PHCC clinic.

Scenario 3: To assess candidates' ability to assess a patient with an unsteady gait in the PHCC clinic.

Aims of the three: To assess candidates' ability to perform falls assessment and lying & standing blood pressure and to suggest appropriate walking aid assistance. We encourage supporting the patient while walking and ensuring safety. To recognize neurological deficits and reach a differential diagnosis and essential management plan, including physical rehabilitation.

Skin integrity scenarios: [Manikins]

Scenario 1: Obtaining wound swab culture specimen by using 3 types of techniques during a home visit to a patient.

Aims: To demonstrate the technique of wound swabbing, the necessary equipment, and demonstrate the difference between inflammation from infection and colonization.

Scenario 2: Assessing pressure injury staging according to the NPIAP classification system.

Aims: To enable the candidate to identify different stages of pressure injuries and take exact measurements.

Scenario 3: Differentiate between arterial (ischemic), venous and diabetic (neuropathic) foot ulcers.

Aims: To enable the candidates and assess their capability in differentiating between arterial and venous ulcers.

Delirium and Dementia: [Actors].

Scenario 1: Case of known patients suffering from dementia with family.

Aims: To assess candidates' ability to perform cognitive assessment and roll out reversible pathological causes. Also, enables them to suggest appropriate management plans for various medical conditions, lack of sleep and behavioural and personality changes.

P-0453

Empowering older adults: a tailored approach to reducing proton pump inhibitor use

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Introduction: The identification and review of Potentially Inappropriate Medications (PIMs) in older adults are crucial for ensuring safe, effective healthcare. In a previous study, we identified a high prevalence of proton pump inhibitors (PPIs) in older adults, with potential risk for adverse effects. Increasing health literacy and adapting information for this population are key factors in improving adherence to medical recommendations.

Methods: Based on results of a previous study, an informational leaflet was developed aimed at older adults to promote the reduction or discontinuation of PPI use. The leaflet was adapted to meet the needs of the older adult population, with large font versions for those with visual impairments and an audio version for those with visual impairments or illiteracy.

Results: The leaflet was designed to be accessible, with clear and simple language, emphasizing the risks of unnecessary PPI use. It was tested with a small group of older adults, and feedback was collected on its clarity, comprehension, and usability. Most participants found the leaflet helpful, especially the large font and audio versions, which facilitated understanding.

Key conclusions: Health literacy plays a crucial role in primary healthcare, and the adaptation of educational materials for older adults can significantly improve medication adherence and decision-making. By tailoring information to the needs of this population, healthcare providers can empower older adults to make informed choices about their treatment, ultimately reducing the risk of PPI-related adverse outcomes. The success of this initiative highlights the importance of targeted, accessible health communication in primary care settings.

P-0454

The efficacy of the older patient care and seek course for the family physicians

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Introduction: Evaluating patients over 65 is becoming increasingly important for family physicians. It is essential to raise awareness of geriatric syndromes and manage older patients' transition between different healthcare services. This study aims to demonstrate the effectiveness of a six-hour training program organized by geriatricians in enhancing family physicians' knowledge of geriatric syndromes.

Methods: The study involved 22 participants who attended an older patient care and seek course at an international family physicians congress. Before the training, participants completed a pretest of 18 questions covering preventive care, polypharmacy, pressure injuries, malnutrition, and cognitive impairment. After the training, the same post-test was delivered to assess any changes in their knowledge. Each question is assigned a score of one point, with a maximum total score of 18.

Results: 86.4% of the participants were women, with a median age of 30 (ranging from 27 to 40). Additionally, 54.5% of the participants were family medicine specialists. The participants' median post-

graduate clinical experience was 5 years(min–max: 2–17years). Regarding the test results, the mean pretest score was 9.00 ± 1.74 , while the mean post-test score improved to 14.59 ± 1.89 . The difference between the pretest and post-test scores was statistically significant ($p < 0.01$).

Key conclusions: Education plays a critical role in recognizing and effectively addressing the needs of the geriatric population utilizing primary health care services. With these educations, the awareness of geriatric syndromes can be increased, ultimately ensuring effective management for older adults. Leadership by geriatricians in educating primary care professionals will enhance healthcare for older adults.

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P-0455

A nurse-led cross-sectoral home-based follow-up visit for older patients post- hospital discharge: a practice research project

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Background: One of the most critical periods for multimorbid older patients is immediately following hospital discharge. During this time, patients often face new challenges recovering from acute illness and readjusting to life at home. Previous studies have highlighted the difficulties of cross-sectoral care transitions, where communication was inadequate, and a lack of shared routines have been identified as obstacles.

Approach: A co-researcher team involving 5 hospital-based nurses and 2 researchers was established, they explored the hospital-based nurses' perspectives on the 'cross-sectoral home-based follow-up visit'. This study is theoretically and methodologically grounded in critical psychological practice research. Within this tradition, research is understood as a collaborative effort aimed at developing knowledge

that can inform professional practice through shared processes of exploration, learning, and instigating changes. Data was collected through 11 co-researcher meetings and the 'condition-, meaning-, and reasoning-analysis' was used to explore the data.

Results: Four key themes emerged from the analysis: 1) Evolving nursing practice and care, 2) Instrumental nursing influenced care over time, 3) Development of caring communities as a bridge between healthcare sectors, and 4) Being in the patient's home transforms nursing and care.

Implications: The 'cross-sectoral follow-up visit' within a practice research framework enabled the nurses to be actively involved in exploring and developing their daily clinical practice. They described bringing complementary knowledge into the meeting for the benefit of the nurses' competencies and the patient course of treatment and care. Being in the patient's home provided the hospital-based nurses with knowledge of the patient's real life.

P-0456

Potentials and challenges of interprofessional education in advancing social and health care integration for geriatric patients

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Introduction: Interprofessional Education (IPE) is championed by WHO as essential for equipping multi-disciplinary care professionals with "collaborative practice-ready" skills and mindset, crucial for advancing patient-centered care and health and social care integration. Despite this, health and social care professionals are often trained separately even for IPE, limiting early opportunities for interaction, mutual learning and collaboration before actual deployment. This pilot study examined a credit-bearing IPE program, aligned with the Canadian Interprofessional Health Collaborative (CIHC) Framework, where students from social and health care disciplines were trained together, actively interacting and collaborating in lectures and work-teams to deliver holistic care addressing complex needs for geriatric patients, in simulations.

Methods: The Interprofessional Collaborative Competency Attainment Survey (ICCAS) was employed to evaluate students' development in interprofessional collaborative (IPC) competency pre-and-post training. Qualitative analysis of post-training reflections and debriefings explored students' learning and collaborative experience, including benefits and challenges encountered in this innovative IPE initiative focused on geriatric care.

Results: T-test revealed significant improvements ($p < 0.05$) in ICCAS items Q9, Q11 ("Role Clarification & Contribution"), and Q20 ("Team Functioning"), despite the small sample size ($n = 23$). Qualitative evaluation underscored substantial concerns including "medical dominance", "role compatibility" and "uncertainty about social care's contribution" within IPC dynamics.

Conclusions: This pilot highlights the value of a co-training IPE model in enhancing knowledge exchange, fostering mutual appreciation and promoting collaborative capacity among social and health care students. Through active interaction in care simulations, it advances their capacity to provided integrated, patient-centered care and support for geriatric patients.

P-0457**The use of narratives in older adult residential care settings: care-professionals share their experience one year after training in life stories.**

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Objectives:

1. To understand the applicability of narratives in older adult residential care settings.
2. To determine how life story training improves professionals' skills in their relationships with residents.

Methodology: A 20-h training course was designed and delivered to 30 professionals; it concluded with an evaluation questionnaire. A face-to-face meeting took place between all involved six months later that analyzed how the knowledge acquired had been applied. Six months later, a second questionnaire was distributed containing 23 questions in four sections: impact and applicability; personal assessment; implementation of improvement actions; and final comments.

Results: A total of 43.3% of participants answered the questionnaire and all reported having applied the knowledge gained in the training. They highlighted the following perceived impacts: improved communication, understanding, and use of narratives (75.0%); and the ability to identify a person's priorities and values (58.3%), while stimulating daily conversations with residents was the most frequently used technique (83.3%). Their ability to implement narratives was high or very high (58.3%). They consider it has changed their approach to care (83.3%) and 100% would recommend this training to other professionals. The most frequent reason for the non-implementation of improvements was lack of time or resources (75.5%).

Conclusions:

1. After training in narratives, professionals perceive improvements in their skills and approach to caring for people and apply them in their daily work.
2. Time constraints are the main obstacle to ensuring the implementation of narratives.
3. All participants recommend this training.

P-0458**Transforming geriatric education: the impact of student-driven projects**

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Introduction: There is a noticeable lack of student interest in caring for geriatric populations, often due to perceived low specialization and high labor intensity [1]. This innovation explores how an academic geriatric elective can motivate future physicians by empowering students to develop innovative projects.

Methods: Students were encouraged to identify topics of interest and develop projects that addressed gaps in geriatric care. Examples include creating a Beers List checklist to improve medication safety, designing self-learning modules for enhanced curriculum delivery,

developing formative assessment items, and conducting case studies and survey-based research.

Results: The projects resulted in practical tools and resources. The Beers List checklist was implemented in clinics, improving medication management. Self-learning modules were integrated into the curriculum, enhancing student learning. Formative assessment items contributed to better evaluation methods. Case studies and survey-based research led to publications, advancing geriatric knowledge.

Key conclusions: Student-developed projects in geriatric electives empower learners and contribute to geriatric care improvements. These initiatives demonstrate the value of student engagement in developing practical solutions and advancing academic knowledge in geriatrics.

Short poster presentation**Education and training****P-0459****Integrating point-of-care ultrasound (POCUS) into undergraduate medical education: implications for geriatric care**

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Introduction: Point-of-Care Ultrasound (POCUS) has emerged as a transformative educational tool within undergraduate medical curricula, presenting notable implications for geriatric patient care. Effective ultrasound training can significantly enhance students' anatomical understanding, clinical reasoning, and diagnostic accuracy, particularly for critical geriatric conditions.

Methods: We developed and implemented a structured, vertically integrated POCUS curriculum across the six-year medical education program in 2018, systematically progressing from preclinical foundational sciences to advanced clinical rotations. The programme includes training for acquiring precise ultrasound images correlated with three-dimensional anatomical concepts and focused diagnostic assessments of geriatric-relevant conditions (e.g., gallbladder disease, pneumothorax, pericardial effusion, aortic aneurysms, and intraperitoneal free fluid). Implementation was managed via structured small-group sessions, comprehensive faculty training, and volunteer simulated patients to ensure realistic and ethical practice experiences for cohorts exceeding 500 students.

Results: Program evaluation demonstrated substantial effectiveness, with a high level of student satisfaction (97.5%). Moreover, 94.5% of participating students recognised the significant value of POCUS training for their future clinical practices, particularly emphasising its role in rapidly diagnosing or excluding life-threatening geriatric conditions.

Key conclusions: Integrating POCUS education into undergraduate medical training significantly enhances future physicians' clinical skills and readiness, particularly in managing geriatric patients. This pioneering approach provides a replicable educational model, contributing to improved patient safety, clinical effectiveness, and healthcare outcomes within geriatric medicine.

Poster

Education and training

P-0460

Developing a multidisciplinary educational program for older adults in medical education

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Introduction: Aging represents a critical phase of life, characterized by diverse health conditions and significant variability in the quality of life experienced by older adults. Despite healthcare advancements extending life expectancy, persistent disparities remain in older adult health and wellbeing. A comprehensive and multidisciplinary approach to older adult health education is crucial yet inadequately addressed within current medical curricula.

Methods: This qualitative study adopted a descriptive phenomenological methodology, employing semi-structured interviews with 24 academic experts across geriatric medicine, nursing, social services, psychology, and gerontology, alongside focus group discussions involving 38 final-year medical students and 27 older adult individuals. Data underwent thematic content analysis utilizing Nvivo software.

Results: Findings indicated considerable educational gaps, notably an overemphasis on medical and clinical aspects with insufficient attention to psychological and social dimensions of older adult care. Five core themes emerged: older adults health and aging education (central theme), aging and older adults, factors affecting older adult health, general approaches to older adult health education, and life-long learning. Participants strongly advocated for a multidisciplinary educational approach, integrating diverse perspectives from medical, nursing, social, and psychological fields. Findings underscored the necessity of structured, interdisciplinary collaboration to enhance older adults care education, ultimately benefiting patient safety, satisfaction, and overall quality of life.

Key conclusions: The study underscores the urgent need for structured, multidisciplinary older adult education programs within medical training to improve healthcare outcomes, patient satisfaction, safety, and physicians' competencies in managing the complexities of aging populations.

Short poster presentation

Education and training

P-0461

Integrated care for older people in Ethiopia – challenges and priorities for policy and research

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Introduction: The world's population is ageing, particularly the developing world. By 2050, the older African population is projected to total 235 million, overtaking Northern and Latin America. Over twenty years since the Madrid International Plan of Action on Ageing, many African countries have national ageing legislation, yet few have policies to specifically promote access to healthcare for older people. A workshop was held in Addis Ababa, February 2025, to discuss challenges and priorities for policy and research relating to integrated care for older people in Ethiopia.

Methods: In-country faculty invited stakeholders from government, non-governmental organisations, primary health care, caregivers, medical and allied health professionals. Faculty presented current Ethiopian research and policy on healthcare for older people. Facilitated small groups discussed challenges, priorities and strategies to address them. After feedback, participants were asked to record their top priority. Content analysis drew on participants' priority notes, facilitators' notes and the discussion. Faculty agreed themes. Verbal consent was obtained to publish workshop outcomes; comments were anonymised.

Results: Thirty-one participants attended (11 female, 5 UK faculty). Four priority themes were identified: social protection, health and social care systems, policy and advocacy. Sub-themes included pensions, health insurance, workforce training, lack of data, stigma, awareness raising, policy implementation and evaluation. Establishing a task force to formulate an intersectoral approach to the rights for older people was proposed.

Conclusion: A multi-faceted approach is required to tackle gaps in research and policy to integrate care for older people in Ethiopia. Adopting a rights-based approach is advocated.

Poster

Education and training

P-0462

Enhancing geriatric competencies among family medicine residents

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Background: As the global population ages and life expectancy rises, equipping physicians—particularly family doctors—with essential geriatric skills is increasingly critical. Family medicine residents are often the first point of contact for older patients, and therefore must possess the knowledge, skills, and attitudes required for comprehensive geriatric care.

Program description: In response to this need, the Tel Aviv-Yaffo district of Clalit Health Services developed a structured educational program to enhance geriatric competencies among family medicine residents. The program includes a dedicated Geriatric Study Day, participation in a professional conference, and hands-on shadowing experiences with geriatricians in the community.

Methods: Residents completed structured feedback forms evaluating the program's contribution to their geriatric knowledge, clinical skills, and confidence in treating older adults. In-depth thematic analysis was also performed on qualitative reflections from the shadowing experiences.

Results: Post-program feedback indicated a marked improvement in residents' confidence and understanding of geriatric assessment, identification of older adults' needs, and familiarity with community

resources. The shadowing experience was highlighted as especially impactful in applying theoretical knowledge and observing multi-disciplinary teamwork in practice.

Conclusion: Combining didactic and experiential learning proves effective in strengthening geriatric competencies among.

P-0463

The evolution of geriatric medicine education in Spanish medical schools over the past 10 years

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Introduction: due to population ageing, education in Geriatrics is recommended for undergraduate medical students. However, its presence in Spanish medical schools has been heterogeneous, despite changes in curricula. This study describes its evolution over the past 10 years.

Methods: An email questionnaire on geriatrics education was sent to 43 of the 50 medical schools offering the Spanish medical degree during the 2024–25 academic year (A). The results were compared with those from a previous survey conducted in 2014–15 (B), which included 36 schools. Teaching content and methods not covered in B were compared with a survey conducted in 2019(C), including 42 schools.

Results: a response rate of 81.4% (35/43) was obtained (B:90.6%;C:94.3%). Geriatrics teaching was present in 91% (B:76%;C:83.3%), being mandatory in 81% (B:96.8%), offered as an independent subject in 36% (B:35.5%) and absent in 7% (B:10%). Lectures were taught by geriatricians in 97.5% (B:74.2%), mostly during the fifth and sixth year of the degree(A:74%,B:74.2%); clerkships were offered in 82% (B: 56.7%), being mandatory in 62% (B:88.2%), and mostly located in Acute Geriatric Units (A:32%;B:47.1%), intermediate-stay centers (A:14%,B:none), and less frequently in nursing homes (A:1%;B:5%). The traditional lecture (A:25%;C:96.8%) was the most frequently used teaching method, while clinical simulation was the most innovative (A:12%;C:41.9%).

Conclusions: Geriatrics teaching has increased in Spanish medical schools although its compulsory nature has decreased. The participation of geriatricians and clerkships have increased, with more placements in intermediate care centers. These changes reflect a greater integration of Geriatrics, although with challenges regarding its mandatory inclusion and teaching approaches.

P-0464

Enhancing RSV awareness and prevention through an educational platform for healthcare professionals

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Background: ReSViNET is developing an RSV educational platform to address the critical need for accurate, accessible information about RSV for healthcare professionals. This initiative aims to bridge

knowledge gaps, improve awareness, and support preventive measures against RSV globally.

Methods: The RSV Learning Hub was developed through rigorous qualitative research conducted by the ReSViNET Foundation, including structured surveys to assess RSV knowledge levels and educational needs among key groups: parents, midwives, and healthcare professionals. This research-driven approach informed the creation of targeted, evidence-based educational resources—including clinical case studies, podcasts, webinars, informational flyers, and FAQs—designed to enhance knowledge and confidence in RSV prevention and management among healthcare providers and the general public.

Results: Preliminary feedback on the open-access RSV educational platform shows strong interest and increased confidence among healthcare providers in discussing RSV. Early engagement metrics, including webinar participation, need for bite-size educational materials, and other resources, suggest high demand for its content.

Conclusion: Launched in November 2024, the RSV Learning Hub provides open-access, reliable resources on RSV-related topics in multiple local languages. Developed to fill knowledge gaps in RSV awareness and prevention, the platform is designed for continuous expansion to support effective, informed conversations and improved outcomes globally.

P-0465

Training nursing home staff in IPC elements and antibiotic stewardship—selection of tools

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Introduction: Nursing homes (NH) have a high antibiotic use. Developing a tailored intervention together with NH staff that aims at improving Infection Prevention and Control (IPC) and appropriate management of infections can reduce the antibiotic use in this setting.

Methods: As part of the tailored training of IMAGINE project, NH staff together with researchers developed a toolkit to improve IPC

elements in NHs. The toolkit consisted of 9 tools focused on hand hygiene, prevention of urinary tract infection (UTI), appropriate diagnosis and antibiotic stewardship (<https://imagineproject.eu/toolkit/english/>). Participating NH selected which tools were to be implemented in their NH.

Results: 100 NH from 8 countries (Denmark, Greece, Hungary, Lithuania, Poland, Slovakia, Slovenia and Spain) participated in the tool selection. On average, each NH selected 7 tools. The most selected tools were a poster about myths related to wearing gloves (86% of the NH), an IPC techniques leaflet (84%) and a hand hygiene poster and quiz (81%). There were differences among countries: an algorithm for appropriate diagnosis of UTI was the most chosen tool in Lithuania (93%) and Spain (90%) whereas Greece, Slovenia and Denmark preferred a poster about UTI myths (87%, 87% and 92% respectively). All NHs from Slovakia chose the training program for new staff tool.

Key conclusions: Including final users in the development of material increases its usefulness and acceptance according to the high selection rate. NH needs are different, especially across countries. Allowing NHs to select tools and tailor their intervention increases the usefulness of the intervention in local practice.

P-0466

Profile of healthcare personnel responding to a survey on perceptions of older patients within the first 15 days of distribution

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Ageism, defined as discrimination based on age, can significantly impact the healthcare provided to older patients. According to the Global Report on Ageism (2021), up to 16% of the global population has experienced ageism, which is associated with serious health consequences for older adults. To explore this phenomenon, a survey was conducted to assess healthcare professionals' perceptions of older patients.

This longitudinal, descriptive study aimed to identify which healthcare professionals responded to the survey within the first 15 days of its distribution. During this period, 189 responses were collected. Of these, 93% (176) came from professionals with direct clinical contact or involvement in patient care. The average age of respondents was 47 years, and 85% (169) were women.

Regarding professional roles, 60 were physicians (3 in training), 78 were nurses, and 40 were nursing assistants. In terms of hospital area, 44% worked in medical departments, 25% (14) in surgical units, 25% (14) in central services, and 29% (52) in other areas.

Notably, 55% of respondents had received at least 20 h of accredited training specifically focused on older patients.

Conclusion: The responses appear to represent a valuable sample of hospital staff, though further studies are needed to confirm its representativeness and reduce potential response bias.

P-0467

Healthcare professionals' perceptions of older patients in a general hospital in the community of Madrid

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Spain's aging population has led to over 20% of citizens being aged 65 or older, accounting for 40% of hospital admissions and nearly 60% of primary care visits. Older adults often present unique challenges due to chronic diseases, geriatric syndromes, and atypical presentations of acute illnesses. Ageism—defined as discrimination based on age—can significantly impact the quality of care provided to this population. It is associated with delayed diagnoses, inappropriate treatments, mental health issues such as depression and anxiety, and risky behaviors like smoking and alcohol use.

To evaluate healthcare professionals' attitudes toward older adults, a digital survey using the reduced Kogan's Attitudes Toward Old People Scale (18 items) was distributed to all hospital staff. A total of 189 responses were collected; 17 were excluded due to lack of clinical involvement. Among the 176 valid responses (mean age 47, 85% women), the average Kogan score was 68.71. A score ≥ 63 indicates a positive attitude.

In this sample, 76.7% (135 professionals) demonstrated positive attitudes toward older patients. Compared to other studies using the full 34-item version of the scale, which found around 60% positive attitudes, our results suggest a relatively favorable perception in our setting.

Conclusion: In our hospital, over three-quarters of healthcare professionals reported positive attitudes toward older adults. While encouraging, further research is needed to identify factors influencing these perceptions and to design interventions targeting areas where attitudes could be improved.

P-0468

A Qualitative exploration of educational needs in geriatric care among nurses—research protocol

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Introduction: Among the various challenges in healthcare, the lack of adequate geriatric training for nurses remains a significant barrier to delivering high-quality geriatric care. This is a study protocol to investigate educational needs of nurses, working in various healthcare settings across different PROGRAMMING COST Action 21,122 member countries, regarding the basic principles of geriatrics.

Methods: A qualitative descriptive design, through face-to-face semi structured interviews, using purposive, convenience and snow-ball sampling to recruit participants. Eligible nurses work during data collection in healthcare settings across countries and care for geriatric patients. Maximum variation in socio-demographics and education will be considered in recruitment. The number of interviews will be determined based on data saturation to ensure an adequate sample size. The collected data will be analyzed using thematic analysis to identify key patterns and themes.

Results: The expected results from Albania, Israel and different countries, include identifying knowledge gaps in geriatric nursing, challenges, and preferences for educational programs and show how needs vary across countries. By highlighting the common priority areas for geriatric nursing education in different countries the study can guide the development of standardized competencies that address essential skills and knowledge for geriatric care, fostering uniformity in nursing practice worldwide.

Conclusions: The findings could shape policy and practice, develop standardized competencies, and improve geriatric care. Moreover, could facilitate international collaboration in geriatric nursing

education, promoting shared best practices and a unified approach to geriatric care.

Keywords: Education, geriatric care, nurses, qualitative

P-0469

Determination of the profile and education needs of the older adults (65 +) in Bolu Province, Türkiye

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With the increasing aging population, identifying the demographic characteristics and educational needs of older adults is crucial for promoting active and healthy aging. This study aims to determine the socio-demographic profile and educational preferences of individuals aged 65 and above living in Bolu, Türkiye.

Methods: A cross-sectional study was conducted using a structured questionnaire applied to 400 older adults in Bolu. The survey collected data on socio-demographic characteristics, daily living activities, life quality perception, and lifelong learning tendencies. Statistical analyses were performed using SPSS 25.0, employing descriptive statistics, t-tests, ANOVA, and correlation analyses.

Results: The mean age of the participants was 68.83 years. Most were primary or secondary school graduates, retired, and living with their spouses. More than half reported having a lower income than their expenses, and the majority did not receive social assistance. Common health issues included cardiovascular diseases, diabetes, and hypertension. Educational needs were primarily focused on physical activity and exercise, psychology, and healthy living. The preferred education method was face-to-face learning, mainly in the morning or on weekends. The major barriers to participation were the lack of sufficient promotion of educational opportunities, health problems, and schedule conflicts. Findings indicated that men had higher quality of life and lifelong learning levels than women. Participants with lower income and health problems demonstrated lower levels of participation in education and lifelong learning.

Conclusion: Establishing collaborations between universities and local institutions could enhance educational accessibility and participation, ultimately improving older adults' quality of life and engagement in lifelong learning.

P-0470

Understanding facilitators and barriers to the implementation process of a supportive service program in Naturally Occurring Retirement Communities: Perspectives from older adult volunteers

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Introduction: Naturally Occurring Retirement Communities (NORCs) can be a community, neighborhood, or building(s) where a significant proportion of the residents are older adults. NORCs offer a

new landscape for delivering onsite services to facilitate aging in place. Successful implementation and sustainability of NORC supportive service programs (SSP) can hinge on volunteer involvement. This study explored the perspectives of older adult volunteers on the facilitators and barriers to implementing a NORC SSP, utilizing the Consolidated Framework for Implementation Research (CFIR).

Methods: We conducted semi-structured focus groups with older adult volunteers (n = 22) across five NORC sites in Toronto, Canada who were actively participating in a newly implemented NORC SSP. Focus groups explored the barriers and facilitators experienced through the implementation process, coded and analyzed using a framework analysis with CFIR constructs.

Results: Volunteers valued the program's ability to help their community age in place and how it adapted to local needs. Their knowledge and awareness about the program, and personal attributes such as altruism, positively impacted implementation, as did having a clear implementation plan, and engagement of key community informants. Unclear roles made implementation more difficult, as did poor communication channels, divergent needs, and pace.

Key Conclusion: Older adult volunteers play a crucial role in the implementation of NORC SSPs. Understanding the challenges they experience, and the ways they overcome those challenges are important for understanding how NORC SSPs can expand the landscapes of care to provide ongoing support to older adults who want to stay in their homes as long as possible.

P-0471

Usability and utility of the COTIDIANA mobile app for osteoarthritis patients: a mixed-methods field study

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Introduction: The COTIDIANA mobile app is a digital tool designed to remotely monitor and assess disease activity in Rheumatic and Musculoskeletal Diseases using Patient Reported Outcome Measures and passive sensing. This study evaluated its usability and utility in clinical care among patients with knee or hip osteoarthritis. A secondary aim was to assess treatment adherence.

Methods: We conducted a non-randomised, one-group, pretest-post-test, mixed-methods field study. This abstract presents quantitative results. Participants with knee and/or hip osteoarthritis and Android smartphones were recruited from three Portuguese hospitals and followed for three months. At baseline (T0), participants installed the app and completed an expectations questionnaire. At one (T1) and

three (T2) months, they completed a 16-item questionnaire covering: utility, feasibility, convenience, capability, attitudes, social norms, and perceived behavioural control. Treatment adherence was assessed using the 8-item Morisky Medication Adherence Scale.

Results: At baseline, eighteen participants (mean age 66.9) were enrolled and found the app helpful for managing daily challenges; ten completed the 3-month follow-up (44.4% attrition). Median weekly use was 14.6 min. COTIDIANA was rated as useful and easy to use (median score > 5). Perceived capability to manage challenges declined (median T0 = 6; T1 = 4; T2 = 3.5). Concerns about reduced person-to-person interaction were reported at all timepoints. Medication reminders were the most valued feature (4/10 at T2). Treatment adherence increased slightly (T0 = 5.3; T1 = 6.1; T2 = 7), but differences were not statistically significant.

Key Conclusions: COTIDIANA was well-rated for usability but concerns about missing person-to-person interaction highlighted the importance of hybrid formats.

P-0472

The effect of the home care nursing education program on ageism and attitude towards the older adults in a developing country; one group pre-posttest design effects of education on ageism and attitude towards older adults

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Aim: The aim of this study is to investigate the impact of Home Care Nursing Education Program on ageism and attitudes towards the older adults.

Materials and Methods: This study was conducted with 21 nurses participating in Home Care Nursing Education Program at a tertiary hospital. The Fraboni Scale of Ageism (FSA) and the Kogan's Attitudes toward Old People Scale (KAOPS) were applied before and after the education.

Results: The mean age of the nurses was 33 (4.7) years (61.9% female). The mean total KAOPS of the nurses was 104.9 ± 13.5 before the training. After the training, it decreased to 102.1 ± 15.7 . It was found that nurses' total score average of the FSA was 68.8 ± 8.3 pre-test and decreased to 67.7 ± 10 post-test. There is no statistically significant difference between their scores ($p > 0.05$).

Conclusion: In this study, it was determined that the Home Care Nursing Education program had a positive effect on nurses' discrimination and attitudes towards the elderly, although it was not statistically significant. This may indicate that earlier stages of nursing education, such as undergraduate courses, need to provide such courses and training. To promote positive attitudes towards older adults and prevent ageism, innovative and intentional teaching strategies need to be incorporated into all nursing courses.

P-0473

Assessing pharmacy students' knowledge of geriatric syndromes

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Introduction: With the growing population, comprehensive geriatric education, including geriatric syndromes, is essential for healthcare providers and students. This study aimed to evaluate pharmacy students' knowledge of geriatric syndromes, which are generally not covered in the standard curriculum.

Methods: In this cross-sectional study, a questionnaire was applied between January 1 and March 10, 2025 to 3rd, 4th and 5th grade students at the faculty of pharmacy.

Questionnaire was created based on the researchers' expertise and literature. The final version included 22 questions covering students' demographic information, knowledge of geriatrics and geriatric syndromes.

Results: A total of 162 students (80.9% female) participated in the study, with a mean age of 22.08 ± 1.29 years. Among them, 43.2% were fifth-year, 32.1% fourth-year, and 24.7% third-year students. Most participants (95.1%) reported that the curriculum covered topics on older adults, primarily within pharmacology, pharmaceutical care, and rational drug use courses. However, 80.9% lacked knowledge of geriatric syndromes, and 67.9% misdefined the concept. While 155 students were familiar with dementia, 148 with polypharmacy, and 130 with malnutrition, only 60 accurately defined polypharmacy, and 93 had partial knowledge of dementia treatments. Students exhibited strong knowledge of medications affecting malnutrition and the pharmacist's role in prevention.

Key conclusions: The majority of students reported having knowledge of geriatrics but limited awareness of geriatric syndromes. However, their knowledge were generally high regarding the pharmaceutical aspects of geriatric syndromes. In the future, enhancing pharmacy students' medical knowledge while integrating it with their pharmaceutical expertise will be crucial for optimizing patient care.

P-0474

Disempowerment and resistance: reimaging geriatric care through older women's narratives

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Introduction: Older women are often overlooked in healthcare research, with limited studies examining their experiences, barriers to care, and potential solutions. This qualitative study explores their perspectives on these challenges and how they envision meaningful improvements.

Methods: As part of a hospital-wide strategic planning initiative, a semi-structured focus group was conducted in Toronto with five women over the age of 65, purposefully selected to reflect diverse social identities. The discussions were transcribed verbatim and analyzed using a critical narrative approach, which examines how individuals construct and convey their lived experiences.

Results: Most participants felt unheard and disempowered in their interactions with healthcare providers, attributing these experiences to the gendered biases and ageism they encountered as older women. These experiences were amplified by intersecting layers of discrimination, including race, gender, and socioeconomic status. Participants resisted these barriers by engaging in self-advocacy but worried about sustaining these efforts as they aged and faced cognitive or physical decline. Despite these struggles, they recounted transformative

moments of empathetic care, where clinicians listened attentively, validated their expertise, and acknowledged their concerns—offering glimpses into what more responsive and inclusive models in geriatric care could look like within new landscapes of practice.

Key conclusions: This narrative analysis reveals how identity-based marginalization, fear of losing autonomy, and the struggle to be heard shapes older women's healthcare experiences and challenges their ability to advocate for themselves. Their stories call for interdisciplinary reforms, from improving geriatric care practices and expanding landscapes of empathy and equity.

P-0475

Leadership in Geriatric Medicine: Challenges, Opportunities, and Professional Development in Europe

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Introduction: Geriatric medicine (GM) remains underdeveloped in several global regions, necessitating strong leadership to advance its integration into national healthcare systems.

Aim: The aim of the study was to gather insights from healthcare professionals across Europe focusing on self-assessed leadership competencies, confidence in teamwork, and perceived institutional support for leadership.

Methods: An online questionnaire was disseminated among an international consortium (PROGRAMMING CA 21122 members). The questionnaire consisted of the open-ended and closed questions regarding definition of leadership, respondents' self-assessment of their skills, their needs and challenges in developing as leaders. Data were collected in January and February 2025. Quantitative and qualitative analyses were conducted. The calculated representative sample was obtained.

Results: We collected 50 responses (12.5% response rate, 82% female; mean age: 45.7 years; mean professional experience: 18.6 years) from 20 countries. 88% of respondents declared that their work needs team management and 94% agreed that leadership initiatives are required. Statistically significant correlations were found between self-confidence in teamwork and leadership skills ($r = 0.452$, $p = 0.00097$), age and self-assessed leadership skills ($r = 0.406$, $p = 0.003$), and professional experience with both self-confidence at work ($r = 0.295$, $p = 0.0376$) and leadership skills ($r = 0.358$, $p = 0.0107$). Three main themes were identified in qualitative analyses: leader characteristics, the relationship between leader and team, the work environment and team members' expectations. The following challenges were identified: external and systemic factors, internal factors related to people, and resistance to change.

Conclusions: These findings highlight a clear need for structured leadership development programs targeting early-career professionals to ensure sustained growth of geriatric medicine across Europe.

P-0476

Expanding competences in geriatric medicine: a path to enhanced care or increased daily responsibilities?

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Background: Older patients are usually treated by multiple specialists with limited competences in Geriatric Medicine (GM). Due to age-specific challenges those specialists should possess basic knowledge in GM.

Aim: The aim of the study was to identify educational needs and perceived barriers to geriatric training of resident doctors across specialties in Poland.

Methods: The focus group was held during the PROGRAMMING 21122 COST Action event in Kraków, Poland. The discussion was recorded and transcribed verbatim, and thematic analysis was performed. Approval of the local bioethics committee was obtained.

Results: Eleven resident doctors of nine specialties participated in the study (72.7% women). In the thematic analysis we identified three main topics: the need for broadening of knowledge in GM, the obstacles in training in GM, and GM in the context of daily work. The participants acknowledged that they work with older patients and identified geriatric problems related to their specialty. They agreed that it would be beneficial to gain more competencies in GM, however, they emphasised that if they had to choose, GM aspects would not be the first to be studied. Most of the respondents agreed that 'being an expert' in GM in their wards, would bring them more responsibilities as they would be asked to deal with those topics.

Conclusion: Early-career doctors are aware of their specialty-specific geriatric problems; however, they avoid acquiring specific knowledge and skills to avoid additional responsibilities or being assigned exclusively to older patients.

P-0477

Ageism in medicine: a daily reality?

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Introduction: Older adults constitute large part of healthcare beneficiaries, therefore most doctors, irrespective of their specialty, work with them. However, misunderstandings concerning old age and unconscious ageism are prevalent.

Aim: The aim of the study was to identify and describe how resident doctors of different specialties from Poland perceive old age and older patients they meet in daily clinical practice.

Methods: The focus group was held during the PROGRAMMING 21122 COST Action event in Kraków, Poland. The discussion was recorded and transcribed verbatim, and then thematic analysis was performed. Approval of the local bioethics committee was obtained.

Results: Eleven resident doctors of nine specialties participated in the focus group (72.7% women). We identified three main themes: needs of older adults, ethical dilemmas in caring for older adults, expectations of oneself and others. All participants considered caring for older adults as an important aspect of their clinical practice and recognised numerous communication needs of older adults with challenges related. However, they often used the terms 'granny' and 'grandpa' when talking about older patients. Some of the participants expressed concern about the possibility of obtaining informed consent given the lack of easy or effective communication.

Conclusion: Early-career doctors, without geriatric background, often perceive older patients as less independent and less capable of advocating for themselves, regardless of their actual age, physical performance or cognitive reserves. Awareness campaigns and teaching activities are crucial to improve knowledge and reshape this perception.

P-0478

Addressing the gap: educational needs and barriers in geriatric medicine training among healthcare professionals

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Introduction: Challenges related to the ageing of society will increasingly burden the healthcare system in the coming years. Therefore, the role of education of healthcare professionals (HCPs) in the subject of geriatric medicine (GM) will increase.

Aim: To explore the perceptions of HCPs in terms of educational needs in GM, barriers and facilitators to start the training.

Material and methods: HCPs working in various environments were invited to take part in a focus group. The discussion was recorded and transcribed verbatim, then thematic analysis was carried out. The focus group was held during the PROGRAMMING 21122 COST Action event in Kraków, Poland.

Results: Ten interviewers participated in the discussion (80% female, seven medical doctors). Of the three nurses, two had professional backgrounds in both nursing and paramedic or physiotherapy. All participants reported caring for older patients in their practice, however 30% had completed a formal training in GM and one was during the training. We identified three main themes: the insufficiency of formal geriatric training, barriers to professional development in geriatrics, effectiveness of educational activities. All participants acknowledged the undergraduate training in GM as insufficient or even not performed in physiotherapists and paramedics. They highlighted lack of time and financial constraints as the main barriers to professional development. They noted that online training is convenient but not effective when compared to simulation, which requires effort but is perceived to be more meaningful.

Conclusions: HCPs found geriatric training necessary. When designing the training programmes in GM, the diverse range of activities should be included to effectively maximize the educational outcomes.

P-0479

The role of preparation in in-situ simulation: a comparison of announced and unannounced scenarios in elderly care wards

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Introduction: An in-situ simulation programme focusing on frailty emergencies was implemented across six elderly care wards at Wythenshawe Hospital. The aim was to enhance the response to medical emergencies from the multidisciplinary team (MDT), including nursing and allied health professionals. This evaluation investigated whether prior notice of a simulation influenced clinical learning or anxiety levels.

Methods: A total of 31 participants from six wards were included: 17 in the unannounced group (no prior notice) and 14 in the announced group (advance notice). Anxiety was measured using an adapted Generalised Anxiety Disorder-7 (GAD-7) questionnaire after the simulation. Participants also provided feedback on how the simulation affected skills such as recognising unwell patients, escalating concerns, and teamwork.

Results: The announced group had a slightly lower average anxiety score (3) compared to the unannounced group (3.2), but this difference was not statistically significant. 47% of the unannounced group preferred prior notice. In the announced group, 100% agreed that the simulation improved their skills, while 95%, 83%, and 94% of the unannounced group agreed for the same skills, respectively. These differences were also not statistically significant. Overall, 97% of participants expressed interest in further simulation training.

Key conclusions: The in-situ simulation programme was effective in promoting skill development and learning without increasing anxiety, regardless of prior notice. No significant differences were observed between the groups, and a large majority of participants expressed a desire for more simulation training. Two additional rounds of simulation are planned for this year.

P-0480

Enhancing clinical skills in geriatrics: high-fidelity simulated scenarios for fourth-year medical students

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Introduction: Clinical training in geriatrics is essential for medical students, especially when managing complex cases involving older patients with multiple comorbidities. High-fidelity simulation provides a valuable opportunity for students to engage in realistic, multi-phase clinical scenarios. This study evaluates a simulation-based teaching programme for fourth-year medical students on their geriatric block at Wythenshawe Hospital, focusing on a patient with Parkinson's disease who becomes acutely unwell in a care home setting.

Methods: The programme includes four high-fidelity simulated scenarios, each representing a different phase of patient care: community setting, A&E, Acute Medical Unit (AMU), and a hospital ward. Simulations cover key tasks such as managing an acutely unwell patient, prescribing medications, navigating end-of-life discussions,

and engaging with family members. At the end of each session, students provide feedback via a standardised form to assess the teaching's effectiveness and suggest improvements. Sessions are held twice a month with different groups, and data has been collected from September 2023 to December 2024.

Results: Initial feedback shows overwhelmingly positive results. 94% of participants found the teaching effective, and 95% reported an increased awareness of managing complex geriatric cases. 98% found the topics relevant to their practice. Instructor engagement was highly rated by 94%, and 91% felt debriefing sessions effectively identified areas for improvement. Students suggested longer breaks during sessions to improve focus and comfort.

Key conclusions: High-fidelity simulations are an effective tool for enhancing medical students' competence in managing complex geriatric cases. The positive feedback highlights the programme's impact on student learning and engagement. Further feedback will guide ongoing improvements.

P-0481

The impact of patient educator teaching on medical students' confidence and competence in parkinsons examination

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Introduction: Medical students often struggle to develop clinical skills in specialised areas like Parkinsons. Effective teaching strategies are crucial to enhancing their confidence and competence in examining and managing patients with Parkinsons. This study evaluates the impact of a patient educator-led teaching programme on medical students' skills in Parkinsons diagnosis and management.

Methods: Medical student groups participated in structured teaching sessions led by a specialist nurse with Parkinsons expertise. These sessions, held monthly with different students, combined theoretical learning on Parkinsons examination, diagnosis, and management with practical, hands-on experience. Students interacted with patients and practised examination skills in preparation for exams. Confidence, clinical knowledge, and perceived exam preparedness were assessed through a post-session survey. Data was collected from 2023–2024, with further data due in 2025.

Results: The programme positively impacted students' clinical knowledge and confidence. 91% of participants reported improved knowledge of Parkinsons, and 81% felt significantly more prepared for their exams. Additionally, students felt more confident in performing Parkinsons examinations following the session.

Key conclusions: Patient educator teaching, especially through interactive, hands-on formats, significantly enhances medical students' clinical knowledge and confidence in diagnosing and managing Parkinsons. This approach improves both theoretical understanding and practical exam preparedness, underscoring the value of patient interaction in medical education.

P-0482

Sense of coherence and quality of life in doctors who have rotated through the geriatrics department during their intership training as medical residents

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Introduction: Medical training requires both technical knowledge and psychological skills to handle stress. The sense of coherence (SOC), crucial for the well-being and performance of medical interns (MIR), helps them manage demands and improve their performance. In geriatric patient care, a high SOC is essential for managing complex situations and providing optimal care.

Methods: A descriptive qualitative study was conducted with 34 residents from Teruel in 2023. The CVP-35 and SOC-13 questionnaires were used to assess professional quality of life and SOC, with the participation of the Ethics Committee. The study explored the impact of SOC on geriatric patient care and how it affects residents' ability to manage emotional and cognitive demands.

Results: Residents reported a high workload, with 62% feeling significant pressure and 59% feeling overwhelmed. Seventy-one percent reported emotional stress, and 59% felt their work negatively impacted their health. While 88% of residents felt some autonomy, only 3% had complete decision-making freedom, limiting their ability to provide personalized care to geriatric patients. Recognition and training deficiencies also affected geriatric care. Seventy percent reported peer support, but only 44% received adequate supervision. Despite challenges, 85% of residents were satisfied with their work, and 97% felt their work positively impacted patients.

Conclusions: The study shows that high workload and stress affect the care of geriatric patients. Enhancing training, autonomy, and SOC is essential to improve residents' well-being and the care provided to elderly patients.

P-0483

Increasing physician continuity in danish geriatric wards: an appreciative inquiry

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Introduction: Geriatric patients often need longer hospital stays than other internal medicine patients.

We hypothesize that increased physician continuity doing medical rounds may increase both patient and physician satisfaction and shorten the length of stay at the hospital.

Here we describe the start of an improvement project in three parts to improve continuity of medical rounds at geriatric wards. Our dream is a situation where the patient can expect the same physician the next day in ward rounds, instead of an endless row of new physicians. We want to measure whether we can increase continuity in geriatric departments in four Danish hospitals, and whether this improves satisfaction of patients, relatives and physicians as well as length of stay at the hospital.

Methods: In this first part we assessed senior physician continuity, and calculated the number of consecutive days each physician has been present in the same ward. We collected data from four Danish geriatric departments. Data was collected in October and November 2024.

Results: Data from four Danish geriatric wards, with 45, 32, 20 and 16 beds respectively, shows the monthly average of consecutive days was 1.50 days (minimum 1.13, maximum 1.81).

Key conclusions: Physician continuity in geriatric ward rounds appears to be quite low in Danish hospitals. We plan to use

appreciative inquiry to create aligned, committed action to improve continuity in ward rounds for geriatric patients.

P-0484

Establishing an international 'healthy ageing research alliance': leveraging multi-disciplinary expertise to improve the health of older people in Europe

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Introduction: Healthy life expectancy in Europe has not kept pace with rising life expectancy. The 2023 Chief Medical Officer (England) Report highlighted insufficient research relevant to older people, limiting governments' ability to respond effectively. Government agencies in Italy and Portugal were also keen to develop older adult research capacity. Here, we describe the process of developing a 'Healthy Ageing Research Alliance' across the three European countries.

Methods: The consortium was built through strategic outreach and snowball recruitment, building on existing diplomatic engagements. We initially identified multi-disciplinary UK-based researchers, then expanded internationally through EUGMS networks, and by consulting UK researchers and embassies. We used a rapid policy and research review to create a synthesis of existing research priority setting exercises. We then created a 'short list' of research themes through a Delphi process, complimented by qualitative interviews.

Results: The alliance successfully recruited 41 multi-disciplinary researchers (22 British, 9 Portuguese, and 10 Italian). The prioritisation process identified key thematic areas: multiple long term conditions, primary prevention, long-term care, and mental health. Specific research questions highlighted interest in prevention of frailty, diet and physical activity, and access to high-quality long-term care.

Conclusion: We have shown the feasibility of uniting multi-disciplinary researchers around a shared research agenda. Given that healthy ageing depends on coordinated action across multiple sectors, it is vital that broad expertise is brought together in research. Our Delphi process is in its final stages, and we intend to formalise participation of Italian and Portuguese researchers ahead of the EUGMS conference.

Short poster presentation

Education and training

P-0485

European medical students' attitudes to becoming geriatricians—data from COST PROGRAMMING action CA 21122

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Introduction: Demographic trends in Europe are creating increased demand for physicians with expertise in geriatric medicine. It is imperative, therefore, that we engage and inspire medical students in geriatric medicine, to meet the needs of our ageing populations. Understanding medical students' attitudes towards geriatric medicine will be vital for developing strategies to promote the specialty of geriatric medicine amongst potential future geriatricians.

Methods: The European Cooperation in Science and Technology (COST) Action PROMoting GeRiAtric Medicine in countries where it is still eMergING (PROGRAMMING) CA21122 developed an online open survey to assess the educational interests of final-year medical students. Quantitative data regarding medical students' attitudes to choosing a career in geriatric medicine were analysed using descriptive statistics.

Results: complete data for 448 final year medical students (n female = 274) studying in 23 European countries were analysed. just 6.7% of respondents stated that they would like to become a geriatrician. only 15.8% of respondents reported that caring for older people was considered much or very much prestigious in their country. conversely, 32% of respondents described high or very high levels of enjoyment when engaging with older people.

Key conclusions: Only very small numbers of medical students currently wish to become geriatricians with many perceiving the specialty to be lacking prestige. Despite this, a much larger minority of medical students enjoy working with older people. Strategies that harness students' enjoyment of working with older people and promote the prestige of geriatric medicine may encourage more medical students to pursue a career in geriatric medicine.

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Poster

Education and training

P-0486

Iatrogenesis in Catalonia. What is known? STOP IATRO project

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Objectives: To describe the level of knowledge about Iatrogenic Dependence and Medication-related Iatrogenesis among primary care and hospital health professionals and people over 65 years of age in Catalonia (Spain).

Methods: Cross-sectional study conducted in 2024. Online surveys, semi-structured interviews and co-creation workshops have been carried out among doctors, pharmacists, nurses and nursing assistants. Focus groups have been carried out in people over 65 years of age. Study funded by the European Union developed in France, Portugal and Spain.

Results: in Catalonia, hospitals health-workers highlighted: routines which foster immobility, cutaneous prolong humidity, use of physical restraints, intravenous medication, unnecessary transfers, and depersonalization of the patient. Primary Care professionals outlined the

pharmacological aspects as the most harmful ones: polypharmacy, long-lasting chronic prescription in persons with advanced frailty, lack of working-time to review and optimize the chronic prescriptions, and lack of awareness of the need for optimization treatment in patients and other non-generalist physicians. The participation of the communitarian pharmacists in chronic prescriptions optimization and advising, was considered as a non-used opportunity. Older adults pointed out: Emergency room visits (high probability to develop delirium and long stay in corridors); delayed access to primary care; the non-transferability of the clinical history in between regions, and mis-communication between doctors and patients (lack of empathy and inadequate transmission of clinical information).

Conclusions: the participants know the concept of Iatrogenic Dependence and Medication related Iatrogeny. Critical points pointed out by participants differ upon clinical settings and type of participant.

P-0487

HIPFORESST—hip fracture outcome recording- empowering, supporting and sustaining teams

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Background: While Ireland provides high-quality hip fracture care across 16 hospitals, patient follow-up remains inconsistent. This project aimed to support national implementation of long-term outcome recording in the Irish Hip Fracture Database (IHFD) through developing an education module and other resources.

Methods: A systematic review of Irish hospital research described methods of hip fracture follow-up. This informed healthcare professional focus groups which used the Consolidated Framework for Implementation Research to explore barriers to outcome recording. Findings of the review and focus groups were combined with input from patient representatives and the WHITE study team to develop an education module. This module supported professionals during an 18-month pilot of IHFD outcome fields and was adapted based on professionals' feedback.

Results: From 2005–2021, the systematic review found that 15/16 IHFD hospitals had at least one study including long-term hip fracture follow-up. Focus groups with 21 participants across five professions identified practical challenges and emphasised the importance of national networks. Patient partners highlighted the trauma of hip fracture, and the reassurance follow-up provides. By 2024, eight hospitals completed the outcome-field pilot. Completeness of 30-day outcomes in three sites exceeded 50% by 2023. The education module was adapted to target new staff and embedded into the national e-learning platform. An animated video for patients was developed in collaboration with patient partners.

Key conclusions: National implementation of hip fracture outcome recording is feasible, but local champions need support through clear guidance and professional networks. Education-based support must consider the implementation climate and engage all stakeholders.

P-0488

The Leeds frailty education course

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“The Leeds Frailty Education Course is a not-for-profit multiprofessional two day hybrid course teaching about frailty to a mixed audience of clinicians, allied health professionals, nurses and other interested professionals. It is run by consultant geriatricians in Leeds, United Kingdom to a national audience although is open to participants from any country.

The course is mapped to tier 2 of the skills for health frailty framework of core capabilities: designed for people who regularly work with people living with frailty, but are not experts in leading frailty services.

Since December 2022 we have taught 959 participants and will pass 1000 with 4 further courses in 2025.

Out of 456 respondents 99% of attendees felt that the course had useful content that was well delivered. 95% of attendees felt that it improved their knowledge of multiple frailty syndromes and topics. On a follow up survey sent > 3months after the course had ended, 69 respondents felt that their knowledge of frailty had improved from an average of 6.44 to 8.85 out of 10. 97% of respondents would recommend the course to others and we also received excellent qualitative feedback on the content of the course, the delivery, and learning points that people remembered that they went on to use in their clinical practice.

In 2025 we will continue to offer courses to interested parties, and will also be delivering training to health and social care staff on the Isle of Wight, who have commissioned our training.”

P-0489

Training healthcare teams for the care of LGBTQIA + older adults—a qualitative review

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Background: Lesbian, Gay, Transgender, and Bisexual and Queer, Intersex and Asexual individuals (LGBTQIA +) account for approximately 9.3% of the total population in the U.S., according to the latest Gallup survey. The LGBTQIA + population, which is still mostly under the age of 65, is expected to age, and we will see more LGBTQIA + patients in the geriatric age group. The LGBTQIA + population is characterized by different health patterns compared to their heterosexual counterparts. Studies indicate that this population experiences more chronic illnesses and engages in more “risky” behaviours throughout their lives. Another characteristic is greater loneliness, which is even more pronounced in older age. Research shows that the medical care received by LGBTQIA + individuals is suboptimal for various reasons, including fear of exposure to healthcare providers, which leads to fewer and delayed medical treatment requests and less adherence to medical follow-ups. Questionnaires among healthcare teams indicate a lack of knowledge and discomfort in treating the LGBTQIA + population. Currently in Israel, most educational and residency programs do not have a structured curriculum regarding issues related to the LGBTQIA + population in general, and in particular regarding LGBTQIA + older adults.

Objective: To identify intervention programs conducted for the training of healthcare teams to work with geriatric LGBTQIA + patients and to review them in order to identify and characterize the strengths of these programs.

Method: In this study, we conducted a qualitative review of the standard data repositories in the field of medical education. The review was carried out in November 2023 and yielded 1,657 articles, of which 13 were found to be suitable according to the inclusion criteria we established.

Results: We identified 13 intervention programs that utilized a variety of teaching techniques, including traditional instruction, online courses, the use of theatre or personal stories, and even virtual reality. Some of the intervention programs were designed for specific professional groups, while others were intended for the entire healthcare team.

Discussion and conclusions: The studies we identified demonstrated the effectiveness of the intervention programs in improving knowledge and skills for working with elderly LGBTQIA + patients. However, most programs did not assess long-term effects on patient satisfaction. Additionally, many of the studies involved small and non-diverse participant groups, which limited the ability to generalize the findings to larger populations. Despite these limitations, the intervention programs proved effective, suggesting that training healthcare teams using various methods can be beneficial, and even brief intervention programs can lead to improvements in the knowledge and confidence of the healthcare team.

P-0490

From waiting to learning: “(Per)curso no SNS”—empowering patients through health literacy

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Introduction: According to the World Health Organization (WHO), health literacy encompasses cognitive and social skills that enable individuals to access, process, and understand health information for informed decision-making. In Portugal, national health strategies emphasize the importance of improving health literacy, particularly among older adults, who often face challenges navigating the healthcare system due to low education levels and social isolation. In the rural areas of Gonçalo, Vela, and Benespera, illiteracy rates are high (5.52%–14.29%) and the population is aging, with a dependency index exceeding 100%. Recognizing these barriers, a local healthcare team partnered with the Quality and Risk Management Unit of ULS Guarda to develop “(Per)curso no SNS”—an educational tool aimed at enhancing patient autonomy and optimizing healthcare access.

Methodology: “(Per)curso no SNS” is a training program consisting of structured courses divided into modules. While waiting for their appointments, patients voluntarily engage with the content on tablets. Upon completing each module, they receive a stamp on a designated card, with progress monitored by clinical staff. The program uses simple, accessible language to provide practical healthcare guidance, promoting informed decision-making and encouraging active patient participation.

Conclusion: This initiative aims to transform waiting time into an opportunity for health education, empowering patients to navigate the healthcare system effectively. By fostering engagement within the patient-family-community-healthcare team framework, “(Per)curso no SNS” promotes co-creation in care quality improvement, reinforcing the role of patients as active contributors to their own health and well-being.

P-0491

Practice changing new criteria for ideal medication use in the last year-TIME for updates

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Introduction: The Turkish Inappropriate Medication use in the oldEr adults (TIME) Criteria are updated quarterly in a year to maintain clinical relevance and keep updated. This presentation summarizes the ongoing update process initiated last year and introduces newly added and revised criteria with potential to impact clinical practice.

Methods: The TIME-National Working Group includes 45 academicians from 16 specialties, including geriatrics. Each of the 153 original TIME criteria (published in 2020), along with their references, was reassessed in light of the current literature. Criteria were revised when necessary, and new evidence-based items were created through multidisciplinary consensus. Since TIME is based on STOPP/START version 2, the latest version (v3) of STOPP/START was also thoroughly reviewed. Selected recommendations specifically aligning for the needs of clinical practice were incorporated into the updated TIME Criteria.

Results: We added 47 new criteria to the TIME, bringing the total to 200 (131 TIME-to-STOP, 69 TIME-to-START). Of these, 35 were adapted from STOPP/START v3, while the remainder were developed by the TIME Working Group (e.g., TIME-to-START, Endocrine system criterion 13: Calcium citrate over calcium carbonate in patients using PPIs who require calcium supplementation (reduced efficacy of calcium carbonate when used with PPIs)). Additionally, 18 criteria were revised based on updated evidence. Details will be shared in the presentation.

Conclusion: With its continuously updated mobile and web applications, TIME Criteria provide a dynamic, accessible resource for clinicians. Clinical validation of the current version in preventing PIM-related harm is among the group’s next goals.

P-0492

Integrating Meds75 + into geriatric care: innovative solution to promote medication quality in everyday clinical practice

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Introduction: Meds75 + supports safer and effective use of medications for older adults aged ≥ 75 years. Meds75 + contains a classification (A-D) and recommendation text for over 450 medicines.

Since professionals increasingly encounter older adults the need for easy-to-use information is vital across Europe. The aim is to describe the content of the Meds75 + and it's applicability in everyday clinical practice.

Methods: Meds75 + is continually updated by a multidisciplinary expert panel of professionals in geriatric pharmacotherapy. The assessment is based on a structured data collection about the efficacy, effectiveness, interactions and adverse effects. User data are drawn from the nationwide Prescription Centre including the entire Finnish population.

Results: Most medicines are classified as class A (suitable, 41%) or class C (suitable with precautions, 37%). One-fifth are in class D (avoid). Most commonly, older adults used paracetamol (46%), bisoprolol (36%) and amlodipine (24%). Paracetamol–codeine (7%), quetiapine (4.5%) and risperidone (4.1%) were the most used class D substances. Meds75 + has been integrated into Finnish web-based health portals, electronic social and healthcare record systems, and also in undergraduate education and further training of healthcare professionals. The Republic of Latvia and the county of Central Norway have integrated Meds75 + in their registers.

Key conclusions: Meds75 + is applicable especially in the Nordic and European countries. Compared with other criteria, the content is valid regardless of indication. Meds75 + can be integrated free of charge to promote communication, comparison and mutual medication quality. In society, the Meds75 + indicator is utilized in service planning of Finnish healthcare.

P-0493

Silver thread: integrating geriatric medicine into the undergraduate medical curriculum

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Introduction: The ageing population and rise in multimorbidity have increased the need for geriatric care. Until recently, this was under-represented in the Leiden medical curriculum. Since The Dutch Framework for Undergraduate Medical Education 2020 (Raamplan Artsopleiding 2020) prompted a revision, there was a unique opportunity for the development of a longitudinal structured integrated geriatric medicine programme within the Leiden Medical School.

Methods: This educational line, a Silver Thread, was developed through an interdisciplinary collaboration. Its aim to weave the theme of aging and appropriate medical care for older people throughout both the Bachelor's and Master's phases of Medical School, with contribution by both primary and secondary care settings. Guided by the National Curriculum Framework for Undergraduate Medical Education 2020, learning objectives were first defined, followed by the development of tailored educational formats. Professionals, students, and older adults were all closely involved in this co-creative process.

Results: In 2023, the new curriculum was officially launched. Geriatric education is now integrated longitudinally across the entire program. Recurring topics include the biology of aging (hallmarks of ageing), heterogeneity of the older population, a holistic approach to healthcare, diversity, resilience and frailty, geriatric assessment, and appropriate care planning.

Key conclusions: In the revised medical curriculum at LUMC, geriatric medicine now holds a more prominent and integrated position. This approach is expected to contribute to the development of

future-proof physicians who are capable of delivering appropriate and person-centered care for older adults—regardless of setting or context.

P-0494

Identification of risk factors for falls in geriatric patients by medical students using cinemeducation and the jigsaw method

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Introduction: Innovative learning methods in Geriatrics education can enhance the understanding of fall management in older adults.

Methods: A seminar focused on fall management was designed for fifth-year medical students. The session began with a general overview of fall prevention using the jigsaw learning method. Students then watched three excerpts (totalling 8 min) from “The Father” [Zeller, 2021] to identify intrinsic and extrinsic risk factors for falls in the main character. Their responses were collected for analysis.

Results: A total of 68 students participated, divided into two groups attending on different days. Each group was further split into teams of four. A total of five intrinsic and six extrinsic risk factors could be identified in the film. After watching the film excerpts, students identified the following intrinsic risk factors: age (100% of groups), dementia (94.12%), functional decline (88.24%), and gait disorders (47.06%). The average number of intrinsic risk factors for falling identified by all groups was 3.29 ± 0.68 . Extrinsic risk factors identified included obstructive furniture (70.59%), inadequate lighting (100%), low seating (64.71%), long pants (52.94%), inappropriate footwear (29.41%), and carpets (23.53%). The mean number of extrinsic risk factors identified by the students was 3.41 ± 1.50 .

Conclusions: Integrating jigsaw methodology with film excerpts into Geriatrics education helped students better understand fall management and risk factors in older adults. This approach provided a more contextualized and meaningful learning experience.

P-0495

Navigating through complaints as a foundation year doctor in the UK.

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Understanding how to deal with complaints as a Foundation Year (FY) doctor is an important yet overlooked aspect of medical training in the United Kingdom (UK). FY doctors, being at the frontline of patient care, often encounter these complaints first hand. However, without proper training and support, they may struggle to address them effectively. This quality improvement project aimed to highlight shortfalls and implement a training programme to improve complaints handling by FY doctors at Wythenshawe Hospital, Manchester University NHS Foundation Trust, UK.

A survey was designed to gather FY doctors' opinions on the adequacy of complaints handling training. The survey collected

information on their personal experiences of the complaints process, confidence in dealing with this, and any perceived knowledge gaps in the current training framework. The results highlighted a significant lack of complaints handling training, with many respondents reporting expected feelings of heightened stress and anxiety if ever confronted with a complaint.

These findings underscored the necessity for comprehensive complaints handling training to better prepare FY doctors for these challenging situations. The next step in this project will be to introduce a structured teaching programme surrounding the complaints process. A follow-up survey will then be distributed to assess improvement in knowledge gaps, perceived effects on mental health, and any remaining learning needs.

P-0496

Evaluation of an active learning session on management of falls in older adults

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Introduction: To describe the level of student satisfaction with a seminar using active teaching and the external observer's assessment.

Method: Designed and delivered a compulsory seminar on the management of falls in older people for fifth year medical students. Sixty-three students participated in the seminar, distributed in two groups, attending on different days. Active teaching methods such as jigsaw, cinemeducation and peer review were carried out during the seminar. Medical interns participated to complete the teams and as observers of the activity. Student satisfaction was assessed with an anonymous survey on a scale of 0 to 10 (0 not at all satisfied; 10 very satisfied). As external observers, medical interns completed a qualitative questionnaire about the seminar.

Results: The mean score for overall satisfaction was 9.4 ± 0.96 . In relation to the scores of the individual activities, the jigsaw method had an average score of 8.87 ± 1.64 ; the cinemeducation method of 9.21 ± 1.43 ; and the peer review of 9.5 ± 1.00 . According to the external observers, the main strengths of the seminar were active participation of the students; promotion of teamwork and the usefulness of the jigsaw and cinemeducation method for applying knowledge. The main weaknesses considered were limited seminar time; difficulty in making the seminar dynamic with only one teacher; and problems with the organisation of the groups.

Key conclusions: The students expressed a high level of satisfaction, making this didactic intervention a good tool for teaching geriatrics. External observers provided ideas for improvement.

P-0497

Cinemeducation, jigsaw methodology and peer-review: active learning methodologies in geriatric education

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Introduction: The aim of this study is to analyse the effectiveness of combining active learning methodologies in the teaching of Geriatrics.

Method: We designed and implemented a compulsory seminar focused on the management of falls in older adults, targeting fifth-year medical students. We conducted a pre-post evaluation using a short-answer questionnaire comprising five questions. Students were organized into teams of four to carry out activities using the jigsaw methodology. Afterwards, three clips from the film "The Father" (Zeller, 2021) were shown. Each group had to identify intrinsic and extrinsic risk factors for falls. Student groups peer-reviewed this task. To study mid-term knowledge retention, a month later, sixty students took a final exam consisting of 10 short-questions, including one about falls.

Results: Sixty-three students participated in the seminar, distributed in two groups. The mean score (out of 10 points) of the pre-intervention questionnaire was 2.69 ± 0.92 and 9.29 ± 0.85 ($p < 0.001$) on the post-intervention questionnaire. To analyse the mid-term impact on student learning, the scores of the final exam (out of 10 points) were placed into three groups: top, middle and low performance. Average exam scores were 8.02 ± 0.47 for the top group, 6.87 ± 0.22 for the middle group and 5.25 ± 0.84 for the low group ($p < 0.001$). Scores on the question about falls (out of 1 point) were 0.99 ± 0.03 , 0.97 ± 0.09 and 0.96 ± 0.06 , respectively ($p = 0.336$).

Conclusions: Mid-term knowledge retention of fall management in older adults proved to be significantly effective through the combination of active educational methodologies, even in the low performance group.

P-0498

Millennials and Z generation geriatricians' professional preferences and expectations in Europe: a talent management challenge

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Objectives: To understand preferences and expectations of young geriatricians from Millennia I(YGen) and Z Generation (ZGen) cohorts in Europe regarding their professional future and to compare results by country and generation.

Method: The YGen and ZGen refer to those born between 1981–1995 and 1996–2012, respectively. From August–December 2024,an online survey was conducted among European geriatricians,both specialists and in training,on voluntary and anonymous basis.Country Coordinators were assigned for the dissemination of the surveys.Statistical analyses were carried out using R-Software.

Results: 354 responses from 15 countries were obtained (Spain:25.1%) including 35 nationalities; YGen: 86.7%; women: 66.9%; doctors in training: 71%. Statistically significant differences were found between participants who had completed/were completing their training in Spain vs. the rest of Europe in terms of considering the shortage of geriatricians in their country (2.9/5 vs. 2.5/5; $p = 0.003$),geographical mobility after completing their specialty (2.7/5 vs. 3.3/5; $p = 0.013$),the importance of salary and other benefits (32.6% vs. 23.8%; $p = 0.032$),and job stability (36.0% vs. 20.8%; $p = 0.005$). Geriatricians who had completed their training in Spain rated their physical health significantly worse than those from other European countries (2.3/5 vs. 2.8/5; $p = 0.017$). ZGen placed more importance on professional recognition (3.5/5 vs. 2.6/5; $p = 0.044$), less on loyalty to their organisation (2.5/5 vs. 3/5; $p = 0.018$), and reported a worse level of self-perceived physical health during training (17.0% vs. 7.9% with “poor” or “very poor” health; $p = 0.017$).

Conclusions: New generations of geriatricians in Europe considered that the number of geriatricians in their countries and in Europe is insufficient.ZGen valued professional recognition more, loyalty to the organisation less, and showed greater geographical mobility.Measures need to be adopted in order to and adapt our organisations and policies to generational changes, which present a significant challenge.

P-0499

Breaking barriers: advancing gender equity in geriatric medicine

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Introduction: The proportion of women working in the geriatric healthcare sector is significant. However, gender barriers and inequalities might still persist.

Aim: The aim of the study was to identify challenges and barriers to women’s career development in geriatric medicine and solutions proposed to overcome them.

Methods: An online survey was distributed to women involved in PROGRAMMING 21122 COST Action on the occasion of International Women’s Day. The responses were analyzed quantitatively and qualitatively.

Results: We have collected responses from 53 women (mean (SD) age 41.6 (9.3) years) from 23 countries. Over 80% of surveyed women identified maintaining work-life balance and family responsibilities as a major challenge, and almost 40% pointed to a lack of mentorship and networking opportunities. Despite the perceived challenges, 45.3% of the women declared that they had not experienced any gender-related barriers to their career advancement in GM, however 62.3% of them felt that there were still some areas for development. Solutions proposed included promoting a balance between working hours and private time (75.5%), increasing the representation of women in decision-making processes (64.2%), and ensuring mentorship (58.5%). For open-ended questions three main topics were identified: impact of family responsibilities on training completion, gender disparities in promotion and career advancement, and scientific and professional recognition.

Conclusion: There is a need for initiatives to make geriatrics more inclusive for women at different stages of their professional careers. Work-life balance should be considered as the most pressing issue for women’s satisfaction and advancement in geriatric medicine.

P-0501

Current practices and gaps in teaching frailty and intrinsic capacity in European medical schools: insights from an EAMA study group

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Introduction: According to the World Health Organisation, teaching frailty and intrinsic capacity are important. We aimed to assess whether and how frailty and intrinsic capacity are taught across European medical schools.

Methods: In ten countries represented by the members of our group, we purposively sampled up to three universities per country. Some countries had an established and accessible geriatrics curriculum allowing us to obtain the required information directly. If not, the academic geriatricians responsible for teaching were contacted. Data were collected in a survey between March and October 2024.

Results: We obtained data from 19 universities in 10 different countries. Frailty was included in the teaching in 17/19 (90%) of the universities (median 4 h, range 1–36). The subject was most commonly taught in the 4th year of medical school. Most of the teaching was done as lectures, the teachers were in 22/25 (88%) geriatricians. In contrast, intrinsic capacity was only taught in 5/19 (26%) of the universities (median 2 h, range 1–20 h), as seminars or master classes. Although these curricula address aspects of intrinsic capacity, the concept itself rarely appears explicitly in learning objectives.

Conclusion: Frailty is taught by geriatricians in a large majority of the included universities, intrinsic capacity is more rarely taught. Research on education in Europe is challenging in many countries due to difficult access to medical education information. The EAMA group is working on an interactive PDF as a flexible educational resource to promote teaching of intrinsic capacity across Europe.

P-0502**Training future gerontologists through participation in research projects**

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Training future gerontologists requires the development of competences to promote active and healthy ageing. These competences can be developed through students' participation in research projects. This study aimed to describe the experiences of gerontology undergraduate students as a result of taking part in a research project on loneliness in older people, through the application of a multidimensional assessment protocol.

A qualitative exploratory-descriptive study was conducted with a sample of social gerontology students in Portugal. A total of 33 students were invited and 13 applied the protocol (adherence rate = 39.4%), resulting in 64 protocols (average = 5 protocols per student). The 13 students were invited to answer an online questionnaire with three topics: (i) contributions to their academic and professional training; (ii) events with the greatest impact; (iii) reflections on their performance in applying the protocols. Twelve students responded, all female, aged between 20 and 47. The data was submitted to content analysis, involving two independent judges.

Main findings suggest that the participation in project allowed to (i) train and improve communication skills, empathy and sensitivity when dealing with older adults; (ii) learn how to apply the protocols, putting into practice what they had learnt in theory. In addition, one respondent said that this participation made no contribution to their training; and another indicated that it allowed a better understanding of older people experience of loneliness.

Results suggest that participation in research plays a relevant role in the acquisition of competences by future gerontologists.

P-0503**The British Geriatric Society's Training Programme Director survey 2023: a summary of our findings**

Sarah True (1), Amanda Koh (1), Amit Arora (1)

(1) British Geriatrics Society

As the UK strives to generate more geriatricians we must understand the journey of the training programme. Information is available from the RCP census and BGS workforce survey with this study complementing that data. A similar survey was undertaken by the BGS in 2019. Since then much has changed, from a pandemic to the first NHS Long term workforce plan.

TPDs were contacted by the BGS VP for workforce at the geriatric medicine specialty advisory committee and invited to complete an electronic survey. The survey had been designed by the BGS workforce committee in line with the BGS strategic plan to strengthen the workforce for older people. The survey was open for 6 weeks.

Surveys were returned from 14 out of 19 deaneries, some were incomplete. National training numbers have increased since the 2019 survey with less vacancies. Six trainees had left the training programme in 2023 before obtaining CCT. The percentage of trainees working less than full time has doubled from 21.9% in 2019 to 44.8%. Most deaneries reported at least one trainee spending time out of programme, the majority pursuing curriculum related experience such as stroke. Qualitative data suggested solutions to increasing national training numbers and encouraging doctors to consider the specialty. What this study adds is an insight into the path to becoming a geriatrician and solutions TPDs have found to support individual needs.

Sharing these solutions can help our members tend to the workforce crisis through successfully recruiting, training and retaining the geriatricians of the future.

P-0504**A conversation analysis study on the jointly constituted assessment environment within simulation-based education**

Kartal Uçar (1)

(1) Schola Medica

Introduction: Simulation-based education (SBE) is a valuable tool for healthcare training, replicating real-life scenarios with realistic acting and medical tools. However, on a discursive level, simulation settings differ significantly from actual practice.

Method: Participants are required to engage in specific discursive work, such as verbally introducing unassimilable medical information, which would not be needed in real-life situations. Furthermore, trainees must demonstrate cognitive insight to allow assessors to evaluate their knowledge and skills. Assessors also influence the process by asking targeted questions that help reveal cognitive processes, conceptual frameworks, and emotional states affecting the trainee's actions. This study examines these discursive dynamics and their impact on simulation-based assessment outcomes.

Results: Simulation-based assessments of general practitioners were recorded, and conversation analysis (CA) was employed to explore how unassimilable medical information was introduced discursively. The findings revealed various strategies for introducing this information. When residents introduced the information themselves, assessors gained deeper insight into their competence. However, when assessors provided the information, only partial insight was obtained.

Conclusions: These different practices significantly influence the assessment environment and its validity. Raising awareness of the discursive elements in simulation-based education can enhance both the learning experience and the validity of assessments, ultimately optimizing simulation-based learning in family medicine and primary care.

Revised version under review at 'Health Communication'.

P-0505**A pilot study on serious gaming; the effectiveness and engagement of schola medica's triage and acute diabetes games**

Kartal Uçar (1)

(1) Schola Medica

Introduction: Serious gaming is revolutionizing medical education, offering a unique blend of immersive, interactive learning while addressing critical challenges in medical training and still being widely accessible.

Method: Schola Medica has integrated serious games into its curriculum, with a focus on improving learning outcomes, efficiency, and engagement. In a pilot study of two key games—the Triage Game and the Acute Diabetes Game—we evaluated their impact, knowledge retention, and learner engagement among GP residents.

Results: Our results demonstrate that serious gaming enhances clinical reasoning, with participants showing improved performance in triage and acute diabetes management under these simulated conditions. These findings highlight the potential of serious gaming to provide scalable, cost-effective training that is not only engaging and fun, but also impactful for GP residents.

Conclusions: Participants reported high levels of engagement and motivation, with many citing the games as a valuable addition to their training experience. This method also offers immediate, actionable feedback, allowing learners to refine their skills in real time. The pilot results suggest that gamified learning can complement traditional methods by making training more accessible, interactive, and relevant to real-world clinical challenges.

Questions for consideration:

1. How can the scalability of serious games be optimized for larger cohorts of GP residents?
2. How can serious games be adapted to other areas of education of GP residents to enhance both content delivery and learner engagement?

P-0506

Centrally organized emergency care medical training in the Netherlands: a case study in efficiency, scale and quality

Kartal Uçar (1)

(1) Schola Medica

Introduction: In the Netherlands, Schola Medica, in partnership with the seven Institutes for General Practice Training, have developed a centralized model for organizing emergency care courses for GP residents.

Method: This innovative model aims to enhance training efficiency, uniformity, improve the quality of education, and create scale advantages. By centralizing the coordination of courses, it is possible to standardize curricula, share experiences, and reduce costs through collective procurement of teaching materials, locale and instructors.

Results: The centralization not only improves consistency in training but also maximizes the reach of high-quality courses, ensuring that all medical trainees, regardless of their region, receive the same foundational knowledge and skills. Additionally, the model benefits from government subsidies and funding, making it a cost-effective approach that reduces regional disparities in educational resources.

Conclusions: This approach has proven successful in improving both the efficiency and effectiveness of training. By fostering collaboration between educational institutions, it has led to more streamlined processes and a higher level of expertise shared across the system.

Questions for consideration:

1. What strategies can be employed to overcome potential barriers to implementing a similar model with different healthcare systems?
2. How can this model be adapted to other fields of medical training to further optimize the use of resources and improve overall educational quality?

P-0507

Is education in geriatrics attractive to young internal medicine physicians? Do they prefer theory or practice?

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Background: Are young internal medicine physicians interested in education in geriatrics?

Is theoretical education enough in their opinion? For which topics do they declare their need to experience clinical practice under the guidance of a geriatrician?

Methods: Key geriatric themes and competencies were formulated based on the European Curriculum for Geriatric Education, Undergraduate and Postgraduate. Questionnaire developed with support by the Alzheimer Foundation. The questionnaire was presented to physicians completing „internal base training “ in the Czech Republic. After 30 months young physicians take the internal base exam. After the exam they can follow up with specialty training in one of 18 specialties. The exam does not include any geriatric questions now. So if the physicians declare they need education in geriatric topics—they need it for clinical practice, not for the exam.

Results: Analysis of data provided by 114 young physicians will be presented. Out of 114 physicians, 98 percent declared they need education in geriatric pharmacotherapy be added in their curriculum. 96 percent declared they want to learn more about differential diagnosis of delirium and dementia. For these topics, clinical practice experience was highly preferred. For 10 out of 17 suggested geriatric topics, more than 80% of physicians responded highly positively or positively.

Conclusion: Each one of the 114 junior internal medicine physicians (non-geriatricians) declared there was at least one geriatric educational topic which they would wish to experience as practical training at a geriatric ward during their specialty training.

Supported by the Charles University research program Cooperatio34-Internal disciplines.

P-0508

A critical review and expert consensus on barriers, enablers, and research gaps to healthy and positive ageing—position of the multidisciplinary international positive ageing group (MIPAG)

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Introduction: This paper aimed to (1) identify the current barriers and enablers to managing healthy aging, (2) discuss the role and impact of healthcare professionals in supporting individuals in maintaining and improving their intrinsic capacity, and (3) outline a research agenda.

Method: A multidisciplinary panel of experts from seven European countries was formed. A narrative review based on a PubMed database search focused on barriers, enablers, limits, gaps, improvements, or facilitators of healthy aging has been performed. A one-day face-to-face meeting was organized to reach a consensus on the most relevant barriers and enablers, the role of each discipline in supporting healthy aging, and a research agenda to be prioritized. Three external experts reviewed the final report.

Results: The experts listed 70 barriers and 64 enablers to managing healthy aging. The MIPAG panel discussed the role of the various disciplines in managing healthy aging. The recommended interventions for healthy aging were categorized into the five key domains of intrinsic capacity within ICOPE and applied to frail and robust individuals. Twenty-six proposals were listed. Finally, the panel members reached a consensus on a research agenda to address data gaps and healthcare changes that are required shortly.

Conclusion: MIPAG identified the societal and individual barriers and facilitators to healthy aging and listed the unanswered questions concerning managing this phenomenon. They defined a research agenda to promote a positive mindset in aging management and concluded that interventions for positive aging must start early in life to optimize intrinsic capacities and prevent their decline.

Poster

Ethics and end-of-life care

P-0509

Role of nutritional therapy in end-of-life care for older adults

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Introduction: End-of-life care presents unique nutritional challenges in older adults, with traditional nutritional paradigms often conflicting with comfort-focused goals. Despite recognition that nutritional needs and approaches shift during terminal illness, standardized protocols guiding appropriate nutritional therapy in end-of-life care remain inadequate. Confusion among healthcare providers, patients, and families regarding nutrition's role often leads to interventions that may increase discomfort without improving quality of life or meaningful outcomes.

Aim: This quality improvement project evaluated the impact of a patient-centered, comfort-focused nutritional approach on symptom burden, quality of life, and family satisfaction in older adults receiving end-of-life care across home, hospice, and palliative care settings.

Methodology: A prospective intervention study was conducted with 52 older adults (mean age 83.7 years) with life-limiting illness and prognosis < 6 months. The intervention implemented a specialized nutritional protocol prioritizing comfort, symptom management, and quality of life over traditional nutritional metrics. Key components included symptom-directed feeding approaches, comfort-focused hydration, family education on expected nutritional changes, and regular reassessment of goals. Primary outcomes included symptom burden scores, quality of life measures, and family satisfaction with care.

Results: Following implementation, significant improvements were observed in symptom burden scores (mean reduction 38%, $p < 0.001$), particularly in nausea, bloating, and discomfort related to feeding. Quality of life scores improved by 26% from baseline ($p = 0.002$). Family satisfaction with nutritional care increased substantially (43% improvement, $p < 0.001$), with 86% reporting

reduced anxiety regarding nutrition decisions. Healthcare provider documentation of nutritional goals improved from 34 to 92% of cases.

Conclusion: A comfort-focused nutritional approach significantly improved quality of life and reduced symptom burden in older adults receiving end-of-life care. Results demonstrate that reorienting nutritional therapy toward comfort and quality rather than traditional nutritional targets enhances patient-centered outcomes. This approach provides a framework for aligning nutritional care with overall goals in end-of-life settings while supporting families through complex decisions regarding nutrition and hydration.

P-0510

Is BAM (brick and mortar) the right place for your palliative patient: a novel collaboration of hospital at home (HaH) with hospice care.

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Background: Caring for older adults with palliative needs is becoming increasingly complex, necessitating innovative, integrated care models. The Newport Community Resource Team (CRT) has established a novel service that embeds St David's Hospice Care (SDHC) within a Hospital at Home multidisciplinary team (MDT) framework to deliver holistic, patient-centred care.

Objectives: This initiative aims to bridge traditional geriatric services with specialised hospice expertise to optimise a patient's journey at the end of their life while addressing the ever-growing secondary care burden.

Methods: The newly established SDHC MDT includes geriatricians, palliative care physicians, nurses, social workers, physiotherapists, and spiritual care advisors. Case studies from the MDTs thus far describe how collaboration between the HAH and hospice team have reduced hospitalisation without compromising the quality of care delivered. Prospective data collection will monitor key outcomes such as hospital readmission rates, symptom relief, and patient and family satisfaction.

Results: Early case studies suggest that collaboration between the SDHC and HAH teams has led to timely palliative and medical interventions, improved interprofessional communication, and smoother transitions across care settings. They also highlight the model's potential to enhance personalised care planning and support, ultimately reducing unnecessary hospital admissions and improving overall quality of life.

Conclusion: The establishment of the Newport CRT's SDHC MDT model represents a promising, innovative approach to addressing the complex needs of older adults. Ongoing prospective data collection and further analysis will be critical to refining the model and validating its benefits for holistic, community-based care.

P-0511

Advance care planning and shared decision-making in hospitalized geriatric patients in Poland—does it work?

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Advance care planning (ACP) and shared decision-making are rarely part of routine patient care in the Polish healthcare system. ACP is the process of discussing and selecting future healthcare and medical treatment options. Since modern medicine strives to respect patient autonomy, this evaluation examines why ACP has not yet become a standard of care.

A survey on advanced care planning was completed by 97 physicians who provide care to geriatric patients in internal medicine wards of the University Hospital in Gdansk.

Of physicians who responded to the questionnaire, 31% had up to 5 years of practice, 36% were specialists with up to 15 years of practice, and 33% were doctors with more than 15 years of practice. The majority of respondents reported that they “always” discuss the state of health (77%) and planned treatment (76%) with patients. However, only 29% “always” mention prognosis. The topic of the end-of-life is raised in advance “often” (56% reporting “always” or “often”), but doesn’t have any structured form. Conversations about end-of-life issues with families without patients’ presence occur “often” (40%), while the subject is “rarely” discussed with patients themselves (39%). The most common reasons for infrequent conversations include: fear of being accused of rejecting treatment (44%) and lack of time (26%).

Most physicians report that treatment plans in order to avoid futility are made routinely at their place of work (82%).

In conclusion, although elements of ACP are incorporated into patient care, physicians face challenges in addressing patients’ wishes in the end of life.

P-0512

Promoting interaction between individuals with severe communication impairments and their loved ones: implications for end-of-life care.

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Introduction: Medical conditions such as stroke, brain tumors and neurodegenerative syndromes can cause severe communication impairments. There is a lack of literature on how to facilitate interaction between individuals with severe communication impairment (e.g., global aphasia, advanced stages of dementia) who are in the end-of-life (EOL) stage and their families and friends.

Methods: Reflections based on the author’s own professional practice and pertinent literature review.

Results: In the context of severe aphasia and advanced stages of dementia, counseling patients’ family members about the nature of the communication impairment and training them with nonverbal communication strategies appear to facilitate interaction. For individuals with severely impaired declarative memory (as in dementia), interactions centered around nondeclarative memories could be considered.

Key conclusions: Healthcare teams should explore ways to facilitate interaction between individuals with communication impairment who are in the EOL stage and their families, regardless of how severe the impairment is perceived to be. Such interactions could promote patients’ physical and emotional well-being and help family members

accept their loved ones’ EOL stage and have meaningful communicative moments and closure.

P-0513

Creation of a humanization project with an art center for geriatric patients based in an Australian model

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Introduction: Humanizing the care provided, respecting the patient’s privacy, adapting the treatment to their needs, explaining the benefits and/or side effects of the treatment to be carried out, respecting the patient’s informed decision is part of humanization in a clinical context.

Methods: Creation of a humanization project with an art center after an international clinical internship experience in a reference center in South Australia. In the hospital context, it would be essential to create a physical space, with quality conditions, where patients would be motivated to express themselves through art and to also do so in their hospital bed if mobility was not possible. Therapists can visit the hospital unit and promote actions with patients, from music to painting, with patients being encouraged to share stories and develop artistic activities, namely, works such as drawing, painting, sculpture and sewing as means of promoting good -being, among others.

Results: Art therapy has benefits for patients in the following contexts: supportive in relaxation and pain control, expression and communication of feelings and emotions in a visual way, building self-esteem in the face of an irreversible illness, identification of values for human beings, increasing communication skills and exploration of imagination and questions about conflict themes.

Conclusions: The humanistic dimension is a central pillar in the relationship between the patient, the family and hospital care, as everything we can offer, in addition to technical-scientific knowledge as health professionals, allows other professionals to collaborate in a team and bring benefits to the quality of life.

Short poster presentation

Ethics and end-of-life care

P-0514

LGBT + geriatric

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Introduction: Older adults identifying as Lesbian, Gay, Bisexual, Transgender, Queer and Intersex (LGBTQI+) face unique health challenges stemming from a lifetime of social stigma, discrimination, and healthcare inequities. Since 2015 the American Geriatrics Society (AGS) has highlighted these disparities, and their contribution to increased risks of mental health disorders, social isolation, and chronic disease within the LGBTQI+ community. With

approximately 17% of the US population aged 65 and older, and 7.6% identifying as LGBTQI +, these statistics emphasize the importance of addressing healthcare disparities and developing a tailored approach to geriatric care for older LGBTQI + adults.

Methods: We conducted A narrative review of existing literature to identify key health concerns, barriers to care, and best practices in treating older LGBTQI + adults. The review focused on issues such as caregiver support, culturally competent care, and the integration of LGBTQI + specific concerns into routine geriatric assessments.

Results: Elder LGBTQI + reported higher rates of anxiety and depression compared to heterosexual peers, often stemming from historical discrimination and reduced access to healthcare. They were less likely to have children or “traditional” family caregivers, increasing their reliance on formal support systems. Successful interventions included creating and fostering inclusive clinical environments, LGBTQI + cultural competence training for healthcare providers, and integrating chosen families into care plans.

Key conclusions: Geriatric care for LGBTQI + adults requires addressing unique psychosocial and medical needs through inclusive policies, education, and collaboration with community resources. By prioritizing culturally sensitive approaches, geriatricians can help mitigate health disparities and improve health outcomes for this underserved community.

Poster

Ethics and end-of-life care

P-0515

The implementation of the acute basic palliation concept in 14 newly introduced hospital departments: an observational study of 100 non-specialized palliative patients discharged to die at home in Denmark

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Introduction: The Acute Basic Palliation Concept (ABPC) is a multidimensional tool designed to ensure high-quality end-of-life care for patients discharged from hospital. This study aimed to assess effectiveness of symptom alleviation achieved by departments experienced in using the ABPC compared to departments newly introduced to the concept.

Methods: Doctors in newly introduced departments (n = 14) used the ABPC following a 45-min training session. Electronic questionnaires were sent to all healthcare staff involved in end-of-life care of patients discharged using the ABPC. Relatives were contacted after the patient's funeral and invited to complete a questionnaire. Patient data were extracted from medical records.

Results: Of 100 patients included, 51 were discharged by departments experienced with ABPC and 49 from departments newly introduced to the concept. In 95–96% of cases, relatives reported that the patients had a dignified death without suffering. Good symptom control for pain, dyspnoea, agitation, and discomfort was frequently reported by relatives (experienced departments: 86–93%; newly

introduced department: 75–80%; all p-values > 0.05). Inadequate symptom relief was rarely reported by relatives, with no significant differences between groups (0–5%; p-values > 0.05). ABPC usefulness ratings were median 92–96 on a 0–100 scale.

Key conclusions: In conclusion, the use of the Acute Basic Palliation Concept resulted in high quality end-of-life care in both departments experienced with the concept and those newly introduced to it. The concept received highly positive evaluations from healthcare professionals and shows strong potential for broader implementation. Future studies will assess its feasibility in large scale and in general practice.

P-0516

Validation of questionnaire for determining palliative care phases in nursing homes

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Introduction: Differentiating palliative care phases in nursing home clients plays important role in identifying clients who would benefit from initiating palliative care and in communicating goals of care. Questionnaire for determining palliative care phases in nursing homes was developed in Dvur Kralove nad Labem nursing home and has been successfully used there since 2022. Aim of this work was to validate questionnaire for use in nursing homes throughout the Czech Republic.

Methods: 39 nursing homes from across the Czech Republic were involved in testing the questionnaire. 2256 nursing home clients (1698 women, 558 men) were examined. We monitored distribution of individual palliative care phases among nursing home clients, whether identified phase corresponds to client's real condition, and assessed suitability of questionnaire for working with nursing home clients.

Results: Using questionnaire, we distinguished 51.2% of clients in the 1st phase (compensated disease), 41.4% of clients in the 2nd phase (irreversibly progressive disease) and 7.4% of clients in the 3rd phase (terminal phase). According to nursing homes staff, phase of palliative care determined by questionnaire corresponds to real state of client in 89.9%, real state of clients does not correspond to results of questionnaire in only 4.6%. 92.3% of nursing homes identified questionnaire as useful tool for working with clients.

Key conclusions: Questionnaire for determining palliative care phases in nursing homes is simple and objective tool for determining palliative care phases. It is suitable for nursing homes and will be possible to start using it in other Czech nursing homes.

P-0517

Exploring the dilemma and needs of hospice palliative care for advanced dementia: institutional administrators, care providers, and major caregivers' perspectives

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Introduction: This study aims to explore the challenges of delivering hospice palliative care to advanced dementia patients.

Methods: Qualitative study design. 2. Sampling Criteria: focuses on long-term care institutions, home-based palliative care service units/organizations, institutional administrators, clinical care providers, and primary caregivers.

Results: This study employed purposive sampling to conduct interviews with 28 participants from central and southern Taiwan, including 13 nurses of hospice palliative care wards, 9 nurses of long-term care facility, and 8 primary caregivers of residents with advanced dementia. The study identified six major issues of challenges: 1. Disease-related factors; 2. Limitations in official eligible application; 3. Family-related factors; 4. Professional staff factors; 5. Care system factors; 6. Environmental factors.

Conclusion: The study recommends developing better assessment tools, enhancing education for nursing staff, and establishing certification systems. It emphasizes improving hospice palliative care skills for non-cancer patients to ensure high-quality care while reducing costs.

P-0518

Association between palliative care and reduced aggressive end-of-life treatment in ESRD patients

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Introduction: This study investigated end-of-life medical resource utilization patterns among ESRD patients.

Methods: This retrospective cohort study analyzed data from 88,445 ESRD patients who died between 2015 and 2021, linking their medical records from 2000 to 2021. The analysis focused on end-of-life medical resource utilization, palliative care usage, and the use of aggressive treatments within the three months prior to death. Logistic regression was used to identify factors associated with both palliative care utilization and aggressive end-of-life treatment.

Results: Palliative care was utilized by 22,252 patients (13.4%). A substantial 68.9% of ESRD patients received aggressive treatment in the three months before death. Female ESRD patients exhibited significantly lower odds of receiving palliative care than males (OR = 0.90). Patients residing in suburban (OR = 1.34) or urban areas (OR = 1.48) had significantly higher odds than those in rural areas. Importantly, ESRD patients enrolled in palliative care exhibited significantly lower odds of receiving aggressive treatment in the three months prior to death (OR = 0.91). In contrast, female patients and those with a history of heart disease or stroke had significantly higher odds of receiving aggressive treatment during this period.

Conclusion: This study demonstrates lower palliative care utilization among female ESRD patients and a high rate of aggressive treatment in the final three months of life. However, patients receiving palliative care did show significantly lower odds of aggressive treatment in their final three months. Therefore, promoting palliative care effectively reduces unnecessary medical resource utilization and significantly improves end-of-life care for ESRD patients.

P-0519

Satisfaction and needs of cancer patients and caregivers under home-based cancer patients management in Jeju

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Background: Jeju regional cancer center has provided home-based cancer patients management since 2008. This study was conducted to improve the quality of home-based cancer management programs through a survey of satisfaction and needs of the program provided by a regional cancer center.

Methods: We conducted face to face surveys of patients and their families. The structured questionnaire asked general characteristics (e.g., sex, age, education level, economic status, religion, duration of home-based patient management, et al.) and the level of satisfaction of management for cancer patients and their main needs.

Results: A total of 101 patients, 59 patients and 41 caregivers, were enrolled. Breast cancer was the main cancer and 51 (86%) patients and 36 (85%) caregivers were satisfied with the number of visits for home-based cancer management. Except for treatment provided directly to the patients, psychological counseling was the most preferred, and satisfaction regarding picnic and cancer education were also high. Satisfaction with the program provided by regional cancer center was relatively high (4.14 ± 1.21 on a 5-point scale). Additionally, satisfaction of the patients was higher than that of the caregivers, but this difference was not significant (4.29 ± 1.11 , 3.93 ± 1.31 , $p = 0.141$). Self-esteem was higher among caregivers than patients, but this difference was not significant.

Conclusions: There was high satisfaction about home-based patient program for cancer patients. To improve the quality of life of cancer patients and caregivers, it is necessary to develop customized programs considering patients' economic situations and need for psychological counseling.

P-0520

Optimizing palliative care in tertiary general hospital: a SWOT analysis based on death patient data

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Introduction: This study evaluates palliative care (PC) service delivery in a Chinese tertiary general hospital using a Strengths, Weaknesses, Opportunities, and Threats (SWOT) framework to identify challenges and strategies for improving end-of-life care.

Methods: A retrospective analysis was conducted on 162 death cases admitted to the palliative care ward of a tertiary general hospital from 2020–2025. Key indicators included admission pathways (emergency: 32% vs. outpatient: 68%), hospitalization costs (mean $\pm$ SD: $48,281 \pm 32,000$ CNY), death locations (86% in palliative care ward), multidisciplinary collaboration (37% with ≥ 3 specialty consultations), invasive procedures (58%), and pain management (Numerical Rating Scale [NRS] ≤ 3 89%).

Results: Strengths: High pain control compliance (89%), urban employee medical insurance coverage (68%), and personalized care implementation (12%). Weaknesses: Cost-intensive care ($\geq 100,000$ CNY in 22%) conflicting with short hospital stays (≤ 7 days in 35%), and suboptimal opioid utilization (21% non-compliant). Opportunities: Aging demographics (≥ 65 years: 71%), policy support for PC integration into medical insurance, and increasing public awareness. Threats: Uneven healthcare resource distribution, limited grassroots PC capacity, and ethical concerns over opioid accessibility.

Conclusions: Tertiary general hospitals demonstrate strengths in pain management and multidisciplinary collaboration but face challenges in cost efficiency and interdisciplinary coordination. Optimization strategies include: 1) implementing standardized multidisciplinary care protocols; 2) advocating for policy reforms to expand PC coverage; 3) establishing hospital-community-family care networks. These evidence-based measures aim to enhance quality of life for terminally ill patients.

Keywords: Palliative Care, SWOT Analysis, Multidisciplinary Collaboration.

Short poster presentation and audience award for best poster

Ethics and end-of-life care

P-0521

Advance care plans and preferences for people living with parkinsonism in the PRIME Parkinson UK study

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Introduction: Advance care planning (ACP) supports people with parkinsonism (PwP) to outline their future wishes. Existing literature suggests that PwP prefer ACP discussion outside of an acute hospital admission, with a Parkinson's specialist. Previous UK studies have highlighted low levels of ACP in PwP.

Methods: We conducted a cross-sectional sub-study of ACP in a randomised controlled trial of a novel model of care (PRIME-UK) for PwP. Participants completed an ACP preferences questionnaire, and online health records were reviewed to identify "Do Not Attempt Resuscitation" (DNAR) codes and Recommended Summary Plan for Emergency Care and Treatment (Respect) forms.

Results: Data collection is ongoing, with preliminary analysis conducted on completed ACP questionnaires ($n = 90$) and online records ($n = 160$). 82% were interested in learning more about ACP, and 70% were open to planning for their future care. 94% had arranged a will, and 70% had appointed a lasting power of attorney (LPA). Only 25% had an online DNAR or Respect form. 60% of online ACPs were completed during a hospital inpatient stay, and 16% were completed by a Parkinson's specialist.

Conclusions: Preliminary results suggest most PwP are interested in ACP. Hospital admission remains the most common setting for ACP discussions. The proportion of participants who had arranged a will or LPA was much larger than those with an online ACP documented by a healthcare professional. Healthcare professionals may be underestimating the willingness of PwP to engage in future planning. Future research should consider how ACP can be better incorporated into outpatient Parkinson's care.

Poster

Ethics and end-of-life care

P-0522

Relationship between health-related quality of life and foot pathologies in mexican older population

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Introduction: Musculoskeletal disorders of the foot and ankle are a common reason for consultation in the older population and are associated with impaired functionality and poorer quality of life (QoL).

In Mexico, the SF-36 scale has been validated for measuring QoL[1], yielding individual results for the following domains: physical functioning, physical limitation, emotional limitation, vitality, emotional functioning, social functioning, bodily pain, and general health.

Objective: To determine QoL in older adults with podiatric pathologies.

Design: A cross-sectional and analytical study conducted in our hospital's geriatrics department from January 2024 to June 2024.

Results: A total sample of 116 individuals was evaluated, with a mean age of 74 years, with a predominance of women (69%). Sociodemographic information was collected, the SF-36 questionnaire was administered, and a systematic physical examination of the foot was performed. The frequencies of footwear-related, skin-related, nail-related, vascular-related, neurological-related, and musculoskeletal-related conditions (bone deformity, hallux valgus, overlapping toes, pain, and decreased range of motion) were reported and correlated with SF-36 results.

Conclusions: 100% of patients suffered from at least one foot condition. Footwear-related alterations were more frequent in people who were unemployed or engaged in unpaid activities. Neurovascular conditions have the most negative impact on quality of life. The presence of bone deformities, overlapping toes, pain or tenderness, and decreased movement are associated with decreased physical functioning, greater emotional limitations, and a negative perception of general health.

[1] Aragón-R, García-MerazM, Trujillo-B. Encuesta de salud SF-36: validación cultural de México. Revista Iberoamericana de Diagnóstico y Evaluación. Octubre 2017;45:5–16.

P-0523

Inpatient palliative care consultations for adults aged 65 and older in a third level specialty hospital in Monterrey, Nuevo León, Mexico

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Introduction: Older adults are more likely to experience terminal illnesses, chronic organ failure, disabling symptoms and geriatric syndromes. While they may underreport symptoms, healthcare professionals frequently delay the initiation of palliative care, which was

originally developed for cancer patients but has since been extended to other chronic conditions.

Objective: To describe the characteristics of in-hospital palliative care consultations for patients aged 65 and older at Dr. José Eleuterio González University Hospital in Monterrey, Mexico.

Methods: A cross-sectional, retrospective, and descriptive study was conducted by reviewing a database of palliative care consultations for hospitalized older adults during 2024.

Results: In 2024, a total of 197 hospitalized patients received palliative care consultations, including 94 women (47.7%) and 103 men (52.2%), with a mean age of 75.5 years. The majority (95%) were first-time evaluations. Most consultations were requested for oncological conditions (51.89%), chronic organ failure—including renal, cardiac, pulmonary, and hepatic diseases (25.2%)—and cerebrovascular disease (12.6%). The most common chronic organ failures were renal ($n = 12$) and cardiac ($n = 13$). Less frequent diagnoses (10%) included dementia, infections, and trauma.

Among patients with oncological diagnoses, histopathological data were available for 35.5% ($n = 29$), with digestive tract malignancies being the most common (12.1%, $n = 10$). The departments that most frequently requested palliative care consultations were internal medicine and emergency medicine.

Conclusions: Most referrals were for cancer patients, highlighting the need to educate healthcare professionals on the benefits of early palliative care for other chronic diseases. As the aging population grows, integrating geriatrics and palliative care becomes increasingly important.

P-0524

Exploring barriers to discussing do not attempt cardiopulmonary resuscitation (DNA CPR) orders among non consultant hospital doctors

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Introduction: Do Not Attempt Cardiopulmonary Resuscitation (DNA CPR) orders are vital components of advanced care planning, particularly for patients with life-limiting illnesses. Despite their importance, there is a significant disconnect in the discussions surrounding these orders among healthcare professionals. This study aims to identify barriers faced by Non Consultant Hospital Doctors (NCHDs) in discussing and documenting DNA CPR decisions.

Methods: A survey was administered to NCHDs within our healthcare facility to assess their attitudes toward DNA CPR discussions and to identify perceived barriers. The survey focused on their experiences with admitting patients, having discussions about treatment escalation plans, and their comfort levels with documenting DNA CPR orders.

Results: Of the 30 NCHDs who completed the survey, a majority reported being regularly involved in patient admissions (24/30). However, only 17/30 had engaged in discussions about treatment escalation with their patients, while 23/30 had done so with the families or significant others. Notably, 11/30 NCHDs expressed concerns about potentially upsetting patients, and 15/30 felt a lack of senior decision-maker support hindered their ability to make appropriate decisions. Additionally, 16/30 feared legal repercussions, while 13/30 felt that acute patient conditions often rendered discussions inappropriate.

Conclusion: The findings indicate substantial barriers to effective communication regarding DNA CPR orders among NCHDs. Enhancing education on the ethical responsibilities of clinicians, alongside clear guidelines on initiating these discussions, is crucial.

Addressing these barriers can facilitate improved patient-centred care and ensure patients' wishes are respected at the end of life.

P-0525

Elderly danes' preferences for their final days: a survey of 1499 participants

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Background: Death is inevitable, but documentation about the final days of life is scarce in the literature. This study explored wishes and expectations regarding end-of-life care and preferences for the place to die.

Methods: An electronic survey including 12 questions was distributed in May 2024 to approximately 6000 members of DanAge in Aalborg. The questionnaire was developed in collaboration with healthcare professionals and DanAge members. Respondents reported gender, age, and postal code but remained otherwise anonymous.

Results: There were 1499 respondents (72% female, mean age 67 years (SD13)). Above half of respondents expressed fear of experiencing pain in their final days (57%), and the majority 87% preferred to be drowsy rather than in pain during this time. Many were also concerned about dying alone (69%) or becoming a practical burden to their loved ones. The preferred place to die was home (61%) followed by hospice (46%). Almost all respondents (94%) wanted to decide on further treatment and their preferred place of death, yet nearly half had not documented their wishes for their final days.

Conclusions: The findings reveal widespread fears about end-of-life experiences, including pain, loneliness, and burdening loved ones. Although most respondents preferred to die at home or in hospice, a significant proportion had not documented their preferences in legal documents. These results highlight the importance of addressing end-of-life concerns and promoting advance care planning to align care with individual wishes.

P-0526

Advance directives in patients admitted to an acute geriatric unit

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Objectives: Patients admitted for acute geriatric care often have advanced chronic diseases requiring palliative care. Advance directives help to guide decision-making. The aim of this study is to determine the proportion of patients with advance directives registered in the national registry.

Methods: All patients admitted between January 2024 and May 2024 were included. Demographic characteristics, geriatric assessment, comorbidities, and in-hospital mortality were collected, as well as whether patients were assessed by the hospital palliative care unit during hospitalisation. The number of patients registered in the Spanish advance directives registry was noted.

Results: 400 patients were included (mean age 94 ± 4.3 years, 71% female). 106 (26.5%) had end-organ disease: 22 with advanced heart failure, 9 with chronic kidney disease, 36 with active oncological

disease, and 42 with terminal dementia (GDS 7). 46 patients were assessed by the Palliative Care Unit. The in-hospital mortality rate was 14.2%. Only four patients had formally registered advance directives. Of these, one did not wish to die at home, two preferred not to be informed during the process, and three had appointed representatives. Most (3 out of 4) said that they would request assisted dying if the legal requirements were met.

Conclusions: Despite the increasing need for older patients with severe diseases to have an advance care plan, the formal drafting of instructions to ensure that their wishes and expectations are properly fulfilled remains limited. New strategies need to be implemented to increase the number of patients with advance directives.

P-0527

Ethical dilemma at the end of life—when does therapy become torture? Between medical possibilities and ethical responsibility

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Introduction: We report on a 78-year-old patient who was undergoing geriatric inpatient treatment due to a rapidly progressive deterioration in his clinical condition, cognition and increasingly frequent epileptic seizures over the past six months. Even prior to hospitalization, the patient was already completely dependent on care in all daily activities due to advanced dementia.

Method: Diagnostics using CCT and MRI as well as cerebrospinal fluid analysis revealed advanced cerebral microangiopathy and indications for Alzheimer's dementia. In addition, repeated EEGs were carried out due to repeated epileptic seizures during the inpatient stay.

Results: During the further hospitalization, epileptic seizures occurred more and more frequently (focal seizures without and with impaired awareness finally a non-convulsive status epilepticus), which resulted in a severe disturbance of consciousness up to coma. The presence of status epilepticus could be detected by repeated EEGs.

Despite exacerbation of the anti-seizure medication, the non-conclusive status epilepticus could not be terminated. Due to the current severe clinical condition and the pre-existing underlying illnesses, it was decided in close consultation with the patient's relatives and in accordance with the patient's presumed wishes not to escalate the therapy and intensive medical treatment any further.

Conclusion: In everyday clinical practice, and particularly at the end of life, the wishes of the patient must ultimately be the top priority of medical action, despite all the medical options available.

Short poster presentation

Ethics and end-of-life care

P-0528

The awareness and perceived difficulties in providing adequate end-of-life care on intensive care units—a questionnaire study of Polish medical personnel

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Introduction: Poland is characterized with low prevalence of limiting futile treatment in intensive care units [ICU] despite the introduction of goals-of-care protocol in 2014. We aimed to evaluate the approach of Polish medical personnel to the problem of futile treatment in the ICUs.

M&M: The survey was conducted during the national Polish intensive care-themed conference in April 2023. It was the second edition of the enquiry. The questionnaire enquiring about demographics, profession, job experience, and 10 custom-made questions regarding knowledge and experience with end-of-life care (EOLC) was collected anonymously. Statistical analysis comparing the enquiry with the first edition (from 2019) was undertaken.

Results: 354 respondents completed the questionnaire. 94.5% found discussing EOLC with patients important. 81.6% believed that the medical personnel should be more decisive than patient's family regarding EOLC decisions. 81% were aware of the existence of futile treatment protocol, only 35% used it regularly. Fear of legal consequences (61.9%) or family's reaction (55.6%) were the most common reasons for not adhering to proper guidelines. Improving hospital procedures (83.6%) and proper legislation (67.2%) were commonly suggested measures to overcome obstacles to adequate EOLC. Comparing our sample with first edition (423 participants), respondents were more likely to use 2014 protocol regularly (35.0% vs. 13%, $p < 0.001$) and identify medical personnel as more decisive in EOLC decisions (81% vs 58.8%, $p < 0.001$).

Conclusion: Despite rising awareness there is still significant room for improvement regarding proper end-of-life care in Polish ICUs, with legislation and adjustment of hospital procedures being the most promising means of improvement.

Poster

Ethics and end-of-life care

P-0529

Insights into mortality patterns in geriatric units: a retrospective analysis

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Introduction: Understanding mortality patterns in elderly populations is essential for improving care outcomes. This study explores the primary causes of mortality and the appropriateness of therapeutic efforts in a geriatric care setting.

Methods: A retrospective review was conducted on 50 patients admitted to the geriatric unit between December 2023 and January 2024. Data included demographic details, date of admission and exitus, cause of death, therapeutic interventions, and residential status. Statistical analyses identified trends and associations.

Results: The median patient age was 88 years (range: 83–96), with females constituting 60% of the cohort. Respiratory infections, including COVID-19, accounted for 25% of deaths, followed by heart failure (20%) and thromboembolic events (15%). Therapeutic efforts were deemed appropriate in 40% of cases, while 20% exhibited suboptimal interventions. Patients residing in care facilities showed similar mortality rates compared to those living independently.

Conclusions: Respiratory and cardiovascular conditions remain leading causes of mortality in geriatric units. Despite advancements in

care, opportunities to enhance therapeutic appropriateness persist. Tailored interventions addressing infection control and cardiovascular management could significantly impact patient outcomes.

P-0530

Palliative care in geriatric patients: approaches and outcomes

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Introduction: Palliative care plays a fundamental role in the management of geriatric patients with advanced diseases. This study analyzes implemented strategies and their outcomes in symptom relief and quality-of-life improvement.

Methods: Data from 100 geriatric patients receiving palliative care during the period from January 2024 to December 2024 were evaluated. The data included age, primary diagnosis, predominant symptoms, interventions performed, and family-reported satisfaction.

Results: The mean age was 85 years, with predominant diagnoses of advanced cancer (50%) and terminal cardiovascular diseases (30%). The most frequent symptoms were pain (70%), dyspnea (50%), and anxiety (40%). Interventions included pharmacological management, emotional support, and non-pharmacological techniques. A total of 85% of families reported high satisfaction with the care provided, highlighting effective pain management and communication with the medical team.

Conclusions Palliative care significantly improves the quality of life of geriatric patients and their families. It is crucial to promote programs that prioritize symptom relief and comprehensive support. This holistic approach should be an essential component in the care of older adults with advanced diseases.

P-0531

Innovation in palliative care: home-based peritoneal drainage for cholangiocarcinoma-associated ascites

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Malignant ascites, particularly in the context of cholangiocarcinoma, is a common source of discomfort and impaired quality of life in geriatric patients. Repeated paracenteses may pose a significant burden on both the patient and the healthcare system. Therefore, alternative approaches that enhance quality of life should be considered.

We present the case of a 93-year-old male patient, functionally independent in both basic and instrumental activities of daily living,

with no prior cognitive impairment. The patient had a diagnosis of cholangiocarcinoma complicated by recurrent malignant ascites, requiring frequent paracenteses and emergency department visits, which led to marked deterioration in his overall well-being.

Due to the discomfort and logistical challenges associated with recurrent procedures, a permanent home-based peritoneal drainage catheter was placed. This intervention was coordinated between the Geriatrics and Palliative Care teams to ensure safe monitoring and patient-centered care at home.

Following catheter insertion, the patient experienced notable improvement in ascites-related symptoms, including reduced abdominal discomfort and more effective fluid management. Furthermore, his quality of life improved significantly due to decreased need for hospital visits and the ability to remain in his home environment.

This case illustrates that the use of a permanent home peritoneal drainage catheter is a safe and effective strategy for managing malignant ascites in elderly patients. It promotes comfort, autonomy, and person-centered care, while reducing the physical and emotional toll of repeated hospital-based interventions.

P-0532

Beyond the patient: the multidimensional impact of liaison geriatrics on nursing teams

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Liaison Geriatrics plays a pivotal role in interdisciplinary care for older adults, enhancing both the quality of care and coordination among healthcare professionals.

Objective: To evaluate, through structured surveys, the satisfaction levels of nursing staff and nursing assistants with Liaison Geriatrics, and their perception of its impact on patient care quality, communication with families, and coordination with primary physicians in long-term care facilities.

Materials and methods: A cross-sectional study was conducted using a structured survey distributed to nurses and nursing assistants who collaborated with the Liaison Geriatrics team at a tertiary hospital during 2024. The survey assessed satisfaction with clinical management, perceived improvement in patient care, communication with families, and collaboration with physicians.

Results: A total of 75 professionals (55 nurses and 20 nursing assistants) from 11 public and private nursing homes participated. Overall, 90% rated Liaison Geriatrics positively in improving care quality; 92% emphasized the value of individualized therapeutic plans, and 84% reported that such plans facilitated clinical decision-making. Additionally, 74% highlighted improved prevention of geriatric syndromes such as delirium and pressure ulcers. Communication with families was rated as improved by 78%, while 88% reported enhanced coordination with primary care physicians, ensuring better continuity of care post-discharge. Qualitative feedback included: “Communication with families has improved significantly,” “It helps detect geriatric syndromes previously

underrecognized,” and “Additional training in geriatric tools would be beneficial.”

Conclusion: Liaison Geriatrics not only improves clinical outcomes in older patients but also enhances healthcare professionals’ perceptions of care quality, family communication, and interdisciplinary collaboration.

P-0533

Snapshot of care at hospice in Bermuda

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Introduction and methods: We conducted an audit of all patients admitted to hospice in Bermuda during the randomly selected period 1st March–30th June 2023 to ascertain patient demographics, diagnoses, admission source, length of stay and the outcome—discharge destination or death. Our secondary objective was to ascertain the proportion of end of life care being provided in the hospice versus the community.

Results: During that period the number of deaths in the community was 88. 49 patients were admitted to hospice with the mean age 79.6 (youngest was 44 years old and oldest was 101 years old). 86% were black, 14% white, 53% were female and 47% were male. The mean length of stay was 7.5 days. The most frequent causes of death were malignancy (35%), dementia (22%), and cerebrovascular accident (CVA) (16%). 94% of patients were admitted from the hospital and 6% from the community. 90% of these patients died at hospice, 2% were discharged home for community palliative care, 2% to a long-term facility, while 6% remained in hospice at the end of the observed period.

Conclusions: The review shows that the hospital hospice cared for a significant number of patients providing symptom control and end of life care. Deaths in hospice comprised 34% of all deaths in the country (population 64,698 at that time) that occurred during that period. The majority of these patients were older, the leading causes of death were cancer, dementia and CVA.

Short poster presentation

Ethics and end-of-life care

P-0534

Navigating tiredness of life in nursing home residents: insights from healthcare professionals on strategies and on the role of antidepressants

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Background: With increasing life expectancy, the number of older adults in nursing homes (NH) continues to rise. These residents often experience significant challenges and losses, leading some to develop feelings resembling Tiredness of Life (ToL). While healthcare professionals (HCPs) frequently encounter ToL, scientific research on this phenomenon remains scarce.

Methods: This qualitative study explores HCPs’ strategies in caring for NH residents struggling with ToL. Data were collected through semi-structured interviews with a purposive sample of 32 HCPs across four provinces in Flanders, Belgium, including nurses, nurse

aides, general practitioners, geriatricians and psychiatrists. The study followed a grounded theory approach, with data analysis guided by the QUAGOL method.

Results: Findings indicate that HCPs interpret ToL in varying ways, reflecting ongoing uncertainty surrounding the phenomenon. An important factor shaping their approach is whether they view ToL as reversible or irreversible. Physicians who perceive it as reversible or intertwined with depression often initiate antidepressants. However, if they remain unable to help, feelings of powerlessness may arise.

Conversely, when professionals acknowledge that for some residents not all suffering can be resolved, actively listen, and provide empathetic care without dismissing residents’ emotions, the HCP’s report a more positive emotional experience. Nonetheless, time constraints due to increasing care demands and the complexity of NH care pose significant challenges.

Conclusion: Understanding HCPs’ perspectives on ToL is crucial, as it appears to be common among NH residents, yet remains poorly understood. Uncertainty persists regarding its relationship with depression and the appropriate use of antidepressants, making it difficult to determine fitted care strategies.

Poster

Ethics and end-of-life care

P-0535

Eating and drinking with acknowledged risks in older adults—a mixed methods study of the experiences of clinicians in Japan and the UK

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Introduction: Older patients are often restricted from oral intake due to feared risk of aspiration. Eating and Drinking with Acknowledged Risks (EDAR) is an alternative process enabling comfort and autonomy. While UK has national guidance on EDAR, other ageing societies do not. To understand the experiences and practices of healthcare professionals in EDAR decision-making, we conducted a mixed-methods study comparing practices in Japan and the UK.

Methods: Twelve healthcare professionals (doctors, nurses and speech therapists) were interviewed on their experiences of EDAR in older adults. The themes extracted from the qualitative analysis were used to develop a survey, distributed among healthcare professionals in both countries.

Results: The qualitative phase revealed three themes: 1. healthcare professionals/healthcare systems, 2. priorities in decision-making, 3. relationship with family/patient. Decision-making was shaped by individual, structural and cultural factors. In Japan there was a greater likelihood to defer decision-making and to side with families’ wishes when they differed from patients.

The quantitative phase involved 1452 participants (Japan 1058, UK 394). UK-based respondents reported significantly higher levels of confidence ($\beta = 2.358$, $SE = 0.137$, $p < 0.001$), greater likelihood of supporting EDAR ($\beta = 1.633$, $SE = 0.148$, $p < 0.001$), and less difficulty in undertaking EDAR ($\beta = -1.970$, $SE = 0.173$, $p < 0.001$). Experience and training were associated with higher confidence. Regarding future interventions, a guiding framework and education were rated as beneficial.

Conclusions: Current guidance is not sufficient; education and training are essential to enable EDAR in older adults.

Short poster presentation

Falls and fractures

P-0536

Regional variance in hip fracture incidence and outcomes

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Introduction: In Southern Finland, hip fracture surgery and perioperative care are centralized to Helsinki University Central Hospital (HUCH), while the rehabilitation is the responsibility of City of Helsinki and four surrounding Well-Being Services Counties (WSCs). This study aimed to investigate regional variance in hip fracture incidence and outcomes.

Methods: Register-based data of hip fracture patients (N = 4456, aged ≥ 65 years) operated in HUCH during 2021–2023 were analyzed. In addition to the incidence rate, patient-related (e.g. age, sex, body mass index (BMI)) and process-related data (time to surgery (TTS) and length of stay (LOS) in the operating hospital) were compared. 30-day and 1-year mortality data were assessed.

Results: Hip fracture incidence varied regionally ranging from 440.1 to 531.5 per 100,000 inhabitants aged ≥ 65 , the highest incidence being observed in Helsinki. The proportion of females (71%) and mean age (82.6 years) were highest in Helsinki, whereas in the four WSCs the respective figures varied between 65.9% and 68.9% ($p = 0.032$), and from 81.4 to 82.1 years ($p = 0.009$). Underweight (BMI < 18.5) was most frequent (10.3%) among patients from Helsinki ($p = 0.018$). The proportion of TTS < 24 h varied from 40.3% to 51% ($p < 0.001$) and mean LOS varied from 5.1 to 8.8 days ($p < 0.001$). No significant regional differences in either 30-day or 1-year mortality were observed.

Key conclusions: Significant regional disparities exist in hip fracture incidence as well as in patient characteristics and care process, despite all surgeries being performed within the same organization. Regional characteristics should be considered when comparing hip fracture outcomes in different areas.

Poster

Falls and fractures

P-0537

Iron status is associated with mobility and functional outcome two months after hip fracture—an observational study of 78 patients

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Aims: Iron is an important cofactor in muscular function and in erythropoiesis. We investigated whether iron status two months after hip fracture was associated with mobility and functional outcomes.

Methods: We included patients ≥ 65 years, surgically treated for hip fracture between October 2022 and August 2023 at Dept. O&T, BBH, and seen at an Orthogeriatric outpatient clinic two months post-discharge. Iron status was defined by transferrin saturation (TSAT) and iron deficiency as TSAT $< 20\%$ in blood tests. Mobility and function were measured using New Mobility Score (0–9 points, 9 best mobility), six-minute walk test, usual gait speed (10-m), 30s. Sit-to-Stand test, and handgrip strength. Associations between TSAT (per 10% units) and outcomes were evaluated by multivariable linear regression, with age, sex, and type of fracture (intra- versus extra-capsular) as covariates.

Results: A total of 78 patients were included (67% women (age 81 ± 8 years), 60% had intracapsular fractures. The average $\pm$ SD TSAT was 0.20 ± 0.09 , 41/78 patients (53%) had iron deficiency. New Mobility Score was on average 5.4 ± 2.7 . The results of the six-minute walk test were 255 ± 133 m, walking speed 0.80 ± 0.29 m/s, Sit-to-Stand test 5.5 ± 5.7 repetitions and hand grip strength 23.4 ± 9.5 kg.

TSAT was significantly associated with New Mobility Score ($B = 0.79$, 95%CI 0.23–1.34, $p = 0.006$), six-minute walk test ($B = 49$, 95%CI 18–80, $p = 0.002$), walking speed ($B = 0.13$, 95%CI 0.07–0.19, $p < 0.001$), Sit-to-Stand test ($B = 1.67$ 95%CI 0.40–2.92, $p = 0.01$), and hand grip strength ($B = 2.24$, 95%CI 0.69–3.80, $p = 0.005$).

Conclusions: The iron status measured as TSAT was significantly associated with mobility and all measured functional outcomes two months after hip fractures.

Poster

Falls and fractures

P-0538

FRAXing the gap: revealing missed osteoporosis treatment in COPD admissions

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Introduction: Patients with chronic obstructive pulmonary disease (COPD) are at increased risk of osteoporosis [1], with vertebral compression fractures contributing to reduce vital capacity [3][4]. NICE guidelines advocate for osteoporosis prevention in patients frequently prescribed oral corticosteroids [5]. This audit aimed to assess osteoporosis risk in COPD patients using the fracture risk assessment tool (FRAX) and evaluate treatment rates in those identified as high risk.

Methods: A cross-sectional audit conducted in March 2025 included COPD patients aged > 60 years admitted to an Irish university

hospital. Osteoporosis risk was assessed using the FRAX tool, with stratification based on National Osteoporosis Guideline Group (NOGG) recommendations [2]. Statistical analysis was performed using DATAtab, with ANOVA applied for significance testing.

Results: Fifty-two patients were included (65% male; median age 79.5 ± 8.19 years). Only 10% were on regular oral corticosteroids, yet 92% had ≥ 1 steroid-requiring exacerbation in the past year (mean 2.1 ± 1.68 ; max 8). Higher exacerbation frequency correlated with increased fracture risk ($p < 0.001$). The mean 10-year probability of major osteoporotic and hip fractures was $14.9\% \pm 10.04$ and $8.89\% \pm 8.25$, respectively. Based on NOGG, 20% were deemed at high risk of fracture and 30% warranted osteoporosis treatment; yet only 44% of these were on treatment. Of those for whom bone density assessment was recommended, only 15% underwent testing.

Conclusions: The audit highlights suboptimal adherence to osteoporosis screening and treatment guidelines in COPD patients. Enhanced implementation of FRAX-based risk assessment and targeted intervention could reduce fracture risk in this vulnerable cohort.

P-0539

Impact of nutritional therapy on fall prevention and management in older adults

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Falls represent a leading cause of morbidity and mortality among older adults, with significant personal and economic consequences. While multifactorial interventions are standard practice, the role of nutritional factors in fall risk remains underrecognized. Malnutrition, vitamin D deficiency, protein inadequacy, and dehydration contribute to muscle weakness, impaired balance, and orthostatic hypotension—all established fall risk factors. Despite emerging evidence, structured nutritional interventions are rarely incorporated into standard fall prevention protocols.

Aim: This quality improvement project evaluated the effectiveness of a comprehensive nutritional therapy program on fall incidence, physical performance, and fall-related outcomes in community-dwelling older adults identified as high-risk for falls.

Methodology: A prospective intervention study was conducted with 68 older adults (mean age 79.2 years) with history of falls or high fall risk scores. Participants received a 16-week multicomponent nutritional intervention including protein optimization (1.2–1.5g/kg/day), vitamin D supplementation based on serum levels, hydration protocols, and micronutrient assessment with targeted supplementation. The program incorporated regular dietitian consultations, meal planning assistance, and education addressing age-related barriers to nutrition. Outcomes measured included fall incidence, physical performance (TUG test, grip strength), and fall-related confidence.

Results: Following intervention, fall incidence decreased by 42% compared to the pre-intervention period ($p < 0.001$). Significant improvements were observed in physical performance measures, with mean TUG scores improving from 14.2 to 11.8 s ($p = 0.003$) and grip strength increasing by 11% ($p = 0.01$). Nutritional parameters improved substantially, with 76% of participants achieving protein targets and 82% reaching optimal vitamin D levels. Fall-related confidence scores improved by 28%, with corresponding increases in physical activity levels.

Conclusion: Structured nutritional therapy significantly reduced fall incidence and improved physical performance in high-risk older adults. Results demonstrate that targeted nutritional interventions addressing modifiable risk factors should be integrated into standard fall prevention protocols. This approach represents a feasible, cost-effective strategy to reduce fall burden in this vulnerable population.

P-0540

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P-0541

Patient-, care- and process-related factors affecting 1-year mortality following hip fracture

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Introduction: Outcomes of hip fracture treatment depend on patient-, care-, and process-related factors. The aim was to examine how such factors affect 1-year mortality.

Methods: Retrospective register-based data was collected on 4,456 hip fracture patients aged ≥ 65 years, treated in Helsinki University Hospital during 2021–2023 requiring operative care.

Results: 1,094 patients (24.6%) died within one-year follow-up. 1-year mortality increased with advancing age (from 10.2% for 65–69

years to 45.9% for ≥ 95 years; $p < 0.001$). It was higher in men than women (31.2% vs. 21.5%; $p < 0.001$) and in patients with dementia (32.4% vs. 22.8%; $p < 0.001$). Mortality rate increased along with ASA scores (8.2% for ASA II, 24.4% for ASA III and 47.6% for ASA IV–V; $p < 0.001$). Underweight patients (BMI < 18.5) had the highest mortality (42.6% vs. 16.8–23.5% for patients in higher BMI categories; $p < 0.001$). Type of fracture and anesthesia method were not associated with mortality rate. Longer time-to-surgery (TTS) was associated with higher mortality rates (23.2% for TTS < 24 h and 28.6% for TTS > 48 h; $p = 0.016$). Length of stay at the operating hospital, performing the surgery during weekdays vs. weekends, during vs. outside office hours (8–16), and day of discharge (Monday to Thursday vs. Friday–Sunday) were not associated with mortality. Except dementia, all observed differences remained statistically significant in multivariable logistic regression model.

Key conclusions: Increased 1-year mortality was mainly associated with patient-related factors including older age, male sex, BMI < 18.5 and higher ASA scores. TTS was the only process-related factor associated with mortality. Care-related factors did not affect mortality.

P-0542

Recurrent falls among older adults: a qualitative study to inform person-centred geriatric care

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(1) University of Iceland

Introduction: Recurrent falls are common in older adults and known to cause morbidity, functional decline, and increased healthcare utilisation. Despite preventive efforts, older adults' perspectives are often underrepresented in clinical practice. This study explored how older adults perceive and cope with recurrent falls, with the aim to inform more responsive person-centred care.

Methods: A qualitative phenomenological study was conducted with 22 community-dwelling older adults (10 women, 12 men), aged 70–91 years, living in urban and rural areas. All participants had experienced recurrent falls. Semi-structured interviews were transcribed and analysed using framework analysis, combining predefined themes with inductively identified new themes. The framework drew on existing literature related to falls and ageing.

Results: Five key themes were identified. 'Causes of falls': included physical impairments, health conditions, environmental hazards, and activity-related triggers. 'The critical moment of a fall': described dynamic responses during the fall, including attempts to prevent injury and immediate consequences such as emotional reactions, pain and injury. 'Long-term consequences of falls': involved persistent pain, fear of falling, depression, social withdrawal, and strained relationships. 'Interactions with healthcare services': reflected both effective support and gaps in care coordination and follow-up. 'Coping strategies and peer recommendations': highlighted individual adaptations, risk management, and shared advice for their peers in similar situations.

Key conclusions: Recurrent falls have complex physical, psychological, and social consequences. Geriatric care should integrate older adults' experiences to guide multidisciplinary fall prevention

strategies that support recovery, reduce fear of falling, and maintain independence.

P-0543

Physical activity and falls in older adults: a population-based study in urban and rural Northern Iceland

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Introduction: Falls are a leading cause of disability and morbidity in older adults. While physical activity (PA) is encouraged for healthy ageing, its association with falls may vary by activity type, demographics, and setting. This study examined how PA relates to falls among older adults in Iceland.

Methods: A population-based cross-sectional study included 175 community-dwelling adults aged 65–92 years (57% men) from urban and rural areas in Northern Iceland. PA was assessed using the Physical Activity Scale for the Elderly (PASE), including leisure, household, and work subscales. Falls in the past 12 months were self-reported. Two outcomes were analysed: ≥ 1 fall and recurrent falls (≥ 2). Models adjusted for age, gender, residence, and basic mobility.

Results: In univariable analysis, ≥ 1 fall and recurrent falls were associated with lower household PA ($p = 0.029$; $p = 0.043$). Recurrent falls were also linked to higher work PA ($p = 0.037$). In multivariable models, household PA remained protective (OR = 0.99, $p = 0.034$ for ≥ 1 fall; OR = 0.99, $p = 0.030$ for recurrent falls). Rural residents had higher odds of ≥ 1 fall (OR = 8.2, $p < 0.001$) and recurrent falls (OR = 22.8, $p < 0.001$). Men had higher odds of ≥ 1 fall (OR = 2.8, $p = 0.025$) and recurrent falls (OR = 7.8, $p = 0.002$) compared to women. Adults aged 65–74 had higher odds of ≥ 1 fall (OR = 2.9, $p = 0.035$) and recurrent falls (OR = 7.7, $p = 0.007$) than those aged 75 +.

Key conclusions: Household PA may reduce falls, while work-related PA may be associated with recurrence. Fall prevention should consider PA type, age, gender, and rural living to reduce fall-related disability and morbidity.

P-0544

Care closer to home—home administration of IV zoledronic acid via Community Resource teams (CRT) in Wales, United Kingdom

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Introduction: Zoledronic Acid, a bisphosphonate used primarily for treating osteoporosis and other bone-related conditions, traditionally requires hospital visits for administration. This can be burdensome for frail older patients. The administration of intravenous (IV) Zoledronic Acid at home via Community Resource Teams (CRT) represents an innovative approach to enhance patient care, while also offering significant benefits to both the patients and the healthcare services.

Service delivery: Our team of highly trained nurses and doctors are equipped to handle potential adverse reactions promptly and

effectively, ensuring patient safety. We have successfully administered IV Zoledronic Acid at home to over 50 patients without any complications, using a thorough, easy-to-use checklist process developed by our pharmacists. This checklist is aimed to deliver prompt care in a safe and user-friendly manner.

Benefits:

1. This approach enhances patient convenience and comfort, allowing them to receive necessary treatments without the need to travel, thereby reducing the physical and emotional distress associated with hospital visits.
2. This also improves adherence to treatment regimens, as patients are more likely to continue with therapy delivered in their own comfort space.
3. It further minimises exposure to hospital-associated infections- an essential consideration for immunocompromised or frail individuals.
4. The reduction in hospital visits alleviates secondary care burden, allowing resources to be allocated more efficiently.

Conclusion: Administering IV Zoledronic Acid at home via CRT not only enhances patient convenience and safety but also supports better healthcare resource management, potentially leading to improved treatment adherence and overall patient outcomes.

P-0545

Successfulness of telemedicine in geriatric patients at high risk of fragility fractures

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Introduction: Telemedicine may improve the monitoring of patients with chronic diseases. Secondary prevention of fragility fractures is an urgent matter to be addressed using available technology, although little evidence supports this so far. We investigated the feasibility, efficacy, and satisfaction of managing older adults at high risk of fragility fractures during the COVID-19 lockdown.

Material and methods: From January to July 2021, a prospective observational study for safety and adherence purposes was conducted among older patients ($n = 407$) with ongoing treatments for secondary prevention of fragility fractures. The study procedures observe national and regional resolutions related to telemedicine service (TS), including equipment, staff behaviours, and patient reports.

Results: A majority (86.48% [$n = 352$]) of the eligible patients participated in remote visits, mainly women (88.2%), 81.4 ± 8.8 years of age, and 49.6% independent in 5 out of 6 BADL, despite high comorbidity (4.9 ± 1.5) and polypharmacy (4.9 ± 3.1). Almost all were on second-line anti-fracture treatments (95.58%) due to previous major (84.03%) and minor (42.5%) fragility fractures.

About 58% reported good and very good reliability of the internet network, allowing easy access to the TS platform, and 54% declared the degree of satisfaction with TS as good and very good.

Regarding the clinicians, about 75% of them acknowledged the efficacy of TS and expressed willingness to recommend the use of TS to colleagues. Ultimately, 68% of specialists defined the time dedicated to patients' remote visits as acceptable.

Conclusion: TS may be a chance to increase the availability of appropriate healthcare services to satisfy patients' needs and optimize healthcare resource allocation.

P-0546

Daily steps after hip fracture in older adults and their relationship with functional recovery

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Objectives: To study the number of steps walked by patients over 75 years of age after hip fracture and determine the relationship of the number of steps with functional improvement at one, three and six months after discharge.

Methods: Prospective, observational study carried out in patients over 75 years of age admitted with hip fracture. Daily steps were monitored using physical activity watches and phone calls made at months one, three and six to record functional variables.

Results: A total of 94 patients were included with a mean age of 83.24 ± 5.99 years. Of the patients included in the study who recorded their daily steps after hip surgery, 59 patients (72%) improved during the first month after discharge with a median of 220 daily steps (IQR 103.5–494.5), cut-off point at 150 steps, determined by Liu's method, was associated with increased likelihood of improvement in basic activities of daily living.. At the third month after hip fracture, 77 patients (86.5%) showed functional

improvement with a median of 778.5 steps (p25: 263, p75: 1697), cut-off point at 425 steps. At month six, 65 patients (80.2%) showed functional improvement with a median of 1757 steps (IQR 696–3388), cut-off point at 2404 steps.

Conclusions: In order to ensure functional recovery in basic activities of daily living, older people discharged from hospital after hip fracture should walk more than 150 daily steps in the first month, 425 in the third month and 2404 after the sixth month.

P-0547

Use of fall-risk-increasing drugs (FRIDs) upon nursing home admission in Denmark

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Background: Falls are common and have major impact on nursing home residents. Causes are multifactorial and use of Fall-Risk-Increasing Drugs (FRIDs) constitute a major component. The aim of this study is to describe the use of FRIDs among older people upon nursing home admission.

Methods: All Danes 65 + yrs admitted to nursing homes during 2015–2021 were identified and individual level data linked with nationwide prescription registries. FRIDs were defined following STOPPFall tool (benzodiazepines, antipsychotics, benzo-related drugs, opioids, antidepressants, anticholinergics, antiepileptics, diuretics, alpha-blockers as antihypertensives/prostate hyperplasia, centrally acting antihypertensives, antihistamines, cardiac disease vasodilators, urinary frequency/incontinence drugs).

Results: The cohort comprised 96,691 residents (62% female; median age 84 years). At time of admission (0–90 days before admission), 78% (n = 75,622) used at least one FRID. Furthermore, diuretics were the most commonly used FRID (36%, n = 34,866) and the most frequent FRIDs classes used in combination were diuretics and opioids (6.0%, n = 5,806) followed by diuretics and antidepressants (5.4%, n = 5,244). Mean (SD) number of individual FRIDs and FRIDs medication classes were 1.8 (1.6) and 1.6 (1.3), respectively. The majority (84%, n = 80,407) of all nursing homes residents experienced a decrease in their use of FRIDs at time of admission (0–90 days prior) compared to one year (271–365 days) prior to admission. At the same time, only 11% (n = 10,682) experienced an increase.

Key conclusions: Use of FRIDs is very common among older adults newly admitted to nursing home and increases up to time of admission.

P-0548

Faisability of implementing the 2022 world guidelines: estimated proportion of 65 + at intermediate or high risk of falling

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The 2022 world guidelines (WG) propose to assess the risk of falling in older people based on the history of falls, their severity, the level of frailty, the Timed Up and Go test and walking speed. The WG algorithm was tested in 65 + who participated in a public conference held during the first national day organized as part of the French falls prevention plan (Montpellier, October 2024). Among the 165 65 + who wished to have their risk of falling assessed, 55 (33.3%) were at low risk, 78 (47.3%) at high risk and 32 at moderate risk (19.4%). Among non-fallers (n = 79), 52 felt themselves unstable when getting up or walking (65.8%), but only 12 (15.2%) were at intermediate risk (walking speed < or equal to 0.8 m/s or TUG > 15 s). Among the 86 people who reported at least one fall in the last year, 78 were at high risk (90.7%).

Considering that 30% of 65 + fall at least once a year, our results suggest that (i) 90% of these 30%, i.e. 27% of the general population of 65 +, could be at high risk of falling and should therefore benefit from individualized interventions and (ii) 19% of non-fallers, who represent 70% of the general population, could benefit from tailored physical exercises (13% of all 65 +). The WG aiming at prioritizing tailored physical activity over individualized interventions for economical and feasibility reasons, our results suggest differentiating a very high risk group among those at high risk, justifying a multifactorial assessment.

Short poster presentation

Falls and fractures

P-0550

Multicomponent exercise falls prevention programs comparison using inertial sensors in older frail persons with high risk of falls

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Background: Falls are a leading cause of mortality and loss of independence in older adults, highlighting the need for effective prevention strategies. Exercise-based interventions, such as OTAGO and VIVIFRIL programs, aim to enhance mobility, balance, and strength to mitigate fall risk. However, the impact of movement kinematics and cognitive-motor integration remains unclear.

Methods: Secondary analysis of an ongoing multicenter randomized controlled trial to assess the differential characteristics on kinematic gait and balance patterns of two 12-week fall-prevention programs: OTAGO (Control Group-CG) and VIVIFRIL-COGN (Intervention Group-IG), the latter including cognitive training. 110 participants were evaluated for gait (single- and dual-task conditions), balance, and chair transitions at baseline (T0), 6 weeks (T1) and 12 weeks (T2). Data was collected using inertial sensors. Additionally, the influence of sex on intervention outcomes was also examined.

Results: At baseline, CG participants showed superior gait parameters (higher velocity and step regularity). After six weeks, these differences disappeared, with the IG demonstrating greater improvements in lower limb power and balance. By 12 weeks, IG participants exhibited significant gains in dual-task gait performance, particularly stride length and step regularity, key indicators of fall risk reduction. Males showed greater gait velocity and energy expenditure, while females displayed better cognitive-motor integration, reflected in enhanced dual-task stability.

Conclusions: VIVIFRIL-COGN, a program that integrates cognitive-motor training into fall-prevention programs, enhances gait stability and dual-task performance, promoting independence in older adults. Multidomain personalized interventions should be prioritized in clinical practice and health policies to reduce risk of falls and optimize functional capacity.

P-0551

Hip fracture and anaemia: comparing ferric carboxymaltose vs ferric saccharate

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Objectives:

- To determine the impact on haemoglobin (Hb) levels of ferric carboxymaltose (FCM) vs. ferric saccharate (FS) in iron-deficiency anaemia in patients > 75 years old with hip fracture.
- To determine differences between both treatments regarding phlebitis, hypophosphatemia and venipunctures.

Methods: Comparative retrospective observational study of 2 cohorts (treatment with FCM/vs/FS) with iron-deficiency anaemia admitted for hip fracture between January/2017-June/2022. Excluded: previous

blood-transfusion, non-iron therapy during admission and death < 48 h. Variables: age, gender, Barthel Index, cognitive status, frailty according to Clinical Frailty Scale (CFS), haemoglobin, ferritin, percentage transferrin saturation (TSAT), phosphatemia, phlebitis, and venipunctures.

Results: N = 813. Included: 191 (85 FS; 106 FCM). 78.5% women, mean age 86-years-old, median CFS 5, 26.7% with moderate-severe dementia, and 2/3 with moderate-severe functional dependence. Patients treated with HC were frailer ($p = 0.012$) with higher previous haemoglobin levels ($p < 0.001$). FS showed higher increased haemoglobin levels (0.7g/dL) compared to FCM ($p = 0.01$). Hypophosphatemia was more frequent in FCM-cohort ($p < 0.001$). FS administration required, three times more venipunctures than FCM, with an incidence rate of 30% of phlebitis ($p < 0.001$).

Conclusions:

- FS has a greater impact on haemoglobin levels compared to HCM.
- FCM presents fewer complications: less phlebitis and fewer venipunctures, despite a higher rate of hypophosphatemia.
- In frail patients, FCM could be recommended due to the lower number of side-effects associated to the administration.
- More studies -and with higher statistical power- should be performed to ensure the best treatment of anaemia in frail older patients with hip fracture.

P-0552

Osteoporosis management for patients following hip fracture

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Introduction: Hip fractures are a major cause of mortality and morbidity in elderly individuals, with high risk of subsequent fractures. Optimizing osteoporosis management is crucial for improving patient outcomes and quality of life. Adequate calcium and vitamin D intake is essential for bone health, while national guidelines support the use of intravenous zoledronic acid in hip fracture patients to reduce the risk of future fractures.

Methods: A retrospective review was conducted on patients aged over 65 years with hip fracture who were admitted to Chelsea and Westminster Hospital from January to December 2024, excluding expired patients. Electronic patient records were analysed to assess vitamin D level, bone profile, osteoporosis management, and follow-up care.

Results: Among 256 patients, 99% (N = 253) had vitamin D levels checked < 50 nmol/L: 36% (N = 91), colecalciferol 140,000 U given to 32% (N = 83) 50–70 nmol/L: 28% (N = 72), colecalciferol 60,000 U given to 24% (N = 60) > 70 nmol/L: 36% (N = 90), repleted, loading dose colecalciferol not indicated 30% (N = 77) received intravenous zoledronic acid during hospital admission, and 56% (N = 143) were referred to the Fracture Liaison Service (FLS) for further management and follow-up regarding osteoporosis.

Interventions and conclusion: Key interventions included early vitamin D testing, standardized osteoporosis management plan, increased use of parenteral treatment to prevent re-fractures, and appropriate FLS referrals for the suitability of Romosozumab or

alternative options. Multidisciplinary team approach in optimising osteoporosis management for hip fracture patients improved patient safety and adherence to best practices.

Short poster presentation

Falls and fractures

P-0553

Multimorbidity classes and risk of falling in older adults

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Introduction: While the link between individual age-related conditions and falls is well studied, little is known about the cumulative effect of comorbidities on fall risk. This study examined the association between multimorbidity classes and falls in older adults.

Methods: We analyzed data from the OPTimising theERapy to prevent Avoidable hospital admissions in Multimorbid older people (OPERAM) trial, including multimorbid participants aged ≥ 70 years followed for 12 months post-hospitalization. Latent class analysis identified multimorbidity classes. Poisson regression assessed the association between multimorbidity classes and fall rate, and logistic regression evaluated the odds of falls and injurious falls across classes.

Results: Among 2005 participants (median age: 79 years, 44.7% female), the median number of comorbidities was 11 (IQR: 8–25). Four multimorbidity classes were identified: “metabolic syndrome,” “miscellaneous/highly multimorbid,” “cardiovascular,” and “digestive/neuroskeletal.” During follow-up, 500 participants (24.9%) reported at least one fall, 54.8% being injurious. Compared to the “digestive/neuroskeletal” class, the “cardiovascular” class had a significantly higher fall rate (adjusted incidence rate ratio: 1.21, 95% CI: 1.01–1.45) and the highest odds of injurious falls (odds ratio: 1.51, 95% CI: 0.91–2.52), though not statistically significant.

Conclusion: The “cardiovascular” multimorbidity class was associated with a higher fall rate. Further research should assess fall prevention strategies in cardiovascular patients.

Poster

Falls and fractures

P-0554

Correlation of Neuro-QoL lower extremity function computer adaptive test scores with legacy scores in older patients after hip fracture: a new opportunity for tech-based assessment

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Introduction: Scales for measuring quality of life and functionality are transforming to allow patients to describe how they perceive their health status. In this study, we aimed to use technology to evaluate whether the Neuro-QoL-Lower Extremity Function-CAT (NQoL-CAT) correlates with traditional functional assessment scales (Barthel Index and Functional Ambulation Classification-FAC) in elderly patients with hip fractures.

Methods: Prospective study that included patients over 69 years admitted to the orthogeriatric unit for 12 months. Sociodemographic, functional and clinical variables were measured at baseline, 3 months and 12 months. Non-parametric analysis (Spearman's Rho) was performed to determine the observed correlation between the three scales at the 3 time points.

Results: 105 patients were included, mean age 87 years. Baseline function: Barthel: 79, FAC: 4, NQoL: 42.2. At discharge, 66% received home physiotherapy, 20% rehabilitation in a skilled nursing facility, and 13% were transferred to a hospital for functional recovery. Functional status at 3 months: Barthel: 69, FAC: 3.5, NQoL: 33.2, and 12% were institutionalized. Functional status at 12 months: Barthel: 70, FAC: 3.7, NQoL: 38.5, and 20% of patients were institutionalized. The correlation of NQoL with Barthel and FAC was: 0.61 and 0.65 at baseline, 0.79 and 0.76 at 3 months, and 0.85 and 0.86 at 12 months ($p = 0.01$).

Conclusions: There is a high correlation between the NQoL-CAT and traditional functional assessment scales in older adults after a hip fracture, suggesting that the use of technology implementing this scale could optimize the measurement of their functional recovery in the future.

P-0555

Dynapenia and vitamin D levels in older patients with hip fracture

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Introduction: Hip fractures in older adults are a major public health concern, linked to factors like dynapenia (low muscle strength) and

hypovitaminosis D. This study investigates their relationship in the etiopathogenesis of hip fractures

Methods: A cross-sectional observational study included 118 patients (78% female, mean age 88) admitted to the Orthogeriatrics Unit (Hospital Universitario de Salamanca, Spain) with hip fractures in 2019. Handgrip strength (HGS) was measured using the Jamar dynamometer (cutoffs: men > 27 kg, women > 16 kg). Vitamin D levels were categorized as deficiency (< 20 ng/mL), insufficiency (20–29.99 ng/mL), or normal (> 30 ng/mL). Functional status was assessed via Katz and Lawton indices.

Results: No significant association was found between HGS and vitamin D levels ($p = 0.284$). However, lower HGS correlated with reduced calf circumference ($p = 0.043$) and poorer Katz index scores ($p = 0.004$). Most patients (81.4%) had vitamin D deficiency, and 66.1% exhibited dynapenia.

Key conclusions: Vitamin D levels did not significantly correlate with dynapenia in this cohort. Functional decline and anthropometric markers like calf circumference may better predict muscle health in older patients with hip fracture.

P-0556

Functional, social and nutritional characteristics of hip fracture patients

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Introduction: Hip fractures disproportionately affect the older adults, with high morbidity linked to functional and nutritional deficits. This study profiles sociodemographic, functional, and nutritional parameters in elderly hip fracture patients.

Methods: A cross-sectional analysis of 118 patients (mean age 88) assessed functional independence (Katz and Lawton indices), admission sources (home/residential care) and discharge destinations were recorded, nutritional status (Mini Nutritional Assessment[®], MNA[®]), and biochemical markers. Calf circumference and handgrip strength were measured.

Results: Most patients (78%) were female, and 53.4% were discharged to residential care. At admission, 50.8% of patients lived at home, while 53.4% were discharged to residential care, and only 21.2% returned home. Functional dependence was prevalent: 60.2% scored C–G on the Katz index, and 47.5% had severe dependency on the Lawton index. Malnutrition risk (MNA[®] < 23.5) was present in 83.1%, with 81.4% showing vitamin D deficiency. Lower handgrip strength correlated with reduced calf circumference ($p = 0.043$).

Key conclusions: Older adults with hip fracture exhibit high rates of dependency, malnutrition risk, and vitamin D deficiency. Most hip fracture patients transition to residential care post-discharge. Comprehensive functional and nutritional assessments are critical for tailored interventions.

P-0557

Validity of the German version of the stay independent questionnaire in community-dwelling seniors: a diagnostic study

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Introduction: Mobility limitations are among the most common functional problems in older people. Various questionnaires have been developed to identify older people at increased risk of falling. However, data for evaluation against standard tests from geriatric mobility assessment are scarce.

Methods: The Stay Independent Questionnaire (SIQ) from the American prevention program STEADI (Stopping Elderly Accidents, Deaths, and Injuries) was used for the identification of community-dwelling seniors aged 70 and older at risk of falling. The original SIQ was translated into German with standard forward and backward translation. We evaluated the SIQ against the Short Physical Performance Battery (SPPB), using SIQ as a diagnostic test and SPPB as the gold standard. Sensitivity, specificity and further measures with corresponding 95% confidence intervals (CI) were used to assess SIQ test performance.

Results: A total of 190 participants (143 women, 75.3%; mean age 80.5 years $\pm$ 5.5) were analysed. SIQ identified 148 (77.9%) participants as at risk of falling; SPPB (< 10 points) identified 81 (42.6%) participants with objectively measurable impairment of standing and walking balance, respectively. The SIQ test performance measures as a diagnostic test are: sensitivity 95.1% CI [88.0%; 98.7%], specificity 34.9% [26.0%; 44.6%]. Receiver-operating characteristic (ROC) analysis: unadjusted area under the curve 65.0% [57.3%; 72.7%], adjusted for sex and age 71.0% [63.8%; 78.2%].

Key conclusions: The SIQ performed moderately as a diagnostic test for mobility impairment, as assessed by SPPB. Further research is necessary to evaluate in how far the application of SIQ will improve the care of seniors at risk of falling.

P-0558

Orthogeriatrics aspects of functional recovery units in Spain. findings from the fun run map study

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Introduction: Functional Recovery Units (FRU) first admission-process is orthogeriatrics. Organized in bed-specific, process-specific

or general FRU units. Despite high level evidence of efficiency, uneven and heterogeneous development is suspected in Spain.

Methods: Cross-sectional study based on an online questionnaire carried out by the scientific committee of the SEGG Intermediate Care working group, using an encrypted online questionnaire, including sociodemographics, center/unit characteristics. Inclusion criteria: publicly-funded hospital units focused on reablement of adults, led by specialists. Data related to Orthogeriatrics are described in 32 questionnaires from 55 centers with inclusion criteria representing 2164 beds in Spain (11 provinces; 8/17 autonomous communities).

Results: 5236 admissions, average (AV) 166 (1–1500, SD 273) admissions/center, AV-length-of-stay 34 (SD 16,21) days analyzed during 2024. 28.13% (N9) FRU participate in the National Hip-Fracture-Registry-Study. 50% (N16) have a specific Orthogeriatrics-path-of-care, 46.88% (N15) have a specific protocol for secondary-fracture-prevention. 43.75% (N14) have an IOSS-type-Fracture-Liaison-unit, and 31.25% (N10) have an associated falls-prevention Unit. On admission, 51.06% have antiosteoporotic treatment prescription, and 73.47% on discharge, 55.47% have only calcium & vitamin-D. 93.75% adapt secondary prevention to comorbidities nad personalized risks, 81.25% based on clinical data and 43.75 through risk-assessment-tools as FRAX/Q-fracture. Clinical Best practice guidelines for secondary prevention followed are SEIOMM (60%, N18), SEGG (56.67%, N17, SECOT-50% (N15), SEFRAOS 33.3% (N10) SEGG. Barriers identified for correct prescription were third-level-hospital-prescription protocol, (65.63% N21), Primary-Care prescription-protocol (3.13% N1), not having access to complex labs (PTH, vitD) (9.38% N3) and not having access to DXA (37.5%, N12). Grade of agreement to established standards (61% secondary prevention prescription with specific osteoporotic treatment and 92% prescription for calcium & vitD were 8.81 (SD1.67, CoefVariation 0.18) and 9.25 (SD0.92, CoefVariation 0.09).

Conclusions: Heterogeneity in secondary-fracture-prevention and in National-Hip-Fracture-Registry participation. Although some centers show high fracture-prevention-commitment, in others there is an improvement-window -opportunity.

P-0559

A feasibility randomised controlled trial of a digital programme to prevent falls and improve well-being in people living with dementia in the community

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Background: Falls are common and costly for people living with Dementia (PLwD). One in two PLwD experience a fall each year. Utilising digital technology to prevent falls and enable PLwD to live in their own home independently for longer, has the potential to

improve quality-of-life and provide cost savings for health and social care. “Keep on Keep up (KOKU),” (<https://kokuhealth.com/>) is a UK National Health Service (NHS) approved tablet/iPad-based, digital gamified programme with strength and balance exercises and health literacy games specifically designed WITH older people FOR older people at risk of falls [1]. KOKU-LITE is a dementia-friendly accessible version of KOKU that has been co-developed WITH people living with dementia to suit their needs. This trial aimed to assess the feasibility and acceptability of KOKU-LITE programme in community dwelling people living with dementia.

Methods: We randomised 50/60 participants (community-dwelling people living with dementia (≥ 55 years) to either intervention group (KOKU-LITE programme + dementia falls prevention leaflet) or control group (dementia falls prevention leaflet) for 6 weeks.

Results: Preliminary results (completion rates for baseline (48/60) participants and follow-ups (22/60 completed to date) and interviews ($n = 7$)) indicate that the KOKU-LITE programme is well-received by people living with dementia, emphasising its feasibility and acceptability.

Conclusion: Participants considered KOKU-LITE to be a useful tool. The emerging findings from the interviews further supported the data gathered from the feasibility assessment. Emerging themes from the interview data reveal a positive perception of the KOKU-LITE programme.

References: 1) Choi NG, et.al. J Appl Gerontol. 2021;40(11):1483–91.

P-0560

Lack of caregiver presence in hospital: the lesson of falls

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Introduction: Limiting family members access to hospital could be detrimental for hospitalized older adults. Falls are a possible consequence of the lack of caregiver presence. The COVID-19 pandemic was a “field study” about the effect of restriction of visitors in hospital.

Our study aimed to assess the rate of in-hospital falls before and after the COVID-19 spread.

Methods: We conducted a retrospective single-center study in a geriatric hospital to compare the fall rates during the COVID-19 period, when caregiver restrictions were enforced, to those during 2018–2019, when hospital wards were open to visitors.

Results: A total of 139 falls were recorded between 2018 and 2021. The wards were closed to visitors starting April 11, 2020 and due to the isolation rules the number of beds was reduced.

After this date, 56 falls happened. No significant differences were observed in the characteristics of patients who experienced falls before or during the pandemic. However, the fall rate per 1,000 patient-days increased significantly from 1.28 to 3.25 ($p < 0.001$), with an overall risk ratio of 2.52 (95% CI = 1.64–3.89) in the post-acute care and rehabilitation ward.

Conclusion: The restriction of visitor access during the pandemic significantly increased the rate of falls in hospital geriatric wards. Probably, the overload of staff and the lack of time for patient and family education may have contributed to increase the risk of falls. Our study confirms the importance of a caregiver to ensure patient safety during hospitalization.

P-0561**What are the characteristics of older patients with hip fracture who are treated conservatively?**

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Objective: To describe the characteristics of older patients admitted to an orthogeriatric unit who were not treated surgically after a hip fracture.

Methods: Retrospective observational study of all patients over 70 years admitted to an orthogeriatric unit for hip fracture in a four-year period who were treated conservatively. Socio-demographic, functional and mental status, comorbidity, type of fracture, anaesthetic risk (ASA) and presence of acute illness contraindicating surgery were collected. Palliative care assessment, in-hospital and 3-month mortality, and 1-month readmission rates were also recorded.

Results: Of the 2045 patients admitted with a hip fracture, only 42 (2.1%) were treated conservatively (66.7% women, mean age 89.1 years). On admission most were severely functionally dependent (Barthel score 32 ± 31 , FAC 1.5 ± 1.7) and 59.5% had advanced dementia. The majority were living in nursing homes (52.4%) and had high levels of comorbidity (CIRS-G 17.8 ± 3.7). The most common fracture type was subcapital (73.8%). 69% were at high anaesthetic risk (ASA IV). In all cases (100%) surgery was contraindicated due to acute illness, with sepsis being the most common cause (26.2%). Palliative care assessment was considered in 33.3% of patients. Mortality was high, with 38.1% dying during admission and 57.2% dying within three months. In addition, 9.5% were readmitted within one month.

Conclusion: Non-operated patients are typically older women living in nursing homes with severe dependency, advanced dementia and high comorbidity. Subcapital fractures are most common. Mortality rates within three months remains significantly high.

P-0562**Urgent community response (UCR) falls pick up service: early results from an intervention to reduce conveyancing to the emergency department**

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Introduction: 30% of > 65 yr olds fall each year, rising to 50% > 80 yrs. 10% of all emergency ambulance calls are due to falls, with the majority in older adults. The UCR team in Lewisham now supports London Ambulance Service (LAS) with a Falls Pick Up Service in the community, hoping to reduce pressure on ambulances and decrease admissions to hospital.

Method: Referrals from community sources were taken via the UCR triage. An Advanced Clinical Practitioner (ACP) and community therapist attended the call, in place of an ambulance. They completed a falls assessment and subsequent referral to the Falls clinic/Community Falls Team if required.

Results: There were 59 referrals in the first 14 months, with 80% over 65 years. 42 patients were seen (26 male, 33 female). 17 referrals were declined: telephone advice given, UCR no capacity or out of area postcodes. 64% required equipment (Elk/Raizor) to aid the pick up. After ACP assessment, only 6 (14%) were subsequently conveyed to hospital: 4 possible fractures (2 confirmed), 1 Grade 4 pressure sore and 1 with a significant postural drop and delirium. Of the 42 seen, 13

of those that stayed at home had ongoing community therapy input to reduce further falls risk.

Conclusions: Reducing the conveyancing to Emergency Departments not only reduces ambulance pressures, but it also decreases emergency attendances and avoids unnecessary admissions. This service enables patients to receive safe urgent assessments within their own home or care home with subsequent interventions and therapy to reduce risk of future falls.

P-0563**Bone and muscle indices in postmenopausal women depending on types of osteoporotic fractures**

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The aim was to study bone and muscle parameters in postmenopausal women depending on the presence of different types of osteoporotic fractures.

Methods. We examined 167 subjects aged 50–89 years, divided into three groups: 1) healthy women without any previous fractures, 2) patients with forearm (FFs) or 3) vertebral fractures (VFs).

Muscle strength was evaluated using hand dynamometry and the “sit-to-stand” test. Appendicular muscle mass (ALM) and bone mineral density (BMD) in the lumbar spine (LS), femoral neck (FN), total hip (TH) and radius, as well as trabecular bone score (TBS) were determined using DXA. The diagnosis of sarcopenia was confirmed using EWGSOP2 criteria.

Results. The participants did not differ in age, main anthropometric parameters and menopausal status. FN and TH BMD were significantly lower in patients with previous osteoporotic fractures (FN BMD: $F = 9.96$; $p = 0.00009$), whereas LS BMD and TBS were significantly lower only in subjects with VFs. We did find significant differences in radius BMD and ALM parameters depending on the presence and types of osteoporotic fractures. Also, we did not reveal significant differences in muscle strength parameters between patients from the study groups. However, the increased risk of confirmed sarcopenia was revealed in the patients with VFs (OR = 2.71, 95% CI: 1.02–7.20; $p = 0.045$) but not in subjects with FFs (OR = 0.60, 95% CI: 0.18–1.95; $p = 0.40$).

In conclusion, the patients with VFs have lower bone strength and quality, as well as an increased risk of sarcopenia compared to subjects without previous fractures, which should be considered in their management.

Short poster presentation**Falls and fractures****P-0564****Pelvic fracture in older adults: risk of new fractures and mortality**

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Introduction: To evaluate the incidence of new fractures and mortality in older patients with pelvic fractures.

Methods: Retrospective observational study of all patients over 65 years diagnosed with pelvic fractures in the Emergency Department of a university hospital during a two-year period. Sociodemographic variables, history of osteoporotic fractures, chronic corticosteroid treatment, anti-osteoporotic treatment before and after pelvic fracture, densitometric variables, new fractures within a year and their location, and mortality at 3 months and 1 year were collected.

Results: 296 patients included (89% women, mean age 85.6 ± 11.0 years). 96.3% had a unilateral pelvic fracture. 45.3% reported previous osteoporotic fractures and 37.2% had been treated with one or more anti-osteoporotic drugs (mostly bisphosphonates 31.4%) for a mean of 4.5 ± 2.9 years. Prior corticosteroid treatment was recorded in 11.1%. Only 25.3% had a densitometry before the fracture (mean T-score: femoral neck -1.92 ± 1.1 , lumbar spine -2.52 ± 1.2). After the pelvic fracture, only 16.8% received any anti-osteoporotic treatment (mostly bisphosphonates 11.1%). 7.8% of the patients had a follow-up densitometry (mean T-score: femoral neck -2.24 ± 0.9 , lumbar spine -2.15 ± 1.4). Mortality was 7.8% at three months and 9.8% at 1 year after the pelvic fracture.

Conclusions: Almost one in four older patients with a pelvic fracture will suffer a new fracture in the following a year and one in ten will be dead. There is considerable room for improvement in the prevention and management of osteoporosis and fractures in these patients.

Poster

Falls and fractures

P-0565

Previous falls are associated with poor physical function, but not with measures of body fat in older Icelandic adults

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Background and aim: Higher body fat has been associated with increased fall risk in older adults. Excess body fat may impair balance and mobility due to altered biomechanics and reduced relative muscle strength. This study aimed to investigate associations between body fatness and the risk of previous falls in older adults.

Methods: A cross-sectional study was conducted in 73 community-dwelling older adults (65.8% women; mean age 82 ± 6 years; BMI = 28.2 ± 5.7 ; body fat% = 42.8 ± 9.0) who frequently used day-care services at nursing homes in Reykjavik, Iceland. Body composition was assessed using Bioelectrical Impedance Analysis (BIA). Physical function was measured with the Short Physical Performance Battery (SPPB), and cognitive function using the Mini-Mental State Examination (MMSE). Questionnaires were used to assess participant characteristics and fall history in the previous 6 months.

Results: Falls were reported by 27.4% of participants. Those who had fallen had, on average, poorer cognitive and physical function compared to those who had not, although no significant differences were found in gender, age, muscle mass, or estimates of body fat. Logistic regression adjusted for age and gender showed that each 1-point increase in SPPB score was associated with a 23% lower likelihood of having fallen ($P = 0.011$). Further adjustment for cognitive function and body fat measures did not substantially alter the association.

Conclusion: In this cohort of older adults, body fatness was not associated with fall risk. As physical function remains trainable in old age, maintaining or improving it may be a key strategy to reduce fall risk in this population.

P-0566

The association between malnutrition risk and in-hospital falls in elderly patients

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Introduction: In-hospital falls pose a significant safety concern worldwide, particularly among individuals aged 65 years and older. The interplay between malnutrition and fall risk in this population remains insufficiently explored. This study examines the relationship between in-hospital falls and the risk of malnutrition among elderly inpatients.

Methods: This retrospective cohort study analyzed data from 429 inpatients aged 65 years or older who experienced a fall at Landspítali University Hospital in 2023. Using a standardized screening tool for nutritional status, patients were categorized into three groups based on their risk of malnutrition: low, moderate, and severe.

Results: Among the studied cohort, 71% of patients were identified as being at risk of malnutrition. Overall, statistical analysis revealed no significant differences in fall frequency, hospital admission rates, fall-related injuries or length of hospital stay among the three groups based on malnutrition risk. Patients at severe risk of malnutrition, exhibited higher rates of disorientation (OR 0.42, p 0.004) and increased in-hospital mortality (OR 0.24, p 0.008). Patients who sustained a hip fracture, 72.7% were at severe risk of malnutrition. Conversely, those at low risk of malnutrition displayed a greater propensity to be discharged home (OR 2.93, p < 0.001).

Key conclusion: The findings suggest that severe malnutrition is a significant risk factor for adverse outcomes following in-hospital falls, including hip fractures and increased mortality rates. In contrast, patients at low risk for malnutrition are more likely to favorable outcome, indicating the need for proactive nutritional assessment and interventions to improve patient outcomes in elderly inpatients.

P-0567

GDF-15 plasma levels are elevated in mobility-limited older adults with frailty and sarcopenia—the BIOFRAIL study

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Introduction: Growth differentiation factor 15 (GDF-15) has been proposed as a potential biomarker for the geriatric syndromes of frailty and sarcopenia. This study investigated plasma GDF-15 as a

biomarker associated with sarcopenia and frailty in a cohort of mobility-limited older adults.

Methods: Patients (≥ 65 years) were recruited from a geriatric outpatient clinic for fall assessment. Frailty was identified using the Clinical Frailty Scale with a cut-off > 5 . Sarcopenia was defined according to European Working Group on Sarcopenia in Older People 2. Plasma GDF-15 was analyzed using electrochemiluminescence assays (Meso Scale Discovery, Rockville, MD, USA). Receiver operating characteristic (ROC) analysis was performed to assess the prognostic accuracy of GDF-15 for identifying frailty and sarcopenia. The optimum GDF-15 cut-off for frailty was determined using Youden's Index.

Results: A total of 429 patients (age 79.6 ± 6.2 years, 64% female) were included, where 16% had sarcopenia and 25% frailty. Median GDF-15 levels in patients with/without sarcopenia and with/without frailty were 1916 pg/mL vs. 1569 pg/mL, $p = 0.035$, and 2252 pg/mL vs. 1438 pg/mL, $p < 0.001$, respectively. The area under the curve (AUC) for frailty was 0.681 (95% CI: 0.623–0.739) with an optimal cut-off of 2047 pg/mL. For sarcopenia, AUC was 0.577 (95% CI: 0.501–0.653).

Key conclusion: GDF-15 plasma levels appear to be elevated in mobility-limited older adults with frailty and sarcopenia. The prognostic accuracy of GDF-15 for frailty appears moderate-to-strong, suggesting a potential clinical role of this biomarker in identifying frailty in older adults. In contrast, the prognostic accuracy of GDF-15 for sarcopenia was poor.

P-0568

Prevalence of stroke among elderly population admitted with a fractured neck of femur (NOF) and hypertension: a retrospective audit

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Background: Stroke and fractured neck of femur (NOF) are closely linked, particularly in elderly and hypertensive individuals. Stroke often leads to muscle weakness, impaired balance, and reduced mobility, significantly increasing the risk of falls and subsequent hip fractures. Additionally, post-stroke osteoporosis and frailty further contribute to bone fragility. Patients with a history of stroke also face prolonged recovery times, higher complication rates, and increased mortality following NOF fractures. Understanding this association is crucial for implementing preventive strategies, optimizing perioperative care, and improving rehabilitation outcomes in stroke survivors at risk of hip fractures.

Methods: This was a retrospective audit of 400 patients admitted to Milton Keynes University Hospital, UK, with NOF between January 2021 and March 2023. The prevalence of hypertension in this cohort was 74.25% (297 patients). Among the hypertensive patients the prevalence of stroke was 10.1%.

Results: Delirium was observed in 46.7% of patients with history of stroke, while postoperative complications (including pneumonia, acute kidney injury, urinary tract infection, atrial fibrillation, and acute coronary syndrome) were present in 70%, with a mortality of 10% in the cohort. The average length of hospital stay was found to

be 25.7 days and a frailty score greater than 4 was recorded in 70% of patients.

Conclusion: Individuals living with stroke and hypertension who experience a NOF tend to have an increased hospital stay, higher prevalence of frailty and complications.

P-0569

Albuminuria as a marker for fractured neck of femur (NOF) in elderly population with hypertension: searching for an alternative to bone DEXA Scan

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Background: Hypertension is a risk factor for chronic kidney disease and cardiovascular disease, increasing the likelihood of fractures of the neck of femur (NOF). Traditionally, bone mineral density assessment using DEXA scans has been the primary tool for evaluating fracture risk. However, albuminuria, a marker of endothelial dysfunction and microvascular disease, emerged as a potential predictor of bone fracture in individuals with diabetes independent of bone mineral density. This study explores the role of albuminuria as a novel biomarker for NOF risk in individuals with hypertension, highlighting the need for a broader diagnostic approach.

Methods: This was a retrospective audit of 400 patients admitted to Milton Keynes University Hospital, UK, with NOF between January 2021 and March 2023. The prevalence of hypertension in this cohort was 74.25% (297 patients).

Results: Among the 297 individuals in this cohort, 18.8% had a prior diagnosis of osteoporosis before being diagnosed with NOF. Only 19 patients had their albuminuria levels measured, and average glomerular filtration rate (GFR) was 72.1 ml/min. Albuminuria was detected in 75% of the tested patients.

Conclusion: We propose that albuminuria may serve as a prognostic indicator for the incidence of NOF in individuals with hypertension. Future studies are needed to confirm this observation and assess whether albuminuria can provide similar or comparable predictive value to DEXA scan.

P-0570

Development of an emergency protocol for addressing falls in older adults

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Introduction: Falls are a major public health issue among older adults and the leading cause of accidental visits to Emergency Departments (EDs). Inadequate management may result in functional decline, institutionalization, and avoidable mortality. Standardized fall assessments have proven effective in reducing adverse events and improving continuity of care.

Methods: We conducted a retrospective study of patients aged ≥ 80 years treated for falls in the ED of the University Hospital of Getafe between January and June 2024. Clinical, functional, follow-up, and mortality data at 3 and 6 months were analyzed using the electronic health record. Based on the findings, a multidisciplinary improvement protocol was developed in alignment with international guidelines.

Results: Of 1,258 patients initially triaged, 636 were confirmed as fall-related cases. The mean age was 86.4 years, 67% were women. Only 40% were correctly identified at triage as fall-related. Functional assessments were poorly documented (Barthel Index 24.4%; Pfeiffer Test 16.2%), and fall-risk evaluation was rarely recorded (4.1%). Of the total, 474 patients were discharged; 25.3% had no follow-up plan. The overall mortality in this group was 10.97% ($n = 52$), with 21 deaths in the first 3 months and an additional 13 by 6 months. No variable was significantly associated with mortality ($p > 0.05$).

Conclusions: Current ED care for older fallers shows critical gaps in identification, assessment, and post-discharge planning. The observed mortality highlights the urgent need for an integrated protocol focused on frailty detection, fall prevention, and improved care continuity.

P-0571

Assessment of osteoprotective treatment in patients with hip fracture at discharge, 30 days, and 120 days post-hospital discharge

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Introduction: Osteoprotective treatment has been shown to reduce the risk of new fractures by between 30 and 50% in patients with fragility fractures. Early implementation and follow-up are necessary to prevent further fractures and associated complications.

Methods: A retrospective study was conducted to assess the degree of implementation of osteoprotective treatment in comparison with the quality indicators of the National Hip Fracture Registry (NHFR) at discharge, 30 days, and 120 days post-discharge. Data collected between January 2023 and December 2024 from the NHFR at the University Hospital of Getafe were used, including patients admitted to the trauma ward for hip fracture under follow-up by the geriatrics department. Data at 120 days began to be collected in January 2024.

Results: Out of 289 patients, at discharge 66 patients (22.84%) initiated osteoprotective treatment: 55 of them (83.33%) with antiresorptive therapy, 88.93% with calcium, and 94.10% with vitamin D. At 30 days, 82 patients (29.6%) had started osteoprotective treatment: 72 patients (87.80%) with antiresorptive therapy, 88.45% with calcium, and 92.42% with vitamin D. At 120 days, out of 129 patients, 78 (60.70%) had initiated osteoprotective treatment: 83.33% with antiresorptive therapy, 83.59% with calcium, and 89.94% with vitamin D.

Conclusions: The results show that patients meet the quality indicator for treatment at discharge with vitamin D and calcium, but the recommended percentage for osteoprotective treatment is not reached.

P-0572

Utilization of intravenous zoledronate in patients with hip fracture. a danish nationwide cohort study 2015–2023

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Introduction: Intravenous (IV) zoledronate treatment before discharge following hip fracture has been recommended to reduce the risk of subsequent fracture. However, the implementation of this practice varies widely due to relative contraindications, clinical uncertainties and practical concerns.

Methods: We conducted a register-based cohort study including all patients undergoing surgery for incident hip fracture in Denmark during 2015–2023. We calculated the proportion of patients receiving IV zoledronate during two time windows in relation to surgery: 1. – 90 to + 30 days, 2. + 30 to + 365 days. Results were stratified on levels of vitamin D (≤ 25 nmol/l, 25–50 nmol/l, > 50 nmol/l) and Estimated Glomerular Filtration Rate (eGFR) (≤ 30 ml/min, 30–40 ml/min, > 40 ml/min).

Results: We observed 2,006 IV zoledronate administrations (during – 90 to + 30 days) among 50,614 patients. The number of yearly administrations increased from 10–15 in 2015–2017 (0.3%) to 731 in 2023 (10%). Widening the exposure window to also include + 30 to + 365 days doubled the number of administrations. Patients with vitamin D < 50 nmol/l increasingly received IV zoledronate, whereas few patients with eGFR below 40 ml/min were treated.

Conclusions: An impressive rise in IV zoledronate utilization has been observed over the past five years in Denmark, indicating increasing adherence to guidelines. However, in 2023, only approximately 10% of patients received IV zoledronate within – 90 to + 30 days following hip fracture surgery, suggesting that a substantial treatment gap remains. It appears that vitamin D status is regarded as a minor contraindication, whereas eGFR below 40 ml/min is considered a major one.

P-0573

Comparative study of mortality rates in elderly patients with trochanteric fractures, treated with Dynamic Hip Screw (DHS) and Proximal Femoral Nail (PFN). R. Hoti [1], Xh. Dracini Prof. Dr. [2] 1-Durres County Hospital, Orthopedic Clinic, Durres Albania

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Introduction: The incidence of intertrochanteric fractures has increased progressively over recent decades, primarily due to increased life expectancy and advancements in medicine. Treating trochanteric fractures in the elderly remains a complex multidisciplinary task. Due to comorbidities, frailty, osteoporosis, sarcopenia, delirium, and other factors, each medical subspecialty encounters unique challenges during treatment. From the orthogeriatric

perspective, the goal is to achieve stable osteosynthesis, which enhances the likelihood of fracture healing and patient rehabilitation.

Methods: This study analyzed data from over 300 patients, aged 65 years and older, with trochanteric fractures between 2013–2019. The patients were divided in two groups. In one group the DHS was used for osteosynthesis (DHS group), in the other PFN (PFN group). The evaluation was based in Harris Hip Score. Age, sex, time to surgery, type of fracture, type of surgery performed, American Society of Anesthesiology (ASA) grade, number of comorbidities were documented.

Results: Mortality rates were compared over various time intervals (30, 60, 90 days, 1 year, 3 years, 5 years, 9 years), along with the differences in mortality rates between male and female patients.

Conclusion: PFN is associated with a shorter operation time and less intraoperative blood loss compared to DHS. PFN offers strong fixation and allows for early weight-bearing, which may help reduce complications such as pressure sores, pneumonia, and thromboembolism. However, it did not significantly affect the risk of post-operative complications and mortality.

P-0574

Percutaneous kyphoplasty-increased access would benefit older patients

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Introduction: Percutaneous kyphoplasty (PKP) results in effective analgesia in acute/subacute vertebral compression fractures (VCF). Access to PKP is limited and opioids are poorly tolerated, particularly in older patients. This study aimed to compare the tolerability and efficacy of PKP in 15 younger (< 65 years, range 48–65) and 10 older (> 80 years, range 80–96) consecutive patients treated with PKP over an 18 month period. All data are presented as mean $\pm$ 1 standard deviation.

Methods: Older patients (86 ± 7 years, 8 females), all of whom had osteoporotic VCF, and younger patients (57 ± 9 years, 9 females), of whom 12/15 (80%) had osteoporotic VCF and 3/15 (20%) suffered malignant VCF, were studied. All underwent PKP. Thirteen (86%) younger and 2(20%) older patients were day cases.

Visual analogue scale (VAS) and analgesic requirements were recorded before and after PKP. Total length of hospital stay (TLOS) and post-procedure LOS(PLOS) were recorded.

Results: VAS pre- procedure was 9 ± 1 , and was 1 ± 2 post-procedure in older patients. Corresponding VAS in younger patients was 9 ± 1 pre-procedure and 1 ± 1 post-procedure. Opioids were not tolerated in 5 (50%) and ineffective in 5 (50%) older patients. Among the younger cohort, opioids were tolerated in 7 (47%), and ineffective in 8 (53%). Nine older (90%) and 14 (93%) younger patients were discharged on simple analgesics only. TLOS and PLOS were 1 ± 1 and 1 ± 1 in younger, and 4 ± 7 and 1 ± 12 respectively, in older admitted patients.

Conclusions: PKP was as well tolerated and efficacious in older as in younger patients. Increased access should reduce opioid usage, hospital admissions and LOS.

P-0575

Factors associated with increased mortality one year after low-energy pelvic and proximal humeral fractures

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Introduction: Pelvic and proximal humeral fractures are common in older adults. Often managed non-surgically, these fractures result in pain, impaired mobility, and increased mortality. We aimed to identify factors associated with mortality within the first year after discharge.

Methods: The CROSS-TRACKS cohort was used to identify patients aged ≥ 65 years with pelvic or proximal humeral fractures in the Central Denmark Region between 2012 and 2022. Mortality was evaluated using the Kaplan–Meier estimator, and associations between sex, age, and Charlson Comorbidity Index (CCI) score and mortality was assessed using Cox regression.

Results: A total of 3,685 patients (79% female) with pelvic fractures and 6,563 patients (76% female) with proximal humeral fractures were included. One-year mortality was 22.7% (95% confidence interval (CI) 21.4–24.1) for pelvic fractures and 11.4% (95% CI 10.1–12.6) for proximal humeral fractures. For pelvic fractures the adjusted hazard ratio (HR) was 1.5 (95% CI 1.2–1.7) for male vs female sex, 6.6 (95% CI 4.3–10.2) for age ≥ 85 vs 65–69 years, and 2.8 (95% CI 2.4–3.4) for CCI high vs low. For proximal humeral fractures the adjusted HR was 1.9 (95% CI 1.6–2.2) for male vs female sex, 6.0 (95% CI 4.5–8.0) for age ≥ 85 vs 65–69 years, and 4.6 (95% CI 3.8–5.6) for CCI high vs low.

Conclusion: High one-year mortality was observed in patients with pelvic or proximal humeral fractures. Male sex, older age, and higher CCI scores were associated with increased mortality, highlighting the need for targeted interventions to improve outcomes in this population.

P-0576

Multicomponent exercise and nutrition based frailty intervention in postoperative hip fracture inpatients—a scoping review protocol

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Introduction: Frailty is common in hip fracture patients. It is predictive of poor postoperative outcomes and complications in this cohort. Frailty is modifiable through a combination of nutrition and exercise, however, there is a paucity of research in inpatient frailty interventions in older adults with major trauma. This abstract will describe a scoping review protocol to identify the existing evidence for exercise and nutritional based frailty interventions in acute post-operative hip fracture inpatients.

Methods: The review will be conducted in accordance to the methodological framework proposed by the JBI Manual for Evidence Synthesis Guidelines. The conduct and reporting of the scoping review will be informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for scoping reviews (PRISMA-ScR). Databases and trial registries searched will include MEDLINE, EMBASE, CINAHL, Cochrane Library, SCOPUS, Web of Science, ProQuest Digital Dissertations and Theses, Clinicaltrials.gov and WHO International Clinical Trials Registry Platform (ICTRP).

Results: A preliminary database search has identified 3504 abstracts for screening after removal of duplicates. Full text screening and data extraction will be performed by AJ, MAR, KM, MO and MWK with conflicts resolved by NOR. Reference list of articles and relevant reviews will also be screened for pertinent articles.

Key conclusions: This scoping review will allow authors to identify the existing evidence for exercise and nutrition based frailty interventions in postoperative hip fracture inpatients. The results of this review will inform the design and development of a feasibility study which involves a frailty intervention in this cohort of patients.

P-0577

Design of an exercise and nutrition based frailty intervention in postoperative hip fracture inpatients—a consensus-based approach

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Introduction: Frailty is common in hip fracture patients. It is predictive of poor postoperative outcomes and complications in this cohort. Frailty is modifiable through a combination of nutrition and exercise, however, there is a paucity of research in inpatient frailty interventions in older adults with major trauma. Our objective was to design an inpatient frailty intervention in addition to usual care via consensus process.

Methods: We selected the Nominal Group Technique (NGT) as the consensus technique after a conducting a literature review. We obtained ethical approval for the consensus process due to patient and public involvement. The panel also involved an orthopaedic surgeon, geriatricians, physiotherapists, exercise professionals and dieticians. The process involved a structured in person generation and ranking of ideas, group discussion amongst the members and subsequent voting as an iterative process towards achieving consensus. A final poll was generated as a result and sent out via SurveyMonkey.

Results: All 15 members of the consensus panel completed the poll. 10/15 voted for additional whey protein supplementation with 8 voting for a dose of 20g per day. 13/15 voted for chair/bed-based exercise. 11 and 9 voted for strength & resistance and aerobic training respectively. Exercise professionals, physiotherapists, research and physiotherapy assistants were all voted to be appropriate personnel to deliver the intervention.

Key conclusions: The frailty intervention will include a chair/bed-based exercise program with additional protein supplementation in the postoperative period after hip fracture. Subgroup meetings will be convened to decide on specific detail of the intervention.

P-0578

Hip fracture in nonagenarians and functional decline

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Introduction: Walking capacity after hip fracture is one of the most important predictor of 1-year survival. Nonagenarian patients with hip fracture are more susceptible to worsening their function during admission.

Methods: A comparative study was conducted between two groups of patients admitted for hip fracture aged over 90 years, in 2014 (n = 165), and after a comprehensive and multidisciplinary approach in 2024 (n = 196). In this second group early mobilization, weight-bearing, and rehabilitation of the affected limb was carried out. Demographic variables, pre-fracture functional status, type of fracture, functional evolution, discharge destination, and mortality were collected. Differences between the two population groups were analyzed.

Results: The characteristics of the patients in both groups were similar in gender (74.5% women vs 73%), functional status (70% Barthel > 60) and in the type of fracture (41% vs 37.5% subcapital). The in-hospital mortality was similar (9.1% vs 8.6%). In 2014 prior to fracture, 61% were independently ambulatory, but at discharge, only 23% were capable of independent ambulation with a walker and 76% of patients do not walk or do so with great difficulty. In 2024 prior to fracture 39% were independently ambulatory/1 stick and 35% used a frame, but at discharge 49.4% were capable of independent ambulation with a walker.

Key conclusions: It is essential to emphasize the importance of a comprehensive geriatric assessment upon admission and discharge from the hospital, which allows the design of an individualized preventive, therapeutic, and rehabilitative plan, in order to achieve the highest level of independence and quality of life for the elderly.

P-0579

Prevalence and associated factors of falls in community-living older adults in a middle-income country

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Objectives: To identify the prevalence and associated factors of falls among community-living older adults.

Methods: The study had a cross-sectional national survey. Guided by the World Health Organization model of risk factors for falls, analysis was conducted on data from the 7th Thailand National Survey of Older Persons in 2021, which included 27,266 individuals aged 60 and above.

Results: The survey revealed a 6.95% prevalence of falls. Within the WHO biological, socioeconomic, behavioral, and environmental domains of fall risk, multifactorial analysis showed that falls were significantly more likely in older adults who were female, unmarried, in poorer health, had impaired vision and hearing, ADL limitations, unemployment, reliance on caregivers, low physical activity, higher alcohol and tobacco use, and toilets outside the house.

Conclusions: Findings direct healthcare providers and policymakers to address key factors for reducing and preventing falls and improving the safety and quality of life for older adults.

P-0580

Variability of cadence during walking sequences at night interacts with falls within the next 12 months

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Introduction: Falls in older people often occur during walking [1] and at night [2]. A low cadence assessed from acceleration data has been identified as a fall risk factor [3, 4], however nightly cadence was not considered separately. We aimed to examine the difference of cadence during daily life between day- and nighttime and the association with falls within the next twelve months.

Methods: Acceleration data obtained during daily life (ActiPal) from 292 participants (mean age 74.2 years, standard deviation (SD) 7.8 years) was pooled from two studies: CareFall [5] and SeFalled [6]. Twelve months after the seven-day tracking period, 154 (52.7%) participants reported no, 73 (25.0%) one and 65 (22.2%) multiple falls. Using the Mobilise-D algorithm [7], cadence was determined for the first gait sequences after lying periods, stratified by day and night based on time-in-bed periods.

Differences for mean and SD of cadence were analysed using ANOVA for the factors time of day (day, night) and prospective falls (no falls, one fall, multiple falls).

Results: While time of day and prospective falls showed no effect on mean cadence their interaction was significant for SD of cadence ($F(2, 289) = 7.01, p = 0.001$). As part of this interaction, participants with one fall showed a lower SD of cadence after standing up at nighttime (0.21 s^{-1}) compared with daytime (0.23 s^{-1}) ($F(1, 72) = 8.32, p = 0.004$). This reversed for those with multiple falls (Night: 0.23 s^{-1} ; Day: 0.22 s^{-1} ; $F(1, 64) = 5.38, p = 0.021$).

Conclusion: The different effect of time of day on cadence for participants experiencing one compared to multiple falls leads to the question whether changes in SD of cadence is a predictive factor for prospective falls.

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P-0581

Hip fracture patient pathway: front door to discharge

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Hospital length of stay (LOS) is a key indicator of healthcare quality, and prolonged stays in neck of femur (NOF) patients increase the risk of worsening clinician reported, patient reported and process related outcomes. Our project aimed to formalise a hip fracture treatment pathway by collaboratively engaging key stakeholders to address barriers to efficient multidisciplinary care.

We conducted an initial service evaluation through retrospective analysis of 50 patients over four months. This examined timing of multidisciplinary team (MDT) member involvement, assessment completion, ward stay duration, and discharge delays. The average LOS was 14.62 days (range 4–50), with key delays including the time from functional assessment completion to transfer of care passport (TOCP) submission (4.17 days) and delays in care package availability after TOCP completion (4.67 days).

Stakeholder input included emergency medicine, orthopaedics, anaesthetics, nursing, physiotherapy, occupational therapy, pharmacy, and discharge teams. These discussions led to the development of a standardised care pathway addressing key inefficiencies. Improvements included earlier orthogeriatric input in emergency departments, standardised anticoagulation guidance, timely orthopaedic senior post-take reviews, early cholecalciferol loading, post-operative therapy input targets, and clearer handover and discharge processes.

By streamlining the patient journey through collaborative working, this project identified key factors contributing to treatment delays and implemented solutions to improve patient flow and discharge. Our final hip fracture care pathway provides a structured approach to reduce LOS, enhance patient safety, and optimise resource utilisation. Continuous collaboration among MDT members will ensure ongoing improvements in patient outcomes and hospital efficiency.

P-0582

The impact of depressive symptoms on prospective fall risk and gait in older adults presenting to the emergency department after a fall

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Introduction: Depressive symptoms represent a major risk factor for falls in older adults, potentially mediated by gait alterations. However, little is known about this relationship in older adults discharged from the emergency department (ED) after a fall. Thus, this study aimed to investigate whether depressive symptoms (a) influence the prospective number of falls and (b) affect gait patterns within this group.

Methods: Utilizing SeFalled study data, older adults who presented to the ED with a fall were followed up for 12 months. Clinical data, the prospective number of falls and gait parameters—including gait speed, margin of stability and different gait phases—were assessed. Differences between participants with and without depressive symptoms were analysed using Pearson's Chi2-Test, t-test and Mann-Whitney-U-Test.

Results: Among the 198 participants, 48 exhibited depressive symptoms at baseline. These individuals experienced a significantly higher incidence of falls ($p=0.011$), including severe falls ($p=0.027$), during the follow-up period. However, no significant differences in gait parameters at baseline were observed, except for a reduced lumbar coronal range of motion ($p=0.022$). Additionally, individuals with depressive symptoms reported significantly greater concerns about falling ($p<0.001$).

Conclusions: Depressive symptoms may serve as an early indicator of an increased risk of future falls in older adults presenting to the ED. While gait differences between individuals with and without depressive symptoms were minimal, concerns about falling were significantly higher among those with depressive symptoms. These findings highlight the need for future research into the interplay between fall-related concerns, depressive symptoms, and fall risk.

P-0583

Delirium and associated factors in older adults hospitalized for hip fracture

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Introduction: Delirium is a common complication among older adults hospitalized for hip fracture and is associated with adverse outcomes. This study aimed to examine differences in clinical and demographic characteristics between patients with and without possible delirium.

Methods: Ninety consecutive patients hospitalized for hip fracture underwent orthogeriatric evaluation within 72 hours of admission. After excluding six patients without a 4AT (4 'A's Test) score, 84 patients were included in the analysis. Delirium was assessed using the 4AT; a score ≥ 4 indicated possible delirium. Comparisons between patients with and without delirium were made using appropriate univariate statistical tests.

Results: Of the 84 patients, 65.5% ($n=55$) were female, and 34.5% ($n=29$) had a 4AT score ≥ 4 . Patients with delirium were significantly older ($p<0.001$). Dementia was strongly associated with delirium; its frequency was 87.5% among those with dementia and 22.4% among those without ($p<0.001$). Patients with delirium had lower Lawton-Brody Instrumental Activities of Daily Living scores ($p<0.001$), lower Mini Nutritional Assessment–Short Form scores ($p<0.001$), higher Clinical Frailty Scale (CFS) scores ($p<0.001$), and lower 25-OH vitamin D levels ($p=0.013$). Pressure ulcers were also more common in this group ($p=0.012$). No significant differences were found regarding sex ($p=0.33$), urinary incontinence ($p=0.96$), number of medications ($p=0.526$), Geriatric Depression Scale (GDS) score ($p=0.642$), or vitamin B12 level ($p=0.707$).

Conclusion: Possible delirium was observed in over one-third of patients. Its association with frailty, malnutrition, and functional impairment highlights the importance of routine delirium screening using tools such as the 4AT.

P-0584

Opening an Orthogeriatric ward at Landspítali University Hospital – First-Year Outcomes on Length of Stay

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Introduction: In October 2023, Landspítali University Hospital opened an orthogeriatric ward specifically for patients with hip fractures living at home in the capital area. Concurrently, a specialized rehabilitation unit for this group was established within the hospital. Orthogeriatric care is increasingly recommended as the model of care, with research suggesting it can decrease the length of stay (LOS), reduce mortality, and improve patient outcomes.

Methods: Statistical data has been collected from the Landspítali University Hospital electronic database since the project's inception. The data includes LOS in the emergency room, wait times for surgery, LOS in the acute ward and rehabilitation, and discharge locations.

Results: In the first year, 69 hip fracture patients were discharged from the orthopedic ward. Median LOS of patient being discharged to in-hospital rehabilitation was 10 days compared to 13.5 days the previous year. The median LOS in rehabilitation until discharge home decreased from 31 days to 26.1 days in the first year. A similarly large group was discharged to nursing homes, but their length of stay decreased from 72 days to 63.3 days.

LOS in the emergency ward increased by 1.1 hours in the first year compared to the previous 12 months, and the average wait time for

surgery increased by 4 hours, from 44.4 hours before the change to 48.4 hours.

Key conclusions: These results highlight the benefits of the orthogeriatric care model in enhancing patient outcomes and efficiency, though some areas, like surgery wait times, may need further attention.

P-0585

Improving nurse-led bone health assessment in a Multidisciplinary Parkinson's Clinic

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Introduction: Parkinson's disease increases fracture risk due to higher fall rates and increased osteoporosis prevalence. This two-cycle bone health audit assessed adherence to the BONE-PARK algorithm at Florence Nightingale Community Hospital's Parkinson's clinic and evaluated improvements over 12 months.

Methods: Fifty patient records were reviewed to assess bone health management, focusing on fracture risk assessments (FRAX/QFracture), serum calcium, vitamin D, and follow-up actions, establishing a baseline before intervention. A re-audit of 39 patients after 12 months assessed progress following Cycle 1 recommendations. The Chi-squared test evaluated statistical significance between cycles.

Results: In Cycle 1, 21/50 (42%) had vitamin D levels checked, 1/38 (3%) of those not on calcium supplements were asked about dietary calcium, and 15/50 (30%) had a FRAX assessment within the previous 12 months. QFracture was not used. Recommendations included post-clinic telephone fracture risk assessments if not completed during the clinic, routine vitamin D testing, and QFracture use where appropriate.

Cycle 2 reviewed patients seen while changes were still being introduced. Vitamin D testing improved to 27/39 (69%, $p < 0.02$), and FRAX assessments to 23/39 (59%, $p < 0.01$). Dietary calcium intake was not assessed in any patient, and QFracture was performed in only 11% of indicated cases.

Conclusion: Cycle 1 recommendations generated improvements in bone health assessment and management, but cycle 2 highlighted that further work is needed to consistently align with national guidelines. Bone health documentation will include questions on calcium intake and exercise. The clinic letter template will be updated to advise on calcium-rich foods and weight-bearing exercise.

P-0586

Vitamin D matters: supplementation lowers fracture risk and enhances bone health in older adults

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Introduction: Vitamin D (VD) deficiency is a recognised risk factor for osteoporosis and fractures in the geriatric population, resulting in

increased morbidity and a reduced quality of life. This study examines the effects of one year of VD supplementation on FRAX scores and serum vitamin D levels.

Methods: This prospective study involved 80 patients admitted to the Geriatrics Department of Saint Luke's Chronic Hospital in Bucharest from 2023 to 2024. Inclusion criteria: age ≥ 60 , serum VD levels, FRAX score assessment, and VD therapy. Exclusion criteria: diseases affecting bone metabolism or receiving therapy for osteoporosis. The data analysis focused on the effects of VD supplementation on bone health and serum vitamin D levels, classified by age groups. Pearson correlation and significance tests were employed.

Results: Among the 80 patients, 69 were female (38 underwent VD treatment), and 11 were male (5 underwent VD treatment). Vitamin D treatment significantly reduced the probability of major osteoporotic fractures in both age groups (60–74 years: $p = 0.002$; ≥ 75 years: $p < 0.0001$). The lack of VD therapy was associated with increased fracture risk in the 60–74 age group ($p = 0.0002$). Vitamin D treatment significantly reduced hip fracture rates (60–74 years: $p = 0.02$; ≥ 75 years: $p = 0.0001$). Serum VD concentrations exhibit significant improvement following one year of supplementation (60–74 years: $p = 0.001$; ≥ 75 years: $p = 0.03$).

Conclusion: A year of vitamin D therapy significantly raised serum VD levels and lowered the risk of major osteoporotic and hip fractures in older patients, proving that it works as a fracture prevention strategy.

Short poster presentation

Falls and fractures

P-0587

Chronic stress and functional health in older adults with concerns about falling—the FEARFALL study

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Introduction: Living independently is a key goal for older adults, but concerns about falling (CaF) contribute to a cycle of CaF, inflammation, muscle loss, and reduced physical function, ultimately leading to poor health outcomes. The FEARFALL study investigates how physiological processes impact CaF to better understand age-related mobility loss.

Materials and methods: FEARFALL is a randomized controlled trial including 160 community-dwelling older adults (79.5 ± 5.3 years, 73.8% female). Participants were assigned to either a multi-component intervention or to a control group (54.4% IG). Before and after the intervention CaF and functional assessments were carried out. The Falls Efficacy Scale-International (FES-I), the Falls Efficacy Scale-International Avoidance Behavior (FES-IAB), and the Updated Perceived Control of Falling Scale (UPCoF) were used to define CaF. Saliva samples were analysed to ascertain stress levels. Cortisol and amylase levels were determined. C-reactive protein (CRP) and interleukin-6 (IL-6) levels in blood indicate inflammation. Additionally, characteristics regarding demographic, health, falls, gait and body composition were obtained.

Results and discussion: The study revealed a decline in CaF levels in both experimental groups over time. However, no statistically significant differences were detected between the two groups. Despite this decline, no alterations in salivary or blood biomarkers were observed. Additionally, no discernible correlation between CaF levels and salivary or blood biomarkers could be identified. Further research is needed to clarify the relationships between CaF, chronic stress, inflammation, muscle loss, and reduced physical function.

Poster

Falls and fractures

P-0588

Launching an orthogeriatric fracture liaison service (FLS) in a Regional Hospital. Presentation of general data and suggesting frailty as a mandatory item to audit

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Introduction: Hip fracture requires a standardized and multidisciplinary management. The International Osteoporosis Foundation promotes the development of FLS units [1].

Methods: We have linked a clinical pathway for elderly hip fractures with the development of a FLS that participates in the National Hip Fracture Registry (RNFC).

Results:

- 225 patients were attended between April 2023 and January 2024
- We are committed to minimizing the time to ward transfer with the development of a “Fracture Code” [2]. 76.8% of patients at the Emergency Department were admitted to the unit within the first 12 h, and 26.7% in the first 5 h.
- A high percentage of patients undergoing surgery into the 48 h was achieved (72%).
- Our patients are classified attending to their frailty status based on Clinical Frailty Scale (CFS) [3] and our distribution revealed a predominance of level 7 (32.8%) followed by 6 (28.2%) and 5 (14.6%). This item is not included in the RNFC yet.
- The prevalence of delirium was 34.6%, mainly during the post-operative period (26.6%).
- Hospital length stay was 9 days
- Treatment for osteoporosis was started in 74.2% (antiresorptive: 62.6% versus anabolic treatment: 11.5% of which 55% belonged to level 6 of the CFS).
- The mortality rate at 30 days was 8.8%

Conclusions:

- Our results do not differ from other hospitals but we are above average in terms of early surgery and treatment of osteoporosis at discharge.
- The CFS should be included in the National Hip Fracture Registries.

P-0589

Assessing and managing bone-health and fracture risk in Parkinson’s disease: the bone park 2 protocol

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Introduction: In Parkinson’s low bone mineral density (BMD) and falls increases fracture risk[1,2]. The UK National Osteoporosis Guideline Group (NOGG) recommends that Parkinson’s triggers fracture risk assessment[3]. However, current clinical pathways are sub-optimal; neither Parkinson’s nor falls history are easily considered, likely leading to an under-estimation of fracture risk. Hence, we developed the Parkinson’s-specific BONEPARK algorithm.

Methods: To inform this algorithm, FRAX-derived probabilities for fracture, and subsequent NOGG management recommendations were obtained excluding/including femoral-neck BMD, and with/without arithmetic adjustment for recurrent falls (30% increase)[3] and compared, using bone health data collected within the PRIME-UK RCT. All FRAX probabilities were calculated selecting rheumatoid arthritis (RA) as a proxy for Parkinson’s[4].

Results: The analysis included 182 individuals with parkinsonism (mean age 74.5 ± 8.2 , 35% female, 31% frail); 74 (40.7%) were recurrent fallers. Including RA as a Parkinson’s proxy increased FRAX probabilities whether including (Major Osteoporotic Fracture (MOF) $10.0\% \pm 7.3$ vs. $12.7\% \pm 9.0$, $p < 0.001$; Hip $3.7\% \pm 5.1$ vs. $5.0\% \pm 6.8$, $p < 0.001$) or excluding BMD[4] (MOF $12.1\% \pm 8.6$ vs. $16.3\% \pm 11.1$, $p < 0.001$; Hip $5.6\% \pm 6.4$ vs. $8.5\% \pm 9.0$, $p < 0.001$). Additional adjustment for recurrent falls escalated the NOGG intervention recommendation for 18 people (24.4% of recurrent fallers). This comprised an additional 9 people being high-risk and recommended treatment, and 9 being very high-risk and recommended treatment and referral to an osteoporosis specialist.

Conclusions: Our revised algorithm is informed by recent NOGG guidance and application to a real-world Parkinson’s population. Adjustment for falls history and use of a Parkinson’s proxy more

accurately defines an individual's risk. The BONEPARK algorithm provides specialised guidance to inform fracture prevention in Parkinson's.

Short poster presentation

Falls and fractures

P-0590

The osteoporosis treatment gap amongst people with Parkinson's in the UK clinical practice research datalink

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Introduction: Fracture risk is increased in Parkinson's, yet patients under-estimate their risk[1], and this risk is often not addressed[2,3] We aimed to study osteoporosis treatment and predictors of treatment in a large, representative cohort with parkinsonism.

Methods: The Clinical Practice Research Datalink (CPRD) GOLD data contains anonymised UK primary care data, from 35-million patients in 1150 GP practices[4]. Fragility fractures (hip, vertebrae, wrist/distal radius, humerus, rib, pelvis and unspecified osteoporotic) occurring between 2010–2019 were identified amongst prevalent parkinsonism patients in CPRD GOLD. We ascertained whether bone protective medication was prescribed in the pre-fracture period or in the 16- or 48-weeks post-fracture. Logistic regression was then used to determine predictors of prescriptions.

Results: There were 21,581 people with parkinsonism (mean age 74.7 ± 9.8 years, 40% female, with data available over a mean period of 3.1 years (SD = 2.5)), of whom 1,823 experienced at least 1 fragility fracture.

Prior to a fragility fracture 12% had a prescription for bone protective medication. This increased to 38% and 53% in the 16 and 48-weeks post-fracture, respectively.

Female gender (OR = 2.06 (1.69–2.51) $p < 0.001$) and sustaining a vertebral fracture (OR = 1.84 (1.38–2.45) $p < 0.001$) increased the odds of bone protection being prescribed. However, sustaining a rib fracture (OR = 0.28 (0.16–0.49) $p < 0.001$) or residing in a care home (OR = 0.64 (0.43–0.96) $p = 0.03$) decreased the odds of prescription.

Conclusion: There is an osteoporosis treatment gap in Parkinson's rendering an already high-risk population at further risk of fracture. Men and those with rib fractures are two groups who are least likely to receive potentially beneficial treatment.

Poster

Falls and fractures

P-0591

The clinical value of dxa scanning in people with parkinsonism

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Introduction: People with Parkinson's disease (PwP) are at increased fracture risk, due to a combination of low bone mineral density (BMD) and falls risk[1,2]. Dual x-ray absorptiometry (DXA) scans are relied on to inform osteoporosis diagnosis and management. However, symptoms such as tremor, camptocormia or poor-mobility can preclude scanning. We investigated the feasibility and clinical value of DXA in a population with parkinsonism.

Methods: DXA scans were obtained from participants enrolled in the PRIME-UK trial. FRAX-derived fracture probabilities, and subsequent National Osteoporosis Guideline Group (NOGG) treatment recommendations, excluding and including femoral-neck BMD, were compared.

Results: Of the 214 participants enrolled (mean age 74.5 ± 8.2 years, 35% female, 37% clinically frail), 186 managed to have a DXA (87%) and 182 (85%) had available measures of femoral-neck BMD. Those lacking a DXA were older (78.6 ± 5.8 vs. 73.9 ± 8.3 years; $p = 0.005$), had worse motor symptoms (MDS-UPDRS Part III: 58.6 ± 21.9 vs. 40.3 ± 18.5 points; $p < 0.001$) and a greater proportion were frail (82.1% vs. 31.7%, $p < 0.001$). Following the inclusion of BMD, FRAX-derived probabilities of major osteoporotic and hip fracture were reduced from $16.3\% \pm 11.1$ to $12.7\% \pm 9.0$ and from $8.5\% \pm 9.0$ to $5.0\% \pm 6.8$ respectively. NOGG-recommended management was unchanged for most participants ($n = 134$, 73.6%). Whilst in 12 (6.6%) the treatment recommendation was de-escalated from above to below the intervention threshold. Conversely, the treatment recommendation was escalated from below to above the treatment threshold for 16 (8.8%) participants.

Conclusion: Whilst DXA was feasible in most with Parkinsonism, including across the spectrum of frailty and Parkinson's severity, it refined osteoporosis treatment recommendations in only 15% of patients.

P-0592

Beyond joint damage: fall risk assessment and associated factors in elderly patients with rheumatoid arthritis

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Introduction: Falls represent a significant health concern for elderly individuals, particularly those with rheumatoid arthritis (RA). This study aims to evaluate fall risk, fear of falling, and associated risk factors among elderly patients with RA

Patients and methods: We conducted a prospective cross-sectional study over a six-month period including patients diagnosed with RA according to the 2010ACR-EULAR classification criteria. Fall risk was assessed using the Tinetti Test(TT), with scores below 23 indicating elevated risk. Fear of falling was evaluated using the Short Falls Efficacy Scale-International (Short FES-I), where scores exceeding 10 signify substantial fear. Disease activity was quantified using the Disease Activity Score-28 (DAS28).

Results: Among 51 RA patients enrolled, 20 (39.2%) were elderly (age > 65 years) with a mean age of 68 ± 2 years and a sex ratio of 0.12. All elderly patients presented with erosive disease, and 85% exhibited joint deformities. Mean disease duration was 25 months [range: 6–72]. Active disease (DAS28 > 3.2) was present in 30% of elderly patients, foot deformities in 60%, and hip involvement in 5%. The average number of previous falls was 1.7 [range: 0–3], with 20% reporting fracture history. Elevated fall risk was identified in 50% of elderly patients (mean Tinetti score: 21 ± 2), and 75% reported significant fear of falling (mean Short FES-I: 12 ± 1.9). Identified risk factors included polypharmacy (65%), cognitive impairment (15%), urinary dysfunction (70%), gait abnormalities (4%), balance disorders (15%), visual deficits (10%), and physical inactivity (25%). Elderly patients demonstrated significantly lower Tinetti scores (21 ± 2) compared to younger patients (25 ± 0.6 ; $p = 0.03$), while fear of falling showed no significant difference between age groups ($p = 0.07$).

Conclusion: Elderly patients with RA demonstrate significantly higher fall risk compared to younger patients, as evidenced by lower Tinetti scores. Early identification of modifiable risk factors and implementation of targeted preventive strategies is essential to mitigate fall risk in this vulnerable population.

P-0593

Fall risk assessment through wearable inertial sensors. Towards a systematic review and individual participant data meta-analysis

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Falls are a leading cause of years lived with disability. Different studies aimed to identify objective biomarkers of fall risk via gait and balance assessment, but solid evidence is still lacking. The current study aims to assess the prognostic ability of fall risk biomarkers based on wearable inertial sensors with a systematic review and individual-participant data meta-analysis (IPDMA).

We searched for articles describing datasets of ≥ 20 community-dwelling individuals with prospective data from wearable inertial sensors and on falls. We invited the authors of the included articles to contribute their datasets for the IPDMA.

We identified 48 datasets from 23 countries, involving 21–32,619 participants. Most datasets included older adults, while others targeted specific patient groups e.g., Parkinson's disease, multiple sclerosis, and stroke. Between 1 and 10 wearable inertial sensors were employed during functional tests in the laboratory, real-world daily activities, or both. Each article proposed 0–592 sensor-based biomarkers, of those 27% were deemed associated with falls.

Twenty-two authors agreed to join the IPDMA. Currently, we are processing the datasets to replicate and test the list of biomarkers proposed in the literature as associated with falls.

The corpus of available datasets represents a valuable resource for testing the performance of existing wearable sensor-based biomarkers for fall risk and for developing fall risk models.

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P-0594

Use of short-term indwelling catheter in neck of femur fractured patients

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Background: Neck of femur fracture (NOFF) patients often experience urinary retention and require short-term catheterisation during their hospital stay. However, there is a lack of evidence in the literature regarding the practice of short-term indwelling catheterisation in NOFF patients. This study aims to explore the incidence and characteristics of short-term catheterisation in this patient group.

Methods: This was a retrospective audit of 169 NOFF patients (115 females, 54 males; average age 81, range 60–100) admitted to Milton Keynes University Hospital, UK, between January 2024 and June 2024. We examined the location of catheter insertion, the duration of catheterisation, and whether catheter removal was successful.

Results: Out of 169 patients, 63 (37.28%) were catheterised during their hospital stay. Of these, 20 patients (31.75%) were catheterised on admission in the Emergency Department, 7 (11.11%) in theatre, 31 (49.21%) on the ward, and for 5 patients (7.94%) the location was not

documented. The average duration of indwelling catheter use was 9.97 days (range: 1–37 days). In 58 patients (92.06%), the catheter was successfully removed on the first attempt. In 3 patients (4.76%), the first removal attempt was unsuccessful, and 2 patients (3.17%) died before catheter removal could be attempted. Only one patient was treated for a urinary tract infection.

P-0595

Comparative analysis of hospital length of stay for intracapsular and extracapsular hip fractures: a retrospective cohort study

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Background: Hip fractures are common among older adults and are associated with significant morbidity, disability, and increased mortality. Hospital length of stay (LOS) is notably associated with these fractures; however, differences across fracture types remain unclear. Understanding variations in LOS between intracapsular and extracapsular fractures can enhance patient management, resource allocation, and rehabilitation strategies.

Methodology: This retrospective cohort study analyzed LOS among patients admitted with hip fractures between 2019 and 2025 at Hamad Medical Corporation. Patients were categorized by age, gender, fracture type (intracapsular vs. extracapsular) and nationality (Qatari vs. non-Qatari). Descriptive statistics included mean, standard deviation, and range for continuous variables (Age, Length of Stay) and frequency and percentage for categorical variables (Gender, Nationality, Type of Fracture). Mann–Whitney U test, were used to compare LOS between intracapsular and extracapsular fracture groups.

Results: A total of 792 patients (mean age 75.13 ± 8.80 years) were analyzed, with 362 (45.7%) males and 430 (54.3%) females. Qatari nationals comprised the majority ($> 30\%$). Among patients, 419 (52.9%) had extracapsular fractures, while 373 (47.1%) had intracapsular fractures. The mean LOS was slightly longer for extracapsular fractures (13.12 ± 19.33 days) compared to intracapsular fractures (12.58 ± 15.12 days); however, the difference was not statistically significant ($p = 0.271$).

Conclusions: No significant difference in LOS was found between intracapsular and extracapsular fractures. While LOS was slightly higher for extracapsular fractures, the clinical impact remains unclear. More research with additional variables is needed to refine predictions and enhance post-fracture care.

P-0596

Evaluation of osteoporosis management in an orthogeriatrics clinic: a retrospective analysis

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Background: Osteoporosis is a major health concern among the elderly, leading to fragility fractures and increased morbidity. Orthogeriatric clinics play a pivotal role in primary and secondary prevention through early screening and timely intervention. This study evaluates osteoporosis management in an orthogeriatrics clinic, focusing on screening rates, treatment initiation, and factors contributing to non-treatment.

Methods: A retrospective analysis was conducted at Hamad Medical Corporation from January 2022 to January 2025. Patients aged ≥ 60 years seeking osteoporosis management were included and categorized into primary prevention (without fractures) and secondary prevention (with fractures) groups. Patients with incomplete treatment records were excluded.

Results: Among 1,190 patients evaluated (369 males, 821 females; 515 Qatari, 675 non-Qatari), 815 underwent primary prevention screening, with 288 (35.3%) receiving antiresorptive treatment. Treatment distribution included zoledronic acid (36%), alendronate (29%), denosumab (19%), and combination therapies (16%). In the secondary prevention cohort, 375 patients had fragility fractures (300 hip, 30 wrist, 45 vertebral), of whom 213 (56.8%) received treatment: zoledronic acid (45%), denosumab (29%), alendronate (13%), and combination therapies (13%). The remaining 162 patients were untreated due to lack of follow-up, referral to other teams, dental issues, refusal, medical ineligibility, repatriation, or death.

Conclusions: This study underscores the importance of orthogeriatric clinics in osteoporosis management but highlights significant gaps in treatment initiation. Barriers such as loss to follow-up, medical contraindications, and patient refusal necessitate improved patient education, streamlined follow-up processes, and multidisciplinary collaboration to optimize care and reduce fracture-related morbidity.

P-0597

Evaluating the impact of an interdisciplinary orthogeriatric program on hip fracture outcomes: a prospective study at Hamad Medical Corporation Qatar

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Background: Orthogeriatric care has been proven to enhance functional outcomes and survival in elderly patients with hip fractures. This study highlights the results of a multidisciplinary orthogeriatric initiative introduced at the Surgical Specialty Centre, Hamad Medical Corporation Qatar.

Methods: A prospective study was conducted from 2022–2024 to evaluate the impact of orthogeriatric services on hip fracture patients. Clinical outcomes, including length of stay (LOS), rehabilitation efficiency, and mortality rates, were assessed. Functional recovery was assessed via the Barthel Index (BI), and Cox regression identified mortality predictors.

Results: The study included 100 patients (mean age: 74.2 ± 7.8 years; 57% male). The mean age-adjusted Charlson comorbidity index (CCI) was 4.4 ± 1.7 , and the average surgical delay was 1.8 ± 3.4 days, with 16% of patients undergoing surgery after 48 h. The mean LOS was 15.8 ± 23.1 days. Functional recovery, as measured by the BI, improved significantly from 34.8 ± 14.8 at admission to 55.7 ± 20.5 at discharge ($p < 0.001$), representing a 38.5% relative functional gain. Rehabilitation efficiency was 34.5% during hospitalization and 60% at six months post-discharge. In-hospital mortality was 1% ($n = 1$), and six-month mortality was 6% ($n = 3$). Cox regression analysis identified higher CCI and longer LOS as predictors of increased mortality risk, while higher BI scores were associated with reduced risk.

Conclusions: The interdisciplinary orthogeriatric program in Qatar enhances nutrition, functional recovery, and survival in hip fracture patients, emphasizing its role in post-fracture care. Further research is needed to optimize care pathways and resource allocation.

P-0598**Assessing pain management strategies and side effects in elderly hip fracture patients: a retrospective analysis**

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Background: Pain management in elderly hip fracture patients remains a significant challenge, with up to 50% experiencing inadequate relief, leading to prolonged recovery and complications. This study evaluates pain management strategies and associated adverse effects in elderly hip fracture patients.

Methods: A retrospective analysis was conducted at Hamad Medical Corporation (September to December 2024). Patients aged ≥ 60 years with hip fractures were included. Variables included preoperative and postoperative pain assessments, analgesic use, and orthogeriatric intervention.

Results: The study included 49 patients (20 males, 29 females; mean age 73.74 years). Patients were categorized by nationality (37 non-Qatari, 12 Qatari) and fracture type: left neck of femur (NOF) (17 cases), left intertrochanteric (17 cases), right NOF (9 cases), right intertrochanteric (3 cases), and others (3 cases). Pain was assessed at admission in 46 patients (94%), but only 15 (31%) were reassessed after 30 min of analgesia. Preoperatively, 34 patients (69%) received immediate analgesia, including opioids. Postoperatively, 44 (90%) received regular paracetamol, and 31 (63%) were given opioids. NSAIDs were administered to 33 (67%) patients during hospitalization. Side effects occurred in 35 patients (71%), with constipation being most common (82%), followed by acute kidney injury (37%) and delirium (12%). Orthogeriatric intervention addressed side effects in 39 cases (80%).

Conclusion: Orthogeriatric intervention played a pivotal role in optimizing pain control and managing side effects. However, pain reassessment protocols were underutilized. Future research should focus on improving reassessment practices and developing individualized pain management strategies to enhance outcomes in elderly hip fracture patients.

P-0599**Postoperative DVT (deep vein thrombosis) among patients undergoing neck of femur fracture: a retrospective cohort analysis**

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Background: Among the elderly, neck of femur fractures following low impact trauma are a significant cause of adverse morbidity and mortality outcomes. Such patients are typically stabilized surgically with either open reduction and internal fixation or arthroplasty. Both interventions are associated with select advantages and disadvantages. Previous research has demonstrated that open reduction and internal fixation may carry a reduced risk in the development of deep vein thrombosis, however, study methodology varies widely with inconsistent results across the literature.

Methods: Retrospective chart review of all patients 60 years and older who underwent surgical open reduction and internal fixation or

arthroplasty for neck of femur fracture between January 2020 and May 2023. Several demographic and clinical variables were recorded for each patient and analyzed, rates of deep vein thrombosis were compared between patients undergoing open reduction and internal fixation and arthroplasty.

Results: In total, 161 patients were treated for neck of femur fracture, among which 27 underwent open reduction and internal fixation and 134 were treated with arthroplasty. Deep vein thrombosis developed in 3.70% of patients undergoing open reduction and internal fixation compared to 1.44% among arthroplasty patients. This difference was not statistically significant.

Conclusion: Although our study did not find a difference in the rate of deep vein thrombosis among the two surgical interventions, this may have been due to the small population size and recording of only symptomatic thrombosis.

P-0600**Benign paroxysmal positional vertigo (BPPV) is a frequent cause of dizziness and unsteadiness among patients 65 years or older referred to a falls and dizziness clinic**

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Introduction: Dizziness, unsteadiness and affected gait function are frequent symptoms among older people. Multiple factors may cause these symptoms. One of these is BPPV, which has a rising prevalence with increasing age.

BPPV may affect patients differently depending on the otolith size and which semicircular canal is affected. Sometimes, the symptoms are not the classic rotatory dizziness but an unsteadiness when walking. These symptoms may be difficult to detect as symptoms of BPPV from the anamnesis and may be missed by clinicians.

Therefore, we want to describe the prevalence and type of BPPV detected among patients examined in a falls and dizziness clinic using a mechanical rotational chair. This chair allows us to identify and treat more cases of lateral canal involvement, multi-canal involvement, and cupulolithiasis.

Method: Retrospective data from the electronic patient record will be collected consecutively on outpatients ≥ 65 years referred to the Falls Clinic at Aarhus University Hospital, DK, from June 1st to November 31st, 2024. Baseline data and symptoms of vertigo, dizziness, and/or unsteadiness will be registered, along with a BPPV diagnosis and a diagnosis of the canal affected.

Results: The final results are not ready for publication but will be presented at the EUGMS 2025.

Key conclusions: This study will bring new insights and awareness into the causes of gait and balance disorders by describing cases of BPPV. It may help guide clinicians when examining and treating older patients with dizziness and unsteadiness.

Short poster presentation**Falls and fractures****P-0601****Post-fall management in Flemish nursing homes: a descriptive survey on current protocols and expectations**

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Introduction: The first World Falls Guidelines recommended post-fall management as a priority in nursing homes (NHs), because it might enable more appropriate and timely care and less unnecessary hospital transfers. This study aimed to map the current state of post-fall management in Flemish NHs.

Methods: A cross-sectional survey was conducted. All 813 NHs in Flanders were invited to complete a questionnaire focusing on demographic characteristics, availability of a post-fall protocol, post-fall management expectations and staff satisfaction. Data were collected via Qualtrics XM from April to May, 2024.

Results: Eighty-seven responses were included for analysis. Respondents were predominantly physiotherapists (49%). The median number of falls in the past year per bed was 2.44. The prevalence of a post-fall protocol was 32%. The majority of respondents from both NHs with and without a post-fall protocol reported that the following domains should always be assessed during the first two hours after a fall: consciousness level, pain, nausea, dizziness, mobility, cognitive functioning and screening for fractures and soft tissue damage. During the two to 24 h period after a fall, the majority of respondents from both NHs with and without a post-fall protocol reported the need to assess the same domains along with blood pressure and heart rhythm. Median satisfaction score concerning the current post-fall management was 7 for NHs with compared to 6 for NHs without a protocol.

Conclusions: Flemish NHs have started to protocolise post-fall care. Available protocols might not enable their full potential, but suggest higher staff satisfaction.

Poster

Falls and fractures

P-0602

Prevalence and correlates of fear of falling in community-dwelling older adults

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Introduction: Fear of falling (FoF) is highly prevalent among older adults and can negatively affect mobility, physical activity (PA) levels fall risk, and falls. This study aimed to assess the prevalence of fall risk and FoF, and their associations with demographic variables, mobility, physical activity, and fall history in community-dwelling older adults.

Methods: A cross-sectional study was conducted with individuals aged ≥ 65 years without cognitive impairment. Data collected included demographics, fall risk (Morse Fall Scale), FoF (Falls Efficacy Scale International-FES-I), mobility and balance (Timed Up and Go-TUG test), PA (Brief Physical Activity Assessment-BPAA), and fall history. Statistical analyses included Pearson's correlation coefficient, chi-square test, t-test, and ANOVA.

Results: The sample comprised 300 older adults (mean age: 74.7 years; 55.3% female). Higher FoF was observed in women ($M = 30.4$, $SD = 10.3$) and those aged ≥ 80 years ($M = 33.1$, $SD = 13.3$) ($p < 0.001$). FoF was positively correlated with impaired mobility/balance (TUG: $R = 0.453$) and fall risk ($R = 0.399$), negatively correlated with PA (BPAA: $R = -0.351$) and strongly associated with prior falls ($R = 0.660$) (all $p < 0.001$).

Conclusions: FoF is common among older adults, particularly women and the oldest age group, and is significantly associated with mobility limitations, low PA levels, increased fall risk, and history of falls. These findings highlight the need for tailored interventions focusing on improving mobility and promoting active lifestyles to mitigate FoF and fall risk.

P-0603

Is the opportunity to treat osteoporosis being missed before hip fractures occur?

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Objective: Many osteoporotic patients remain undiagnosed and untreated, missing the opportunity to prevent fractures. This study aimed to determine whether anti-osteoporotic treatment was initiated in patients with osteoporosis criteria who had been evaluated by hospital services capable of prescribing such treatment two years before their admission to Orthogeriatrics due to a hip fracture.

Methods: A retrospective, observational study of patients aged ≥ 70 years admitted to Orthogeriatrics over one year due to hip fracture. Sociodemographic data were collected. It was analyzed whether they had been evaluated two years prior by services capable of prescribing anti-osteoporotic treatment (Geriatrics, Gynecology, Internal Medicine, Rheumatology, Rehabilitation, Traumatology). The study assessed if they met clinical criteria for treatment initiation including:

previous fractures, low bone mineral density (BMD), and chronic corticosteroid use. Reasons for not prescribing treatment or contraindications were also recorded.

Results: Among 588 patients (72.9% women, mean age 86 years), 46.4% had been previously evaluated, only 40% of them had received/ receiving treatment. Among untreated patients, 66.4% did not meet osteoporosis criteria, while 24% were not treated despite meeting one or more criteria: 10.4% had chronic corticosteroid use, 29.3% had low BMD, and 34.5% had prior fractures. Additionally, 9.6% had contraindications (advanced dementia or poor short-term prognosis).

Conclusions: Nearly half of the patients had prior evaluations, yet a quarter of eligible patients did not receive treatment. Missed opportunities for osteoporosis management before hip fractures remain significant.

P-0604

Risk factors for proximal femur fracture in patients with previous frailty fractures admitted into a Orthogeriatrics Unit

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Introduction: To analyze which variables are related to proximal femur fracture (ProFF) in patients aged 75 years or older with a history of previous frailty fractures (PreFF) admitted to an Orthogeriatrics Unit (OGU).

Methods: Data were collected from patients admitted into the OGU between July 2023 and January 2024, including clinical, functional, frailty characteristics (VIG-Frailty Index [VIG-F]), and osteoporotic treatment.

Results: Among 234 patients, 73 (32.9%) had a PreFF history, mainly vertebral (26.4%) and proximal femur (25%) fractures, apart from proximal humeral (11.1%), distal radius (9.7%) and others. Among the people with PreFF, 25% had more than two fractures before the ProFF. Patients with PreFF were mainly women (82.2% vs. 67.8%; $p = 0.024$) and had a higher frailty calculated with the multidomain scale VIG-F ($p = 0.046$). Only 13.9% of the patients with ProFF had osteoporosis treatment. Key risk factors related to a ProFF after a frailty fracture were female sex (OR = 2.193, 95% CI: 1.099–4.378, $p = 0.026$), moderate frailty (OR = 4.928, 95% CI: 1.35–17.935, $p = 0.016$), and absence of prior osteoporotic treatment (OR = 8.10, 95% CI: 3.408–19.289, $p < 0.001$). Patients with previous osteoporotic treatment had less risk of suffering ProFF (OR = 0.123, 95% CI: 0.052–0.293, $p < 0.001$).

Conclusions: Female sex, moderate frailty, and lack of osteoporotic treatment may increase the risk of ProFF. Most patients did not receive treatment for osteoporosis, despite having PreFF. It is necessary to emphasize the importance of carrying out early preventive interventions to reduce the risk of frailty fractures in elderly patients.

P-0605

Osteoporosis treatment before and after vertebroplasty: Are we approaching it correctly?

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Introduction: Fragility fractures are the fourth leading cause of chronic morbidity in Europe, with vertebral fractures being the most common. These fractures are often underdiagnosed due to their silent clinical presentation, resulting in 80% of cases going untreated. This contributes to decreased quality of life, reduced functionality, and increased comorbidity.

Materials and methods: We conducted a retrospective descriptive study of patients over 70 years old who underwent vertebroplasty at Getafe's Hospital between February 2022 and March 2025. The objective was to evaluate the use of prophylactic measures and osteoprotective treatment before and after the procedure.

Results: A total of 67 vertebroplasties were performed, with an average patient age of 80 years; 59% of the patients were female. Prior to intervention, 52.23% received prophylactic supplementation. Additionally, 35.82% had a history of previous fractures, 87.5% of which were classified as fragility fractures. Despite this, only 28.57% of those with prior fragility fractures were receiving anti-osteoporotic treatment. Following vertebroplasty, 44.77% of patients were prescribed osteoporosis treatment, representing a 16.20% increase. Among those treated, 80% received antiresorptive agents and 20% received osteoforming agents. Furthermore, 82% of patients received calcium and/or vitamin D supplementation post-procedure, representing a 29.85% increase compared to preoperative levels.

Conclusion: Fewer than half of patients with vertebral fractures receive appropriate treatment. These findings underscore the need for early detection and proactive management of osteoporosis to prevent major fractures and related complications.

P-0606

Does vertebroplasty contribute to reducing the need for pharmacological analgesia in vertebral fragility fractures?

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Introduction: Vertebroplasty is indicated for the treatment of painful vertebral fractures that are refractory to pharmacological therapy. Opioid-based analgesic treatment often leads to adverse effects such as excessive drowsiness, confusion, or constipation. These complications significantly impact the quality of life in older adults.

Methods: We conducted a retrospective descriptive study of patients over 70 years old who underwent vertebroplasty at Getafe's Hospital between February 2022 and March 2025. The objective was to evaluate whether the procedure reduced the need for analgesic treatment before and after the intervention.

Results: A total of 67 vertebroplasties were performed, with an average patient age of 80 years; 59% of the patients were female. Prior to the procedure, 53.73% of patients were receiving step 3 analgesia, 35.82% were on step 2 analgesia, and 5.97% on step 1 analgesia. After vertebroplasty, 38.8% continued on step 3 analgesics, 10.44% on step 2, and 35.82% were managed with step 1 analgesics.

Conclusion: Vertebroplasty appears to contribute to the deprescription of step II and III analgesics in patients over 70 years of age, potentially reducing medication-related side effects and establishing itself as a viable alternative for pain management. However, further studies are warranted to confirm these findings.

P-0607

Patient characteristics and risk of fall-related injuries and fractures among new users of opioids in Denmark: a longitudinal descriptive study

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Introduction: Use of opioids is associated with increased fall risk. We aimed to assess the 1-year risk of fall-related injuries among new users of opioids in Denmark.

Methods: Using Danish health registers, we identified all new adult users of opioids between 2010–2022 (first time use within five years). We used logistic regression to estimate odds ratios (ORs) associating baseline risk factors to injurious fall or fall-related fracture. Patients were followed after opioid initiation until fall-related-injury, death, leaving the country, or 1-year follow-up which ever occurred first.

Results: We identified 1,638,358 unique new users of opioids (54% women; median age 58 years). The 1-year risk of fall-related injuries and fall-related fractures was 9.9% and 4.7%, respectively. Risk of injurious falls was highest during the first weeks following opioid initiation and increased with age, peaking at 31% at 90+ years. Depression, rheumatoid arthritis, Parkinson's disease, and osteoporosis were all associated with new injurious falls. Prior fall-related injuries were predictor of new fall-related injuries (OR 2.28; 95% CI 2.25–2.32) and fall-related fractures (OR 1.38; 95% CI 1.34–1.42). Prior fall-related fractures were predictor of new fall-related injuries (OR 2.72; 95% CI 2.69–2.76) and fall-related fractures (OR 8.85; 95% CI 8.62–9.09).

Conclusion: The 1-year risk for fall-related injuries and fractures was 9.9% and 4.7%, respectively, and highest in the first weeks following opioid initiation. Increasing age, history of fall-related injuries, and specific medical diagnoses were all associated with new fall-related injuries. Physicians should be aware of patient characteristics related to fall risk when prescribing opioids.

P-0608

Psoriatic arthritis and osteoporotic hip fractures in elderly patients

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Introduction: Psoriatic arthritis (PsA) is a chronic inflammatory disease associated with systemic bone loss, increasing the risk of

osteoporotic fractures. Hip fractures, particularly femoral neck fractures, significantly impact morbidity, mortality, and functional independence in elderly PsA patients. However, the relationship between PsA severity, osteoporosis, and hip fractures remains underexplored.

Objective: To evaluate the prevalence, risk factors, and clinical impact of osteoporotic femoral neck fractures in elderly patients with PsA.

Materials and methods: A cross-sectional study included 201 elderly PsA patients (≥ 65 years; 72.4 ± 5.5 years) diagnosed based on CASPAR criteria. Dual-energy X-ray absorptiometry (DXA) assessed bone mineral density (BMD) at the femoral neck and lumbar spine. Fracture Risk Assessment Tool (FRAX) estimated 10-year fracture risk. Patients with confirmed osteoporotic hip fractures were compared to those without fractures. PsA activity was evaluated using DAS28-CRP and ASDAS-CRP, while inflammatory markers CRP, IL-6, TNF- α , and bone turnover markers (CTX, P1NP) were measured.

Results:

- Hip fracture prevalence: 28.4% ($n = 57$), with significantly lower BMD ($p < 0.01$) in fracture cases.
- FRAX scores were significantly higher in fractured patients ($p < 0.001$).
- IL-6, TNF- α , and CRP levels were elevated in fracture cases ($p < 0.05$).
- Multivariate regression analysis identified ASDAS-CRP, IL-6, and low BMD as independent fracture predictors ($R^2 = 0.52$, $p < 0.001$).
- Patients with fractures had higher HAQ-DI scores ($p < 0.01$) and increased mortality risk.

Conclusions: Osteoporotic hip fractures are prevalent in elderly PsA patients and strongly associated with inflammation, disease activity, and low BMD. Early osteoporosis screening, anti-inflammatory treatment, and fall prevention strategies are essential to reduce fracture risk and improve patient outcomes.

P-0609

Fall-risk-increasing drugs and falls in community-dwelling older adults: a Danish prospective cohort study

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Introduction: Fall-risk-increasing drugs (FRIDs) are a significant and modifiable risk factor for falls in older adults. However, prospective data using robust fall ascertainment on specific FRID classes are

scarce in community-dwelling populations. We aimed to investigate the association between individual FRID classes and both single and recurrent falls in community-dwelling adults ≥ 75 years.

Methods: We analysed data from a Danish prospective cohort of 241 community-dwelling adults aged ≥ 75 years. Medication records were collected at baseline, and drugs were classified using the STOPPFall consensus FRIDS list. Falls were recorded prospectively for 1 year using monthly fall-calendars, verified using telephone follow-ups. Associations between FRIDs and one-time (1 fall) and recurrent falls (≥ 2 falls) were explored using Cox proportional hazards model, adjusting for clinical and sociodemographic factors.

Results: The median (IQR) age was 82 (80, 86) years, 66.4% were women, and 43.6% had a positive fall history. Prevalence of polypharmacy and use of any FRID were 70.5% and 73.9%, respectively. During follow-up, 88 participants (36.5%) fell at least once while 41 participants (17.0%) fell twice or more. Baseline use of benzodiazepine-related drugs, strong anticholinergics, and antiepileptics were significantly associated with recurrent falls in the fully adjusted analyses with hazard ratios (95% confidence intervals) of 3.34 (1.28–8.75), 2.48 (1.04–5.89), and 4.78 (1.24–18.35), respectively.

Key conclusions: Several specific FRID groups were significantly associated with recurrent falls in this cohort of well-functioning community-dwelling adults, highlighting the importance of targeted medication review and careful prescribing in fall-prevention strategies.

P-0610

Older patients with osteoporosis and chronic kidney disease-mineral and bone disorder (CKD-MBD): a series of challenging cases

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Objective: OP treatment decisions in cases with CKD-mineral and bone disorder (MBD) is challenging. We will present a series of cases evaluated for OP and CKD-mineral and bone disorder (MBD) by Istanbul Musculoskeletal Health Consortium.

Participants and methods: Cases from December 2023 to December 2024 were analyzed. eGFR, serum calcium, phosphorus, albumin, PTH, ALP, 25-OH vitamin D levels, DXA T-scores were documented. FRAX tool components, geriatric syndromes, comorbidities and sociodemographic data were assessed. CKD-MBD was diagnosed via biochemical findings, without bone biopsies.

Results: The study included 20 participants (mean age, 77.4; female, 50.0%). Mean eGFR, 31.9 mL/min/1.73 m², with 2 patients on

dialysis. Fragility fracture history was present in 65.0% (13 patients; 3 hip, 8 vertebra and 2 both), but only 15.3% were on current OP treatment. 50.0% patients had OP-only, while the other 50.0% had OP + CKD-MBD (10 patients: 7 adynamic bone disease [ABD], 3 osteomalacia [OM]). 7 ABD patients were discontinued calcium and Vitamin D supplements, and/or started phosphorus binders. After biochemical correction, 71.4% (5/7) were started teriparatide, 1 (14.2%) denosumab. After vitamin D replacement, 2 of 3 CKD-MBD (OM) patients (66.7%) received denosumab, and 1 (33.3%) teriparatide. Among 10 OP-only patients, denosumab was the chosen treatment in 40.0%. Bisphosphonates and romosozumab were chosen each in 15.3% (2) patients and teriparatide in 1 (10.0%) case.

In the total population, 35.0% (7) received teriparatide, 35.0% (7) denosumab, 10.0% (2) romosozumab, 10.0% (2) bisphosphonates, and 10.0% (2) were followed without treatment.

Conclusion: In this series, half of CKD patients with OP had overt biochemical CKD-MBD, with ABD being the most common form (70.0%). Treatment options varied by CKD-MBD type and patient characteristics, emphasizing the need for individualized care in older adults.

P-0611

Optimising pain management in neck of femur fracture patients

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Effective pain management in neck of femur fracture (NOF#) patients is critical for reducing complications such as delirium, pneumonia and pressure ulcers. Effective pain management facilitates early mobilisation, improving recovery and reducing length of stay.

Our aim was to ensure all patients with NOF# receive appropriate analgesia.

We followed the Model for Improvement framework with concurrent PDSA cycles:

- Cycle 1 (evaluation of practice): Analysis of days 0–5 analgesia prescriptions through cross-sectional data for patients admitted with NOF# over a 2-week period.
- Cycle 2 (evaluation of knowledge): Structured questionnaire assessing prescribing attitudes of resident trauma doctors.
- Cycle 3 (development of pathway): Review of literature and engagement of stakeholders (Emergency medicine, Trauma, Anaesthetics, Perioperative medicine) to develop an analgesia pathway.

Results:

- Cycle 1: Large variability in Days 0–2 prescribing. 92% of patients (n = 14) received fascia-iliaca blocks. 50% of patients had analgesia escalated in accordance with WHO pain ladder. 35% of patients were not prescribed PRN analgesia. 71% of patients prescribed morphine at variable doses (2.5 mg–10 mg) without reasoning for variability. No correlation between prescribed analgesia and subjective pain scores.

- Cycle 2: Highlighted areas of knowledge gaps (e.g. renal dosing) and lack of resources to guide prescribing.
- Cycle 3: Evidence-based guideline developed encompassing day 0–7 of admission. Agreed with stakeholders.

Suboptimal analgesia prescribing was prevalent. We highlighted the need to standardise prescribing practices to optimise pain control. The next steps involve wider distribution of the guideline through the trust intranet, regular education and to audit adherence to improve patient care and outcomes.

P-0612

Falls profile of older adults attending a community specialist team for comprehensive geriatric assessment

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Introduction: The aim of this study was to evaluate the falls risk stratification, assessment and management of older adults who receive Comprehensive Geriatric Assessment (CGA).

Methods: A retrospective evaluation was undertaken of all patients ≥ 65 years who attended a Community Specialist Team over a 7-month period.

Falls risk stratification and Multifactorial Falls Risk Assessment (MFRA) [1] were undertaken as part of CGA.

Data was analysed using descriptive statistics and binary logistic regression.

Results: $n = 96$: (37 male, 59 female), mean age: 80 years (SD = 7), median Clinical Frailty Scale score: 5 (mild frailty), Barthel score: 17/20 (low dependency).

Forty-four percent ($n = 42$) were referred for CGA because of falling. Opportunistic screening identified 97% ($n = 93$) had falls risks, 86% ($n = 83$) were high risk and 66% ($n = 63$) reported falling in the past year.

Balance and gait impairment was an independent predictor of falls (OR = 3.167, CI = 1.157–8.668, $p < 0.025$). Other risk factors were musculoskeletal disorder (68% $n = 65$), cognitive impairment (66% $n = 63$), Falls-Risk-Increasing-Drugs (62% $n = 59$), probable sarcopenia (40% $n = 38$) and Orthostatic Hypotension (30% $n = 28$). Median number of falls-specific interventions was 4 (range 0–9). Most frequent interventions were Physiotherapy (51% $n = 49$), medication changes (47% $n = 45$), Dietetics (42% $n = 40$), Occupational Therapy (38% $n = 36$), Pharmacy (35% $n = 33$), Memory Clinic (35% $n = 34$) and Cardiology (13% $n = 12$).

Conclusion: Older adults attending for CGA are at high risk for falls. MFRA is an essential component of CGA. This evaluation will guide multi-domain service delivery to address key risk factors.

Reference:

1: Montero-Odasso, Manuel, et al. "World guidelines for falls prevention and management for older adults: a global initiative." *Age and Ageing* 51.9 (2022): afac205.

P-0613

Risk factors for falls differ in acute- and post-acute geriatric cohorts: an analysis of data from interRAI instruments

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Introduction: Falls are a common health concern for older adults, with serious physical, psychological, and social impacts. Research suggests that tailored risk assessments are more effective than general screening. Risk factors for falls may vary by care setting, requiring setting-specific prevention strategies.

Methods: Selected risk factors for falls assessed by the interRAI Acute Care instrument in Australian hospitals [Peel et al., 2018] were compared with risk factors assessed by the Post-Acute Care instrument in an Icelandic geriatric rehabilitation cohort.

Results: The Icelandic cohort ($n = 765$) was slightly older, mean age (SD) was 83.4 (6.6) years vs 80.8 (6.7) years in Australia ($n = 1288$). Falls occurred in 16.1% individuals in the post-acute care setting, compared to 5.8% in the acute care setting. Most of the risk factors were more prevalent in the post-acute cohort. Shared risk factors in both settings included problems with balance, fall history and cognitive impairment. In post-acute care, dependency with toilet transfer and urinary incontinence were additionally associated with falls. In acute care, male sex, dependency in personal hygiene and managing medication, and delirium were risk factors specific to that setting.

Conclusions: Fall risk factors differ between acute and post-acute care, highlighting the need for setting-specific approach to prevention. While some risks are universal, others vary by care context, emphasizing the importance of tailored assessments. Country-level differences may also play a role.

P-0614

Risk of falls and hip fractures in an outpatient's geriatric clinic

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Introduction: Loss of balance and the risk of falls are reported as common causes of fractures in older adults, while also affecting their frailty. In 400 adults who visited the 65 + outpatient clinic of Amalia Fleming Hospital, the impact of fall risk and the percentage of risk for osteoporotic fractures were studied.

Methods: Standardized questionnaires and scores were used to assess fall risk (FESI: Falls Efficacy Score-International). Additionally, fracture risk was evaluated based on the FRAX (Fracture Risk Assessment Tool) score.

Results: In the studied population, there were 53.3% men and 46.6% women with mean BMI 28.71. The mean risk of major osteoporotic fracture was 11.38%, and the risk of hip fracture 4.14%. The risk of

hip fracture was independent of BMI and gender, while it showed a positive correlation with advancing age ($p < 0.05$). Thus, patients over 85 years old had a statistically higher probability of hip fracture compared to those under 85 years old ($p < 0.05$).

27.5% of the study participants reported falls in the past year. The mean fall risk score, was 25.13. The risk of falls was not strongly associated with age and remained the same in elderly patients over 85 years old.

Key conclusions: Older age predisposes to hip fractures, independently and may lead to increased morbidity and mortality. A multidisciplinary approach to elderly patients by a healthcare team represents the best condition for effectively addressing the comorbidities that accompany them.

P-0615

The role of sarcopenia in the obesity and falls connection

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The evidence behind the relationship between falls and obesity is currently conflicting, with cross-sectional studies from different study populations yielding varying results. Few prospective studies have been conducted to address this controversy. With the obesity paradox, many clinicians have exercised caution in the promotion of weight reduction in older adults living with obesity, with the concern that weight loss may lead to muscle loss which may then increase falls risk. Using data from the Malaysian Elders Longitudinal Research (MELoR) study, we have identified an increased risk of falls in individuals aged 55 years and above who are overweight and obese ($BMI > 25 \text{ kg/m}^2$), both cross-sectionally using the baseline dataset as well as at 5-year follow-up. Further, the relationship between falls and increased BMI is mediated by sarcopenia. Subsequently, we evaluated changes in weight from baseline to follow-up with falls, and found that in women, weight gain over six years was associated with the risk of sustaining at least one fall at follow-up. There was no actual relationship between weight change and falls in men. Interestingly, the relationship between weight gain and falls in women was mediated by percentage body fat and muscle strength, suggesting that older women who gain weight are more likely to falls because of the development of sarcopenia. Future studies should now consider interventions to prevent weight gain in older women in addition to weight loss intervention with resistance training in those with increased BMI as fall prevention strategies.

P-0616

Clinical course of patients with moderate and severe malnutrition with hip fracture in the Spanish National Hip Fracture Registry (RNFC)

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Introduction: Hip fracture is mostly produced by osteoporosis and falls, both related to the nutritional status.

Objective: To compare the characteristics and clinical evolution of patients according to their nutritional status (moderate versus severe malnutrition), included in the National Hip Fracture Registry (RNFC).

Methods: Prospective multicenter study of cases recorded in the RNFC from July 1, 2022, to June 30, 2023. Malnutrition was assessed using GLIM criteria and patients were classified as well-nourished, moderate or severe malnourished. Demographic, clinical variables, functional (modified Functional Assessment Category scale (mFAC)) and cognitive (4AT scale) assessment was performed. A 30-day follow-up was realized. We performed univariate analysis.

Results: We registered 9409 cases, 5492 (58.4%) received nutritional assessment (mean age 86.9 ± 6 years, 75.6% women), of whom 2523 (45.9%) had malnutrition (35.4% moderate and 10.6% severe). Compared to moderate malnourished patients, those with severe malnutrition mostly came from nursing homes (37.9% vs. 27.8%), were more dependent (39.6% vs. 22.9%) (mFAC > 6), higher incidence of delirium (28.2% vs. 24.4%) (4AT scale), higher anesthetic risk (86.9% vs. 84.4%) (ASA > 3), longer surgical delay (70.6 vs. 69.08 h) and lower hospital stay (10.68 vs. 11.39 days) compared to those with moderate malnutrition. At discharge, had higher rate of institutionalization (43% vs. 38.7%), were prescribed less anti-osteoporotic treatment (32.2% vs. 48.8%). At 30-day, had more mortality (9% vs. 5%). All with $p < 0.05$.

Conclusions: The prevalence of malnutrition is very high in the older hip fracture patient. Patients with severe malnutrition had a worse previous status and clinical outcome.

P-0617

Brittle & breathless: fracture risk and vitamin D & calcium deficiencies in COPD patients

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Background: Vitamin D deficiency is prevalent among older Irish adults, especially in winter. Vitamin D and calcium deficiencies are known contributors to reduced bone density and increased fracture risk. COPD patients face higher deficiency rates, worsening bone fragility and respiratory health. This study explores the relationship between vitamin D, calcium levels, and fracture history in COPD patients.

Methods: A cross-sectional study was conducted over six-weeks involving COPD patients aged > 60 years admitted to a level three Irish hospital. Statistical analysis was performed using WEKA 3.8.6 and ANOVA for significance.

Results: The cohort included 100 patients (64% male; median age 75.5 ± 9.4 years). Serum vitamin D was assessed in 62% of patients: 20.9% were severely deficient (< 25 nmol/L), 1.6% deficient (25–30 nmol/L), 19.4% insufficient (30–50 nmol/L), and 58% sufficient (> 50 nmol/L). Vitamin D levels were not assessed in 35% of patients, and 35.9% of this cohort were noted to have sustained ≥ 1 fractures. Meanwhile, 51.8% of patients with vitamin D levels below 50 nmol/L sustained previous fractures. Lower vitamin D level is associated with higher fracture risk ($p < 0.001$). Vertebral fractures were most common (19%), followed by ribs (15%), hips (8%), and radial (5%). Calcium deficiency (< 2.2 mmol/L) was found in 6%, none of whom received supplementation.

Conclusion: Vitamin D and calcium deficiencies are significantly associated with increased fracture risk in COPD patients. Despite this, serum vitamin D testing and supplementation remain under-utilised. Addressing these gaps presents an important opportunity to reduce fracture-related morbidity in this vulnerable population.

P-0618

Identifying high-risk patients: predictive values for functional decline after a sentinel fall in the ED—the SeFalled study

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Introduction: Older adults presenting to the emergency department (ED) after a fall are at high risk for functional decline and subsequent falls, yet limited research exists on those not hospitalized. The SeFalled study aims to identify risk factors predictive of functional decline in this group.

Methods: Individuals aged 60 and above, attending the ED after a fall without hospitalization, underwent comprehensive geriatric assessments at 4 weeks, 6, 12, and 24 months following ED presentation. Thirteen parameters were tested for predictability using a generalized linear model, with activities of daily living (ADL) as the primary outcome, quantified by the Jonkman scale (range: 0 = no impairment to 18 = fully dependent).

Results: A total of 335 individuals (mean age: 75 ± 9 years) were included. In preliminary analyses including 313 participants, ADL scores increased by 0.16 at each measurement point. Key predictors of functional decline included age ($p < 0.001$), previous falls ($p = 0.04$), level of care ($p < 0.001$), institutional living ($p = 0.002$), concerns about falling ($p < 0.001$), cognition ($p = 0.004$), education ($p < 0.01$), and health-related quality of life ($p < 0.001$). For example, each additional point on the Falls Efficacy Scale-International (FES-I) score resulted in a 0.32-point increase in ADL scores. Further analyses, incorporating additional and diverse parameters, will refine the model to develop a predictive score.

Key conclusions: Preliminary findings provide a practical risk stratification scheme for older non-hospitalized ED patients post-fall.

Implementing this score in ED practice could enable tailored secondary prevention, ensuring high-risk individuals receive follow-up care. A follow-up study, iSeFalled, will focus on implementation and effectiveness.

P-0619

Can exergames be used to improve the physical abilities of older male care home residents in Saudi Arabia? A feasibility randomised controlled trial

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Background: MIRA-Rehab-Exergames activities derive from the OTAGO and FaME exercise programs, proven to reduce falls in older adults.

Aim: This research aimed to assess the viability of Exergames for older male residents in a care facility.

Methods: Following the Medical Research Council (MRC) guidelines, a feasibility RCT enlisted males aged 65 and above. They were split into two groups: one receiving a Chair-Based Training (CBT) booklet and the other undergoing MIRA-Rehab-Exergames sessions for six weeks, followed by a six-week monitoring phase. The evaluation encompassed feasibility metrics and other measures assessed at three intervals.

Results: Thirty elderly males were randomized into Control Group (CG: 16) and Intervention Group (IG: 14), with an average age of 78.70 (SD 10.63). No participants withdrew during data collection, although the final week of Exergaming was called off due to the Covid-19 outbreak. Recruitment and attrition rates indicated no dropouts in the initial six weeks, with high retention. All participants completed the three assessments successfully. The Exergames demonstrated safety, feasibility, usability, and acceptability.

Conclusion: The study of MIRA-Rehab-Exergames among elderly men in Saudi Arabian care center highlights the potential for integrating such innovative technology in this rapidly evolving country.

P-0620

Assessing the implementing MIRA rehab exergames (MRE) for older men in a care home setting in Saudi Arabia: a feasibility randomized controlled trial

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Introduction: MRE have shown promise in mitigating falls among older individuals, offering a viable solution to training obstacles and enhancing balance and strength.

Methods: This study aimed to assess the feasibility of implementing MRE among older males in a Saudi Arabian care home. Participants aged 65 and above were enrolled in a feasibility RCT. Through a permuted block design, individuals were assigned to either a CG receiving chair-based-training or an IG engaging in MRE over a 6-week period (18 sessions). Outcome measures included feasibility

aspects, falls risk indicators (e.g., balance, strength, mobility, depression, fear of falling), and quality of life, assessed at baseline, six weeks, and twelve weeks.

Results: The study achieved an 86% recruitment rate and maintained 100% retention despite COVID-19 challenges. Data collection for the IG was optimized within a 5-week period, yet resource constraints were noted due to lengthy eligibility checks. Adherence rates varied, with the IG averaging 7.06 sessions versus the CG 11.61. Participants reported poor usability but generally viewed the intervention positively, though opinions on ease of use varied. Outcome measurements indicated diverse health metrics, with the IG showing declines in balance and quality of life, while the CG exhibited slight balance improvements but decreased quality of life.

Conclusion: MRE are feasible and well-received by the target population, suggesting their potential despite encountered challenges. Future research should address clothing, language, and cultural considerations, necessitating a larger RCT to evaluate Exergames' effectiveness in fall prevention.

Poster

Frailty and resilience

P-0621

Improving Frailty Through Low-Volume Resistance Training: Who Responds and Why?

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Introduction: Frailty in older adults, marked by reduced physiological reserve and heightened vulnerability to stressors, severely impacts the quality of life and autonomy. Neuromuscular decline, particularly in muscle function, is central to its development. While multiple strategies exist, low-volume resistance training is emerging as a feasible and effective approach.

Objectives: To characterize the profile of older adults who respond to a low-volume resistance training program by improving their frailty status, and to identify baseline neuromuscular variables that best discriminate between responders and non-responders. Secondary objectives included identifying which frailty criteria are most responsive to training.

Methods: Thirty-one (pre)frail older adults from daycare centers completed a 12-week resistance training program. Pre and post-intervention assessments included musculoskeletal (handgrip strength, muscle power, muscle mass index (MMI), functional (gait speed, Short Performance Physical Battery, Composite Physical Function), and clinical (Fried's phenotype) parameters. Results. Significant improvements in frailty status were observed among frail individuals, whereas prefrail individuals showed no change. Responders and non-responders differed mainly in BMI and MMI at baseline. Changes in physical activity, absolute muscle power, and MMI correctly classified 83.9% of responders. Physical activity was the most responsive criterion (25.8%), while strength showed the lowest response (3.2%).

Conclusion: A low-volume resistance exercise program effectively improved frailty status in individuals with more severe baseline frailty, higher BMI, and lower MMI. However, the intervention produced a heterogeneous response across the five frailty criteria, highlighting the complexity of individual adaptations.

P-0622

Impact of nutritional therapy on frailty management in older adults

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Introduction: Frailty represents a multidimensional geriatric syndrome characterized by decreased physiological reserves and increased vulnerability to stressors, affecting 10–15% of community-dwelling older adults. While frailty involves multiple physiological systems, nutritional factors—including protein inadequacy, micronutrient deficiencies, and reduced caloric intake—contribute significantly to its pathophysiology. Despite growing evidence, standardized nutritional interventions targeting the specific nutritional deficits of frail older adults remain underutilized in clinical practice.

Aim: This quality improvement project evaluated the effectiveness of a comprehensive, multicomponent nutritional therapy program on frailty status, physical function, and healthcare utilization in community-dwelling older adults with established frailty or pre-frailty.

Methodology: A prospective intervention study was conducted with 64 older adults (mean age 81.3 years) meeting established frailty criteria. Participants received a 24-week nutritional intervention comprising high-protein supplementation (1.5 g/kg/day), vitamin D optimization, targeted micronutrient supplementation, and energy balance assessment. The protocol incorporated resistance exercise coordination, individualized meal planning addressing barriers to intake, and caregiver education. Primary outcomes included frailty status using validated tools, physical performance measures, and healthcare utilization.

Results: Following intervention, frailty status improved in 68% of participants, with 42% transitioning from frail to pre-frail status ($p < 0.001$). Significant improvements were observed in physical performance measures, with mean gait speed increasing by 0.12 m/s ($p = 0.002$) and grip strength improving by 16% ($p < 0.01$). Nutritional parameters showed substantial improvement, with 73% achieving protein targets and 81% reaching optimal vitamin D levels. Emergency department visits decreased by 38% compared to the pre-intervention period, with corresponding reductions in hospitalization rates.

Conclusion: Structured nutritional therapy significantly improved frailty outcomes and physical function in older adults. Results demonstrate that targeted nutritional interventions addressing the specific nutritional deficits of frail older adults should be integrated into standard frailty management protocols. This approach represents a feasible, non-pharmacological strategy that may alter frailty trajectory and reduce healthcare utilization in this vulnerable population.

P-0623

The association between frailty syndrome and hospital related adverse events in older acutely admitted patients

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Introduction: Frailty is an age-related syndrome that increases vulnerability to adverse outcomes. Hospital-related adverse events (AEs) are complications not primarily caused by the patient's pre-existing conditions. While age has been widely studied, less is known about how frailty affects in-hospital AEs in older adults.

Methods: We conducted a single-centre observational study using routinely collected data from University Hospitals of Leicester between October 2017 and October 2023. The cohort included patients aged ≥ 65 admitted via the emergency department (ED). Frailty was assessed at ED presentation using the Clinical Frailty Scale (CFS). AE categories included: falls, pressure ulcers, moisture damage, adverse drug reactions, medication errors, infections, abuse, self-harm, discharge and transfer incidents, and hospital injuries. Poisson regression was used to estimate the association between frailty and AEs.

Results: Among 158,455 admissions, frailty was associated with a significantly increased risk of adverse events. Compared to CFS 1–3, adjusted relative risks (RR) for CFS 7–9: falls (RR = 1.9), pressure ulcers (RR = 3.5), moisture damage (RR = 4.63), medication errors (RR = 2), infections (2.63), discharge/transfer issues (RR = 3.86), and hospital injuries (RR = 2.11). Risks generally increased with frailty level and remained significant after adjusting for age, sex, ethnicity, ED wait time, and inpatient length of stay.

Conclusion: Frailty is a strong and consistent predictor of adverse events during hospital admission. Increasing frailty levels were associated with higher risks across multiple event types, highlighting the need for targeted prevention strategies in frail populations.

P-0624

Muscle power predicts frailty and other adverse events across different settings

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Objectives: To evaluate the association between lower-limb muscle power (MP) and frailty, measured using eight different scales, in older adults from four clinical settings. Additionally, to examine the predictive capacity of MP for adverse health events.

Design: A cross-sectional and longitudinal analysis using data from the Spanish cohort of the Frailtools project.

Setting: Nursing homes, primary care clinics, geriatric inpatient wards, and outpatient clinics.

Participants: 245 older adults (mean age 82 ± 4.6 years, 64% women).

Measurements: MP measures were estimated using the five-time sit-to-stand (5STS) test and validated equations to obtain absolute (AMP), relative to body weight (RMP), and allometric (ALMP) values. Frailty was evaluated using eight scales, including the Frailty Phenotype and the Frailty Trait Scale. The incidence of adverse events (e.g., frailty, hospitalization, falls, and disability) was recorded over 12 months.

Results: Frailty prevalence varied significantly across scales and settings, with the lowest rates observed in primary care and the highest in nursing homes. Cross-sectional analysis revealed significant associations between all MP measures and frailty for most scales. RMP demonstrated the strongest associations, particularly with the Frailty Trait Scale-5 and FRAIL scale, across primary care, nursing homes, and outpatient clinics. Longitudinally, RMP was significantly associated with incident frailty and several adverse events, including hospitalizations (AUC: 0.71) and disability in activities of daily living (AUC: 0.71). Sex-specific MP cut-off points were identified for predicting health events. No significant differences were observed among MP measurements.

Conclusion: Lower-limb MP is a valid clinical biomarker associated with frailty and negative health events in older adults. The degree of associations varied according to frailty scale and clinical context, but no significant differences were observed when we compared their predictive ability. The proposed MP cut-off points may enhance frailty assessment and screening, particularly in primary care, nursing homes, and outpatient clinics. These findings highlight the clinical potential of incorporating MP measures into frailty tools and stress the need for further research to refine age-specific cut-off points and explore the influence of body composition.

P-0625

Patients know best: self-rated quality of life predicts adverse events in geriatric patients independently of frailty and comorbidity scores

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Introduction: Predicting adverse clinical outcomes—such as death or hospitalization—is a key goal of geriatric assessment. While physicians often rely on tools like frailty and comorbidity scores, listening to the patient may be just as effective—or better—in identifying those at risk.

Methods: A total of 388 outpatients aged ≥ 65 years were consecutively enrolled over a 2-year period. The composite outcome of death or hospitalization within the following year was recorded. Data were analyzed using STATA v13.1. Univariable and multivariable logistic regression models were employed to assess associations with the outcome.

Results: Among 388 patients (mean age 72.2 ± 7.1 years; 55% female), 40 experienced the composite outcome. In unadjusted analysis, the Likert quality of life (QoL) score (1 = worst, 10 = best) was significantly associated with the outcome (OR per point decrease: 1.70; 95% CI: 1.37–2.11), performing comparably to the FRIED

frailty scale (OR: 1.68; 95% CI: 1.24–2.28), the CFS scale (OR: 1.81; 95% CI: 1.37–2.37), and the Charlson comorbidity index (CCI) (OR: 1.75; 95% CI: 1.24–2.45). In multivariable analysis adjusting for demographics, CFS, CCI, depressive symptoms, hospitalization within the last year, and laboratory markers (detectable CRP and low eGFR), the QoL score remained an independent predictor of the outcome (adjusted OR: 1.42; 95% CI: 1.06–1.89).

Conclusions: Self-rated QoL (1–10) is a simple, non-invasive, and patient-centered measure that may independently predict medium-term adverse outcomes in geriatric patients with predictive value comparable to frailty (FRIED, CFS) and comorbidity scales.

P-0626

Aging well together ! Promoting healthy aging through personalized and accessible prevention

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Demographic aging is a major global challenge, particularly in the Alpes-Maritimes region, where more than a third of the population is already over the age of 65. While life expectancy has increased, healthy life expectancy has declined, highlighting the urgent need for innovative strategies to prevent the loss of autonomy among older adults. However, existing prevention programs remain too generic, insufficiently tailored to individual, social, and environmental factors, and often inaccessible to those who are remote from the healthcare system.

This project aims to redefine the approach to autonomy prevention by moving beyond a purely medical model and integrating three core principles: accessibility, empowerment, and individualization. Our ambition is to develop a comprehensive and inclusive prevention program that effectively reaches older adults who are geographically, socially, or digitally distant from healthcare services.

By adopting a socio-ecological perspective on health, this project will identify the key individual, environmental, and policy factors that influence access to and adherence to prevention programs. Through an interdisciplinary and co-constructed approach, we aim to develop and evaluate a prevention framework that prioritizes engagement and effectiveness. Key areas of focus include:

- The impact of environmental exposures on loss of autonomy,
- Empowerment strategies to enhance self-care and active aging,
- The integration of digital solutions to better match resources with individual needs,
- The personalization of prevention by considering social, cultural, economic, and environmental determinants.

A cornerstone of this initiative is placing participants at the center of prevention, offering them personalized pathways and fostering a community of users actively involved in the program's development and evaluation. In collaboration with local associations and territorial authorities, we will create an innovative real-life laboratory where participants will be assessed along multiple dimensions, including biological markers, and will follow an individualized 12-week intervention delivered through digital, videoconference, or face-to-face formats. Participants will be re-evaluated post-intervention and followed for one year, with a dedicated digital platform facilitating communication and data collection.

This project is ambitious in both its interdisciplinary scope and its immediate societal impact. With the goal of including 5,000 individuals over the age of 60, it brings together ten research laboratories covering public health, sociology, psychology, physiology, biology,

and geography. Strongly rooted in previous collaborations, the project is developed in partnership with two associations, three companies, two regional authorities, and a university hospital (CHU). By fostering an innovative and participant-centered approach, this initiative aspires to set new standards for accessible, effective, and personalized autonomy prevention in aging populations.

P-0627

Emotional regulation and resilience as key factors in healthy aging: a preventive approach

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Introduction: Emotions are central to human experience, influencing psychological well-being across all stages of life. The term emotion originates from the Latin *ex-movere*, meaning "to move out" or "to stir," highlighting its intrinsic role in driving action and behavior. Historically, emotions have been conceptualized as fundamental forces guiding both cognitive and physiological responses. Despite their significance, emotions are rarely integrated into formal educational curricula in France, and emotional literacy remains underdeveloped in family and social contexts.

Current scientific literature underscores the critical role of emotions in mental health and overall well-being throughout life. Research by Apter (2010) describes emotions as a "movement toward others," emphasizing the social and interpersonal dimensions of emotional regulation. In the context of aging, emotional competence is particularly relevant, as it contributes to stress management, resilience, and adaptive coping strategies in response to age-related challenges. From a preventive perspective, implementing interventions focused on emotional regulation is essential to fostering long-term psychological well-being.

Methodology: This study is embedded within the "Bien Vieillir Ensemble" (BVE) research project and aims to develop a structured approach to emotional health prevention. Following an initial characterization phase, participants will undergo a comprehensive assessment using validated clinical scales and quality-of-life measures to evaluate the impact of emotions on psychological well-being. Given the absence of dedicated emotional health interventions within the CHU framework, we propose the development of a preventive program specifically targeting emotional regulation. This initiative aligns with theoretical models emphasizing the role of emotional flexibility and resilience in mental health, as proposed by Fredrickson (2001).

The need for preventive emotional health programs has been identified in various populations, including employees within corporate settings and individuals insured by mutual organizations, particularly concerning stress and emotional regulation. Inspired by evidence-based programs in Canada and the United States, which have demonstrated promising results in this domain, we will pilot a four-session in-person intervention. The primary objective is to collect data on the program's feasibility, efficacy, and participant engagement. In the long term, the intervention will be adapted into a hybrid format to facilitate broader accessibility through digital tools.

Additionally, a personalized follow-up component will be integrated, allowing participants to track their emotional progress through self-report questionnaires and digital emotional journaling. Workshops and conferences will cover key topics, including stress management, emotional resilience, and adaptive coping strategies for age-related transitions.

Research question:

How can interventions based on emotional intelligence and resilience promote healthy aging—both emotionally and cognitively—while enhancing the overall quality of life in adults aged 55 and older?

Expected outcomes:

The anticipated benefits of this intervention include:

- Reduced perceived stress levels,
- Enhanced resilience,
- Improved emotional regulation strategies.

Beyond these immediate effects, the program aims to cultivate a greater awareness of emotional dynamics and establish a longitudinal monitoring system to assess the sustained impact of the intervention.

Discussion: This study seeks to equip participants with scientifically validated, practical tools to enhance emotional resilience and psychological well-being. Furthermore, the interaction between participants, researchers, and healthcare professionals is expected to strengthen social connectedness, fostering a sense of belonging within a proactive aging community. In the long term, these initiatives may evolve into fully hybrid or digital formats, ensuring sustained accessibility and continuity of emotional health prevention regardless of participants' geographic location. By integrating interdisciplinary expertise and digital innovation, this program aspires to set a new standard for emotional health promotion within aging populations.

Keywords: Emotions, Resilience, Healthy aging, Emotional regulation, Psychological well-being.

Short poster presentation

Frailty and resilience

P-0628

Predictors of Frailty in Older Adults: A Retrospective Cohort Study on Gait Speed, TUG, and Chronic Pain

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Introduction: This study aimed to identify clinical and functional predictors of frailty development among older adults and to determine the power of the Timed Up and Go (TUG) test and usual gait speed (UGS) in predicting frailty.

Methods: Data from 211 older adults, initially non-frail and followed up in the geriatrics outpatient clinic, were retrospectively reviewed. Participants who developed frailty were compared with those who did not. Median follow up was 34 months. Frailty was assessed using the FRAIL scale. Baseline measurements included UGS (m/s), TUG time (s), nutritional status, presence of chronic pain, and activities of daily living (ADL/IADL). ROC analysis was used to determine the optimal cut-off value for TUG. Multivariate logistic regression was performed to identify independent predictors of frailty development.

Results: Among the participants, 71.1% were female, mean age was 74 (SD: 6.1). Frailty developed in 15.2% of the cohort and this group had significantly lower UGS, longer TUG time, higher prevalence of malnutrition, impaired IADL, and chronic pain. A strong correlation was observed between TUG and UGS ($r = -0.81$), and therefore they were analyzed in separate models. The optimal cut-off for TUG was identified as ≥ 9.3 s (AUC = 0.648). After adjustment for covariates, lower UGS (≤ 0.8 m/s, OR = 3.21, $p = 0.027$), longer TUG time (OR = 4.00, $p = 0.008$), and presence of chronic pain (OR = 2.93, $p = 0.016$) were independently associated with incident frailty.

Conclusion: TUG and gait speed are effective tools for predicting frailty. Chronic pain may represent a modifiable target for prevention strategies.

Poster

Frailty and resilience

P-0629

Clinical frailty as a predictor of infection-related admissions in hospitalised older adults: insights from a singapore tertiary hospital study

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Introduction: Frailty is a geriatric syndrome characterised by diminished physiological reserve, increased vulnerability, and a higher risk of adverse health outcomes. This study aimed to evaluate the association between clinical frailty levels, as measured by Clinical Frailty Scale (CFS) upon admission, and infection-related admissions (IRAs), healthcare-associated infections (HAIs), and 30-day readmissions in hospitalised older adults.

Methods: A 3-month prospective observational study was conducted in an acute geriatric unit in Singapore. A total of 476 hospitalised patients aged ≥ 60 years were included. On admission, CFS scores, reasons for admission, the incidence of HAIs, and 30-day readmissions were collected. Logistic regression analysis was performed to assess the association between clinical frailty levels and IRAs, HAIs, and 30-day readmissions.

Results: The mean age of participants was 83.8 ± 8.2 years, with 58.4% being female. The mean length of stay (LOS) was 13 ± 9.3 days. The prevalence of frailty (CFS ≥ 4) was 82.9% ($n = 395$) while IRAs, HAIs, and 30-day readmissions occurred in 55.6% ($n = 265$), 15.1% ($n = 72$), and 17% ($n = 81$) of cases, respectively. A CFS score ≥ 4 was significantly associated with a higher incidence of IRAs ($p = 0.0002$; odds ratio [OR]: 2.2; 95% CI: 1.35–3.58). However, no significant associations were found between CFS levels and HAIs ($p = 0.07$) or 30-day readmissions ($p = 0.12$).

Key conclusions: Higher frailty levels (CFS ≥ 4) were strongly associated with IRAs, suggesting that Clinical Frailty Scale (CFS) may serve as a predictive tool for infection-related hospitalisations. Interventions targeting frailty reduction could potentially mitigate the risk of infection-related admissions in older adults.

P-0630

A COPD patient and the beginning of his failure to thrive

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Introduction: Patients with advanced chronic obstructive pulmonary disease (COPD) present multiple severe physical and psychological symptoms. They usually lack of knowledge about the natural history and the prognosis of the disease; therefore, they are not aware about end-of-life symptoms and signs.

Medical history: An 80-year-old male patient with a history of heart failure, atrial fibrillation, arterial ischemia, COPD and pulmonary hypertension. He was admitted for femoral fracture due to a fall and

multiple decompensations of his chronic diseases, for which he was on rehabilitation.

Medication: Bisoprolol, Acetylsalicylic Acid, Amiodarone, Formoterol/ Glycopyrronium/ Budesonide inhaler.

Comprehensive Geriatric Assessment:

- Social: Married.
- Functional: Barthel Index prior to the fall 90/100. Barthel Index at admission: 0/100.
- Cognitive: Delirium. Mild cognitive impairment.
- Nutritional: Malnutrition. Dysphagia.
- Prognostic scales: NECPAL (palliative need) positive. ECOG 4. Frail-VIG index 0.72.

Case report: The patient presented multiple complications, including COPD exacerbation, delirium, micro aspirations, dyspnea and failure to thrive. The geriatric and the pneumology department work together to assess which was the patient's prognosis and jointly with his family, he was discharged to his house with the support of the palliative care team. He died five months later.

Conclusions: COPD patients' evolution is mostly unpredictable, and the difficulty to assess the overall survival represent an obstacle to opportunely refer to palliative care.

P-0631

Frailty phenotype: evidence of both physical and mental health components in community-dwelling early-old adults

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Introduction: Demographic aging results in increased incidence of old-age disability. Frailty is a major factor contributing to old-age disability. The aim of this study was to investigate the prevalence of the frailty phenotype as defined by Fried et al. and to estimate the need for associated preventative interventions in early-old community-dwelling inhabitants of the southern industrial region of Poland, as well as to investigate the defining components of the frailty phenotype.

Methods: The study group consisted of 160 individuals with an average age of 66.8 ± 4.2 years, 71 of study participants were women. The cohort was randomized out of over 843 thousand community-dwelling Upper Silesian inhabitants aged 60–74 years, who agreed to participate in this project. A comprehensive geriatric assessment (CGA), frailty phenotype test, blood tests and bioimpedance body structure analysis was completed for study participants. Functional assessment included: Barthel Index, IADL, MMSE, TUG test, Tinetti Performance-Oriented Mobility Assessment (POMA), and GDS.

Results: Prefrailty was diagnosed in 24.4% of the subjects and frailty in 2.5% subjects more frequently in women. Having one or more positive frailty criteria was positively associated with depression and negatively associated with MMSE score and fat-free mass.

Conclusion: At least 25% of the early-old community-dwelling population would benefit from a frailty prevention program. The frailty phenotype reflects both physical and mental health in this population.

P-0632

Capturing the frail patients' perspective: EQ-5D-3L and PROM-OPAC for hospital at home

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Introduction: Frimley Health provides acute hospital-level care in patients' homes known as 'Hospital at home' (HAH). Service metrics such as length of stay and mortality rate are routinely collected. Two patient reported outcome measures (PROMs), EQ-5D-3L and PROM-OPAC, were introduced in December 2024 to assess the quality of HAH service from the patient's perspective.

Methods: Clinicians completed EQ-5D-3L paper questionnaires with patients on first and last visit. PROM-OPAC was given to patients to independently complete and collected on discharge. Data was collected over 3 months. Patients who lacked capacity or were too unwell to complete the form were excluded.

Results: 40 patients completed EQ-5D-3L. Average health related quality of life (HR-QoL) increased from 0.45 at first visit to 0.49 at last visit. 52.5% patients perceived their health improved after treatment by HAH, 40% felt their health stayed the same and 7.5% rated lower health on the EQ-Visual Analogue Scale.

50 patients completed the PROM-OPAC questionnaire. The majority of patients treated by HAH knew the results of their tests and investigations (86%), knew how serious their problem was (86%), knew what happened next with their healthcare (82%), felt listened to in decisions about their healthcare (86%), felt in control when managing health problems (88%), felt they had enough support where they lived (82%), felt safe living with their health problems (82%), felt safe to continue with their present living arrangements (94%).

Conclusions: There was a significant increase in HR-QoL 0.03 ($p < 0.05$), high enablement and situational security for patients receiving HAH treatment.

P-0633

Assessing physical resilience in older patients admitted to the acute medical unit: insights from recovery trajectories and the clinical frailty scale

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Background: In the Acute Medical Unit (AMU), quantifying the physical resilience—i.e., ability to resist and recover from health stressor—of older patients (65+) may help to decide whether they can recover safely at home or require further hospitalization. The AMU Resilience Monitor project aims for a comprehensive overview of physical resilience factors in this setting. The current study examined the association of the Clinical Frailty Scale (CFS) with functional recovery trajectories of older AMU patients.

Methods: This ongoing study included 266 older AMU patients (74 ± 6 years, 48% female) admitted to the Radboud university medical centre. Functional limitations were assessed using the TOPICS-SF Daily functioning subscale (10 to 40, higher is more limitations). Measurements were taken upon admission, retrospectively two weeks before admission, and one and three months after discharge. Linear mixed models were used to establish recovery trajectories and the role of CFS as predictor.

Results: Patients' average $\pm$ SD functional limitation score at admission was 25 ± 9 . Functional limitations significantly increase prior (5.7, 95%-CI 6.7–4.8) to admission and significantly decrease (-6.3 , 95%-CI -7.3 to -5.2) after discharge. Each point lower CFS was significantly associated with less functional limitations at admission (-1.3 , 95%-CI -0.78 to -1.9) and better recovery (-0.76 , 95%-CI -0.11 to -1.4) in the first month after discharge.

Key conclusions: A higher CFS was associated with more limitations at admission and less recovery after discharge. This offers the first step towards a comprehensive overview of physical resilience and recovery in the AMU.

P-0634

Association of serum iron levels with mortality in adults aged 65 and older

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Iron is essential, but its homeostasis is crucial. Deficiency is common in the elderly and linked to poor outcomes, even without anemia. The prognostic value of normal-low serum iron in non-anemic elderly is unknown. This study assesses this association with mortality in people over 65 without anemia or biochemical deficiency.

A descriptive analysis compared baseline characteristics by serum iron quartiles (sex-specific). A subcohort ($n = 1658$) over 65 years without anemia or biochemical iron deficiency was analyzed. Cox models (sex-stratified) evaluated the association between serum iron quartiles and mortality, adjusting for key confounders (age, comorbidity, nutrition, function).

In men, the lowest iron quartile showed higher mortality risk versus the highest. In women, no iron-mortality association was found; however, high transferrin independently increased mortality risk.

These results show notable sexual dimorphism in the prognostic value of iron metabolism markers in older individuals without apparent hematological issues. Simple iron status parameters may identify differential risk subgroups, pointing to iron metabolism as a potential target in healthy aging and longevity research.

This work provides the first evidence, to our knowledge, that elderly men without manifest anemia or iron deficiency, but with serum iron at the lower limit of the normal-low range, face substantially elevated mortality risk (up to double) compared to those with higher levels.

Short poster presentation

Frailty and resilience

P-0635

2. Social Frailty as a Barrier to Healthcare Among Community-Dwelling Older Adults in Europe

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Introduction: While physical and cognitive frailty are well-known predictors of healthcare needs, the influence of social frailty—reflecting a decline in social connections and support—remains less examined. This study explores the association between social frailty and healthcare utilization among older adults in Europe, drawing on Wave 9 data from the Survey of Health, Ageing and Retirement in Europe (SHARE), which includes over 61,000 individuals aged 50+ across 27 countries.

Methods: Social frailty is measured through a composite index including five indicators: living alone, low social participation, limited social networks, insufficient support, and loneliness. We analyze how these dimensions affect the use of primary (GP visits), secondary (specialist consultations), and preventive healthcare services (e.g., flu vaccination, cancer screenings). Poisson and logistic regression models, adjusted for demographic, socioeconomic, and health-related factors, are employed to assess the association between social frailty and healthcare use. Differences across European welfare regimes are also examined.

Results and discussion: Findings indicate that socially frail individuals are less likely to access both secondary and preventive healthcare, with limited networks and low participation being particularly associated with reduced healthcare use. These associations are most pronounced in Post-Socialist and Mediterranean countries, suggesting that institutional context may exacerbate social disparities. Overall, the results underscore social frailty as a vital correlate of healthcare access in later life and reveal substantial inequalities across welfare systems. Promoting social integration and support networks may improve healthcare equity and ensure timely, appropriate care for aging populations in diverse European settings.

Poster

Frailty and resilience

P-0636

Prevalence of frailty and factors affecting frailty in individuals 65 years and older

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Introduction: The aim of the study was to determine the prevalence of frailty and the factors affecting frailty at elderly people living in Manisa, Türkiye.

Methods: The population of this cross-sectional study included 2874 elderly people living in the urban area in Manisa, Türkiye. The sample size of the study was calculated as 638 using Epi Info 7.0 software. Sample selection was performed by a simple random sampling method of the records of Manisa Provincial Public Health Directorate. The participation ratio was 84.1% (n = 537). The research data were collected by face-to-face interview method from those who accepted the research at their homes. Sociodemographic data questionnaire, FRAIL Scale and KATZ Activities of Daily Living scale were applied to the participants. The data were evaluated using descriptive statistics, chi-square t test and logistic regression analysis.

Results: The mean age of the participants was 71.64 ± 6.37 years. Of note, 50.9% of the elderly participants were women, 42.9% were primary school graduates and 14.0% were living alone. The fragility rate in our study was found to be 23.0%. The risk of frailty is high in the elderly, who have increased age, female gender, not being married, not having formal education, having a chronic disease and who are determined to be dependent according to the Katz Index. It has been determined that as the income-expenditure perception increases, frailty decreases ($p < 0.05$).

Key conclusions: This study revealed that the prevalence of frailty in the elderly has been identified as a common and important problem.

Key words: Frailty, prevalence, elderly.

P-0637

Serum ferritin levels as predictors of frailty severity in older adults

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Introduction: Repeated evidence has reported serum ferritin levels to represent frailty marker, with both high and low values associated with increased vulnerability. Nonetheless, the relationship between ferritin levels and severity of frailty has not been adequately studied.

Methods: 365 consecutive patients aged > 65 years admitted at the Geriatric Unit of AOU Federico II in Naples were recruited. All participants underwent a comprehensive geriatric assessment, followed by calculation of frailty index based on 40 items. To investigate the association between serum ferritin levels and frailty status, we performed an ordinal multinomial logistic regression analysis.

Results: The participants were predominantly male (223, 61%) and presented a mean age of 75 ± 9 years, and were assigned to group of mild (n = 218), moderate (n = 107) or severe (n = 40) frailty according to predefined cutoffs of frailty index. Increasing serum ferritin levels were associated with a higher probability of belonging to the severe frailty group. However, ferritin concentrations did not significantly influence the likelihood of being in mild frailty group (cluster 1).

Conclusions: The results of the present study indicate that elevated serum ferritin levels are significantly associated with frailty severity

in hospitalized older adults. These findings support the potential role of ferritin as a biomarker of patients at increased risk of advanced and may contribute to ameliorate the risk stratification and the targeted interventions in clinical practice.

P-0638

Neighborhood environmental factors and physical activity among taiwanese adults: a GIS-based study

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Background: Insufficient physical activity and unhealthy lifestyles pose serious threats to health and significantly increase the risk of mortality.

Purpose: This study investigated the association between neighborhood environmental factors and physical activity among Taiwanese adults.

Methods: Data were collected from 549 adults aged 18 years and older across northern, central, southern, and eastern Taiwan. Participants' residential addresses were geocoded, and environmental data were obtained using geographic information systems (GIS). Hierarchical logistic regression was employed to examine the relationships between objectively measured neighborhood environments and physical activity levels.

Results: Compared to adults aged 18–34, those aged 35–49, 50–64, and ≥ 65 were more likely to engage in at least 150 min of physical activity per week within the 800-m (OR: 1.83, 2.75, 2.15), 1,000-m (OR: 1.87, 3.02, 2.29), and 3,000-m buffer zones (OR: 1.90, 2.93, 2.24). A positive association was observed between neighborhood slope and physical activity across all buffer ranges. Street intersections were positively associated with physical activity within the 800-m buffer zone. In contrast, residents living on dead-end streets were less likely to meet the 150-min weekly physical activity guideline.

Conclusions: These findings underscore the significance of activity-supportive neighborhood environments in promoting physical activity among adults in Taiwan. Aesthetically pleasing surroundings and well-connected street networks were positively associated with walking behavior, increasing the likelihood of meeting physical activity recommendations.

P-0639

Life-course socio-economic factors associated with frailty in later life

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Introduction: Frailty increases with age and is associated with negative health outcomes as falls, hospitalization, and mortality. Socio-economic situation (SES) in childhood and adulthood are associated with frailty. It is unclear how the interaction of childhood hardship and adulthood SES effects frailty.

Methods: A register-based study using data from national registers and from the Lolland-Falster Health Study, involving individuals aged 50 and above. Frailty status was assessed using a modified version of Fried's phenotype. Logistic regression models with

multiple adjustments were used to analyze the odds of frailty. Causal interactions between economic hardship in adulthood, perception of childhood, self-reported stressful events in childhood, and self-reported educational level were assessed by estimating the relative excess risk due to interaction (RERI).

Results: The study included 10,163 individuals. The percentage of individuals fulfilling 2–5 frailty criteria varied between 17% in the 50–65 age group and 44.9% in the 85 + age group. Women had a higher proportion of fulfilling 2–5 frailty criteria (21.5%) compared to men (17.2%). Socio-economic factors associated with frailty status included perception of childhood, stressful childhood events, educational attainment, and economic hardship in adulthood. A significant causal additive effect on the percentage of individuals fulfilling 2–5 frailty criteria was demonstrated for two composite outcomes: perception of childhood + educational attainment and stressful events in childhood + economic hardship in adulthood.

Conclusion: The study showed that joint exposure to adverse socio-economic factors in childhood and adulthood, potentiated the odds of frailty in older adults. Our findings corroborate the theory of cumulative dis/advantage.

P-0640

Integr'âge—the integration of complementary medicine therapies to standard care for patients on geriatric hospital units presenting with common geriatric syndromes—an implementation study

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Age-related functional decline is linked to various geriatric syndromes and the multimorbidity which can negatively impact quality of life. Thus, there is a need for a more holistic, integrative approach to geriatric care. This study evaluates the feasibility of integration of complementary medicine (CM) therapies alongside conventional care for older patients with common syndromes—namely pain, anxiety, and sleep disorders—in two hospital settings in the French-speaking part of Switzerland.

This is an intervention-observational implementation study in which eight complementary medicine (CM) therapies—hypnotherapy, herbal medicine, aromatherapy, heart coherence, massage, osteopathy, spiritual guidance, and a sensory cart—were integrated into standard care at the two hospitals in Switzerland. Participants, aged 65 and older, presented with pain, anxiety, and/or sleep disorders and were admitted to either an acute care geriatric unit (Morges) or a rehabilitation unit (Geneva). Exclusion criteria included patients with acute delirium or those lacking capacity. Participants actively selected therapies based on their symptoms. Outcomes assessed included acceptability, appropriateness, feasibility, reach, and maintenance, measured through questionnaires completed by both patients and healthcare professionals (HCPs). Recruitment is ongoing, with data collection scheduled from July 2024 to September 2025.

By January 2025, 61 participants (70% women) had been included. Mean age was 81 (SD 8; Min–Max 67–93) years in the acute setting and 87 (SD 6; Min–Max 76–97) years in the rehabilitation setting. 87% of participants presented with pain, 34% with anxiety and 23% with sleep disorders. The most frequently chosen therapies were massage (34%), hypnotherapy (30%) and osteopathy (23%). 80% of HCPs perceived CM therapies as beneficial and reported that integrating them at the hospital was important to respect the patient's needs and beliefs, establish a relationship of trust, facilitate the treatment process and reduce medication. Some HCPs raised concerns

about the feasibility of this implementation in an acute hospital unit, due the short length of stay.

The integration of complementary medicine to standard care in geriatric hospitals for the treatment of common geriatric syndromes appears to be feasible, particularly in rehabilitation setting.

Short poster presentation

Frailty and resilience

P-0641

Measuring mobility as an outcome in randomised controlled trials targeting older frail adults: a systematic review

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Background: Frailty is a multicomponent, age-associated syndrome, with mobility at its core. As many RCTs in frail older adults target mobility, accurate quantification of mobility is essential to establish the efficacy of interventions. This review aims to describe and assess the tools currently used to capture mobility in RCTs.

Methods: Four electronic databases were systematically searched (MEDLINE, EMBASE, AMED, PsychInfo) up to January 5th, 2024. Studies were included if they were an RCT, captured mobility as an outcome measure, population was aged ≥ 65 years, identified as frail or prefrail using a validated frailty instrument. A risk of bias analysis was conducted using the RoB2 tool.

Results: After identifying 4056 papers, removing duplicates and performing screening, 65 studies were included. The most common intervention and frailty tool were exercise (55/65) and the phenotypic model of frailty (39/65), respectively. Performance based tools were most common (60/65) specifically Short Physical Performance Battery, gait speed, and Timed Up and Go (33, 27 and, 21 studies, respectively). Three studies used technology in a laboratory environment.

Discussion: Mobility is usually evaluated as a single faceted concept in RCTs, only considering the physical domain, often at a single time point. This fails to reflect the multifaceted nature of mobility that encompasses cognitive, psychosocial, physical, environmental, and financial domains. In future, technology might address some of these deficits but further work is required before this is deployed routinely in trials to accurately evaluate the efficacy of novel interventions.

Poster

Frailty and resilience

P-0642

Therapeutic landscapes and the functioning-based WHO approach of healthy ageing: results from the German longitudinal urban cohort ageing study (LUCAS)

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Introduction: In 2015, WHO has developed a new conceptual model of Ageing and Health. This functioning-based approach is oriented towards developing and maintaining the functional ability that enables wellbeing in older age. Functional ability is linked both to the individuals and the interaction between them and their environment. This study aimed to examine whether the concept of Therapeutic Landscapes could be valuable to better understand processes supporting functional ability maintenance.

Methods: In 2009 and 2023, two surveys of the Longitudinal Urban Cohort Ageing Study (LUCAS), a representative metropolitan setting in Hamburg, Germany, contained specific questions on therapeutic landscapes. Participants were asked about sources of strength (e.g., nature, faith) to get through difficult phases of life and to identify places (e.g., buildings, green/blue areas) where they feel comfortable and replenish. Changes from robustness to frailty were assessed using the LUCAS Functional Ability Index.

Results: Replies of 1,954 participants (median age 75.6 years, 61.5% female, wave 2009) revealed family (75%), positive thinking (64%) and nature (43%) among the most important sources of strength. Over 14 years (2009–2023), the importance of nature even increased for all grades of functional ability. Participants identified home (32%), private (27%) and public green/blue areas (36%) as their most important places of strength.

Key conclusions: Green and blue areas are important sources to maintain functional ability, and thus avoid frailty and need of care. Cities should provide universal access to safe, inclusive and accessible green/blue spaces for older persons—which is Therapeutic Landscape at its best.

P-0643

Heat-related vulnerability and functional ability in the older population: results from the heat-health action plan study 65+ in Cologne, Germany

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Introduction: Climate change has intensified significantly across the globe in recent decades. Among others, the 65+ age group and those with certain pre-existing illnesses are at risk. To date, functional ability, as proposed in the WHO framework on Ageing and Health, is not addressed in Heat-Health Action Plans. Our study aimed to explore the significance of considering the functional ability to identify older individuals at risk during episodes of heat.

Methods: Face-to-face interviews were performed with 258 adults aged 65+ (mean age: 74.1, 50.8% female) using a standardised questionnaire covering heat-related areas in four carefully selected locations in Cologne, Germany, representing the range in both socioeconomic status (affluent vs. deprived) and thermic exposure (less vs. highly heat-impacted). Functional ability was assessed using the LUCAS Functional Ability Index (robust, post-robust, pre-frail, frail) and disability (care level) according to the German Medical Advisory Services.

Results: The main finding of this study is that the distinction between functionally robust (62%) and functionally disadvantaged (38%) participants has a significant impact on identifying heat-related vulnerability which cannot be identified using chronological age groups (65–74: 55%, 75+: 45%). During heat events, functionally disadvantaged persons perceived significantly higher levels of heat strain, were significantly more worried about their health and perceived

significantly more symptoms such as tiredness, headaches or dizziness.

Key conclusions: Considering functional ability by screening community-dwelling older people with a population-based questionnaire on functional resources and risks proved to be a good asset in evaluating persons with high heat-related vulnerability in the heterogeneous older population.

P-0644

Individualized resistance training based on force–velocity profiles to enhance muscle power and functional ability in older adults

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Muscle power is essential for maintaining functional ability in older adults [1], and power-focused resistance training (RT) is a proven strategy for improvement [3]. However, traditional RT programs often fail to account for the variability in muscle force and velocity capabilities observed in older adults [2]. Since adaptations to RT are load- and velocity-specific [3], the one-size-fits-all approach may limit its effectiveness. Therefore, this study examines whether individualized power-focused RT, tailored to the force–velocity (F–v) capabilities, leads to superior outcomes compared to non-individualized training.

The F–v profiles of 99 adults aged 55–85 years were established through a baseline test on a pneumatic leg press. Maximal force and velocity were expressed as z-scores relative to a younger reference group (30 males and 30 females aged 20–35 years). The force–velocity z-score difference was used to identify force- and velocity-deficits. Those with a deficit were enrolled in a 12-week intervention and randomly assigned to an individualized (IND) or non-individualized (NON-IND) RT group. Twice a week, IND participants trained according to their deficit (high-load for force deficit, low-load for velocity deficit), while NON-IND followed a standardized protocol. Muscle power, F–v characteristics, and functional ability were assessed pre-, mid- (6 weeks), and post- (12 weeks) intervention. Currently, baseline testing of 76 participants is completed. Out of the included participants, 56 have completed mid-testing and 47 have completed post-testing so far. Data collection will be completed in June, with analysis of the results to follow shortly thereafter. These results will be presented at the EuGMS conference.

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P-0646

Wearable-derived trajectories of physical recovery after oncologic surgery in adults aged 70+: a pilot study

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Introduction: The physical recovery trajectories of older patients after major oncologic surgery remain largely unknown. This pilot study evaluates recovery trajectories and the feasibility of using wearable devices to track physical recovery after surgery.

Methods: TOPFORM is a prospective pilot study conducted at two hospitals in the Netherlands. Patients aged ≥ 70 years scheduled for solid tumor resection receive a wrist-worn wearable device and undergo a geriatric assessment at their pre-operative visit. Patients receiving neoadjuvant therapy are excluded. Baseline wearable data—including step count, heart rate variability, and sleep—are collected between the pre-operative visit and surgery. Follow-up continues until three months post-surgery or the initiation of adjuvant chemotherapy. Recovery is assessed via step count relative to baseline.

Results: Of 46 eligible patients, 29 agreed to participate (63% recruitment rate). Four withdrew before baseline completion (two due to metastatic disease, two due to dermatitis from the wearable). Among the 25 participants (median age: 76 years; 44% female; 44% pancreatic cancer), two withdrew before completing the full follow-up (92% retention). Twelve participants have completed the full follow-up to date. Participants wore the device for a median 97% of follow-up days. Currently, there is not enough data to draw conclusions on recovery trajectories. Data collection is ongoing, and we anticipate including approximately 50 participants by the time of the conference.

Conclusion: Preliminary data from TOPFORM suggest high feasibility of wearable-based recovery monitoring. Additional data available at the time of the conference will provide initial insights into physical recovery trajectories in older adults after oncologic surgery.

P-0647

Survival outcomes in older ICU survivors: insights from geriatric vs other other units

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Background: Beyond age and pathology, the higher mortality of older patients during and after intensive care correlates strongly with

geriatrics factors including autonomy and frailty. A global geriatric approach could improve outcomes for those patients.

Methods: This multicenter retrospective cohort study compared the survival outcomes among patients aged > 80 years following intensive care unit hospitalization, based on their subsequent admission in geriatrics units (GU) versus other units (OU).

Primary outcome was survival rate at 3 months. Secondary outcomes included in-hospital mortality, hospital length of stay and factors associated with mortality and re-hospitalisation.

Results: A total of 656 patients > 80 years old were included from 2018 to 2023, excluding covid period from January 2020 to June 2022. Among them, 458 patients were admitted in the OU cohort and 198 in the GU cohort.

At 3 months, survival did not significantly differ between GU and OU groups (mortality 19% in GU Vs 17% in OU, $p = 0.609$). Nonetheless, patients in the GU cohort were significantly older (median 85 Vs 83 years $p < 0.001$), exhibited greater frailty (ADL (6 [5–6] Vs 6 [6–6]) and CFS (5 [3–6] Vs 4 [3–5])) and had a higher prevalence of malnutrition (Body Mass Index < 22 kg/m² 33.3% Vs 24%). Male patients were more prevalent in OU (58% Vs 47%).

Key conclusions: This study found no reduction of mortality at 3 months with admission in geriatric units compared to other units. However, the GU cohort exhibited significantly higher key factors associated with mortality.

P-0648

Prognostic utility of the Frail-VIG Index in geriatric patients admitted to an acute care unit

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Introduction: Since the establishment of the geriatric service at our hospital in 2021, a multidisciplinary care model has been implemented for both outpatient and acute inpatient settings. This shift enabled the integration of the Frail-VIG index—validated in 2017 by Amblàs-Novelles et al. [1]—into comprehensive geriatric assessments.

The Frail-VIG index evaluates 25 deficits across eight domains, scoring from 0 to 1 and classifying frailty as: non-frail (< 0.20), initial (0.21–0.35), intermediate (0.36–0.50) or advanced frailty (> 0.50).

Objective: Analyze the association between frailty levels and clinical and prognostic variables in patients admitted to an acute geriatric unit.

Methods: A retrospective study of 104 admissions in 2024, assessing age, gender, length of stay, discharge outcome, Barthel index, Lawton-Brody index, Frail-VIG index, dysphagia, polypharmacy, and primary diagnosis.

Results: The study included 104 patients of which a 19.2% died. The mean Frail-VIG score was 0.49 (men: 0.50; women: 0.48), with 38.5% exhibiting advanced frailty (> 0.50 : men: 42.3%; women: 34.6%). Among deceased patients, the Frail-VIG score was higher (0.54 vs 0.47 in discharged patients), associated with increased dysphagia (85% vs 67.9%), polypharmacy (95% vs 85.7%), and reduced functional recovery (Barthel index: 31.2 to 35.5 points overall; 10% of deaths showed worsening).

Conclusions: Elevated Frail-VIG scores, indicative of advanced frailty, were associated with higher mortality, dysphagia, polypharmacy, and poorer functional recovery in geriatric inpatients. Its systematic use enables frailty stratification and guides therapeutic effort adjustments in hospital settings.

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P-0649

Sleep quality predicts frailty and physical decline in functionally preserved geriatric outpatients

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Background: Sleep quality impacts aging, but its outpatient frailty role is unclear. We assessed its association with frailty and physical performance in preserved-capacity patients.

Methods: From 225 geriatric outpatients (mean age 83.2 ± 7.9 , 68% female), we analyzed 80 with SATED sleep scores (0–10, lower = worse), excluding those with Barthel < 60 or MMSE < 18 . Frailty (VIG Fragile Index), physical performance (SPPB), and covariates (age, gender, Barthel) were evaluated. Correlations and regressions tested SATED's relationship with VIG Fragile and SPPB, stratified by age (> 75 vs. 65–74).

Results: The 80-patient subgroup had Barthel 85.2 ± 25.6 and VIG 0.28 ± 0.14 . Mean SATED was 7.6 ± 2.4 , SPPB ($n = 67$) 7.4 ± 3.1 . Lower SATED correlated with higher frailty ($r = -0.35$, $p = 0.002$) and lower SPPB ($r = 0.31$, $p = 0.01$). Adjusted for age, gender, and Barthel, each 1-unit SATED decrease predicted a 0.015 VIG increase ($\beta = -0.015$, $p = 0.003$) and a 0.45 SPPB drop ($\beta = 0.45$, $p = 0.02$). Effects were stronger in patients > 75 ($n = 62$, $r = -0.42$, $p = 0.001$ for VIG; $r = 0.36$, $p = 0.008$ for SPPB).

Conclusion: In outpatients with preserved function, poor sleep quality predicts frailty and physical decline, notably after 75. Sleep assessment may guide early interventions. Larger studies are warranted.

P-0650

Influence of gender on mortality in heart failure and frail elderly: a metanalysis

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Object: This metanalysis investigates the role of gender in influencing the association between frailty and Heart failure and its impact on mortality.

Methods: PubMed, Embase, Scopus, and Cochrane databases were used. Out of 10,638 initial articles, 14 were selected, using PRISMA algorithm.

Results: In a HF Frail population of 1,511 women and 1,618 men, gender had a statistically significant ($p < 0.001$) role in predicting mortality, with a 38% lower risk in women than men. To reduce the heterogeneity, sub-analyses were conducted, stratifying by setting, age, and study design. In the frail patients < 69 years of age, despite low heterogeneity (9%), gender did not affect mortality ($p = 0.43$). In 70–79 year aged group, a low heterogeneity ($I^2 = 19\%$) and a

significant ($p < 0.0001$) higher survival of women compared men was found, with a 74% lower mortality risk. Above 80 years, the heterogeneity also remained low ($I^2 = 23$) and gender continues to affect mortality with a percentage of 64% in favor of HF Frail women. By setting, the studies show very low heterogeneity ($I^2 = 0.00\%$) but only a trend in significant difference ($p = 0.05$) between women and men. By setting, gender did not affect the risk of mortality. By study design, the perspective studies, although influenced by a substantial heterogeneity ($I^2 = 60\%$), showed a significant ($p = 0.03$) difference with HF Frail women surviving more (43%) than HF Frail Men.

Conclusions: This metanalysis, recruiting 3129 Frail patients with Heart failure, demonstrated a higher all-cause mortality risk in Men compared to Women, also when sub-analyses were performed.

P-0651

Describing the components of frailty in a population with parkinsonism

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Introduction: Frailty is not well characterised in Parkinson's disease and other neurodegenerative diseases. We describe components of frailty in a randomised controlled trial (RCT) population of people with parkinsonism (PwP).

Methods: Data was collected as part of the PRIME-UK RCT baseline assessment, including age and gender, weight (kg), "timed up and go" (TUG), bilateral grip strength (kg) using a handheld dynamometer, and non-dominant calf circumference (cm). Clinical frailty score (CFS) was determined based on clinical assessment and a score of ≥ 5 indicated frailty. We compared components of frailty using statistical tests comparing the frail and non-frail groups.

Results: We recruited 214 people with parkinsonism. 59% were male ($n = 48$) and 38% ($n = 82$) were frail. The frail group were older (78 vs. 73 years; $p < 0.001$), had weaker grip strength (right: 19.1 kg vs. 27.8 kg; left: 17.8 kg vs. 26.0 kg; $p < 0.001$) and TUG performance (TUG 23.0 vs. 11.7 s; $p < 0.001$) compared to the non-frail group. Whilst weight and calf circumference were lower in the frail group (72.9 kg vs. 77.2 kg and 36.3 cm vs. 37.4 cm, respectively), the differences were small and have a moderate probability of being due to chance ($p = 0.07$).

Conclusions: We highlight the associated between frailty and impaired physical performance in parkinsonism. Further research could explore how to best address these multidimensional syndromes that are associated with significant morbidity.

Short poster presentation

Frailty and resilience

P-0652

The association between intrinsic capacity and functional ability in older adults—exploring the role of the physical environment

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Introduction: Ageing in place has been promoted in the Netherlands, to encourage optimal functional ability (FA) and independent living among older adults. FA is likely dependent on intrinsic capacity (IC; a composite measure of an individual's mental and physical capacities) and its interaction with the physical environment in which people live. This study investigates the association between IC and FA and the interaction with the physical environment in older adults.

Methods: Data of men and women of the Longitudinal Aging Study Amsterdam (LASA) were used (N = 1637). Decline in functional limitations (FL) over six years served as the measure of FA. An IC score (0–100) was developed, incorporating all five IC subdomains (cognition, sensory, locomotion, psychology and vitality). Data on urbanization, air pollution: particulate matter (PM10) and nitrogen dioxide (NO₂), neighborhood socio-economic status and walkability were used as characteristics of the physical environment. Multiple logistic regression analyses were conducted to investigate the association between IC and FL decline (yes/no). Interaction terms were tested for each environmental variable and IC, using FL decline as outcome.

Results: Higher IC was associated with lower odds of FL decline (OR:0.90, 95% CI:0.88–0.93). A significant interaction was only observed between IC and PM10 (p = 0.098). Stratified analyses using a PM10 cutoff of 30 µg/m³ showed a stronger association between IC and FL decline in lower PM10 environments (OR:0.84, 95% CI:0.76–0.92), compared to higher PM10 environments (OR:0.92, 95% CI:0.89–0.95).

Conclusion: Particulate matter appears to mitigate the protective association between IC and FL decline in older adults.

Poster

Frailty and resilience

P-0653

Predictive validity of the maintools for detecting frail older people in primary care: the Detfragil2 study

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Introduction: Both Spain and the Basque Country are experiencing rapid population aging, with a widening gap between total life expectancy and healthy life expectancy. This underscores the urgent need for early frailty detection in primary healthcare (PHC) to reduce dependency and promote active aging. The DETFRAGIL2 study aims to assess the predictive validity of key frailty detection tools in PHC, considering functional impairment, hospital admission, institutionalization, and 12-month mortality. Additionally, it will evaluate the effectiveness of the current frailty screening strategy used by the Spanish National Health System.

Methods: This is a prospective observational cohort study conducted in five PHC centers in Bilbao (Basque Country). A total of 323 participants aged ≥ 70, without impairment in activities of daily living (Barthel ≥ 90), will be assessed using physical performance tests (gait speed, Short Physical Performance Battery [SPPB], Timed Up and Go test [TUG]), frailty questionnaires (Fried, FRAIL, VIDA), and the current SNS frailty screening strategy. Predictive validity will be analyzed using logistic regression and Cox proportional hazards models to determine optimal cutoff points.

Results: Fieldwork will take place from April to June 2025, with follow-up at 6 and 12 months. Baseline results, including frailty prevalence and the profile of frail individuals, will be available by the time the study is presented.

Key conclusions: DETFRAGIL2, conducted within a research training program, aims to establish a framework for frailty screening, optimize early detection in PHC, and explore deficits in instrumental activities of daily living (IADL) as an early detection method.

P-0654

Longitudinal association between frailty and HIV-associated neurocognitive disorder (HAND): a Mexican prospective study

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Introduction: Geriatric syndromes such as frailty may be more prevalent and present earlier in people aging with HIV, which in turn may negatively impact on other relevant outcomes such as cognition. Therefore, we aimed to investigate the longitudinal association between frailty and the risk of incident HIV-associated neurocognitive disorder (HAND).

Methods: Longitudinal analysis of 194 participants followed in a cohort of people living with HIV aged ≥ 50 years at a referral center in Mexico City. Participants underwent two standardized geriatric assessments at least one year apart. The Antinori criteria were used to determine HAND, and the Fried phenotype was used to assess frailty. Inverse probability weighted Cox models adjusted for confounders extracted from a directed acyclic graph (i.e., age, educational level, detectable viral load, diabetes, stroke and ischemic heart disease)

were used to determine the association between frailty and maintaining or progressing within HAND categories.

Results: Participants' median age was 55 (53–61) years, 167 (86%) were men, and with a median follow-up of 2.3 (1.6–3.1) years. 129 (66.4%) participants were robust, 62 (31.9%), pre-frail and 3 (1.5%) frail. For the main outcome, the adjusted model found an independent and statistically significant association between frailty and maintaining or progressing within HAND categories (HR 12.45; 95% CI 6.4–24.2; $p = < 0.001$).

Conclusions: A condition susceptible to interventions such as frailty increased the incident risk of cognitive impairment in older people with HIV. Tailored interventions to mitigate these outcomes should be conceptualized early in the continuum of care for people aging with HIV.

P-0655

A comparative study of symptom clusters and frailty in older adults: cancer vs. non-cancer populations

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Objectives: This study aims to examine the relationship between symptom clusters (depressive symptoms, sleep disturbances, and pain) and frailty in older adults with and without cancer.

Methods: Data from two cross-sectional studies conducted in Changsha and Hong Kong, China, were used. Participants included older adults living in nursing homes and older cancer patients attending outpatient clinics. The study employed questionnaires to assess frailty and symptom clusters. Statistical analyses were conducted using SPSS version 26.0 and the PROCESS macro for mediation and moderation analyses.

Results: A total of 399 participants were involved, with 227 older cancer patients and 172 nursing home residents. Nursing home residents were older, had a lower BMI, were less likely to be married, and had lower education levels. Significant correlations were found between frailty, depressive symptoms, sleep disturbance, and pain in both groups. Mediation analysis showed that sleep disturbances significantly mediated the relationship between depressive symptoms and frailty in both groups. Pain interference significantly moderated this relationship only in older adults without cancer.

Conclusions: The study highlights the complex interplay between depressive symptoms, sleep disturbances, pain, and frailty in older adults, with differences observed between older adults with and without cancer. The findings underscore the need for tailored interventions to reduce depressive symptoms and sleep disturbances to manage frailty, with special emphasis on pain management in older adults without cancer.

P-0656

The effect modification of systolic blood pressure on the association of frailty and cardiovascular disease in community-dwelling adults

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Background: Frailty has been increasingly recognized as an important predictor of cardiovascular disease (CVD) risk; however, the modifying role of systolic blood pressure (SBP) in this association remains unclear. This study aimed to investigate the impact of SBP on the relationship between frailty and CVD risk.

Methods: This study utilized data from the China Health and Retirement Longitudinal Study (CHARLS), including 7,210 community-dwelling adults aged ≥ 45 years. Frailty status was assessed using a constructed frailty index, and participants were stratified based on SBP levels. The primary outcome was incident CVD events (myocardial infarction or stroke) during follow-up. Cox proportional hazards models were employed to examine the association between frailty and CVD risk, with SBP evaluated as an effect modifier.

Results: During 53,531 person-years of follow-up, 1,663 CVD events occurred, with an overall incidence of 31.1 per 1,000 person-years. Frailty was associated with a higher CVD incidence, particularly among those with SBP 120–129 mmHg (HR 3.13, 95% CI 2.22–4.42). The risk increase was 28% (SBP < 120 mmHg), 54% (120–129 mmHg), and 25% (≥ 130 mmHg) per SD frailty index increment. Spline analysis showed a nonlinear trend, with risk leveling off in low and high SBP groups but rising steadily in the 120–129 mmHg category. Frailty consistently increased CVD risk across all SBP strata.

Conclusion: Frailty is a significant risk factor for CVD, and SBP modulates this relationship. These findings highlight the need for individualized blood pressure management strategies to optimize CVD prevention in frail populations.

P-0657

The relationship between intrinsic capacity and its domains with frailty in hospitalized older adults

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Introduction: This study aims to examine the relationship between intrinsic capacity (IC) and its domains with frailty in hospitalized individuals aged 60 years and older.

Methods: Inpatients aged 60 years or older were included in study. IC was assessed across five domains: locomotor (4-m gait speed), sensory (self-reported hearing/vision), cognitive (MMSE), psychological (EuroQOL-5D), and vitality (MNA). IC was scored from 0 to 5, with 1 point per normal domain; a higher score indicated greater IC. Frailty was measured using the FRAIL scale. Associations were analyzed by multivariable logistic regression.

Results: A total of 245 older inpatients were recruited. Frailty was identified in 58% of the participants. Patients with a low IC score were significantly older and more frail (p values < 0.001). Within IC domains, locomotor impairment (4-m gait speed < 0.8 m/s; OR: 3.8, $p = 0.003$), vitality impairment (MNA < 11 ; OR: 5.2, $p < 0.001$), and psychological impairment (EuroQOL-5D score ≥ 2 ; OR: 3.6, $p = 0.006$) showed the strongest associations with frailty. Sensory and cognitive impairments were not significantly related when evaluated

individually. However, combined impairments in multiple IC domains markedly increased the likelihood of frailty. The strongest association was found in the coexistence of locomotor and vitality impairments (OR: 5.6, $p = 0.003$).

Key conclusions: Frail older inpatients have lower intrinsic capacities, particularly in the domains of locomotion and vitality. Routine assessment of these domains may facilitate earlier and more effective management of frailty.

P-0658

Living and eating alone on depressive symptoms by physical frailty status: a cross-sectional study based on the Korean Frailty and Aging Cohort Study

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Introduction: General health conditions in older adults, including their mental health, differ greatly based on their physical health conditions rather than age. Thus, we evaluated how lifestyle factors, which included eating and living, affected depressive symptoms in older adults based on their physical frailty status.

Methods: We included older adults aged 70–84 years from the Korean Frailty and Aging Cohort Study (KFACS).

Based on their eating and living patterns, we classified them into four groups: “lived and ate with others,” “lived alone yet ate with others,” “lived with others yet ate alone,” and “lived and ate alone.” Depressive symptoms and physical frailty were measured using the Korean version of the Geriatric Depression Scale and modified version of the Cardiovascular Health Study (CHS) Frailty Index, respectively.

Results: A total of 2,702 participants, 11.4% lived with others yet ate alone, and 19.7% lived and ate alone. For robust older adults, after adjusting for variables, the “ate alone” group was significantly related with depressive symptoms, and the “lived and ate alone” group showed a higher risk of depressive symptoms. In the prefrail to frail participants, the “lived and ate alone” group was at a higher risk of depressive symptoms.

Conclusion: Eating and living alone are key risk factors for depressive symptoms in community-dwelling older adults regardless of their physical frailty status. Therefore, social interventions are needed for both physically frail and healthy older adults to support their eating patterns and increase opportunities for social interaction.

Short poster presentation

Frailty and resilience

P-0660

Mental health problems in midlife and the longitudinal association with frailty up to 35 years later: the HUNT study

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Introduction: Not much is known about life-course risk factors that contribute to the development of frailty in later life. This study aimed to determine whether mental health problems in midlife are associated with the development of frailty after the age of 70, as measured by two sets of frailty criteria.

Methods: This population-based longitudinal study utilised data from the Trøndelag Health Study (HUNT). The baseline sample consisted of 27,958 participants aged 35 to 60 in HUNT1 (1984–1986), while 9,956 participants from HUNT4 70 + (2017–2019) were included at follow-up. We conducted logistic and linear regression models using self-reported mental health problems at baseline (HUNT1) as the exposure and the categorical Fried criteria and the continuous Frailty Index (HUNT4-FI) as outcomes up to 35 years later (HUNT4 70 +). We adjusted for baseline data on age, sex, education, pre-existing diseases, marital status, physical activity, and alcohol consumption.

Results: Preliminary analyses from the complete-case study sample ($N = 8,386$) showed that reporting mental health problems in midlife was associated with a more than two-fold increased odds of developing prefrailty/frailty, according to the Fried criteria (OR 2.56, 95% CI 1.85–3.55) at follow-up. In participants reporting mental health problems in midlife, HUNT4-FI scores were 0.06 points higher at follow-up (CI 0.05–0.07), compared to those who did not report such problems.

Conclusion: Midlife mental health problems showed longitudinal associations with frailty more than three decades later, regardless of frailty criteria used. Mental health problems in midlife may represent a modifiable target for preventing and postponing frailty in the population.

Poster

Frailty and resilience

P-0661

Blood-based biomarkers for frailty detection in primary care settings

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Introduction: Facing demographic challenges, frail older adults require targeted support. Thus, their efficient identification is crucial. We aimed to build sex-specific predictive models for frailty using blood-based biomarkers available in primary care.

Methods: We analyzed baseline data from the ActiFE cohort study (Ulm, Germany, 2009/2010), which included 1188 community-dwelling adults aged 65 and older. Frailty was estimated using a frailty index (eFI), where an $eFI \geq 0.2$ identified frail participants. Routine blood-based biomarkers associated with frailty were selected according to evidence in previous literature. Sex-specific logistic regression analyses were performed adjusting for age and medications that could influence biomarker levels i.e. statins.

Results: Models for both sexes included haemoglobin, leucocytes, urea, gamma-glutamyltransferase (GGT), total and high-density lipoprotein cholesterol and C-reactive protein (CRP). In men, alanine-aminotransferase (ALT) was included additionally. Using a cut-off of 0.3 for the estimated probability of being frail, the models showed low sensitivity (men: 0.508, women: 0.643) and low positive predictive value (PV) (men: 0.474, women: 0.522). In contrast, detection of non-frail individuals was accurate with high specificity (men: 0.873, women: 0.796) and high negative PV (men: 0.888, women: 0.865). Models AUC were 0.787 and 0.804 in men and women, respectively. Notably, GGT was particularly strong as a marker, an association previously poorly explored.

Conclusion: With a high specificity and negative PV, models including routine blood-based biomarkers could be a cost- and time-efficient method to identify non-frail individuals. This approach could support the initial step of a serial frailty screening strategy in outpatients' settings.

P-0662

Polypharmacy among frail elderly with dementia

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As the global population ages, geriatrics becomes ever more crucial in medicine. This study primarily aims to explore the correlation between polypharmacy and frailty, while also analyzing the medications prescribed in long term care facilities. Additionally, it seeks to assess the prevalence and severity of dementia, along with its treatment approaches.

A total of 102 participants were included in this study. 67.7% were females, and median age of the group was 78 years. Frailty was evaluated using the Clinical Frailty Scale. Polypharmacy was defined as concomitant use of five or more medications per day. Information about dementia was obtained from the patients' medical history. Polypharmacy was positively associated with frailty. The number of medications correlated with the degree of frailty (Kendall's tau = 0.14; $p < 0.05$). Patients with more prescribed medications were more frail than those with fewer medications. Polypharmacy was present in 96.1% of the patients. The largest group of prescribed drugs were nervous system acting medications. The majority of these were neuroleptics. According to the medical history dementia was present in 73.5% of the patients.

This study confirms the association of polypharmacy and frailty. It also demonstrates a high prevalence of polypharmacy in the long term care facilities.

Key words: Polypharmacy, Frailty, Dementia

P-0663

Co-designing a multicomponent intervention to combat informal carers' social frailty: a roadmap

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Introduction: Social frailty, characterised by reduced social interactions and support, poses a significant threat to healthy aging,

particularly among older carers. This vulnerability undermines their access to external support and connections, which are crucial for managing the impact of caregiving on their well-being. This study reports on our experience co-designing a multicomponent intervention that empowers carers to optimise use of social resources and health services.

Methods: Content analysis and deductive mapping were employed to identify evidence-based interventions to alleviate social frailty. This process involved four stages: 1) a review of the literature identified primary studies demonstrating effectiveness in improving any of the social frailty constructs; 2) studies were prioritised based on quality criteria and relevance to the Australian context; 3) the TiDieR framework was applied to all interventions to enable replicability; and 4) the selected interventions were mapped to the COM-B framework, the Theoretical Domains Framework (TDF), and the FASI (Feasibility, Affordability, Sustainability, Importance) matrix.

Results: The mapping process identified relevant components for a core intervention with optional supplements. Each component was justified based on its theoretical alignment, evidence of effectiveness, and affordability within existing resources.

Key conclusions: This process offers a structured approach to planning social frailty strategies and piloting them under real-life circumstances. Our next research steps involved consumer consultation with older carers via Nominal Group Techniques and in-depth interviews with social and health care providers to refine the intervention components and delivery mode. This study provides a foundation for designing targeted interventions to minimise social frailty.

Short poster presentation

Frailty and resilience

P-0664

The impacts of an mHealth platform-enabled lifestyle-integrated multicomponent exercise program on reversing pre-frailty in community-dwelling older adults: A randomized controlled trial

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Introduction: Multicomponent exercise has robust evidence supporting their effectiveness in preventing pre-frailty/frailty. However, a generalizable model for managing frailty through exercise in real-world settings is still not well defined. A promising approach is to incorporate exercise into daily life. We have developed a lifestyle-integrated multicomponent exercise program supported by a mHealth platform. The objective of this research was to assess its effectiveness and elucidate its potential mechanisms for reversing pre-frailty.

Methods: In this prospective, two-arm parallel randomized controlled trial, 134 pre-frail older adults were enrolled from the Fujian Prospective Ageing Cohort. Participants were randomly assigned to either the intervention group (integrating multicomponent exercise through a mHealth platform) or control group (health education). The primary outcome was the proportion of participants exhibiting pre-frailty after a 6-month intervention. Secondary outcomes included changes in functional fitness, body composition, bone mineral density, physical activity, and sedentary behavior.

Result: Of the 134 participants, 52 (77%) from the intervention group and 54 (81%) from the control group completed the study. After 6 months, the proportion of pre-frailty was significantly lower in the

intervention group compared to the control group (32.8% vs 98.5%, $P < 0.001$). Improvements were observed in five frailty components, except for unintentional weight loss. The intervention group also demonstrated significant enhancement in functional fitness, bone mineral density, and body composition ($P < 0.05$).

Conclusion: The lifestyle-integrated multicomponent exercise program, facilitated through a mHealth platform, shows promising beneficial effects on reversing pre-frailty, improving functional fitness and body composition, and decreasing sedentary behavior in community-dwelling older adults.

Poster

Frailty and resilience

P-0665

Predictive validity of social frailty typologies on physical frailty, depressive symptoms and self-rated health at 2 years: a latent class analysis

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Background: Social frailty is a complex construct that links social determinants to adverse health outcomes. Gaps remain regarding lack of clear composite patterns of social frailty and their risk of adverse outcomes amongst healthy older persons. We aim to identify distinct typologies of social frailty and examine their predictive validity for physical frailty, depressive symptoms, and self-rated health at 2-years.

Methods: We assessed 230 community-dwelling participants (mean age: 67.2 ± 7.4 years; mean FRAIL: 0.17 ± 0.42) from GeriLABS-2 study for social frailty using validated SFS-8 scale. Outcome measures were: 1) Physical frailty using Fried Frailty Phenotype; 2) depressive symptoms using 15-item Geriatric Depression Scale; and 3) EuroQoL-5D self-rated health. We performed latent class analysis to identify distinct patterns of social frailty, and logistic regression to examine the predictive validity of identified patterns with outcomes adjusted for covariates and baseline values.

Results: We identified three social frailty typologies: Socially Non-Frail (77.4%, S1), Decreased Social Resources (11.3%, S2), and Decreased Social Need Fulfilment and Financial Resources (11.3%, S3). Compared with S1 (Non-Frail), S2 comprised older men with lower educational attainment who were less likely to have friends for advice, whereas S3 participants tended to live alone, eat alone and have more limited financial resources for medical services. Amongst 193 (83.9%) who completed 2-year follow-up, S3 significantly predicted frailty (OR: 3.95, 1.22–12.78), depressive symptoms (OR: 3.28, 1.25–8.62), and self-rated health (OR: 4.58, 1.30–16.12), but not S2.

Conclusions: Our study explicated the heterogeneity of social frailty typologies with distinct sociodemographic profiles and 2-year risk of adverse outcomes, highlighting the need for interventions tailored by social frailty subtypes.

P-0666

Factors influencing frailty screening by geriatric care nurses in an acute hospital: a qualitative analysis using the theoretical domains framework

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Background: As Singapore's population ages, so will the number of elderly patients admitted to hospitals. Determining a patient's frailty level is crucial for tailoring treatment priorities and goals to individual needs. This study used the Theoretical Domains Framework to identify barriers and facilitators to inpatient frailty screening performed by geriatric care nurses in an acute hospital.

Methods: 11 geriatric care nurses of varying experience in an acute hospital were invited for a semi-structured interview through purposive sampling till saturation. Framework analysis was conducted by two independent study team members. Theoretical domains relevant to behavioral change were identified if they fulfilled the following criteria (1) relative high frequency of specific beliefs, (2) presence of conflicting beliefs, and (3) evidence of strong beliefs that may impact on behavior. All three criteria were considered concurrently to judge relevance of domains. Final results were concluded by consensus.

Results: 10 key themes emerged: knowledge, training, professional role, beliefs about capabilities, beliefs about consequences, goals and prioritization, memory and attention, environmental context, emotion and behavioral regulation. Nurses were divided in their knowledge, beliefs about capabilities and beliefs about consequences of frailty screening. Training was often informal, with many citing the lack of formal training. Nurses saw it as their professional role to screen frailty, although role duplication was raised as an issue. Many struggled with memorization of CFS but this was ameliorated by readily accessible references. Whilst frailty scoring was seen as lower priority to more urgent tasks, protocolization prompted nurses to complete scoring with no resultant perceived burnout. Feedback was lacking although much appreciated when given.

Conclusions: Our findings highlighted the need to enhance education and training, to clarify role responsibilities, and to improve on feedback to nurses. Further studies should explore doctors' views regarding the responsibilities of performing frailty screening to address interprofessional dynamics.

P-0667

Mitochondrial dysfunction as a biomarker of frailty: results from the FRAMITO study

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Introduction: Frailty syndrome often coexists with multimorbidity, sharing several risk factors and outcomes. The FRAMITO project aimed to evaluate biomarkers of mitochondrial dysfunction associated with frailty, with and without multimorbidity.

Methods: The FRAMITO cross-sectional study enrolled 82 individuals aged 65 + from inpatient and outpatient clinics at the Geriatrics Units of the University Hospitals of Ferrara and Monza (Italy). Participants were categorized into three groups: 25 without frailty and multimorbidity (NFWoM), 25 with frailty but not multimorbidity (FWoM), and 32 with frailty and multimorbidity (FWM). Blood samples were collected to isolate Peripheral Blood Mononuclear Cells (PBMCs), CD14, CD3, and CD19 subpopulations and to analyze mitochondrial dysfunctions through functional studies and untargeted metabolomics. FRAMITO is supported by the European Union–Next Generation EU (Mission 4-C2, CUP:2022NSN355).

Results: Preliminary results comparing the NFWoM (mean age 73 years, 29% females) and FWM (mean age 88 years, 65% females) groups, did not show any significant differences in reactive oxygen species and mtDNA copy number. Concerning cellular energy metabolism, FWM participants had lower PBMC spare respiratory capacity (9.66 vs 10.68), namely the respiratory machinery available to respond to sudden energy demand, than those NFWoM. Moreover, all mitochondrial bioenergetics (basal, ATP-linked, and maximal respiration, and spare respiratory capacity) were significantly down-regulated in the CD14 subpopulation of FWM individuals.

Key conclusions: The coexistence of frailty with multimorbidity in older adults is associated with a reduced mitochondrial metabolic efficiency. These preliminary data support the need to identify targets for interventions to counteract the development of frailty and multimorbidity.

P-0668

Diagnostic performance of frailty screening tools in primary care: the DETFRAGIL1 study

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Introduction: Frailty is a geriatric syndrome associated with increased risk of adverse outcomes. Early identification in primary care (PC) is essential to prevent disability and optimize healthcare resource use. However, current screening tools show variable diagnostic performance and may lead to false positives.

Methods: A cross-sectional study was conducted in individuals aged ≥ 70 years without impairment in basic activities of daily living (BADL; Barthel Index ≥ 90). The diagnostic performance of gait speed (GS), Short Physical Performance Battery (SPPB), Timed Up and Go (TUG), the FRAIL scale, and the VIDA questionnaire for instrumental activities of daily living (IADL) was evaluated using the Fried frailty phenotype as the gold standard. Sensitivity, specificity, and predictive values were calculated. Combinations of performance-based tests with FRAIL and VIDA were also assessed.

Results: Preliminary findings suggest that individual tools show moderate sensitivity and specificity. Combining performance-based tests with IADL and FRAIL assessments improves diagnostic accuracy. Optimal cut-off points for frailty detection vary across tools and differ from current national recommendations.

Conclusions: The combined use of screening tools enhances frailty detection in PC, reducing false positives and supporting targeted interventions. Results may inform improvements to the Spanish

National Health System (SNS) strategy, promoting earlier and more efficient care for older adults.

P-0669

Digital biomarkers for physical frailty: an automated measurement of the sit-to-stand test using AI-based motion tracking technology

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Introduction: The increasing prevalence of frailty and people in need of nursing care among the elderly places a significant burden on healthcare systems worldwide. The early detection of frailty and timely intervention can prevent its progression to severe disability. However, existing frailty assessment tools lack simplicity, quantifiability, and objectivity. This study aimed to develop a digital application using a motion tracker to assess frailty and postural instability by analyzing sit-to-stand movements and identifying digital biomarkers associated with frailty severity.

Methods: A total of 42 elderly inpatients at Osaka University Hospital who were examined for frailty and cognitive impairment were recruited to participate in this study. Movements of each subject's body as they moved from a sitting to standing position were recorded by a non-contact AI-based motion tracker, and temporal changes of the head position in the vertical direction were analyzed. We evaluated the initial downward displacement of the head position as a "dip area" and examined its correlation with the severity of frailty.

Results: Larger dip areas were observed in participants with higher scores in J-CHS frailty criteria. Participants identified as having a pre-frail or frail status had significantly larger dip areas than those with a robust status ($p < 0.05$).

Key conclusions: The dip area during a sit-to-stand test measured by a motion tracker may reflect the severity of a person's frailty. This method enables the efficient assessment of frailty and may contribute to fall prevention strategies and the optimization of nursing care planning.

P-0670

The tempoforme® application: promoting the detection and prevention of frailty

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Introduction: Lille University Hospital and its partners have developed an application called *tempoforme*[®] offering a self-assessment of the functional ageing profile. The objective is to describe it and present some preliminary data.

Methods: The *tempoforme*[®] app is free. The assessment can be quickly completed on a smartphone or computer. Users answer a 40-item questionnaire, and the classification algorithm defines different ageing profiles based on 28 questions, integrating the Grille de Fragilité du Gérontopôle de Toulouse and 22 additional criteria selected by experts in the field.

Results: 31,278 questionnaires were completed between March 2022 and July 2024 by users with a mean age of 63 ± 12 years, predominantly female (60.6%, $n = 18,961$). Almost a third of users (31.5%, $n = 9,858$) report memory disorders, 17% ($n = 377$) of whom are under 44. One in four users (25.8%, $n = 8,058$) reported a reduction in walking speed. With an age distribution consistent with the literature, 21.2% of users were classified as frail, 44.7% as pre-frail and 34.1% as robust [1]. Frail or pre-frail users are advised to discuss the results with their general practitioner. They can also book an appointment at the *tempoforme*[®] clinic at Lille University Hospital for a 3-h assessment to evaluate their intrinsic capacities and define a personalized care plan.

Key conclusions: The *tempoforme*[®] application makes it easy to identify frailty and guide users towards an in-depth assessment of their intrinsic capacities. The aim is to make this tool known to healthcare professionals so that it can be used in primary care to help identify frailty in everyday medical practice.

Key words: prevention, frailty, *tempoforme*[®], ageing

Declarations: The *tempoforme*[®] program is funded by the CHU de Lille, CARSAT Hauts-de-France, Pr'Ag'Lab, Métropole Européenne de Lille (MEL), ARS Hauts-de-France, Région Hauts-de-France and Département du Nord. The authors have no conflicts of interest to declare in connection with this study.

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P-0671

Identifying resilience and resistance to Alzheimer's dementia using blood biomarkers: a novel approach using Bio-Hermes-001

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Some older adults have high neuropathological burden or risk for developing Alzheimer's dementia (AD) but no impairment in cognitive performance. This resilience and resistance to AD has historically been attributed to the protective effects of lifestyle factors, including profession, level of educational achievement, etc. While resistant profiles are not well researched, evidence suggests cognitively resilient individuals are likely to have delayed presentation of cognitive symptom but accelerated decline post onset, indicating the need to identify hallmarks of resilience and resistance to more effectively manage AD incidence in these instances.

We utilised the diverse cross-sectional Bio-Hermes-001 dataset ($N = 1001$) of multi-modal biomarkers to identify and describe resilient individuals ($N = 91$) based on our novel composite AD-specific neuropathological burden as measured on blood biomarkers. We also identified resistant individuals ($N = 81$) with low neuropathological burden measured in blood biomarkers but high risk to developing AD, as measured using validated risk scores.

Principal component analyses on composite features of cognitive performance, neuropathology, and functional independence, demonstrates our approach can capture resilience and resistance. Compared to an approach relying on brain amyloid PET-defined pathology, our method better captures the diversity of neuropathological profiles, such as tau-dominant burden.

These findings not only demonstrate the utility of novel blood biomarkers in capturing AD-specific neuropathological burden, but they are also an important advancement towards standardising identification of modifiable risk factors for resilience and resistance to AD that would improve clinical management of the steep cognitive decline associated with these conditions.

Short poster presentation

Frailty and resilience

P-0672

Comparative analysis of the clinical frailty scale and the Irish Hip Fracture Database 21-item frailty index for predicting outcomes in older patients with hip fracture

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Introduction: Frailty has a substantial impact on prognosis and outcomes following hip fracture. The Irish Hip Fracture Database (IHFD) developed a 21-item frailty index (FI21) to improve predictions of prolonged length of stay (pLOS) and mortality beyond traditional markers such as age, sex, and ASA score. Recently, the Clinical Frailty Scale (CFS) was integrated into the IHFD, though its adoption varies across hospitals. This study compared the predictive performance of CFS and FI21 for mortality and pLOS.

Methods: This retrospective cohort study included hip fracture episodes with discharge dates in 2022 and 2023 from two hospitals with high CFS completeness. Multivariable logistic regression models were developed to predict 7-day mortality, 14-day mortality, and pLOS using age, sex, ASA score, and either FI21 or CFS. Predictive performance was assessed using the area under the curve (AUC).

Results: Among 1,290 patients (mean age 80.1, 68.7% women), FI21 was calculated for 1,116 (mean 0.11, SD 0.09), and 1094 (84%) had admission CFS (median 5, IQR 3). AUCs for FI21 models ($n = 1030$) were 0.89 (SE 0.03) for 7-day mortality, 0.82 (SE 0.04) for 14-day mortality, and 0.70 (SE 0.02) for pLOS. AUCs for CFS models ($n = 1,011$) were 0.94 (SE 0.03), 0.87 (SE 0.04), and 0.70 (SE 0.02), respectively. Although CFS models seemed marginally more discriminative of mortality, no significant differences were found between AUC values.

Key conclusions: Both CFS and FI21 performed similarly in predicting outcomes after hip fractures. Given its simplicity, CFS may offer a practical alternative to FI21 for clinical frailty assessments.

P-0673

Clinical experience of a novel Frailty Trigger for use among older adults at triage in the emergency department: a six month review

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Introduction: A novel, two-question Frailty Trigger was developed following a systematic review and two round eDelphi. To investigate diagnostic test accuracy for frailty, consecutive adults aged ≥ 70 yrs attending a university hospital emergency department (ED) between December 2021 and February 2022 were recruited. The Frailty Trigger was compared to the Clinical Frailty Scale (CFS), Variable indicative of Placement (VIP) and PRISMA-7. An independent comprehensive geriatric assessment (CGA) determined frailty status. In total, 313 adults aged ≥ 70 years were available, median age 78 ± 9 years. The Frailty Trigger had excellent accuracy for frailty, Area Under the Curve (AUC) 0.822 (95% CI:0.780–0.865).

Methods: The Frailty Trigger was formally introduced into an electronic patient management system (IPMS) of the Mercy University Hospital (MUH) ED in August 2024. Triage nurses underwent training before the Frailty Trigger launch on IPMS. The Trigger was subsequently administered by triage nurses to adults aged over 65 years as part of routine triage data collection.

Results: 4,758 adults aged > 65 years were screened at triage between August 2024–Jan 2025. 51% of adults were male, median age 77 years ± 8 years. 53% of Frailty Trigger Positive older adults were triaged as Manchester Triage System (MTS) Level 3 (Urgent). 52% of adults screened were frail. Median Frailty Trigger completion time was 8 s.

Conclusion: The Frailty Trigger has been fully integrated into mandatory electronic triage data collection in MUH ED. It has shown to be feasible and accessible to use in the early identification of frailty in ED at triage.

Poster

Frailty and resilience

P-0674

Impact of a day hospital program on functional, cognitive and nutritional status in older adults

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Introduction: Geriatric day hospitals (GDH) provide multidisciplinary interventions aimed to improve function, cognition, and nutritional status in frail older adults. Evaluating their outcomes is essential to assess their clinical value.

Methods: We conducted a descriptive observational study including 26 older adults attending a GDH twice weekly. Two were excluded due to poor adherence, resulting in a final sample of 24. Sociodemographic variables, body composition (weight, height, BMI, body fat, abdominal fat, muscle and bone mass), functionality (Barthel Index, FAC, gait speed in m/s, 4-m walk time, chair rise repetitions), cognition (MOCA, GDS), depression screening (Yesavage), nutrition (MNA), and frailty (CFS, VIG, SPPB) were assessed at admission and discharge. Anderson–Darling, paired t-tests, and Wilcoxon signed-rank tests were used.

Results: Mean age was 82.1 years (SD = 5); 50% were female. Significant improvements were found in:

- Functionality: Barthel Index ($Z = -4.56$; $p < 0.001$), FAC ($Z = 2.92$; $p = 0.004$), gait speed ($Z = -3.81$; $p < 0.001$), 4-m walk time ($Z = 2.17$; $p = 0.030$).
- Cognition: MOCA ($Z = 2.64$; $p = 0.008$).
- Frailty: CFS ($Z = -2.89$; $p = 0.004$), VIG ($Z = -2.84$; $p = 0.005$).
- Nutrition: MNA ($Z = -2.71$; $p = 0.007$).

No significant changes were observed in body composition or chair rise test. Yesavage showed a non-significant trend toward improvement ($p = 0.058$).

Conclusions: A GDH program significantly improved function, cognition, frailty, and nutritional status, supporting its role in comprehensive geriatric care.

P-0675

Chronic pain characteristics: integrating age and frailty

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Introduction: Chronic pain in older adults is often multifactorial, with distinctive features such as mixed-type presentation, multiple

affected locations, and higher intensity [1,2]. However, the role of biological age in shaping chronic pain characteristics remains underexplored [3]. This study aimed to examine the association of age (chronological age) and frailty (as an estimator of biological age) with chronic pain characteristics.

Methods: We conducted a cross-sectional descriptive study involving 455 patients aged 18 years or older (no upper age limit was established) in a Primary Care setting. Chronic pain presence and 33 pain-related variables were assessed under clinical practice conditions. A 31-item frailty index (FI) was developed by consensus [4]. Descriptive analyses were followed by regression modelling to examine the relationship of age and FI (independent variables) with pain characteristics variables (dependent variables).

Results: Frailty significantly influenced chronic pain characteristics, including frequency, duration, intensity, type, course, location, modifying factors, and accompanying symptoms. Chronological age, in contrast, exerted a more limited influence. Frailty level was significantly associated, unlike age, with intensity (sr 0.230, r² 5.29%), continuous course (OR 0.060, 95% CI: 0.949–0.989), and pain frequency (sr 0.104, r² 1.08%). Interestingly, the relationship between frailty and age was inverse for some variables, such as pain duration and accompanying symptoms.

Key conclusions: Considering frailty level when characterizing chronic pain, especially in older adults, facilitates more precise assessments and enables early, individualized management. This approach could contribute to better pain control and improved health outcomes in this population.

P-0676

A new proposal of frailty definition: frailty as an accelerated-ageing marker. Accelerated-ageing as a disease

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Introduction: Advances in the study about ageing are changing the concept of how we age and raise the possibility of considering this process as a disease [1]. Based on these updates, we propose a new integrative approach to frailty definition and its relationship with the ageing process and the “comprise of morbidity”.

Method: We describe an algorithm showing,

1. Healthy-ageing with morbidity compression.
2. Accelerated-ageing with “frailty points” signaling the change to a new reversible state of disfunction/disability. Here we explain the relationships of these changes with hallmarks of aging, physiological disfunction, age-related diseases, lost of intrinsic capacity and disability.
3. Possible second route for the development of age-related diseases with “triggers” that accelerate it and its relation with the phenotype of frailty (frailty related to diseases?) [2].

Results: We consider frailty as the critical period immediately before disfunction/disability, which is reversible when associated with accelerated-ageing. We can distinguish between celular frailty, phenotype of frailty and functional/cognitive frailty. Accelerated-ageing, but not ageing itself, should be considered as a disease.

Conclusions: Geroscience and Geriatrics should work together, principally when phenotype of frailty is presented [3], to define different phenotypes of ageing and to find possible treatments capable of reversing age-related diseases and slow accelerated-ageing. Physical exercise is, nowadays, the most recognize non-pharmacological treatment for frailty [4,5] but what we can do in this regard, is really enough with our current lifestyle?

P-0677

Frailty classification challenges in the Emergency Department: agreement and variability in clinical frailty scale scoring

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Introduction: The Clinical Frailty Scale is a feasible tool for identifying frailty in the emergency department (ED) [1]. Our study investigates the impact of different healthcare professionals and assessment methods on CFS scores and explores patient characteristics contributing to challenging assessments.

Methods: Data from 500 patients ≥ 65 years admitted to Haukeland University Hospital (2019–2023) with suspected pneumonia were analysed. Patients were initially scored with CFS in the ED and reassessed retrospectively through chart review. CFS scores were categorized as fit (1–3), pre-frail (4), and frail (5–9). Agreement was measured by Intraclass Correlation Coefficient (ICC) and groups were compared using t-test or Mann–Whitney U-test.

Results: Of 500 patients, 252 (50.4%) had their CFS score changed. Despite this, there was moderate to good agreement (ICC 0.73, 95% CI: 0.68–0.77; p-value < 0.001), with retrospective scores being significantly higher. Frailty category changed in 144 patients (28.8%), with the highest agreement in the frail group (89.7%). Patients whose CFS category changed were older with more comorbidities, including COPD and chronic kidney failure, compared to those with unchanged category. Additionally, more patients in the changed group received home health care and had higher one-year mortality.

Key conclusion: The CFS yields varying results across healthcare professional and methods, with retrospective evaluations often resulting in higher scores, especially for community-dwelling patients with high comorbidity, advanced age, and COPD. Special emphasis and additional collateral information are recommended for prefrail patients and those with complex histories. Equal basic training in CFS use is advised to avoid discrepancies in assessment scores.

Reference:

1. Falk Erhag, H., et al., The Association Between the Clinical Frailty Scale and Adverse Health Outcomes in Older Adults in Acute Clinical Settings—A Systematic Review of the Literature. Clin Interv Aging, 2023. 18: p. 249–261.

P-0678

Potential effectiveness of a mobile health application intervention in pre-frail older adults: a pilot randomized controlled trial

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Introduction: Health management through mobile health (mHealth) apps has gained attention for its high scalability. Pre-frailty, affecting over 50% of older adults, is seen as a promising target for mHealth interventions, though their effectiveness remains unverified. This pilot trial examined the potential effectiveness of a mHealth app in pre-frail older adults.

Methods: In this 24-week randomized controlled trial (6-week intervention followed by 18-week observation), 52 older adults with pre-frail, assessed using the revised Japanese version of the Cardiovascular Health Study (J-CHS) criteria, were enrolled. Participants were randomly assigned (1:1) to the intervention group (mHealth app plus health education) or the control group (health education only), with six weekly 60-min training sessions. The J-CHS score and dietary variety score (DVS) were assessed at baseline, 6 weeks, and 24 weeks.

Results: Following the intention-to-treat principle, 51 participants were analyzed. The mean app login rate over the study period was 70.4% (IQR: 51.4–97.5). At week 24, the adjusted mean J-CHS score was 0.72 points higher in the intervention group compared to the control group (95% confidence interval [CI]: – 1.19 to – 0.24, Cohen's $d = -4.42$), and the DVS was 1.06 points lower (95% CI: – 0.47 to 2.59, Cohen's $d = 0.4$). We identified 11 adverse events, 10 in the intervention group, including six serious cases, none related to the intervention.

Conclusions: The mHealth app intervention did not significantly improve frailty in pre-frail older adults. This may reflect a high rate of unrelated adverse events, suggesting that program revision may be necessary.

P-0679

Non-consultant hospital doctors in ireland experience of frailty in model 3 and model 4 hospitals

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Introduction: Non-consultant hospital doctors (NCHDs) are at the forefront of frailty assessment in Ireland. Early identification and management of frailty has been shown to improve morbidity and mortality. We formulated an anonymous survey to explore the baseline level of knowledge among NCHDs in Ireland of frailty and its impact on clinical care in both model 3 and model 4 hospitals.

Methods: A prospective cohort questionnaire-based survey was distributed to NCHDs across 3 secondary and tertiary hospitals in Ireland. The main outcome measures were familiarity of the definition of frailty, impact of frailty on clinical practice, and recognition of frailty amongst this cohort.

Results: A total of 90 NCHDs responded to the survey. Most NCHDs were at least moderately familiar with frailty as a concept (85%). 45% of NCHDs defined frailty as a state of increased vulnerability to stressors. 80% of NCHDs felt that frailty was reversible to some extent. 86% of NCHDs considered frailty in their clinical decision making. 59% of NCHDs felt that frailty should not be included in clinical history as part of past medical history. 71% of NCHDs felt that taking frailty into account would improve patient outcomes.

Conclusion: The majority of training doctors surveyed are familiar with frailty and consider it in clinical practice. Improved education into the definition of frailty and its impact on patient care amongst NCHDs would therefore have a positive impact on morbidity and mortality in older persons.

Short poster presentation

Frailty and resilience

P-0680

Response of digital gait biomarkers to a mobile health application intervention in prefrail older adults: a pilot randomized controlled trial

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Introduction: Prefrail older adults could be ideal candidates for frailty prevention using mobile health (mHealth) applications as they still have the ability to use digital health technologies. Digital gait biomarkers (DGBs) measured using wearable sensors provide a novel method for assessing changes in frailty status by offering real-time biometric data in daily settings. This secondary analysis aimed to evaluate the response of DGBs to an mHealth application intervention in prefrail older adults.

Methods: A total of 51 individuals with prefrailty who owned smartphones were randomly assigned to either the intervention or control group. The intervention group attended six weekly 60-min lectures for the first six weeks on using the mHealth application's features. DGBs associated with frailty, including step count, maximal walking speed, step-time variability, and manual tasks performed while walking, were measured using wrist-worn accelerometers. These measurements were obtained seven days before and seven days after the six-week intervention and again after the 18-week follow-up period.

Results: The lecture attendance and application login rates were 93% (83–100%) and 70% (51–96%), respectively. Mixed-effects models for repeated measures, adjusted for sex and age, estimated that the fixed effects for step count and maximal walking speed were higher in the intervention group than in the control group from baseline to follow-up period (429.1 steps/day, 95% CI: – 325.9 to 1184.1; 0.70 mm/s, 95% CI: – 1.80 to 3.20, respectively).

Conclusions: This secondary analysis suggests that specific DGBs may respond to mHealth interventions. Larger-scale clinical trials are required to strengthen these findings.

Poster

Frailty and resilience

P-0681

Frailty and sarcopenia: nutritional and therapeutic perspectives in modern times

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Introduction: Frailty and sarcopenia are interrelated syndromes affecting older adults, characterized by loss of functional reserves, muscle mass, and increased clinical vulnerability. In Spain, their prevalence reaches 18–20% and 10–15%, respectively, among those aged ≥ 65 , exacerbated by malnutrition (5–15% in community settings, 40–60% in hospitals). Shared risk factors include chronic inflammation, sedentarism, and nutritional deficits, driving dependency and reduced quality of life.

Methods: Diagnosis combines validated tools: frailty scales (Fried's Phenotype, FRAIL, FTS-5) and the F-A-C-S algorithm (EWGSOP2) for sarcopenia, assessing muscle mass and strength. Malnutrition is identified via GLIM criteria. Interventions emphasize Mediterranean diets, protein supplementation (1.0–2.0 g/kg/day), vitamin D (800–1000 IU/day), omega-3, and multicomponent exercise (resistance, balance). Trials like APPETITE test plant-based protein formulas combined with physical activity.

Results: Overlap among syndromes is significant: 70% of frail individuals have sarcopenia, while 68% of malnourished patients are frail. Nutritional and exercise interventions improve muscle mass (15–30%) and physical function (SPPB + 2.3 points). Sarcopenic obesity (37% in hospitals) requires dual strategies: fat loss and muscle preservation. However, only 8.4% of frail individuals are malnourished, highlighting multifactorial pathogenesis.

Conclusions: Managing these syndromes demands multidisciplinary approaches integrating nutrition, exercise, and psychosocial support. Future challenges involve adopting wearable technologies and AI for monitoring, personalized therapies (biomarkers), and public policies promoting routine screenings. Standardizing outcomes (e.g., Core Outcome Sets [COS]) and community education are critical to address aging populations effectively.

P-0682

The frail fitness project: physical exercise in frailty and sarcopenia as pillars of healthy aging

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Introduction: Frailty and sarcopenia are critical geriatric syndromes that significantly impact the health and quality of life of older adults. Frailty, characterized by a decline in physiological systems, and sarcopenia, marked by loss of muscle mass and strength, are closely linked and potentially reversible with appropriate interventions. This study aims to investigate the effectiveness of an 8-week high-intensity interval training (HIIT) program combined with geriatric nursing health education in improving functional capacity, muscle strength, and quality of life in frail older adults, with a particular focus on those with sarcopenia.

Methods: A prospective, longitudinal study will be conducted starting in September 2025, involving 200 participants aged 70 and older, recruited from the Geriatrics outpatient clinic of Hospital Universitario Infanta Sofía. All participants will receive health education from geriatric nurses and undergo an 8-week HIIT program. The HIIT program will include supervised sessions twice a week, with intervals of high-intensity exercise followed by active recovery. Functional

capacity will be assessed using the Short Physical Performance Battery (SPPB), handgrip strength, and gait speed. Secondary outcomes will include muscle mass, nutritional status, mood, and quality of life, measured using bioimpedance, calf circumference, the Yesavage test, and the EuroQol-5D questionnaire, respectively. Data will be collected at baseline and after 8 weeks.

Results: The study will evaluate the impact of the combined HIIT and health education intervention on functional capacity, muscle strength, and quality of life in frail older adults. Expected outcomes include improvements in SPPB scores, handgrip strength, and gait speed, particularly in participants with sarcopenia. Nutritional status and quality of life scores are also anticipated to show positive trends, with a potential reduction in fall incidence among participants.

Key conclusions: This study will provide valuable insights into the feasibility and effectiveness of a combined HIIT and health education intervention for frail older adults, particularly those with sarcopenia. The findings are expected to contribute to the development of multimodal strategies aimed at promoting healthy aging. Further research will be needed to explore long-term benefits and optimize HIIT protocols for this population.

P-0683

Frailty, gastrointestinal symptoms, and sleep quality in hospitalized older adults: cross-sectional study

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Background: Links between gastrointestinal and sleep symptoms have been reported, yet little is known about their associations with frailty. This cross-sectional study aimed to explore such associations.

Methods: Data were gathered from the FRailty Project, an on-going observational multicenter study aimed to evaluate the impact of frailty on adverse health-related outcomes in older in-patients. Patients were administered the Pittsburgh Sleep Quality Index (PSQI) and the Gastrointestinal Symptom Rating Scale (GSRS). Frailty was assessed through Fried's frailty phenotype. The relationship between GSRS, PSQI and the Fried's phenotype was evaluated by using pre-specified median regression models.

Results: We present data from 181 older adults, with 47.5% of them being female and a median age of 76 years. Although our sample had a low burden of chronic diseases and cognitive impairment, 61.3% were classified as frail according to Fried's phenotype. The median GSRS of pre-frail individuals was 5.0 (95%CI 2.7 to 7.3) vs. 18.0 (13.9 to 22.1) for frail individuals, corresponding to a difference of 13.0 (8.4 to 17.6). Results remained consistent after adjusting for comorbidities. The median PSQI of pre-frail individuals was 6.0 (95%CI 4.7 to 7.3) vs. 8.0 (6.6 to 9.4) for frail individuals. After adjusting for age, sex and comorbidities the difference in PSQI between pre-frail and frail individuals was not more statistically significant.

Key conclusions: Gastrointestinal symptoms and sleep disturbances are independently associated with frailty in older adults. Detecting these frailty-associated factors in relatively healthy older adults could aid in early identification of this dynamic and potentially preventable condition.

P-0684**Frailty and geriatric syndromes in intermediate care: identification of patient profiles at admission through cluster classification**

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Introduction: Patients admitted to Intermediate Care Units often present a high prevalence of geriatric syndromes (GS), which may influence their clinical course and prognosis. Tools such as the Frail-VIG Index (IF-VIG) can support an efficient initial screening of these syndromes.

Methods: A longitudinal observational study was conducted with assessments at admission and at 4, 8, and 12 months in the Intermediate Care Unit of Sant Celoni Hospital (Barcelona, Spain). A Two-Step Cluster classification was applied to identify patient profiles based on GS burden, frailty level, and functional dependence.

Results: Three clusters were identified: “Low GS,” with a low GS burden and better prognosis; “Medium GS,” with moderate impact and a high prevalence of incontinence and falls; and “High GS,” characterized by advanced frailty, high dependence, and mortality (63.3%). Women, particularly those living alone, showed higher frailty levels. A p value < 0.001 confirmed statistically significant differences between clusters.

Key conclusions: GS and frailty are highly prevalent and interrelated in intermediate care settings. The IF-VIG Index, together with tools such as the Geriatric Syndromes Tree app, facilitates early screening and personalized care planning. Cluster-based segmentation allows for better resource optimization and supports tailored interventions during care transitions, taking gender perspective and social context into account.

P-0685**Therapeutic intensity determinants: the role of frailty**

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Introduction: The decision regarding therapeutic intensity during hospitalization is complex. Traditionally, it has been based on age, comorbidities, and functional autonomy, but frailty is an emerging key factor. This study analyses the main determinants of therapeutic intensity adequacy profile in an intermediate care rehabilitation unit.

Methods: Retrospective observational study of 50 patients consecutively discharged from December 2024 to March 2025. Each patient's profile was registered according to the Adequacy of Diagnostic and Therapeutic Intensity Model, which classifies patients into five categories, ranging from candidates eligible to maximum therapeutic effort (profile I) to exclusive symptomatic management (profile V). Correlations with age, Charlson Comorbidity Index, Barthel Index (baseline, admission, and discharge), Lawton Index, and Frail-VIG Index (IFV) were analysed (Spearman and ANOVA).

Results: The therapeutic intensity profile assigned during hospitalization showed a moderate correlation with frailty measured by IFV ($r = 0.53$, $p < 0.001$) and Barthel Index at discharge ($r = -0.45$, $p = 0.002$). Patients with higher frailty were attributed lower therapeutic intensity profiles ($p < 0.001$). Age and Charlson Index showed weaker associations ($r = 0.28$ and 0.22 , respectively).

Conclusions: Frailty was a determining factor in therapeutic intensity profile decision, surpassing age and comorbidities. Integrating frailty assessment into clinical practice could improve decision-making during hospitalization. Further studies are needed to assess its clinical impact.

P-0686**Correlation of age and frailty status with one-year mortality in a longterm-care facility**

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Introduction: Frailty is defined as a clinically recognizable state of increased vulnerability resulting from aging-associated decline in function and is associated with increased risk for poor health outcomes (falls, disability, hospitalization and mortality).

Methods: an observational study of one-year mortality among patients over 65 years admitted in Geriatric Department, long-term-Care (LTC), November 2022–April 2023. Edmonton's Frailty Scale (EFS) for determine the severity of frailty (0–5 not frail, 6–7 vulnerable, 8–9 mild frailty, 10–11 moderate frailty, 12–17 severe frailty) and data from patient's medical records were used. The patients were divided into 4 categories—vulnerable, mild frail, moderate frail and severe frail since all of them has AFS score > 6 .

Results: 133 patients age $65 +$ were enrolled, 63 male, 70 female, with mean age 79.72 ± 7.35 years. EFS score was as follows: Vulnerable 15.7% (10.53% male, 5.2% female), Mild frailty 25.5% (15.04% male, 10.53% female), Moderate frailty 26.3% (10.53% male, 15.79% female), Severe frailty 32.5% (11.28% male, 21.5% female). At the 12-month follow-up, 33 (27.06%) older adults had died. 27 of 33 pts (81.82%) had severe frailty EFS score. Statistically significant association were revealed between severity of frailty and one year mortality (OR 0,1, 95% CI, $p < 0.0001$). There was no association between age and mortality (OR 0.8, 95% CI, $p = 0.56$).

Key conclusion: Frailty status was associated with one-year mortality rate better than age itself. It can be a useful strategy to predict mortality in a LTC patients and to plan both the optimal individualized care and the resources.

P-0687**Frailty syndrome and multimorbidity in the elderly from the Republic of Moldova**

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Background: The aging process involves a multitude of physiological and physiopathological changes. The purpose of the study was to evaluate the impact of physiopathological risk factors on frailty syndrome(FS).

Materials and methods: Descriptive epidemiological study included 613 elderly (73.16 ± 0.24 years), who were examined according to clinical examination, laboratory and complex geriatric assessment (CGA)—Katz, Lawton, Tinetti, MMSE, DGS; FS screening—Fried Criteria, Charlson Comorbidity Index (CCI).

Results: All the elderly included into the study had polypathologies. The study data revealed the following results, based on FS screening criteria: frail elderly—304 (49.59%), pre-frail—177 (28.87%) and robust—132 (21.53%). According to the CGA, the frail elderly showed the lowest scores: Katz— 9.70 ± 0.12 , Lawton— 10.89 ± 0.23 , Tinetti— 17.56 ± 0.36 , MMSE— 24.09 ± 0.20 , DGS— 7.58 ± 0.18 pt., being followed by pre-frail and robust elderly with highest scores. The clinical examination revealed the following pathologies, for frail elderly group prevailed—osteoarticular pathology—89.21%, neurological—95.43%; pre-frail elderly group—cardiovascular pathology—97.31%, neurological—96.64%, osteoarticular pathology—80.53%; robust elderly group—cardiovascular pathology—93.38%, neurological—91.73% and osteoarticular—75.20%. The mean number of concomitant diseases was 4.62 ± 0.12 diseases. According to CCI: CCI frail elderly group— 4.71 ± 0.12 , CCI pre-frail elderly group— 3.83 ± 0.12 , CCI robust elderly group— 3.57 ± 0.18 pt. The frail elderly presented mainly low physical activity, fatigue, decreased walking speed, low weight.

Conclusion: The results of the study highlight the impact of the polipathology on the development of frailty syndrome with a decline of functional and cognitive status of the elderly.

P-0688

Correlation between the level of organic acids in urine and frailty syndrome on the cohort of long-living adults in the Central Region of Russian Federation

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Background: The aim of this study was to investigate the association between urinary organic acid levels and frailty syndrome on the Cohort of long-living adults in the Central Region of Russian Federation..

Methods: This cross-sectional study included 3,717 of long-living adults (90 years and older). Based on a short battery of physical function tests, subjects were stratified into three groups: frailty (≤ 7 points), pre-frailty (8–9 points), and non-frailty (10–12 points). Urinary organic acids were analyzed using high-performance liquid chromatography with mass spectrometry (HPLC–MS) and gas chromatography with mass spectrometry (GC–MS). 56 organic acids were measured in urine.

Results: Frailty was identified in 760 (22.43%) men and 2,628 (77.57%) women. The mean age of frail participants was 92.56 ± 2.42 years, compared to 92.37 ± 2.37 years in the non-frail group. After adjusting for multiple comparisons, regression analysis revealed that elevated urinary levels of the following acids were independently associated with frailty (regardless of sex and age): Methylmalonic acid: 1.2-fold increased risk of frailty (95% CI: 1.05–1.46, $p = 0.016$), p-Hydroxyphenylpyruvic acid: 1.1-fold

increased risk (95% CI: 1.02–1.09, $p = 0.005$), p-Hydroxyphenyllactic acid: 1.2-fold increased risk (95% CI: 1.05–1.39, $p = 0.022$).

Conclusion: Elevated urinary levels of methylmalonic acid, p-hydroxyphenylpyruvic acid, and p-hydroxyphenyllactic acid may serve as additional biomarkers of frailty in long-living adults. Increased excretion of p-hydroxyphenylpyruvic and p-hydroxyphenyllactic acids suggests impaired tyrosine/phenylalanine metabolism and may indicate a potential link between frailty, gut dysbiosis.

P-0689

Research protocol: the impact of frailty and sarcopenia in persons with Parkinson's disease

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Background: Parkinson's disease (PD) is a complex neurodegenerative disease characterized by a spectrum of both motor and non-motor symptoms. Frailty is defined as a reduced physiological reserve and increased vulnerability to stressors. Sarcopenia is defined as the progressive loss of muscle quantity and quality associated with age. All three conditions are associated with aging, while frailty and sarcopenia appear to be more prevalent in PD. However, the prevalence of frailty and sarcopenia in PD has not been established in Ireland.

Methods: This mixed methods study will recruit 170 persons with PD from movement disorder clinics at a single site, model four hospital in Ireland. Participants will undergo assessments to determine the prevalence of frailty and sarcopenia, alongside assessing PD characteristics, cognitive status, anthropometric data, carotenoid levels, and quality of life. Participants identified as frail or sarcopenic will be invited for interview to explore their experiences of living with PD, their understanding sarcopenia or frailty, perceptions of exercise, and their future priorities.

Discussion: This study will be the first to establish the prevalence of frailty and sarcopenia in PD in Ireland. The qualitative data will offer novel insights in the field of frailty and sarcopenia in PD. Findings will inform the development of a novel, multimodal intervention addressing frailty and sarcopenia in PD.

P-0690

PD, or not PD—the role of frailty in Parkinson's disease: a scoping review

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Background: Parkinson's disease (PD) is a progressive, neurodegenerative disease characterised by a complex spectrum of motor symptoms and non-motor symptoms, while frailty is a condition associated with increased vulnerability to stressors and reduced physiological reserve. Increasing age is a risk factor for both conditions, and there can be considerable overlap in the presentation. PD is often an exclusion criteria in frailty research. Our aim was to summarise the literature on the effect of the pathological features of PD on conventional frailty research.

Methods: We undertook a scoping review following the methodological framework set forth by the Joanna Briggs Institute (JBI) and the Preferred Reporting Items for Systematic Reviews and Meta-

Analysis extension for scoping reviews (PRSIMA-ScR). Studies assessing the prevalence of frailty in persons with PD using a validated tool were included. 3747 studies were identified from Embase, Web of Science, Pubmed, and CINAHL.

Results: Fifteen studies were included for final review. All studies used a quantitative methodology. No qualitative data was identified. The emerging importance of the is highlighted by the fact that 60% of the studies were published in the last 5 years. Prevalence of frailty ranged from 23.7% to 95.6% depending on tool used. Only one study assessed quality of life and physical activity respectively. Over a third of articles excluded advanced PD, which may have underestimated rates of frailty.

Conclusion: This review identified a knowledge gap in exploring the lived experiences of frail persons with PD including perceived quality of life and physical activity levels.

Short poster presentation

Frailty and resilience

P-0691

Interventions targeting frailty and sarcopenia in persons with Parkinson's disease: a scoping review protocol

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Introduction: Parkinson's disease (PD) is a progressive, neurodegenerative disease characterised by motor symptoms and non-motor symptoms. Frailty is a condition associated with increased vulnerability to stressors and reduced physiological reserve. Sarcopenia is the progressive loss of muscle strength and function. Increasing age is a risk factor for all three conditions, and there is considerable overlap in their presentations. Exercise and nutritional interventions have been shown to be beneficial in treating each individual condition. This scoping review aims to establish whether there is evidence for interventions delivering benefit to frail or sarcopenic persons with PD. A scoping review will be conducted to map the evidence given the expected heterogeneity of the literature and potential for identifying gaps in the literature.

Methods and analysis: This review will follow the methodological framework set forth by the Joanna Briggs Institute (JBI). A complete search will be completed on multiple databases. References in selected studies will also be hand-searched for relevant articles for inclusion. Studies will include original literature, published in English since the inception of the database. A team of reviewers will screen identified studies for inclusion. Data will be presented in tabulated form and summarised descriptively.

Discussion: This scoping review will provide an overview of the current literature to improve the evidence base for interventions addressing frailty and sarcopenia in Parkinson's disease. Title and abstract screening is complete. The results will be used to guide the development of a multicomponent intervention for frail and sarcopenic PwP in an Irish community setting.

Poster

Frailty and resilience

P-0692

Frailty and its association with muscle stiffness in geriatric outpatients with increased risk of falling

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Introduction: Frailty is associated with increased vulnerability to adverse health outcomes and is often seen in patients with sarcopenia. As frailty is closely linked to sarcopenia, a progressive muscle disorder, early diagnosis is essential. Shear-wave elastography (SWE) has shown promise in evaluating muscle stiffness, which may reflect muscle quality and overall frailty status. This study aims to examine the association between frailty and muscle stiffness.

Methods: Patients were recruited from the Falls Clinic at Odense University Hospital—Svendborg, Denmark from October to December 2024. Patients, aged ≥ 65 years at risk of falls were included, while those with impaired cognition or acute illness were excluded. Frailty was assessed using the Clinical Frailty Scale (CFS) and sarcopenia was diagnosed according to European Working Group on Sarcopenia in Older People (EWGSOP2) criteria. Muscle stiffness of the rectus femoris was measured using SWE, following Sarcopenia Assessment through Ultrasound (SARCUS) recommendations. Physical performance was evaluated using hand grip strength, Short Physical Performance Battery (SPPB).

Results: Of 130 invited to participate, 114 (65.8% female, median age 80, IQR 75–85) were included, participation rate 97% ($n = 126$). The median CFS was 4 (IQR 3–5). Shapiro–Wilk test will assess normality. Demographics will be summarized using mean $\pm$ standard deviation or median with interquartile range, based on data distribution. Correlation and association between muscle stiffness and frailty will be analysed.

Key conclusions: We hypothesize SWE can provide objective muscle quality measures correlating with frailty, contributing to identifying individuals at risk of functional decline, sarcopenia and fall risk.

P-0693

Comparison of robustness, resilience and intrinsic capacity including prediction of long-term adverse health outcomes: the KORA-age study

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Introduction: Frailty, resilience, and intrinsic capacity (IC) are concepts used to assess the health status of older adults, but no comparison exists regarding their associations with adverse health outcomes. The aim of this study was to determine which concept is most useful in predicting long-term health in older individuals.

Methods: Analyses were based on the KORA (Cooperative Health Research in the Region of Augsburg)-Age study ($n = 940$, aged 65–93). Frailty was assessed using the physical frailty phenotype by Fried et al. For comparability, we used the concept of robustness instead of frailty. Resilience was measured using the 11-item resilience scale, and the IC score was based on four domains (locomotion, cognition, vitality, and psychiatric capacity). Associations with falls, disability, hospitalization, and mortality at 3- and 7-year follow-ups were evaluated using multivariable logistic and Cox regressions.

Results: In the fully adjusted models, robustness showed significant inverse associations with most outcomes (3-year follow-up: OR (95%CI): disability 0.448 (0.300–0.668), 7-year follow-up: falls 0.477 (0.298–0.764), hospitalization 0.547 (0.349–0.856), and all-cause mortality 0.649 (0.460–0.915)) while resilience and IC showed significant inverse associations with disability only (e.g., 7-year-follow-up: resilience: 0.467 (0.304–0.716), IC: 0.510 (0.329–0.793)). 23% of the participants met the criteria for both robustness and IC while 22% met those for robustness and resilience.

Conclusion: Robustness was the most useful concept, showing the strongest protective associations for most adverse health outcomes. IC and resilience were particularly strong in predicting disability. Robustness overlapped with resilience and IC, supporting the mind-body interaction concept.

P-0694

Physical and cognitive frailty: relationship and functional response to multicomponent intervention in a Geriatric Day Hospital

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Introduction: Physical and cognitive frailty often coexist in older adults and are associated with poorer functional outcomes and a higher risk of institutionalization. Assessing their progression in response to structured interventions allows for the development of individualized care strategies.

Methods: A retrospective observational study was conducted in older adults attending a Geriatric Day Hospital. Functional variables were collected at admission and discharge: handgrip strength (dominant and non-dominant hand), Short Physical Performance Battery (SPPB), Clinical Frailty Scale (CFS), and the VIG-Frágil functional score. Cognitive function was assessed using the Montreal Cognitive Assessment (MoCA) and the Global Deterioration Scale (GDS, Reisberg). Nutritional status was evaluated using the Mini Nutritional Assessment (MNA). Correlations were analyzed between changes in functional and cognitive parameters.

Results: A total of 23 patients were included (mean age: 81.3 years). Overall improvement was observed in SPPB (8.0 vs 10.0), VIG-Frágil (0.28 vs 0.20), and handgrip strength. MoCA scores improved or remained stable in most participants (mean increase: + 2.3 points). Handgrip strength and SPPB showed a positive correlation with MoCA scores at both admission and discharge, whereas CFS was negatively correlated. MNA scores also improved. The GDS cognitive scale remained stable or improved in the majority of patients.

Conclusions: Cognitive frailty showed improvement or stability following a multicomponent intervention based on physical exercise, nutritional support, and cognitive stimulation. Functional gains were associated with better cognitive performance. This approach appears effective in maintaining or improving physical and cognitive status in frail older adults in an ambulatory care setting.

P-0695

Multicomponent intervention in cognitive frailty: functional and cognitive outcomes in a Geriatric Day Hospital

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Introduction: Physical and cognitive frailty frequently coexist in older adults and are associated with poorer functional outcomes and a higher risk of institutionalization. Monitoring their progression in response to structured interventions can help guide individualized care strategies.

Methods: A retrospective observational study was conducted in older patients attending a Geriatric Day Hospital. Functional variables were collected at admission and discharge: handgrip strength (dominant and non-dominant hand), Short Physical Performance Battery (SPPB), Clinical Frailty Scale (CFS), and the VIG-Frágil functional score. Cognitive function was assessed using the Montreal Cognitive Assessment (MoCA), and global cognitive status was measured using the Global Deterioration Scale (GDS, Reisberg). Nutritional status was evaluated with the Mini Nutritional Assessment (MNA). Correlations were analyzed between changes in functional and cognitive parameters.

Results: A total of 23 patients were included (mean age: 81.3 years). Overall improvement was observed in SPPB (8.0 vs 10.0), VIG-Frágil score (0.28 vs 0.20), and handgrip strength. MoCA scores improved or remained stable in most patients (mean increase: + 2.3 points). Handgrip strength and SPPB were positively correlated with MoCA at both admission and discharge, while CFS showed a negative correlation. MNA scores also improved. The GDS remained stable or improved in the majority of cases.

Conclusions: Cognitive frailty showed improvement or stability following a multicomponent intervention based on physical exercise, nutrition, and cognitive stimulation. Functional gains were associated with better cognitive performance. This approach appears effective for maintaining or improving physical and cognitive status in frail older adults in an outpatient setting.

P-0696

Is cognitive frailty reversible? Results from an outpatient program in older adults

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Introduction: Cognitive frailty, defined as the coexistence of physical frailty and mild cognitive impairment, is a potentially reversible

condition if detected and addressed early. The geriatric day hospital provides an appropriate setting to implement multidimensional interventions in ambulatory older adults.

Methods: Retrospective observational study conducted in 24 outpatients aged ≥ 70 years, enrolled in a structured geriatric intervention program with twice-weekly follow-up. Assessments were performed at baseline and upon completion of the program using: Montreal Cognitive Assessment (MoCA) and Global Deterioration Scale (GDS) for cognitive status; Barthel Index and Functional Ambulation Categories (FAC) for physical function; Mini Nutritional Assessment-Short Form (MNA-SF) for nutritional status; Clinical Frailty Scale (CFS) and Frailty Index-VIG for frailty. The Wilcoxon signed-rank test was used for paired comparisons.

Results: Significant improvements were observed in cognitive performance (MoCA, $p = 0.008$), physical function (Barthel Index, $p = 0.002$; FAC, $p = 0.004$), frailty status (CFS, $p = 0.004$; VIG, $p = 0.005$), and nutritional status (MNA-SF, $p = 0.005$). Global cognitive decline (GDS) remained stable ($p = 0.257$). Most participants either maintained or improved their baseline condition without functional or cognitive progression.

Conclusion: A structured and intensive outpatient program may reverse cognitive frailty and stabilize its progression. These findings reinforce the role of the geriatric day hospital in preventing functional and cognitive decline and support the concept of frailty as a modifiable condition over time.

P-0697

Catch the 'clinical frailty scale' if you can

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Introduction: The Clinical Frailty Scale (CFS), introduced in 2005 during the Canadian Study of Health and Aging (CSHA), is used to assess the overall fitness or frailty of older adults. In our study, we explored whether the position of the CFS within the Comprehensive Geriatric Assessment (CGA) form affected its completion by assessors. We tested two versions of the CGA form, aiming to improve documentation and ultimately enhance the care of elderly patients.

Methods: This retrospective study was conducted at Newport Intermediate Care, Wales, UK. Our multidisciplinary team includes consultants, speciality doctors, nurse practitioners, pharmacists, physiotherapists, occupational therapists, and a mental health team. We support patients in the community who are referred by General Practitioners and managed in a "virtual ward" after a CGA is completed at home.

We compared two CGA formats:

Old format (October 2021–February 2022): CFS was placed near the end, before the consultant's post-take review.

New format (October 2023–February 2024): CFS was placed mid-document, between personal and social history.

We randomly selected and reviewed 30 CGA forms from each version to assess which version documented CFS better.

Results: CFS was recorded in 24/30 (80%) of old forms.

CFS was recorded in 17/30 (56%) of new forms.

Key conclusions: Placing the CFS near the end of the CGA, as in the old format, improved completion rates. This study suggests that position of CFS, within the CGA plays a key role in proper documentation of frailty, which is essential in elderly care.

Short poster presentation

Frailty and resilience

P-0698

Impact of a multicomponent exercise program on prevalence rates of lower physical function in residents of senior care facilities—a sub-analysis of the bestform-trial

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Introduction: Lower scores in the Short Physical Performance Battery (SPPB), a widely used tool to assess physical function in older adults, indicate physical impairments and an increased risk of adverse health outcomes and all-cause mortality. This sub-analysis of the bestform-trial (NCT04207307) assessed the prevalence of lower SPPB scores in senior care facilities and the impact of a six-month multicomponent exercise program.

Methods: Senior care facilities were cluster-randomized to intervention group (IG) or the usual care group (UC). Residents of IG participated in a six-month multicomponent exercise program, while residents of UC received lifestyle education. SPPB scores were assessed at baseline and after 6 months. A score ≤ 9 points was classified as lower physical function. Prevalence rates of lower SPPB were calculated and compared between groups.

Results: Out of a total of 404 participants, 342 residents (85.3 ± 6.5 years, SPPB: 6.9 ± 3.0 points, 81.0% female), were analysed, with 199 participants assigned to IG and 143 participants to UC. At baseline, 75.9% participants of IG and 74.1% of UC had an SPPB score ≤ 9 . After six months, this prevalence of lower physical function decreased to 65.8% in IG, whereas it remained stable in UC. Thus, residents in IG showed a greater improvement in physical function, with an increased proportion of participants with good SPPB scores 10–12 points (34.2% vs. 25.9% in UC).

Key conclusions: The prevalence of lower physical function in senior care facilities is high. Participating in a six-month multicomponent exercise program reduced the prevalence of lower physical function by 10%.

Poster

Frailty and resilience

P-0699

Cerebrospinal fluid proteomic profile of frailty

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Introduction: Frailty is a clinical state reflecting a decrease in physiological reserve capacities, known to affect numerous biological pathways and is associated with health issues, including neurodegenerative diseases.

We hypothesized that frailty would be associated with a cerebrospinal fluid (CSF) protein signature in patients suspected of normal pressure hydrocephalus (NPH).

Methods: In this post hoc cross-sectional biomarker analysis, we included 90 adults (52–85 years) suspected of NPH and presenting with markers of various neurodegenerative diseases.

We investigated the human proteomic profile of CSF associated with frailty defined by an established cumulated frailty index according to Rockwood (FI, average = 0.32).

CSF proteomics was analyzed using a label-free quantitative proteomic approach by nanoscale liquid chromatography coupled to tandem mass spectrometry.

Results: 52% of subjects had increased risk of NPH (Rout > 12 mmHg/mL/min), 72% had an increased risk of Alzheimer Disease (ratio TAU/A β 42 > 0.21), 20% had an increased risk of Parkinson disease (dopamine deficiency on DATSCAN), and 69% had an increased risk of vascular dementia (Fazekas scale $\geq$ grade 2).

We identified and quantified 999 proteins of which 13 were positively associated with frailty and 60 were negatively associated with frailty. Pathway analysis with the top positively frailty-associated proteins revealed enrichment for proteins related to inflammation and immune response. Among the proteins negatively associated with frailty, functional pathways enriched included neurogenesis, synaptogenesis and neuronal guidance.

Conclusions: This study sheds light on the physiopathology of frailty in NPH-suspected patients, highlighting processes of neuroinflammation and inhibition of neurogenesis.

P-0700

Association between homocysteine, frailty and biomechanical response of the CNS in NPH-suspected patients

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Introduction: Frailty is a geriatric syndrome that combines physiological decline, disruptions of homeostatic mechanisms across

multiple physiologic systems and thus, strong vulnerability to further pathological stress.

Previously, we provided the first evidence that increased risk of poor health outcomes, as quantified by a frailty index, is associated with an alteration of the central nervous system (CNS) biomechanical response to blood pulsatility.

In this study, we explored correlation between plasma biological parameters, the CNS elastance coefficient and frailty index.

Methods: We included 60 adults (52–92 years) suspected of normal pressure hydrocephalus (NPH) and presenting with markers of multiple co-existing brain pathologies, including Parkinson disease, Alzheimer disease and vascular dementia.

Lipid profile with Very Low Density Lipoprotein, Low Density Lipoprotein, High Density Lipoprotein, Apolipoprotein A1 & B, triglycerids & total cholesterol, inflammatory profile with C reactive protein (CRP) and homocysteine, renal profile with creatinine, uric acid, blood urea nitrogen, and metabolic profile with cobalamin and folates were measured in the plasma by the hospital laboratory according to routine procedures.

Results: We showed that the homocysteine level was independently and positively associated with both frailty index and the CNS elastance coefficient (adjusted R² of 10% and 6%). We also demonstrated that creatinine clearance and folate level were independently associated with homocysteine level.

Conclusions: Based on previous literature results describing the involvement of homocysteine in endothelial dysfunction, glial activation and neurodegeneration, we discuss how homocysteine could contribute to the altered biomechanical response of the CNS and frailty in NPH-suspected patients.

P-0701

Biomechanical response of the CNS is associated with frailty in NPH-suspected patients

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Introduction: Frailty is a multidimensional syndrome that increases vulnerability to adverse health outcomes and has been identified as a predictor of dementia. However, the neurobiological mechanisms linking frailty to neurodegeneration remain poorly defined. We hypothesize that alterations in the biomechanical response of the central nervous system (CNS) are associated with frailty. We focused on patients suspected of normal pressure hydrocephalus (NPH), a group that often presents with overlapping neurodegenerative pathologies, providing a relevant model for investigating pathological brain ageing.

Methods: We analyzed data from 60 older adults enrolled in the PROLYPHIC cohort who underwent lumbar infusion testing and phase contrast magnetic resonance imaging (PCMRI). The CNS biomechanical response was quantified using the elastance coefficient, derived from combined ICP measurements and cerebral blood

flow changes during the cardiac cycle. Frailty was assessed using a validated frailty index (FI) based on the accumulation of 40 health deficits. Statistical models examined the association between elastance, frailty, and age, adjusting for cerebrospinal fluid (CSF) outflow resistance.

Results: The CNS elastance coefficient showed a significant and independent association with frailty ($r = 0.32$, $p = 0.014$), comparable in effect size to that of age. This relationship persisted even after adjusting for CSF dynamics, suggesting it is not specific to NPH-related pathology. Patients with higher elastance coefficients tended to have broader systemic health deficits, highlighting reduced mechanical resilience of the brain as a potential contributor to frailty.

Conclusion: CNS biomechanical alterations are significantly associated with frailty in older adults and may reflect early pathological brain ageing. The elastance coefficient, as a dynamic marker of brain vulnerability to mechanical stress, could complement traditional frailty measures and aid in identifying individuals at risk of neurodegenerative decline.

P-0702

Functional aspects of a geriatric nephrology consultation

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Introduction: Chronic kidney disease (CKD) affects approximately more than 20% of people over the age of 60. In primary care patients the prevalence of CKD can reach 35–40%.

Our objective was to analyze the parameters associated with CKD and their possible relationship with the degree of fragility (Frail) and/or functionality (Barthel and Lawton) in geriatric patients referred from Primary Care.

Methods: Descriptive and observational epidemiological study of a case series, including all patients who were referred to the Nephrology Service at HUNSC over an 8-month period.

Results: Of the 1,263 patients, 41.1% were over 75 years of age and 19.1% required evaluation in the Nephrogeriatric consultation.

Analyzing the relationship between frailty and functionality with parameters associated with CKD, we observed that the groups with greater frailty were older and had lower hemoglobin and albumin levels ($p < 0.05$). Likewise, it was observed that frail patients had a higher risk of mortality than non-frail patients ($p < 0.05$).

When comparing the means of parameters associated with CKD in relation to the development or absence of a nephrological event, defined as a progressive decline in eGFR and/or the need for EPO, creatinine, eGFR, hemoglobin, and albumin showed a significant impact on the presence of a nephrological event ($p < 0.05$).

Conclusions:

- The geriatric population represents an important subgroup of patients referred to Nephrology.
- CKD is associated with high levels of frailty and, therefore, a high risk of impaired functionality in older adults.
- In geriatric patients and those with CKD, the implementation of frailty and functionality scales can improve care and the efficiency of the healthcare process.

P-0703

Prognostic value of frailty on mortality and treatment response in older patients with multiple myeloma

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Introduction: Frailty predicts prognosis in most clinical settings but has not been explored in older patients with multiple myeloma (MM). We explored the ability of different frailty scales in predicting mortality and treatment response in this subgroup.

Methods: Observational, prospective, single-centre study including patients aged ≥ 65 years assessed at MM onset and one year later at a hematogeriatrics clinic. Geriatric 8 (G8) and Geriatric Assessment in Hematology (GAH) were used for frailty screening; Rockwood's Clinical Frailty Scale (CFS), Frail-VIG (Spanish abbreviation for Comprehensive Geriatric Assessment [CGA]) Index (IF-VIG), and the modified Fried frailty phenotype were used for diagnosis. One year later, the best response to treatment according to the International Myeloma Working Group (IMWG) criteria and mortality were registered.

Results: 47 patients (mean age 77.8 ± 5.5 years, 27 women) diagnosed between November 2019–2023 were included. Between 51% (GAH > 42) and 89% (G8 ≤ 14) were suspected of being frail. Frailty prevalence was 49.0% for CFS (> 3), 53.2% for IF-VIG (≥ 0.2), and 40.4% for Fried criteria (≥ 3). Within a year, 19 (40.5%) patients had achieved a complete response, and 3 (6.4%) had died. In logistic regression, none of the screening or diagnostic frailty scales were predictors of mortality, and only the GAH scale predicted treatment response ($p = 0.03$).

Key conclusions: Approximately half of older patients with MM are frail, although frailty does not predict mortality in this population. Only the GAH scale, specifically developed for this patient profile and incorporating key aspects of CGA such as nutritional and cognitive status, predicts treatment response.

P-0704

Microstructural brain changes associated with frailty in older adults: insights from diffusion tensor imaging

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Objectives: This study investigates the relationship between frailty status and white matter integrity (WMI) in older adults, focusing on associations with Fried sub-criteria.

Methods: 125 older adults without dementia were included in the cross-sectional study. A comprehensive geriatric assessment was conducted. Frailty status was evaluated by the Fried Frailty. Brain MRI with Diffusion Tensor Imaging was performed, and MD, FA, AD, and RD values were calculated in white matter tracts using an ROI-based method.

Results: The mean age was 81.76 ± 7.07 years, and 64% were female. Of the participants, 69 (55.2%) were frail, 42 (33.6%) pre-frail, and 14 (11.2%) non-frail. After adjusting for age and sex, significant differences in WMI were found in the cingulum, inferior longitudinal fasciculus, and forceps major in the left hemisphere. Regression analysis showed demyelination of the left cingulum and left forceps major was linked to increased frailty risk. Additionally, malnutrition further heightened frailty risk. Canonical correlation analysis identified the Lawton-Brody IADL and Epworth Sleepiness Scale scores as the strongest predictors, while the cingulum showed the highest association among white matter tracts.

Conclusions: Frailty and prefrailty were associated with deteriorated WMI, particularly in the left cingulum and left forceps major. The strong link between frailty and white matter changes may reflect shared underlying mechanisms including sleep, functionality and nutrition.

P-0705

Extracting geriatric syndromes from electronic health records: a scoping review

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Introduction: Geriatric syndromes (GS) are presentations common in older adults, that span organ systems, and exhibit fluctuations in response to stressors (1,2) There remains variation in what is included in the category, and currently no definitive list (1,2).

GS may be under-captured compared to medical diagnoses (3) using clinical codes (3), as supporting information may be located in unstructured text (4), particularly regarding less clearly defined syndromes (5).

This scoping review describes studies that extracted GS from electronic health records (EHR) and related datasets.

Methods: The review was registered on the Open Science Framework. Pubmed, Medline, CINAHL Plus and Scopus databases were searched in October 2024 following medical librarian consultation. Of 7884, 73 studies had full text review, and 14 studies were included. Studies were excluded if extraction method for all included syndromes was unclear.

Results: 14 studies from 9 countries identified 35 GS using diagnostic codes, screening or diagnostic tools, and free text analysis. 7 studies used a single method, and 7 used free text though exactly how this was analysed was not always clear. Across studies, 19 GS were included in > 2 studies. The most common GS were falls, functional decline, and malnutrition. Incontinence was common, with studies generally combining urinary and faecal issues.

Key conclusions: There is heterogeneity in what researchers include as GS, and how these are identified in EHR. Future studies should use dual extraction methods and clearly describe what they consider to be GS and why this designation is pragmatic in their studies' context.

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P-0706

Factors affecting the subjective health view of senior welfare volunteers in Kyoto: an analysis using health literacy, subjective health, social capital, and health behavior as explaining variables

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Introduction: In Japan, many civilian welfare volunteers (SWVs) provide health and welfare support services to children in the local community which are expected to facilitate social capital (SC). I attempted to reveal whether SC, health literacy (HL), health control (HLC), and health behaviours had a strong impact on the subjective health of SWVs, based on the hypothesis that SC promotes the rapid dissemination of health information and increases the likelihood of adopting healthy behaviours.

Methods: The survey was conducted from Oct. 2020 to Mar. 2021 sent by mail to SWVs in U district in Kyoto City (n = 180, aged 45 to 75, Mean = 64). In order to verify the above-mentioned hypothesis, I conducted a binary logistic regression analysis using a model in which the subjective health of SWVs themselves was used as the independent variable, and age, sex, HL, SC, HLC, and health behaviour were used as dependent variables. The goodness of fit of the model was assessed using the likelihood ratio test.

Results: 120 valid samples were analysed, excluding ones with missing values. The data yielded a significant chi-square statistic with $\chi^2(13) = 24.7$, $p < 0.025$, and a significant coefficient for health behaviour ($\beta = 1.47$, $p < 0.005$).

Conclusion: The hypothesis that volunteer activities related to local health and welfare enable people to gain knowledge and information about health and promote healthy behaviour was confirmed, suggesting that volunteer activities contribute to promoting the health of older people. Approval No. of Research Ethics Committee of Kyoto Koka University is 098, 2022.

P-0707

Correlation of muscle thickness assessed by ultrasonography with physical performance among nursing home residents

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Introduction: Point-of-care ultrasonography (POCUS) has gained popularity in various fields of medicine due to its accessibility, and accuracy. Within geriatrics, muscle POCUS is a possible alternative for the diagnosis of sarcopenia. Multiple studies proved a strong association between muscle thickness and this condition. Moreover, recent studies revealed that frailty syndrome is related to changes in muscle thickness. This study aims to assess the association between muscle thickness and physical performance among nursing home residents.

Methods: All residents of four nursing homes who were able to declare consent statement and perform TUG were examined. Walk time was evaluated with the Timed Up and Go (TUG) test. A hand-grip dynamometer was used to assess grip strength. The rectus femoris muscle thickness (RF-MT) and anterior muscles of the arm muscle thickness (AM-MT) were examined with the portable ultrasound system. Data were presented as a median ($\pm$ IQR).

Results: Ninety-four nursing home residents participated in the study; 45% of them were males ($M = 42$, $F = 52$). The median age was 78 (± 70 –86). The median of the TUG test was 16.96 (± 11 –31.5) seconds. The median of the handgrip strength was 16.99 (± 12.06 –25.05) kilogram-force. TUG test results negatively correlated with RF-MT ($r = -0.42$, $p < 0.001$) and AM-MT ($r = -0.29$, $p = 0.004$). Grip strength positively correlated with RF-MT ($r = 0.52$, $p < 0.001$) and AM-MT ($r = 0.67$, $p < 0.001$).

Conclusions: Physical performance is closely associated with muscle thickness assessed by ultrasound in older people. Further studies should evaluate the association between muscle thickness and clinical outcomes related to decreased physical performance such as falls.

P-0708

Validating rapid nurse-administered Clinical Frailty Scale scoring tools amongst community-dwelling older persons

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Introduction: Frailty assessment by the Clinical Frailty Scale (CFS) is limited by the need for training and clinical judgement by a geriatrician. Modified versions of CFS (CFS-A and CFS-FAST) address these shortcomings but have not been validated for use in the community. We aimed to validate CFS-A and CFS-FAST as rapid nurse-administered frailty assessment tools.

Methods: 218 community-dwelling older adults aged ≥ 65 years old were evaluated for frailty at baseline by nurses with CFS-A and CFS-FAST, and followed up over 12 months prospectively. We assessed concurrent validity of CFS-A and CFS-FAST with area under receiver operator characteristic curves (AUC) against a 30-item Frailty Index (FI). Predictive validity was assessed by univariate analysis to compare frailty-related outcomes at 12-months follow-up.

Results: The prevalence of frailty was 45.4% by CFS-A, 43.1% by CFS-FAST and 37.2% by FI. Both CFS-A (AUC = 0.97; 95% CI, 0.95–0.99, $P < 0.01$) and CFS-FAST (AUC = 0.98; 95% CI, 0.96–0.99, $P < 0.01$) had excellent diagnostic performance against FI-defined frailty. There was no significant difference in pairwise comparison of AUC between CFS-A and CFS-FAST ($P = 0.331$). At 12 months, both CFS-A and CFS-FAST were significantly associated

with quality of life, functional decline, emergency department attendance and hospitalization. CFS-A ($P = 0.04$), but not CFS-FAST ($P = 0.39$), was significantly associated with mortality at 12 months.

Conclusions: Both CFS-A and CFS-FAST had good concurrent and predictive validity in frailty assessment and prognostication of frailty-related adverse outcomes at 12 months, and may be used to facilitate rapid nurse-led screening of frailty amongst older adults in the community.

P-0709

BRIDGE recruitment model to engage frail older adults in intervention trials: lessons learned from ACTIVE-AGE@home

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Introduction: Multicomponent physical activity (PA) programs prevent frailty in older adults but remain underutilized. To improve adoption, healthcare policies must prioritize research on preventive strategies. Randomized controlled trials (RCTs) and clinical trials (CTs) are crucial, but recruitment challenges hinder their success. This study aims to identify the most effective recruitment strategies by analyzing recruitment efforts and outcomes from the ACTIVE-AGE@home trial.

Method: During recruitment for the ACTIVE-AGE@home trial, researchers documented experiences using field notes. A multidisciplinary team conducted thematic analysis (TA) following Braun and Clarke's six-step approach, using: 1) a deductive TA, guided by the TiBaR model for recruiting hard-to-reach older adults, which includes building trust, offering incentives, identifying barriers, and being responsive, and 2) an inductive approach to explore motivation for long-term engagement, adherence and maintenance.

Results: Thematic analysis revealed four themes: 1) Be appealing—Differentiate the project through uniqueness, accessibility, and approachability. 2) Foster reciprocal relationships—Build trust and shared ownership with recruitment partners. 3) Understand identity—Consider identities and contexts of recruitment partners and the target group. 4) Gear trial requirements—Align trial design with recruitment and identity needs.

Key conclusions: The four themes led to the development of the BRIDGE recruitment model, a gear-based approach, emphasizing collaborative thinking over key points of attention. It serves as a reflective tool in which recruitment and identity needs are balanced

with trial requirements. As rigid study designs like RCTs pose recruitment challenges, more flexible trial designs should be explored. Researchers should share successes and challenges to improve future trials.

P-0710

APTITUDE-PROXI: acting for the trans-pyrenean prevention of dependence among seniors in the local area

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Introduction: The demographic aging affecting all countries in the world particularly impacts the south of Europe, leading to the increase in the number of dependent subjects. This phenomenon is aggravated in rural and disadvantaged urban areas. This observation is at the origin of the APTITUDE-PROXI project. The objective of this project is to delay the loss of autonomy among seniors by relying on the ICOPE Program of the WHO.

Methods: APTITUDE-PROXI is led by a consortium of four beneficiaries: Toulouse University Hospital (France, lead partner), Navarrobiomed and Barcelona University (Spain), and Health Service (Andorra). It is funded by the European POCTEFA Program. Duration: 01/01/2024–12/31/2026.

The ICOPE program is deployed in 33 sites in the France/Spain/Andorra cross-border area through the intervention of locally established Health Prevention Teams (HPT). The HPT intervention on a site ends with a free cultural event.

Results: In 2024, 33 sites that met the necessary criteria for the deployment of the action were selected (being in rural or disadvantaged urban areas, agreement from the municipality, having a sufficient number of professionals to constitute the HPT, ...). As of 03/26/2025, 4 sites in France, 2 in Spain and 3 in Andorra have benefited from the action. The launch of the intervention on the other sites (24) is planned on 2025–2026.

Key conclusions: APTITUDE-PROXI proposes a strategy to each country to deploy the ICOPE program. The advantage lies in the mobilization of all stakeholders in the region to carry out dependency prevention actions close to the seniors.

P-0711

The association between frailty, emergency admission and mortality in the PRIME-UK cross-sectional study

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Introduction: Parkinsonism is more common amongst older people, so many patients are also living with frailty, which has been associated with adverse outcomes. However, there are no Parkinson's-specific frailty measures. Those based on the frailty phenotype often require in-person assessment including handgrip strength and walking speed. We have previously shown that the Survey of Health, Ageing and Retirement in Europe Frailty Index (SHARE-FI)75 + was feasible for self-completion and predicted functional ability. We aimed to test whether it predicts hospitalisation and mortality.

Methods: In this single-centre study, which particularly sought to reach under-served groups, participants self-reported answers to the five components of SHARE-FI75 + . This generated a score between

0 and 1, where a higher score indicated greater frailty. Mortality and emergency hospitalisation data was obtained. Logistic regression was used to explore the association between frailty score and the composite outcome death or emergency hospitalisation in the 2.5-years after questionnaire completion.

Results: 471 out of 475 recruited participants (mean age 76 ± 8.5 years, 65% male, 70% frail/pre-frail) had complete data for SHARE-FI75+, of whom 76 died and 139 died or had an emergency admission in the 2.5-year period. For each standard deviation increase in frailty score, odds of death or emergency admission nearly doubled (OR 1.93; 95% CI 1.56, 2.40; $p < 0.001$). This was partially attenuated after adjustment for age (OR 1.60; 95% CI 1.25, 2.05, $p < 0.001$).

Key conclusions: Frailty score, calculated using SHARE-FI75 + and without in-person assessment, predicted death or emergency hospitalisation in people with parkinsonism.

P-0712

Effect of infections on frailty trajectories in hospitalized older patients: preliminary results from the INFRAGEN study

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Introduction: Infections are among the most common causes of hospitalization in older adults; however, their impact on frailty is still unclear. We assessed frailty changes of older patients hospitalized for infections and possible factors modifying frailty trajectories.

Methods: INFRAGEN is an ongoing prospective and multicenter study involving patients aged 70 + admitted to the Geriatric Units of the University Hospitals of Ferrara, Padua, Monza, and Naples (Italy), with at least one infection during hospitalization and a pre-admission Clinical Frailty Scale (CFS) < 6 . For each participant, we collect data from comprehensive geriatric assessment and hospitalization-related information. Three frailty evaluations are performed through the CFS and the Frailty Index (FI): pre-admission, discharge, and 3 months after discharge. INFRAGEN is supported by the European Union–Next Generation EU (PNRR-MAD-2022-12376569).

Results: Preliminary data from 162 patients (mean age 85.5 years, 53.5% females) show that 16.7% had > 1 infection during the hospitalization, mainly in the respiratory (51.7%) and urinary tracts (20.3%). The CFS increased from 2.99 (SD 1.27) pre-admission to 4.14 (SD 1.59) at discharge and 4.02 (SD 2.13) at the 3-month follow-up. The corresponding FI changes were 0.12 (SD 0.08), 0.16 (SD 0.08), and 0.14 (SD 0.10). Patients experiencing multiple infections had a steeper CFS increase; no other significant interactions with the site and severity of infections were observed.

Key conclusions: Infections in older inpatients are associated with substantial frailty worsening. INFRAGEN will explore the pathophysiological mechanisms of frailty in the context of infections through a translational approach that considers inflammatory markers and genetic/epigenetic factors.

P-0713

Can changes in sit-to-stand performance throughout a 30-s time interval be used as a marker of muscle fatigability in middle-aged to older adults?

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Introduction: The 30-s sit-to-stand (STS) test is widely used to assess functional capacity in middle-aged and older adults, typically focusing on total repetitions or mean power output. This study investigated performance drops within the 30-s period, which could be indicative of muscle fatigability.

Methods: 93 middle-aged (55–64 years; 46% female) and 102 older adults (≥ 65 years; 53% female) performed a 30-s STS test. A body-fixed sensor measured (sub) durations of the four STS phases (i.e., sit, sit-to-stand, stand and stand-to-sit), STS trunk flexion range and muscle power production of all repetitions; the mean was calculated for the first and last 10 s. To assess whether changes in performance over time differed between age-groups and sexes, linear mixed modeling was used.

Results: Middle-aged adults and men showed less trunk flexion and higher power production during STS than older adults and women, respectively ($p < 0.05$). Performance changed over 30-s time, with proportionally more time spent in the sit-to-stand phase (+ 1.5%, $p < 0.001$) and less in the stand-to-sit phase (− 1.5%, $p < 0.001$), more trunk flexion (1.4°, $p < 0.001$) and lower power production (− 15 W, $p < 0.001$) during the sit-to-stand phase in the last 10 s. No time-by-age-group interaction effect was found.

Conclusion: The performance changes in STS movement strategy throughout the 30-s timeframe, i.e., more trunk flexion during standing up and less braking during sitting down, combined with the drop in power production could be indicative of induced muscle fatigue in well-functioning middle-aged to older adults. Despite being statistically significant, these changes were minor, raising questions about their clinical relevance.

P-0714

Predicting successful ageing among older adults seems possible even as far as two decades ahead

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Introduction: Successful ageing is the term often used for depicting exceptional ageing and can be measured with multidimensional models including physical, psychological and social wellbeing. The aim of this study was to test multidimensional successful ageing models to investigate whether these models can predict successful ageing, and which individual subcomponents included in the models are most significantly associated with successful ageing.

Methods: Successful ageing was defined as the ability to live at home without daily care at the age of 84 years or over. Data on the participants' physical, psychological and social wellbeing were gathered at baseline and the follow-up period was 20 years. Four successful ageing models were constructed. Backward stepwise logistic regression analysis was used to identify the individual subcomponents of the models which best predicted successful ageing.

Results: All successful ageing models were able to predict ageing successfully after the 20-year follow-up period. After the backward stepwise logistic regression analysis, three individual subcomponents of four models remained statistically significant and were included in the new model: having no heart disease, having good self-rated health and feeling useful. As a model, using only these three subcomponents, the association with successful ageing was similar to using the full models.

Key conclusions: Multidimensional successful ageing models were able to predict successful ageing after a 20-year follow-up period. However, the three subcomponents (absence of heart disease, good self-rated health and feeling useful) significantly associated with successful ageing performed as well as the multidimensional successful ageing models in predicting ageing successfully.

P-0715

Experiences of a self-care program in older and frail persons with heart failure

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Introduction: Heart failure (HF) affects over 37 million people worldwide. The combination of HF, comorbidities, frailty and aging increases the risk of hospitalization and reduces the ability to perform self-care. Effectively performed self-care in HF, which includes health-promoting activities, symptom monitoring, and illness management, leads to better quality of life, fewer hospital readmissions, and higher survival rates. Few intervention studies on self-care for frail, older adults with HF are available. This study aimed to describe the experiences of frail, older patients participating in a self-care program intervention.

Methods: Older, frail adults (levels 4–5, Clinical Frailty Scale) with HF ($n = 22$) participated in a self-care program intervention to be performed at home. This included personal instructions on physical training, nutritional intake, and symptom management. Following the three-month intervention period, nine participants were interviewed using a semi-structured guide. Data were analyzed through content analysis.

Results: Participants faced barriers like unfavorable weather and living environment layout, which hindered self-care. Reduced physical ability and lack of knowledge about HF also limited their activities. Despite these challenges, participants felt motivated and committed to maintaining an active lifestyle after gaining knowledge. Positive changes included improved physical abilities, mobility, and dietary habits. Overall, participants expressed satisfaction with the self-care intervention and its impact on their health.

Key conclusions: Barriers like living environment and physical limitations hinder self-care in frail older adults with HF. Despite this, motivation and positive changes were described. Knowledge and continuous support from healthcare personnel are crucial for improving self-care and reducing hospitalizations.

P-0716

Long-term trajectories of triglyceride-glucose index and their association with frailty in urban older adults: a 10-year cohort study

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Introduction: The triglyceride-glucose (TyG) index, a simple alternative index of insulin resistance, has not yet been proven to be associated with frailty. This study aimed to investigate the association between the TyG index and its trajectory with frailty from a cross-sectional, retrospective and prospective level based on an ongoing cohort.

Methods: This longitudinal study included 1,866 older residents from the “Fujian prospective aging cohort”. The TyG index was calculated using the formula: $\ln [\text{fasting triglyceride (mg/dL)} \times \text{fasting plasma glucose (mg/dL)} / 2]$ and group-based trajectory model (GBTM) was applied to identify the trajectory of TyG index.

Results: In the cross-sectional analysis, the highest quartile of the TyG index was associated with an increased risk of frailty (TyG index Q4 vs. Q1, OR = 1.50, 95% CI 1.00–2.25, $P = 0.048$). Restricted cubic splines demonstrated an increasing trend for TyG index and frailty risk. During a follow-up of ten years, three distinct trajectories of the TyG index were identified: low-stable ($n = 697$, 38.3%), moderate-stable ($n = 910$, 50.0%), and high-stable ($n = 214$, 11.7%). Compared with those in the stable-low group of TyG index trajectory, the ORs (95% CI) of prefrailty and frailty risk were 1.79 (95% CI 1.11–2.88) and 2.17 (95% CI 1.01–3.88) for the high-stable group, respectively ($P = 0.017$ and $P = 0.038$). Prospectively, the highest quartile of the TyG index was associated with a 2.09-fold significantly increased risk of one-year ADL/IADL decline ($P = 0.045$).

Key conclusions: This study suggests that a persistently high TyG index may contribute to an increased risk of frailty.

P-0717

The relationship between frailty, inflammation and autophagy markers in older adults

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Introduction: Autophagy, the cellular recycling mechanism, plays role in maintaining cellular homeostasis in response to stressors. Autophagy contributes to cellular quality control by enhancing lysosomal degradation of misfolded, aged proteins and damaged organelles. Beclin1 is defined as peripheral biomarker of autophagy. Inflammaging is an important mechanism in pathophysiology of both frailty and autophagy. The study aimed to investigate the possible relationship between autophagy-inflammaging and frailty.

Methods: Participants who applied to the geriatrics clinic in August–October 2023 are grouped according to their frailty status. Comprehensive geriatric assessment was applied to all participants, hand grip strength, walking speed, activity levels were measured. Blood samples for Beclin1 and HMGB1 were collected under favorable conditions.

Results: Hundred and ninety-three participants, 107 (55.4%) of whom were women, were included. The median age of was 73 (65–102) years and 106 (54.9%) of participants were frail. Hand grip strength, walking speed, and daily activity levels were found to be significantly different between frail and non-frail participants ($p < 0.001$). Median Beclin1 levels were lower ($p = 0.01$) and median HMGB1 levels were higher ($p < 0.001$) in frail group. HMGB1 levels were higher in participants with low hand grip strength ($p = 0.010$).

Key conclusions: Results indicate that Beclin1, defined as peripheral biomarker of autophagy, also plays role in frailty pathophysiology. HMGB1, as an autophagy regulator and also acting in inflammaging, was shown to be related with both frailty and decreased muscle strength. Clarifying the relationship between autophagy-inflammaging and frailty may help development of new approaches to prevent frailty.

P-0718

Frailty assessment without the doctor. Validation of the NDFA: Nurse Directed Frailty Assessment.

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Introduction: Frailty will be increasingly common in ageing populations. Screening of frailty can help to identify patients that could benefit from a Comprehensive Geriatric Assessment (CGA).

Methods: The Nurse Directed Frailty Assessment (NDFA) was designed for outpatient care nurses, and does not require specialised equipment. The NDFA ranges from 0 and 11 points, and evaluates the medical (2 points), psychological (3 points), functional (4 points), and social domain (2 points). It was validated against a CGA based Frailty Index (FI). Associations with unplanned hospital admissions, emergency department (ED) visits, and mortality were analysed with generalized mixed models, reported as Hazard Ratios (HR) and 95% Confidence Intervals (95% CI). The best cut-off value was determined with the Youden index.

Results: The NDFA was validated in 314 patients, median age 78 ± 6.3 years, 171 (55%) female. After 1 year follow-up 15 patients (5%) died, 57 (18%) had unplanned hospital admissions, and 83 (26%) ED visits. The best cut-off value was 4 points. For mortality, an HR of 3.59 (CI 95% 1.16–11.15) was found. For unplanned hospital admissions, an HR of 1.78 (CI 95% 1.06–2.97), and an HR of 1.87 (CI 95% 1.25–2.78) was found for ED visits. With the FI, similar HRs and CI 95% were seen for all three outcome measures.

Key conclusions: The NDFA identifies patients at risk for hospitalization, ED visits, and mortality within 12 months equally well as the FI. Further research is necessary to determine the effectiveness of the NDFA in cohorts than the Geriatric Medicine outpatient population.

Poster

Geriatric Emergency Medicine

P-0719

Clinical characteristics and outcomes of older patients diagnosed with acute pulmonary embolism in the emergency department

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Introduction: Knowledge on characteristics and outcomes of older Pulmonary Embolism (PE) patients in the Emergency Department (ED) may fuel shared decision making and pro-active care planning, but data is scarce. We described characteristics and outcomes of older PE patients diagnosed at the emergency department (ED).

Methods: We used two ED-cohorts of the Leiden University Medical Center (Leiden, The Netherlands): 194 patients retrospectively collected patients (≥ 70 years) diagnosed with PE in the ED, and 751 patients (≥ 70 years) prospectively included in the Acutely Presenting Older Patient (APOP) study who visited the ED for any indication.

Results: PE patients were, compared to general older ED patients, slightly younger (76 (IQR 72–81) vs 78 (IQR 74–83) years; $p < 0.001$), performed similarly on cognition and functioning scores, were more often hospitalized (76% vs 43%, $p < 0.001$), had a higher 7 days (8.3% vs 1.9%, $p < 0.001$), 3 months (19% vs 9.5%, $p < 0.001$) and 1 year (34% vs 18%, $p < 0.001$) mortality. The 56 (23%) patients with active cancer in the PE cohort were younger and less cognitively impaired, yet had a threefold higher mortality risk at three months compared to patients without cancer.

Conclusion: Older patients diagnosed with PE at the ED had twice the mortality rate at three months compared to general older patients at the ED, cognition and functioning being comparable to general older ED patients, this was primarily due to the presence of cancer in older PE patients.

Short poster presentation

Geriatric Emergency Medicine

P-0720

5 year timeline of the development of acute Frailty Service

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Background: Within the National Health Service, frail patients are the main service users, with complex medical and socioeconomic needs which lead to a risk of adverse outcomes and subsequent prolonged admissions, with many hours spent in the Emergency Department (ED).

The Frailty Service in ED is therefore, of paramount importance to delivering comprehensive care to provide the best outcomes, with emphasis on early intervention and supportive discharge.

Methods: Interventions below have innovated the Frailty Service over 5 years for patients referred > 65 years.

Start of Frailty Team: Consultant Geriatrician and Physician Associate, Monday–Friday 8–4 h (2020).

Addition of Junior Doctor (2021).

Direct referrals from GPs, Paramedics, Community (2022).

Creation of dedicated Frailty Unit within the ED blueprint (2022).

In-reaching patients from ED prior to review by ED Doctor (2023).

Daily huddles with ED Consultants to identify potential patients (2024).

Results: Exponential rise in referrals.

From average < 50 referrals per month on its inception to > 300 in 2024.

Average discharge rate from ED of 5% in 2019, rising to 20% in 2022 and hitting its peak of 40% discharges in July 2024.

Conclusions: Frail patients should not be perceived as a problem to the system but rather new models of care via innovation are imperative to address the challenging needs of an ever-aging population.

Dedicated specialist teams provide better outcomes via early intervention with prompt discharges from ED, leading to improved patient care.

As such continued innovation will continue to provide service users with the best experience when attending hospital.

P-0721

The success of alternative pathways—direct paramedics referrals to dedicated Frailty Unit

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Background: Within the National Health Service (NHS), dedicated Frailty Units have proven to be successful in improving patient outcomes and reducing length of stay. Delays in recognising frailty can lead to unnecessary admissions and thus increase pressure on busy Emergency Departments (ED).

This recognition by community colleagues i.e. paramedics is therefore of utmost importance to stream these patients to specialised units where they receive more appropriate care using alternative pathways.

Methods: Fortnightly collaborative meetings with wider multi-disciplinary team including paramedic operational leads.

Call before conveyance method to streamline frailty patients to right pathway.

Use of Consultant Connect phone for direct advice by Frailty Clinician between 8–4 working hours.

Results: Since July 2024 (Frailty Unit un-bedded following winter bed pressure) till February 2025, number of direct referrals from paramedic colleagues risen from 33 to 85 per month, following inception of changes as noted.

Of these, 24 from 33 (73%) and 65 from 85 (77%) were streamed directly to dedicated Frailty Unit.

In total since July 2024, total 418 direct paramedic referrals made with 345 of these brought directly to Frailty Unit.

Conclusions: With 83% of total paramedic conveyances being brought to the Frailty Unit since July, this shows regular liaison and communication between systems partners had led to a successful alternative pathway.

Direct referrals by paramedics to dedicated Frailty Units are vital for improving the care of frail patients, reducing unnecessary hospitalisations, optimising healthcare resources and enhancing patient outcomes in the NHS whilst reduced pressure on the ED.

P-0722

Frailty on the weekends—a success story!

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Introduction: With increasing demand on the National Health Service (NHS), addressing needs of the frail population is of paramount importance. Frail patients do not discriminate depending on the day so why should these services come to a halt on weekends?

Frailty services provide continuity and prevent gaps in care, help prevent otherwise avoidable hospitalisations and improve patient outcomes with reduced readmission rate.

Methods: Established frailty service started 7 day working week as a trial from January– February 2025.

Dedicated frailty unit open on weekend.

Team consisted of: Consultant Geriatrician, Physician Associate, FY1.

8am–4pm working hours.

Focus on Geriatric syndromes, patients that are Clinical Frailty Scale ≥ 4 and NEWS ≤ 4 .

Results: Comparing patients on the medical take between 8–4pm on 8 consecutive weekends in January–February 2024 to Frailty weekend data from 2025 shows:

Total number of patients 419 and 401 respectively.

Increase in discharges within 24 h for ≥ 75 years from 16 to 41% and ≥ 85 years from 11 to 24% with no change to readmissions despite higher turnover of 7% in both 2024 and 2025.

No change to mortality, 12% and 10% respectively.

Conclusions: As frailty becomes more prevalent, especially among the elderly, the NHS must adapt. Weekend frailty cover is an essential part of this adaptation.

It is critical that frail patients receive continuous, timely and appropriate care to improve their quality of life, and this approach aligns with the NHS's model to provide high-quality, integrated and patient-focuses services that are readily accessible everyday and not just during weekdays!

P-0723

Geriatrician presence in Emergency Departments across Europe

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Introduction: Attendance at Emergency Departments (ED) by older patients in Europe has significantly increased with ageing populations, causing service pressures. The creation of ED Geriatric Services (EDGS) by some units has allowed earlier comprehensive geriatric assessment, alongside the development of a European Curriculum in ED Geriatric Medicine. However, presence of this service varies significantly across Europe. This study collected European data on the existence and frequency of EDGS.

Methods: Board members of the European Union of Medical Specialities-Geriatric Medicine Section responded to a cross-sectional survey about the existence and frequency of EDGS (as part of a broader survey) in their countries. The questionnaire categorised service availability from institutions into four levels: No(none), Yes-Minority($< 25\%$), Yes-Some($25\%–75\%$) or Yes-Majority($> 75\%$).

Results: Responses from 39 countries were gained, which we categorized into four geographical regions: Nordic(NORD; $n = 5$), Central-Western Europe(CWE; $n = 9$), Eastern Europe(EE; $n = 17$), Southern Europe(SE; $n = 8$). There was a significant variation in the availability of services between countries. More services were provided in the CWE (8/9; 88.9%) and NORD (3/5; 60.0%) countries. In

contrast, EDGS were lacking in SE (3/8; 32.5%) and EE (only 1/17; 5.9%) countries. Overall, 15 (42.9%) countries reported having some EDGS, although only 3 countries (7.7%) had this service in the majority ($> 75\%$) of hospitals.

Discussion: This is the first comprehensive survey of provision of EDGS across Europe and shows wide heterogeneity between the 4 regions of Europe. The data gathered will be valuable for discussions with policy makers in developing Geriatrician presence within ED in their countries.

Poster

Geriatric Emergency Medicine

P-0724

An infrequent cause of hematuria

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Introduction: One of the most common renal tumors are angiomyolipomas (AML). These tumors are characterized by being benign. Its origin is at the mesenchymal tissue and are primarily formed by smooth muscle fibers and dysmorphic blood vessels. Its incidence on all age group is about 0.3–3%. There are different kinds of AMLs, the most described one are single focal lesions, mostly presented in women (4:1) and at 40–60 years old.

Mostly asymptomatic, sometimes patients describe the presence of a palpable mass, when they are bigger than 4 cm, associated to abdominal pain and hematuria.

Case report: An 84-year-old women with history of non-Hodgkin lymphoma in remission (recently treated with chemotherapy) and vitamin D deficiency, and was prescribed Lorazepam and vitamin D supplements. She was admitted for rehabilitation after a severe infection by the flu.

Comprehensive Geriatric Assessment:

- Social: married.
- Functional: previous Barthel-Index: 60/100. Barthel-Index at admission: 15/100.
- Cognitive: no cognitive impairment.
- Nutricional: malnutrition risk.

Results: The patient presented abdominal pain located in the right flank associated to a palpable mass and self-limited hematuria in the context of an ITU. Ultrasonography showed a suggestive image of a renal AML of about 11 mm. Due the clinical context and the oncological stability the medical team decided to perform an active vigilance of the mass with radiological exams in order to avoid surgery. Finally, the patient recovered her previous functional status.

Conclusions: This case shows the importance of close evolution follow up of patients with this type of benign tumors, and the importance of giving an opportune treatment if this condition associates to infections.

P-0725**Engagement with patients as partners in a frailty at the front door service: outcomes from a patient experience survey**

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Introduction: One of the pillars of integrated care describes “people as partners in care”. Positive patient experiences are linked to better adherence to treatment plans, improved clinical outcomes, and reduced healthcare utilisation. Patient feedback is essential in fostering effective and efficient care [1]. The Frailty at the Front Door (FFD) service in the emergency department (ED) of a model 3 hospital conducted a patient experience survey to facilitate patient centred care.

Methods: The survey comprised 3 parts: 1. Did input from the team help discharge? 2. Rate experience with the team and 3. Comments. Surveys were sent to all patients assessed by the team, who were discharged home in 2024. Data on responses were analysed.

Results: In total 304 surveys were sent and the response rate was 17% (n = 52).

Fifty-eight percent (n = 30) reported that the input from the FFD team helped their discharge. The majority (82%, n = 43) were either very satisfied (67%, n = 35) or satisfied (15%, n = 8) with their experience with the team. Comments were completed in 85% (n = 44) of cases and 100% were positive. Most common themes were helpfulness (39%, n = 17) and thankfulness (16%, n = 7). There was no reported dissatisfaction or negative comments.

Conclusion: The FFD team has had a positive impact on patient experience. Further engagement is planned to increase response rates and target specific elements of the service.

Reference:

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P-0726**Evaluation of falls assessments and interventions by a geriatrician-led frailty intervention team in the Emergency Department of a model four Irish Hospital**

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Introduction: 32–42% of adults over 70 years old fall each year(1). Falls are the cause of 10–15% of hospital admissions in older adults(2). Assessing falls is an important part of the Emergency Department’s (ED) work.

Our Frailty Intervention team (FIT) comprises of a Consultant and registrar in Geriatric Medicine and a full cohort of members of the multidisciplinary team. FIT carries out comprehensive geriatric assessments for frail adults over 65 presenting to ED.

We aimed to evaluate how FIT manage patients presenting with falls.

Methods: Data from September 2024 was reviewed retrospectively. We included patients who presented to ED with fall being their primary issue, and who were assessed by FIT.

Results: In September 2024, 58 patients presenting to ED with falls were assessed by FIT. Age ranged from 65 to 96. Mean clinical frailty score was 5.

84% underwent mobility assessment. Postural blood pressures were measured in 72%, with orthostatic hypotension identified in 33%. Bone health was assessed in 34%. Polypharmacy was identified in 36%. Medications were changed for 41%. 33% had analgesia prescribed by FIT.

52% were discharged directly home, with 33% of these referred to local integrated care teams. 29% required hospital admission. 19% were transferred to offsite rehabilitation.

Conclusions: Older adults presenting to ED following falls require comprehensive multidisciplinary assessments. Identifying orthostatic hypotension is an important modifiable risk factor for falls.

36% of patients received Geriatrician-led input post fall- in rehabilitation or at home by integrated care teams. This would not be possible without FIT’s involvement.

References:

1. WHO. WHO Global Report on Falls Prevention in Older Age [Internet]. www.who.int. 2008. Available from: <https://www.who.int/publications/i/item/9789241563536>

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P-0727**Referral patterns to an integrated care program for older people (ICPOP): opportunities and risks**

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Introduction: Geriatrician led Comprehensive Geriatric Assessment (CGA) delivers better outcomes for frail older people (FOP). The evidence is particularly strong for supported discharge models from acute hospital and emergency care settings but less so for admission avoidance approaches from the community. Maturing Integrated Care services increase CGA access to wider groups of community-based FOP and referrers.

Methodology: Referral sources to ICPPOP were reviewed over a six year period from when the service was established in 2018. Referrals were grouped into those that were supporting discharge from hospital versus those that had been supporting community based residents at the point of referral. Patterns of referral rate were established.

Results: Supported Discharge rates from Acute hospital care have been falling from a peak of 48% (127/279) of referrals in 2018 to a low of 29% (365/863) in 2023. There has been an increase in referrals from the community setting with 56/79 (71%) of GPs referring an average of 2.5 patients each in 2023, the first year of fully open access to primary care.

Key conclusions: The best evidence base for Comprehensive Geriatric Medicine in an Integrated Care setting is in “supporting discharges” from hospital. There is a substantial risk that finite Multi-Disciplinary Team resources to deliver this activity are targeted at a less evidence based community dwelling “admission avoidance” older population.

Community-based referrals are an increasing feature of the ICPOP service despite a relatively poor evidence base. Strategically agreed whole system outcomes are required to ensure finite resources are used most effectively.

P-0728

Comparison of the prognostic value of qSOFA and alternative geriatric-qSOFA in geriatric patients with suspected sepsis in the Emergency Departments

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Introduction: Sepsis primarily affects individuals aged ≥ 65 , with incidence further increasing among those ≥ 85 . In emergency departments (EDs), the quick Sequential Organ Failure Assessment (qSOFA) score is commonly used to detect sepsis early or identify high-risk patients. Its effectiveness in older adults appears limited, possibly due to the Glasgow Coma Scale's (GCS) reduced ability to detect cognitive changes in this population. This study evaluates whether replacing the GCS with the 4AT score in the qSOFA—generating the Geriatric-qSOFA (G-qSOFA)—improves its diagnostic and prognostic performance in elderly patients. Secondary aims include assessing the prevalence of sepsis and delirium, exploring etiological factors and identifying associations with specific variables.

Methods: Patients aged ≥ 65 admitted to the EDs of Cattinara and Maggiore Hospitals in Trieste between 09/12/2023 and 09/06/2024 were enrolled. Each was assessed using both the 4AT and qSOFA scores, and data were collected. A six-month survival follow-up was conducted. Statistical analysis was performed using R software.

Results: A total of 172 patients were included, with a median age of 84. Sepsis was diagnosed in 35% of cases, 53% of whom tested positive on the 4AT. Significant associations were found between sepsis/positive 4AT scores and demographic factors, comorbidities, clinical and laboratory data, ED stay, hospitalization duration and outcomes. G-qSOFA showed higher sensitivity (80%) than qSOFA (53%) in predicting mortality in septic patients, especially for those over 80.

Key conclusions: Delirium may serve as an early marker for sepsis. G-qSOFA could be a valuable tool for identifying high-risk geriatric patients in emergency settings.

P-0729

Relandscaping frailty services -impact of a novel admission proforma on frail older adults in the Emergency Department

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Background: Innovative approaches to meet the acute care needs of Frail Older People (FOP) in the Emergency Department (ED) are needed. Frailty Intervention Teams (FIT) enhance FOP care in the ED. We developed an admission proforma, tailored to improve FOP experience, compliment wider Multi-Disciplinary Team Comprehensive Geriatric Assessment (MDTCGA) and reduce physician time expended in the ED in a rural Irish Hospital.

Methods: We completed a retrospective case-control study of FOP admitted from the ED over a four month period. A novel FIT medical admission proforma, complimenting a MDTCGA, was introduced. We compared its use with patients admitted on a conventional Integrated Medicine Pathway (IMP). FOP who were aged > 70 years, with a Clinical Frailty Scale (CFS) score of 2–8 and who could not be discharged on the same day were included. Clinically unstable, unwell patients were excluded.

Results: From 68 FIT total admissions, 67 had a CFS score of ≥ 4 . Mean age was 82.6 years. 34 patients were admitted using the FIT proforma and 34 patients were admitted using the conventional IMP. Physician time expended using the FIT proforma (75 min) was significantly less compared to those admitted on the IMP (135 min). The mean patient experience time was shorter for those admitted via FIT proforma (20.7 h) compared to the IMP (21.7 h).

Key conclusions: A tailored FOP medical proforma, complimenting the wider Multi-disciplinary CGA, reduced physician assessment times by 1 h. Further study may show improvement in both wider clinical outcomes and enhanced ED patient flow.

P-0730

Healthcare utilization indicators in geriatric patients: towards a new model of integrated care

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Introduction: Italy's aging population presents significant challenges for the healthcare system, particularly in managing frail older adults. Inefficient healthcare utilization, including frequent emergency department (ED) visits and increasing specialist consultations, highlights the need for structured care pathways. This study analyzes healthcare utilization indicators in geriatric patients over 75 years old to inform the development of an integrated hospital-territory model.

Methods: A retrospective analysis was conducted on geriatric outpatient consultations and hospital admissions from 2019 to 2024. Key indicators included the number and priority classification of geriatric visits—urgent (Class B), priority (Class D), and non-urgent (Class P)—waiting times, and direct hospital admissions from outpatient clinics. A structured triage system was introduced to optimize specialist requests, and a facilitated hospital-territory pathway was implemented to improve care transitions.

Results: Between 2019 and 2024, urgent (Class B) visit requests increased by 551.7%, often inappropriately, while priority (Class D) visits increased moderately (+ 29.6%). Non-urgent (Class P) visits decreased (– 72.8%), indicating a shift toward urgent access. Waiting times for priority Class D visits increased (+ 85.5%), reflecting system overload. Direct hospital admissions from outpatient clinics rose from 17 in 2019 to 30 in 2024, suggesting that integrated care pathways help reduce unnecessary ED visits.

Key conclusions: Analyzing healthcare utilization indicators is essential for redesigning geriatric care pathways. A structured, multidisciplinary model can improve triage, reduce inefficiencies, and enhance care continuity. Future efforts should focus on digital integration and remote monitoring to optimize care transitions, resource allocation and general practitioner.

P-0731

Cardiac tamponade in an institutionalized elderly woman with prior pericarditis

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(1) Dr

An 85-year-old woman with a history of hypertension, dyslipidemia, hypothyroidism, stage IIIB chronic kidney disease, paroxysmal atrial fibrillation, and heart failure with preserved ejection fraction. In 2020, she had pericarditis with moderate pericardial effusion. Her last echocardiogram (2023) showed mild mitral, aortic, and tricuspid regurgitation, and a 12 mm anterior pericardial effusion. She is institutionalized, with a Barthel Index of 90, moderate frailty (FRAIL-VIG 0.44), and mild cognitive impairment.

She was referred to the emergency department for acute kidney injury in the context of diarrhea and presyncope. On arrival: bradycardia (heart rate 48 bpm), blood pressure 120/50 mmHg, muffled heart sounds, decreased breath sounds in the left hemithorax, and jugular venous distension. Electrocardiogram showed sinus bradycardia with low voltages. Chest X-ray revealed a globular cardiac silhouette and cardiomegaly. Laboratory tests showed creatinine 2.56 mg/dL, estimated glomerular filtration rate 16.52 mL/min, NT-proBNP 3495 pg/mL, lactate 2.55 mmol/L.

Point-of-care echocardiography revealed a massive pericardial effusion with right ventricular collapse, consistent with cardiac tamponade. She was transferred to a referral hospital, where subcostal pericardiocentesis was performed, draining 1120 cc of hemorrhagic exudate. Her clinical condition improved, with recovery of normal sinus rhythm.

Discussion: The prevalence of idiopathic pericardial effusion is reported to be 2.6% of all pericardial effusions. Conversely, when pericardial fluid accumulates chronically over time, there may be no obvious clinical symptoms.

Conclusion: Considering the patient's medical history, she was at risk for recurrent pericardial effusion. Cardiac tamponade is an emergency condition that can quickly lead to death.

Keywords: Cardiac tamponade, Elderly.

Short poster presentation**Geriatric Emergency Medicine**

P-0732

Cumulative dose of repeated musculoskeletal corticosteroid injections and Emergency Department visits

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Introduction: A key strategy in management of musculoskeletal pain in the elderly involves joint and bursae corticosteroid injections. Typically, a water insoluble corticosteroid (IC) is used to prolong presence at the injected site and to limit systemic absorption. Yet, there is potential for systemic effects such as immune suppression, hypothalamic-pituitary-axis suppression, fracture, and hyperglycemia predisposing patients to emergency department (ED) visits. We studied the association of increasing cumulative IC dose with ED visits.

Methods: We used an institutional EHR database to identify a cohort of 8816 patients receiving IC over a 4-year period beginning in 2018. The annual and cumulative IC dose, type, and number of injections were determined. ED visits and reasons for visit were collected. Based on the cumulative dose received, the cohort was divided into "High", "Medium", and "Low" dose. An adjusted logistic regression model was used to account for age and gender differences between groups.

Results: A total of 43,156 IC injections and 19,121 ED visits occurred with the most common ED visit complaint being chest pain. The number of patients having at least one ED visit was compared between IC dose groups. Logistic regression modeling showed more patients in the High and Medium IC groups had at least one ED visit compared to the Low.

Key conclusions: Patients receiving IC injections often have complex healthcare needs and understanding the potential for serious systemic effects leading to ED visits is important. Our data shows an association between higher cumulative IC dose and risk of ED visit.

Poster**Geriatric Emergency Medicine**

P-0733

Low-intake dehydration and mortality risk in hospitalized older adults

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Introduction: Serum-sodium is often used to assess hydration status in older adults. Recent guidelines recommend calculating serum osmolality to assess dehydration in older adults, with values > 295 mosmol/L indicating low-intake dehydration. However, the whether calculated serum-osmolality provides additional information over just serum-sodium remains unclear.

Method: We conducted a retrospective cohort study of a random sample of 500 patients aged ≥ 80 years hospitalized Aalborg University Hospital in 2023 for internal medicine care and collected age, admission biochemistry (sodium, potassium, urea, glucose). The end follow-up was the 30th of September 2024. Patients with eGFR < 30 mL/min/1.73 m² and serum-osmolality < 275 mosmol/L were excluded. Serum-osmolality was calculated using the formula recommended by ESPEN and categorized into groups.

Results: Of 500 patients, 403 (mean age 86.9 ± 5.0 years) met inclusion criteria; 180 (43%) had died by end of follow-up (median follow-up time 319 days). Using a Cox regressions analysis we analyzed the risk of death comparing the groups with increased serum-osmolality with the normal group (275–295). The two highest groups showed a statistical significant increase in mortality (300–305: HR 1.90 95%CI 1.22–2.96, above 305: HR 1.96 95%CI 1.36–2.82). Furthermore, both groups remained significant after adjusting for serum sodium.

Discussion: Elevated serum osmolality above 300, independent of serum sodium, was associated with increased mortality in older

hospitalized adults. These findings support the added benefit of calculated serum-osmolality and underline the need for prospective studies to determine whether early correction of low-intake dehydration can improve outcomes.

Short poster presentation

Geriatric Emergency Medicine

P-0734

Innovation in the primary and secondary care for crisis admission prevention in the frail elderly: qualitative data

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Introduction: Subacute Zorg (SaZ) is an outpatient model at the primary-secondary care interface based on the Comprehensive Geriatric Assessment (CGA). It is designed to optimize care for frail elderly living at home and prevent admissions. This study examines the impact of SaZ on qualitative outcomes compared to traditional care pathways. The participants' experiences and discussions were incorporated into action research.

Methods: A nine-month mixed-methods study compared SaZ with three conventional pathways: emergency department (ED), outpatient emergency clinic (OEC), and home visits. Quantitative measures included Patient-Reported Outcome Measures (PROMs, [1]), caregiver burden (EDIZ, [2]) and Patient-Reported Experience Measures (PREMs, [3]). Action Research phases were applied to analyze participant interviews and meetings [4].

Results: Among 85 enrolled patients, after the follow-up, quality of life improved from baseline (mean 6.2), with most increases in OEC (7.3) and SaZ (8.2). Similarly, perceived health increased from baseline (mean 5.8) in OEC (7.1) and SaZ (7.8). EDIZ showed the most reduction in the OEC (-2.8 versus -2.3). PREMs revealed high satisfaction with rapid accessibility and comprehensive consultations, though highlighted the need for prompt implementation of the care plan. The target sample size was not achieved due to complicated financial compensation and setting-specific factors influencing referral patterns.

Conclusion: SaZ demonstrates promising outcomes in improving quality of life and reducing caregiver burden with a strong belief among all participants and a positive collaborative spirit. Future implementation should integrate home visits and accessible hospital services, implementing a centralized triage system and streamlined reimbursement processes.

Poster

Geriatric Emergency Medicine

P-0735

Polypharmacy and inappropriate prescribing in patients over 85 years old presenting to the Emergency Department due to poisoning

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Introduction: Older adults are particularly vulnerable to drug-related poisoning due to age-associated physiological changes, polypharmacy and inappropriate prescribing. This study aims to describe the clinical profile of patients ≥ 85 years presenting to the emergency department (ED) with poisoning and to assess polypharmacy and inappropriate prescribing.

Methods: A retrospective study of patients ≥ 85 years attending the ED for poisoning between 2012 and 2023 was conducted. Demographic and clinical variables, poisoning characteristics, and mortality were collected. Polypharmacy (≥ 5 medications) and inappropriate prescribing according to STOPP/START criteria were assessed. Descriptive and bivariate analyses were performed.

Results: 142 patients were included (mean age 89.15 ± 3.67 years, 73.2% female, 52.1% cognitively impaired). Most poisonings occurred at home (92.3%) and were accidental (72.5%). Drug-related poisonings accounted for 81.7%, mainly digoxin (37.1%), benzodiazepines (31%) and opioids (14.7%). Hospitalisation was required in 29%, and mortality was 7.8%.

Polypharmacy was observed in 90.1% (mean 8.87 ± 3.52 drugs), and inappropriate prescribing in 83.1%, mainly benzodiazepines (55.9%), digoxin (36.4%), and proton pump inhibitors (23.7%). Inappropriate prescribing was associated with polypharmacy, heart disease, chronic kidney disease, and drug intoxication ($p < 0.005$). Overall, 55.6% of drug poisonings involved inappropriate prescriptions; for digoxin, 100% of misprescriptions resulted in poisoning, and for benzodiazepines, 59%.

Conclusions: Poisoning in individuals ≥ 85 was predominantly accidental and drug-related. The high prevalence of polypharmacy and inappropriate prescribing highlights the need for regular medication review and a geriatric-focused approach to improve safety in this vulnerable population.

P-0736

Poisoning in patients over 85 years old in the Emergency Department: clinical description and factors associated with mortality and intentionality

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Introduction: Poisoning in older adults represents a clinical challenge in the emergency department (ED). This study aimed to describe the clinical profile of patients ≥ 85 years presenting to the ED with poisoning and analyse factors related to intentionality and mortality.

Methods: Retrospective study of patients ≥ 85 years old attending two EDs (2015–2023) due to poisoning. Sociodemographic and clinical variables, poisoning intention, substances involved, and mortality were collected. A descriptive and bivariate analysis was conducted.

Results: 225 patients were included (mean age 88.87 ± 3.55 years, 69.3% female, Barthel Index (BI) 65.28 ± 29.60). The most frequent substances were digoxin (39.1%), benzodiazepines (16.4%), household products (11.1%) and opioids (8%). Poisonings were mostly accidental (81.8%), followed by self-poisoning (12.4%) and recreational (5.8%), with the latter being more frequent in males ($p = 0.002$). Self-poisoning was associated with higher BI and psychotropic and paracetamol use ($p < 0.05$), while accidental cases were linked to digoxin ($p < 0.05$). Twelve patients (5.3%) died, mainly from digoxin and hypoglycaemic agents, with the latter significantly associated with mortality ($p = 0.000$). Neurological ($p = 0.012$) and respiratory symptoms ($p = 0.000$) were also linked to mortality.

Conclusions: In our study, poisoning was mostly accidental by digoxin, benzodiazepines and opioids. Patients with higher functionality had more self-harm attempts and psychotropic use. Overall mortality was 5.3% and was associated with hypoglycaemics and respiratory or neurological symptoms. These findings highlight the need for appropriate prescribing in older adults to prevent serious poisoning.

P-0737

Barnet hospital frailty service—a new chapter in a London District General Hospital

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The acute care system is operating at maximal capacity, emergency care is in an ‘awful state’, and there is continual rising of demand [1]. The ageing population is a triumph and challenge, with more people living with frailty and complex needs [2]. Demand continues to rise, and our services need to respond to this new reality [3].

Barnet Hospital is situated within the largest population of older people in London, UK. Our local ageing population provides opportunities to develop Same Day Emergency Care (SDEC) for frail patients traditionally underserved and excluded from such services [4]. Despite embedded frailty initiatives, the traditional models of inpatient focussed care for those with frailty are unsustainable [3]. High conversion rates from attendance in our ED to hospital admission for frail older patients further reinforces need for frailty SDEC services [5].

Barnet Hospital was an early adopter of Geriatrician and MDT presence within the ED, however a previous iteration of a front-door frailty service was non-functional in 2024. A new front-door Frailty Service was never more urgent with evidence showing the oldest old waiting longest to be assessed in the ED with increased mortality, and frail patients waiting longest to be seen on the medical take [6,7,8].

A multidisciplinary working group used service improvement methodology to design and develop a new Frailty Service, despite workforce and infrastructure challenges. With increasing patients seen by the expanding service, patient/carer feedback remained excellent, and mortality rates and unplanned re-attendance rates at 7 and 30 days remained lower than expected.

P-0738

Research on hospitalization of elderly people with surgical emergencies in the surgery and Intensive Therapy Unit

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Introduction: The global population of individuals over the age of 65 is increasing. Consequently, the rate of surgical procedures in this target group is also increasing. In addition, surgical emergencies present a considerable challenge in medical practice, given the elevated risk of morbidity and mortality among elderly patients compared to younger patients undergoing similar interventions. This study aims to investigate the most prevalent surgical emergencies in the third age, the duration of hospitalisation, the identification of coexisting diseases, the type of surgical intervention, and the new laparoscopic approaches that are favourable for maintaining a good quality of life.

Methods: This prospective study will include patients over the age of 65 who have been hospitalised and received surgical emergency care at the Xhaferr Kongoli Hospital. The primary variables to be analysed encompass demographic and clinical factors, diagnoses confirmed by specialist physicians, surgical interventions performed, postoperative complications, duration of hospital stay, mortality rate and rehabilitation outcomes. The data obtained will be analysed using SPSS 22, employing descriptive statistics.

Results: The results of this study are expected to demonstrate a high rate of both types of surgical interventions and comorbidities among elderly patients, which leads to increased surgical procedure vulnerability. Furthermore, it has been highlighted from many studies that postoperative complications arising from both internal and external factors are prevalent among this group, and that these complications have a significant impact on survival rates among elderly patients. Survival analysis will be performed through the evaluation of the impact of various surgical and laparoscopic approaches on the overall survival of elderly patients who have undergone surgical interventions in cases of surgical emergency. The requirement for intensive care support is a possibility, given that age-related physiological changes have an effect on the recovery process.

Conclusion: The present study aims to highlight the multifaceted challenges faced by healthcare providers in managing surgical emergencies in the elderly population. The promotion of multidisciplinary approaches inclusive of comprehensive geriatric assessments and enhanced communication regarding treatment options with families is advocated, to achieve superior health outcomes and enhancements in the quality of life of patients in the period following surgical intervention.

Keywords: Research, Elderly, Surgical emergency, Intervention, Hospital.

P-0739**An innovative emergency department model for nonagenarians: a value-based care approach in a private health network**

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Introduction: The growing population of nonagenarians presents significant challenges for emergency departments (EDs), requiring tailored approaches to optimize outcomes. Traditional ED workflows often result in prolonged hospital stays, increased complications, and fragmented care. This study describes an innovative ED model designed to deliver specialized, outcome-driven, and value-based care for patients aged 90 and older in a private health network in São Paulo, Brazil.

Methods: From July 16, 2024, to January 16, 2025, all nonagenarians arriving at the ED were promptly identified and directed to a dedicated triage unit. Patients were then assigned to the most appropriate care pathway based on clinical assessment, including medication administration, laboratory tests, imaging, emergency intervention, observation, or hospitalization. A geriatric-trained physician reassessed all patients after initial treatment. Upon discharge, a multidisciplinary team provided structured follow-up for up to 10 days, ensuring resolution of the acute episode, medication reconciliation, prevention of infections and injuries, and anchoring in long-term geriatric care.

Results: During the study period, 40,775 emergency visits were recorded, involving 28,776 nonagenarians. The structured triage and specialized care pathways enhanced response efficiency, reduced unnecessary hospitalizations, and improved patient safety. The post-discharge follow-up program strengthened continuity of care, addressing unresolved clinical issues and reinforcing preventive strategies.

Key conclusions: Implementing a specialized ED model for nonagenarians, centered on outcome-based and value-driven healthcare, enhances patient safety, optimizes resource utilization, and reduces unnecessary admissions. This approach demonstrates the potential for scalable, geriatric-focused ED frameworks to improve emergency care for aging populations.

P-0740**Developing a patient friendly information leaflet for humeral fractures in the Emergency Department (ED)**

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Introduction: Proximal humerus fractures, the 3rd most common fracture in older adults impacts the functional independence and activities of daily living (ADLS) for those living with frailty [1,2]. 85% of proximal humeral fractures are managed conservatively with direct discharge from ED. 8% (128) of patients followed up by the Trauma Assessment Clinic (TAC) in 2024 had humerus fractures. We identified the need to develop a patient friendly leaflet to support the care of these patients.

Methods: A Plan Do Study Act approach and stakeholder engagement was led by the Geriatric Emergency Multidisciplinary Service (GEMS), with the aim of supporting and maximising independence at home. The leaflet was piloted in January 2025. 10 leaflets were provided to patients reviewed by GEMS between January and March.

Results: Domains included; support with ADLS (washing, dressing), sleep and bone health education. 90% of patients responded to a

telephone interview 1 month post discharge. 100% reported it met their expectations and all patients would recommend it to another patient with similar fracture.

Key conclusions: A multidisciplinary developed leaflet has been shown to have a positive impact on the patient experience and enhance patients' recovery and rehabilitation process.

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P-0741**Evaluating effect of implementing frailty alert as a clinical routine—an observational study in a Swedish Emergency Department**

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Background: Long waiting times in the Emergency Department (ED) increase the risk of death in older patients. This study evaluated a clinical routine to expedite workup of older patients living with frailty that was implemented in a Swedish ED in January 2025. The intervention included an alert for assessed frailty followed by a recommendation for prioritisation of patients with a Clinical Frailty Scale (CFS) score > 4.

Method: A retrospective observational study at the Linköping University Hospital ED. Time to physician, ED Length of stay (LOS), and admission rate were compared between a pre-intervention group (control) and an intervention group (intervention). Data collection for the control started in October 2024. Consecutive patients aged ≥ 65 years with CFS > 4, who consented were included.

Results: A total of 389 ED visits of patients were analysed (177 in control, 212 in intervention). Time to physician was shorter for patients in the intervention group 28 (IQR 12–62) vs 45 (IQR 19–99) minutes respectively ($p < 0.001$). ED LOS was reduced from 345 (IQR 259–502) to 313 (IQR 236–455) but this was not statistically significant ($p = 0.08$). The admission rate was unchanged at 58%.

Conclusion: The clinical routine led to a 17 min decrease on the time to physician and a non-significant 32 min decrease in ED LOS. Frailty alerts could be used to expedite work up.

P-0742**Older patient in the ICU: characteristics and prognostic factors associated with mortality**

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Introduction: To evaluate characteristics of old patients admitted to the Intensive Care Unit (ICU) and establish factors associated with in-ICU mortality.

Methods: Descriptive retrospective study Patients over 80 years old admitted to the ICU from 1/01/ 2023 to 31/12/2024 were included. Baseline characteristics were collected: age, sex, functional status, comorbidities, and medications. Time until ICU admission, severity (SOFA score), hemoglobin (g/dL) and C-reactive protein (CRP) values at admission were recorded, the presence of cardiopulmonary arrest, renal failure, or neurological impairment. The reason for admission, ICU supportive treatment, in-ICU mortality and presence of delirium were documented.

Results: 85 patients were included. The mean age was 85 years (4.3), 52% were men. 14.1% did not have physical function documented. No significant differences in baseline characteristics were observed concerning mortality. Significant differences in mortality were observed in patients with septic shock ($p = 0.02$), altered level of consciousness ($p = 0.0001$), renal dysfunction ($p = 0.001$), respiratory failure ($p = 0.01$) or cardiopulmonary arrest ($p = 0.04$). Patients with low hemoglobin, elevated CRP, higher SOFA scores at admission, and those requiring non-invasive or invasive mechanical ventilation for > 48 h had higher mortality rates.

Conclusions: There is no relationship between baseline characteristics and mortality. However, higher mortality is associated with pathology, hemoglobin levels, CRP, and the treatment received. A high percentage of patients did not have physical function documented in their medical records, and for the rest, it was recorded in an unstructured manner, which may explain the lack of association with mortality.

P-0743

Causes of admission of geriatric patients in the Internal Medicine Emergency Department and their correlation with the final diagnosis

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Introduction: Geriatric patients represent an increasing part of the population, that often uses the Emergency Department health services requiring multifactorial and comprehensive approach due to its particular characteristics. Among them, atypical presentations of diseases correlate with delays in diagnosis and treatment.

Methods: We retrospectively studied the incidence of atypical presentations in a population of 110 elderly patients (older than 75 years) admitted within three months in the Internal Medicine Emergency Department of a University Hospital in Athens, Greece, as well as their correlation with demographic data and information drawn by the patients' hospitalization records.

Results: Four out of 10 elderly patients presented with atypical presentations, with falls and alterations of the level of consciousness being the commonest among them. Urinary and respiratory tract infections were the most frequent final diagnoses related to initial atypical presentations. The latter were significantly correlated with the functional level of the elderly in the domains of basic and instrumental activities of daily living, as well as with the negative outcome of their hospitalization. Moreover, atypical presentations were more frequent in men with two or more concurrent illnesses. No correlation was observed between atypical presentations and elderly patients' family status, number of children or place of residence.

Key conclusions: Recognizing the atypical presentations of diseases in the elderly patients requires a high index of vigilance on behalf of

the health professional, aiming at prompt diagnosis and appropriate treatment.

P-0744

A retrospective service review assessing the impact of a Geriatric Emergency Multidisciplinary Service

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Introduction: Frailty, a state of diminished physiological reserve, predisposes older people to adverse outcomes, functional decline, increased length of stay, mortality and institutionalization post-acute hospital admission. A key area of interest for both specialist geriatric multidisciplinary teams and emergency physicians alike, mapping the level of frailty and admitting specialty of patients seen by the Frailty at the Front Door team in the Emergency Department (ED) plays a key role in planning service and resource utilisation. This service review study aims to assess the level of frailty and admitting specialty of older adults seen by a Geriatric Emergency Multidisciplinary Service (GEMS) in an Irish Model 3 Hospital.

Methods: A retrospective service review carried out to assess patients ≥ 75 years seen by GEMS in August 2024. Frailty was measured using the Clinical Frailty Scale (CFS). For admitted patients, the admitting specialty was recorded. The average wait to be seen by GEMS team in ED was recorded.

Results: 219 patients aged ≥ 75 years included. Median CFS was 5 (min = 1, max = 9). Most older adults assessed were not delirious (MEAN 4AT = 1.01, SD = 1.85). 77% were under Emergency Medicine, 22% were admitted under medicine (boarding in the Emergency Department), 1% were admitted surgically. Median wait time for GEMS assessment was 7 h and 53 min. Over half of patients seen by GEMS were discharged home from ED (59%, n=130).

Key conclusion: Early screening for frailty and multidisciplinary intervention in the ED has the potential to enhance safe and appropriate discharge, identify integrated pathways and divert admissions to more appropriate services.

P-0745

Outpatient geriatric care after falls: impact on physical function, nutrition, polypharmacy, and healthcare resource utilization

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Introduction: Falls in older adults with multiple comorbidities and polypharmacy are a common reason for emergency department visits and a major contributor to functional decline, institutionalization, and frequent reconsultations. Continuity of care through outpatient Geriatrics follow-up may improve physical function, reduce medication burden, and optimize healthcare resource utilization.

Methods: A retrospective observational study was conducted in patients seen in the Emergency Department due to falls and referred to an outpatient Geriatrics consultation with structured follow-up. The following variables were assessed at baseline and after follow-up:

Short Physical Performance Battery (SPPB), number of medications, nutritional status using the Mini Nutritional Assessment (MNA), and number of emergency reconsultations and hospital admissions. Changes in these indicators were analyzed after individualized geriatric intervention.

Results: A total of 36 patients were included, all over 75 years of age, with high comorbidity and polypharmacy. After follow-up, a significant improvement was observed in SPPB (mean increase: + 3.1 points) and MNA (mean increase: + 2.4 points). The average number of prescribed medications per patient decreased from 9.2 to 7.1. Additionally, a 62% reduction was documented in emergency department reconsultations and new hospital admissions within the following six months.

Conclusions: Outpatient geriatric follow-up after a fall improves physical function and nutritional status, reduces polypharmacy, and significantly decreases healthcare resource use in frail older adults. This care model offers both clinical value and healthcare efficiency.

P-0746

Outpatient follow-up after emergency care: a descriptive profile of older adults in the Geriatrics Consultation

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Introduction: Emergency departments often represent the first point of contact for older adults with early signs of frailty or functional decline. Follow-up through Geriatrics outpatient clinics allows for clinical reassessment and the implementation of preventive strategies. This study describes the functional, cognitive, and nutritional profile of patients referred from the Emergency Department to outpatient Geriatrics.

Methods: A retrospective observational study was conducted including patients over 75 years of age referred from the Emergency Department to a Geriatrics outpatient clinic. The following variables were recorded: functional status using the Barthel Index and Functional Ambulation Categories (FAC); cognitive status using the Global Deterioration Scale (GDS, Reisberg); nutritional status using the Mini Nutritional Assessment-Short Form (MNA-SF); and frailty status using the Clinical Frailty Scale (CFS). A descriptive analysis of the cohort was performed.

Results: A total of 43 patients were included, with a mean age between 80 and 85 years. Most presented with preserved functional status (Barthel Index between 90 and 100; FAC levels 4–5). Cognitive function was globally preserved (GDS stages 1–3). Nutritional status was acceptable in most patients (MNA-SF: 10–12). The CFS indicated mild to moderate frailty, with most patients scoring between 4 and 5.

Conclusions: Older adults referred to Geriatrics consultations after emergency care commonly present with mild frailty and preserved functional and cognitive status. These patients may benefit from early preventive interventions to maintain autonomy and prevent further decline. Outpatient Geriatrics plays a key role in bridging acute care and long-term follow-up.

Short poster presentation

Geriatric Emergency Medicine

P-0747

1. Adverse outcomes after urgent medical calls among patients assessed for frailty by a new rapid screening tool (FastFrail) and the Clinical Frailty Scale

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Introduction: Frailty assessment is encouraged in older adults' encounters with acute care services. A suitable tool for the very limited time frame of urgent medical calls has been lacking. We aimed to examine the newly developed FastFrail tool's ability to predict adverse outcomes among older callers, compared to the more comprehensive Clinical Frailty Scale (CFS).

Methods: We conducted a study of patients aged ≥ 70 years calling four urgent care call centres in Norway between 01/10/2024 and 31/01/2025. Nursing home residents and patients assessed to need immediate help were excluded. FastFrail scoring was done prospectively, by call centre operators. CFS was assessed retrospectively based on a follow-up telephone interview approximately 40 days after the initial contact. Frailty was defined as ≥ 1 (of 3) frailty criteria's by FastFrail and CFS ≥ 4 .

Preliminary Results: 325 patients were assessed by FastFrail (mean age 79.2, 51.1% females). CFS scores and information on outcome were obtained for 312 patients. Frailty prevalence by FastFrail and CFS was 40.4% and 56.4%, respectively. The likelihood of hospital admission was increased (31.0% vs 21.5%) and mean length of stays longer (5.2 vs. 3.2 days) among patients assessed as frail vs. non-frail by FastFrail. Frail patients were also more likely to need more help after the acute illness/injury (46.0% vs. 18.3%). Sensitivity and specificity of FastFrail to detect patients with CFS ≥ 4 was 64.2% and 90.4%, respectively.

Key conclusion: FastFrail can identify patients with adverse outcomes and potentially serve as a rapid frailty identification tool in urgent medical calls.

Poster

Geriatric rehabilitation

P-0748

Multidisciplinary challenges in managing central post-stroke pain syndrome: a case report

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Background: Central post-stroke pain syndrome (CPSP) is a neuropathic condition affecting 8–14% of stroke survivors, often refractory to treatment. It results from central nervous system lesions, disrupting pain modulation. Management is challenging due to complex pathophysiology, limited pharmacological options, and frequent comorbidities, necessitating a multidisciplinary approach.

Case presentation: A 67-year-old female with Parkinson's disease, hypothyroidism, and GORD developed severe CPSP after a right intracerebral hemorrhage requiring decompressive craniectomy. She experienced left-sided allodynia, hyperalgesia, and spasticity, impeding rehabilitation. Pain was refractory to gabapentin, opioids, and adjunctive therapies, necessitating a trial of amitriptyline and referral for botulinum toxin therapy. Complications included pneumonia, urinary tract infection, and dysphagia requiring nasogastric feeding. Persistent pain and sedation hindered rehabilitation, leading to discharge to long-term care.

Discussion: This case underscores the challenges of CPSP management and the limitations of standard treatments. Amitriptyline provides partial relief but is often poorly tolerated. Emerging alternatives like duloxetine, botulinum toxin, and neuromodulation techniques show promise. Stereotactic thalamotomy offers potential benefits but remains underutilized.

Conclusion: CPSP requires a tailored, multidisciplinary approach integrating pharmacological, rehabilitative, and interventional strategies. Early spasticity management and further research into novel treatments are crucial to improving patient outcomes.

P-0749

Baseline FRAIL and SPPB scores predict functional gains at six months in geriatric day hospital patient

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Introduction: The main objective was to determine the relationship between significant improvement in the Short Physical Performance Battery (SPPB) at six months and frailty variables at admission in patients in a geriatric day hospital. Significant improvement was defined as an increase of ≥ 2 points in the SPPB score between admission and six months. Three frailty assessment tools were used:

- FRAIL: A screening tool for frailty.
- SPPB: A functional performance test to evaluate frailty.
- Frailty Index-Comprehensive Geriatric Assessment based (IF-VIG): A scale based on the accumulation of deficits.

Methods: Retrospective observational study included 142 patients. The data collected included demographic variables (age, sex) and frailty assessment tools (FRAIL, IF-VIG at admission, SPPB at admission and six months).

Results: 46 patients (22.7%) showed significant improvement in SPPB with a mean age of 81 years (SD 7.54). 25.7%, men and 74.3%, women.

- SPPBi: 3.32 (SD 1.2).
- SPPB6m: 7.45 (SD 1.54).
- FRAIL: 3.15 (SD 0.7)
- IF-VIG: 0.31 (SD 0.1)

The non-improving group had:

- SPPBi: 5.57 (SD 2.4).
- SPPB6m: 5.64 (SD 2.5).
- FRAIL: 2.68 (SD 1.2)
- IF-VIG: 0.31 (SD 0.1)
- 74.3%, women and 25.7%, men.

Statistical analysis showed significant differences in improvement related to SPPBi ($p < 0.0001$) and FRAIL ($p < 0.42$). No significant differences were found for age, sex, or comorbidity index.

Key conclusions: Patients with greater frailty at admission, according to FRAIL and initial SPPB benefited most from the intervention, highlighting frailty as a key factor in patient selection which could optimize intervention and improve clinical outcomes.

P-0750

Impact of nutritional therapy on geriatric rehabilitation outcomes in older adults

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Introduction: Geriatric rehabilitation presents unique challenges with older adults exhibiting complex medical conditions, functional limitations, and nutritional vulnerabilities. Despite evidence linking nutritional status to rehabilitation outcomes, standardized nutritional protocols tailored to the rehabilitative needs of older adults remain underutilized. Malnutrition, sarcopenia, and inadequate protein intake significantly impede functional recovery, yet are frequently overlooked in standard rehabilitation approaches.

Aim: This quality improvement project evaluated the effectiveness of a comprehensive nutritional therapy program on functional outcomes, length of stay, and rehospitalization rates in older adults undergoing inpatient rehabilitation following acute hospitalization.

Methodology: A prospective intervention study was conducted with 72 older adults (mean age 77.4 years) admitted to inpatient rehabilitation following orthopedic surgery, stroke, or deconditioning. The intervention group ($n = 38$) received enhanced nutritional therapy including high-protein supplementation (1.2–1.5 g/kg/day), micronutrient optimization, and coordinated nutrition-exercise timing. The control group ($n = 34$) received standard care. The protocol incorporated regular nutritional assessment, individualized meal planning, and education addressing rehabilitation-specific nutritional needs. Primary outcomes included functional independence measures (FIM), length of stay, and 30-day rehospitalization rates.

Results: The intervention group demonstrated significantly greater improvements in FIM scores compared to controls (mean increase 32.6 vs. 23.8 points, $p < 0.001$). Median length of stay decreased by 3.2 days in the intervention group ($p = 0.002$). Thirty-day rehospitalization rates were substantially lower in the intervention group (8% vs. 24%, $p = 0.001$). Nutritional parameters improved significantly, with 78% of intervention participants achieving protein targets compared to 31% of controls. Hand grip strength increased by 18% in the intervention group versus 7% in controls ($p < 0.01$).

Conclusion: Structured nutritional therapy significantly enhanced rehabilitation outcomes in older adults. Results demonstrate that targeted nutritional interventions supporting increased protein intake and optimized nutrition-exercise coordination should be integrated into standard geriatric rehabilitation protocols. This approach represents a feasible, cost-effective strategy to improve functional recovery and reduce healthcare utilization in this vulnerable population.

P-0751

Effect of comorbidity measured by the Charlson index on the functional evolution of patients undergoing rehabilitation

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Introduction: Comorbidity influences the functional evolution of geriatric patients undergoing rehabilitation. The Charlson Comorbidity Index (CCI) is a validated tool to estimate the impact of chronic diseases on survival and functionality. However, its relationship with functional outcomes in rehabilitation is not fully established.

Methods: Retrospective, descriptive and observational study of 177 patients admitted to a rehabilitation unit during 2024 for different clinical reasons. Correlations between CCI and functionality (FAC and Barthel at admission and discharge) were analyzed using Spearman's coefficient. Functional levels were compared according to three Charlson groups (3–5, 6–8, ≥ 9) using the Kruskal–Wallis and Mann–Whitney U tests. Intraindividual functional evolution was assessed with the Wilcoxon test. A value of $p < 0.05$ was considered significant.

Results: A significant inverse correlation was found between CCI and functionality, at admission and discharge. Higher CCI was associated with lower FAC and Barthel scores: baseline FAC ($p = -0.209$, $p = 0.005$), FAC at discharge ($p = -0.279$, $p < 0.001$), baseline Barthel ($p = -0.209$, $p = 0.005$) and Barthel at discharge ($p = -0.266$, $p < 0.001$).

Kruskal–Wallis tests showed significant functional differences between Charlson groups ($p < 0.05$). In the post hoc analysis, patients with Charlson 3–5 presented better baseline and discharge functionality compared to groups 6–8 and ≥ 9 ($p < 0.01$) [1–3].

Conclusions: Patients with lower Charlson index (3–5) present better functional status at admission and greater recovery at discharge. These findings support the use of CCI as a prognostic tool to guide rehabilitation planning in geriatric patients.

P-0752

Use of inflammatory biomarkers as predictors of recovery in geriatrics

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Introduction: Chronic low-grade inflammation (“inflammaging”) is associated with functional decline and poor recovery in older adults. Biomarkers such as C-reactive protein (CRP) and serum albumin are potential predictors of rehabilitation outcomes. This study explores the relationship between these biomarkers and functional recovery in geriatric patients undergoing inpatient rehabilitation.

Objective: To evaluate the association between CRP and albumin levels at admission and functional improvement in elderly patients.

Methods: A retrospective observational study was conducted in a geriatric unit, including patients aged ≥ 75 years. CRP and albumin levels were recorded at admission, alongside functional assessments using the Barthel Index before and after rehabilitation. Pearson's correlation and multivariate regression models were used to analyze associations between biomarker levels and functional outcomes.

Results: with a sample of 30 patients; Patients with elevated CRP (> 10 mg/L) showed significantly lower improvement in the Barthel Index at discharge ($p < 0.05$), while higher albumin levels (> 3.5 g/dL) were associated with greater functional gains. After adjusting for confounders (age, comorbidities, and baseline function), CRP remained an independent predictor of poorer recovery.

Conclusion: High CRP levels and hypoalbuminemia at admission are associated with reduced functional improvement in geriatric patients. These biomarkers could be useful in identifying patients at risk of poor recovery, allowing for early intervention and personalized rehabilitation strategies. Incorporating inflammatory biomarkers into routine assessments may enhance risk stratification and optimize rehabilitation protocols. Early nutritional and anti-inflammatory interventions could potentially improve outcomes in high-risk patients.

P-0753

Centenarian patient with recovery of autonomy after hospitalization: a success story

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Introduction: Advanced age often presents challenges in medical care, with ageism and misconceptions potentially limiting appropriate decision-making. However, chronological age alone should not dictate prognosis or treatment goals.

Case report: A 100-year-old male was admitted with community-acquired pneumonia. Workup revealed a positive pneumococcal urinary antigen and consolidation in the left lower lobe. His PSI/PORT score was 170 (Class V risk, estimated mortality 27–29.2%). He received third-generation cephalosporins and macrolides for 12 days. Oxygen therapy was required for 22 days. Despite resolution of infection, the patient experienced marked functional decline, including loss of ambulation and a Short Physical Performance Battery (SPPB) score of 5.

A Comprehensive Geriatric Assessment revealed a previously autonomous, non-frail patient (Frailty Index: 0.04), with intact cognition (MoCA 26, Pfeiffer 0 errors), no nutritional issues, and full independence in daily activities prior to admission.

Given his preserved functional reserve, an 8-week resistance-based rehabilitation program was initiated. The patient showed progressive improvement, with SPPB increasing to 10. He was discharged and, at one-month follow-up, had resumed his usual home activities, regaining full autonomy.

Conclusion: This case highlights the importance of individualized care and comprehensive assessment, even in centenarian patients.

When functional reserve exists, age should not preclude rehabilitation efforts. With appropriate support, significant recovery is achievable, challenging the assumption that extreme age limits functional outcomes.

P-0754

Management of functional constipation with abdominal massage in the elderly: a randomized controlled study

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Introduction: Constipation is one of the most common problems among the elderly. This study aims to evaluate the effect of abdominal massage on constipation in older adults.

Methods: This randomized controlled study included an intervention group that received abdominal massage for 15 min per day, five days a week, for four weeks. 86 participants were included in the study. No intervention was applied to the control group. Participants were randomly assigned to the groups using simple randomization. All were evaluated based on ROME IV criteria at the beginning. Those diagnosed with constipation and without contraindications for massage were included. Effectiveness was assessed using the Constipation Severity Instrument and the Patient Assessment of Constipation Quality of Life (PAC-QOL).

Results: The mean age was 82.9 ± 8.0 in the intervention group and 83.4 ± 7.4 in the control group. Overall, 65.1% were female. The median Constipation Severity Instrument score decreased in the intervention group but remained unchanged in the control group. PAC-QOL scores improved significantly in the intervention group compared to the control group.

Key conclusions: Abdominal massage is a non-invasive, side-effect-free, and cost-effective method that can be easily applied to manage constipation in the elderly. Randomized controlled studies should be conducted to evaluate the effect of abdominal massage on the management of constipation in the elderly, where longer-term interventions are carried out in other ages, and where confounding factors are controlled with advanced analyses.

P-0755

Physical therapy treatment of hip osteoarthritis in geriatric patients

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Introduction: Hip osteoarthritis is a degenerative joint disease affecting the hip. It is characterized by an imbalance between degenerative and reparative processes with secondary inflammatory changes in the synovium and articular cartilage. Common symptoms include pain, stiffness, swelling, and decreased range of motion.

Treatment options vary with severity and may include lifestyle modifications such as weight management, low-impact exercise, physical therapy, medications, injections, and surgery.

Aims: Aims at evaluating the effects of integrative physical therapy treatment in reducing pain, improve mobility, enhance overall function and quality of life.

Materials and methods: The sample included 87 patients treated in the Department of Physical Medicine in SHGPM 13 November, during 2024. The study included patients aged 65–75 years (28 males and 59 females). The patients were treated with electrotherapy, ultrasound, Magnetic therapy, low-frequency pulsed field, thermotherapy and kinesiotherapy. They were treated in the course of 2 to 3 weeks.

Results: After the treatments, 11 patients there was a significant improvement, 45 patients had moderate improvement of symptoms, 24 patients had minimal improvement, while 7 had no improvement.

Conclusion: Physical therapy is essential for managing hip osteoarthritis. A personalized treatment approach is vital for reducing pain and improving function. These results support further research.

Keywords: Hip osteoarthritis; Physical therapy, Geriatric patients.

P-0756

Development of a survey to assess the satisfaction of older adults attending a geriatric day hospital

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Introduction: Evaluating patient satisfaction in medical services is crucial for tailoring services to meet patients' needs. However, satisfaction surveys are not specifically adapted for older adults, despite this group comprising a large portion of patients attending health services.

Objective: To develop a satisfaction survey to evaluate the services provided in a Geriatric Day Hospital.

Materials and methods: A multidisciplinary team of geriatrics experts, occupational therapists, and senior geriatrics residents designed the survey. The tool includes Patient-Reported Outcome Measures and Patient-Reported Experience Measures to assess both health outcomes and patient experiences. The survey (which will be included) contains 18 questions: 4 with an ordinal scale, 13 with dichotomous responses, and 1 open-ended. It evaluates the care received, environment, staff attitude, overall satisfaction, and perceived improvement in daily living activities. Patients completed it upon discharge from their treatment program.

Results: Since September 2024, 24 patients have completed the functional recovery program and filled out the survey. Seven had completion errors: five due to cognitive impairment or dementia and two due to poor completion. The remaining 17 surveys were completed correctly. The team has agreed to conduct a feasibility study and adjust the tool for patients with and without cognitive impairment.

Conclusions: This survey is the first one specifically developed for older adults. Although a feasibility study needs to be completed, the initial analysis suggests it is effective for patients without cognitive

impairment. Adaptations are needed for those with cognitive impairment.

P-0757

Are the Montreal Cognitive Assessment (MoCA) and Mini-Mental State Examination (MMSE) scores associated with functional performance after geriatric rehabilitation?

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Introduction: The aim of study was to determine whether there is a relationship between the Montreal Cognitive Assessment (MoCA), Mini-Mental State Examination (MMSE) scores and the functional outcome after geriatric rehabilitation.

Methods: A cross-sectional study was carried out in inpatient rehabilitation unit on 41 subjects aged 60 years and older in subacute period of orthopaedic surgery, fractures and other chronic diseases. Functional performance was assessed in the end of rehabilitation by Keitel test for lower limbs (KT) and Barthel index (BI). Montreal Cognitive Assessment (MoCA) and Mini Mental Status Examination (MMSE) scores were evaluated in patients during the rehabilitation process. Data was analysed using SPSS 27.0.1.0: Spearman 's rho, Pierson 's correlations were performed.

Results: Mean age of participants was 73.22 ± 9.419 years, 36 (81.8%) female. Mean value of MoCA score was 20.37 ± 4.030 , MMSE 25.13 ± 3.622 , KT 27.92 ± 6.546 , BI 77.07 ± 13.037 . Assessing cognitive tests scores showed that MoCA had a moderate positive correlation with BI ($r = 0.440$, $p = 0.004$) and MMSE had a weak positive correlation with BI ($r = 0.377$, $p = 0.037$). There was no statistically significant correlation between MoCA and KT scores ($r = 0.188$, $p = 0.265$), MMSE and KT scores ($r = 0.348$, $p = 0.075$).

Key conclusions: Lower cognitive tests (MoCA, MMSE) scores were associated with low functional performance assessed by BI after geriatric rehabilitation.

P-0758

Impact of cognitive decline on functional recovery in patients admitted to a Functional Rehabilitation Unit

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The impact of cognitive decline in patients from the Functional Recovery Unit (FRU) at a tertiary hospital was analyzed.

This descriptive and retrospective study evaluated patients admitted in 2024. Cognitive impairment was assessed using the Global Deterioration Scale (GDS), functionality was evaluated through the Barthel Index (BI) and Functional Ambulation Category (FAC) at admission and discharge, and instrumental activities were measured with the Lawton and Brody Index.

Clinical and demographic variables were analyzed in 178 patients (mean age: 87 ± 6 years; 65% women). According to the GDS, 20.9% had no impairment (GDS 1), 54.8% had mild impairment (GDS 2–3), 22.6% moderate (GDS 4–5), and 1.7% severe (GDS 6–7). Statistically significant differences in baseline and discharge functionality were found according to cognitive impairment degree, with

those without impairment showing greater functionality across all scales, which progressively decreased:

- -Baseline FAC ($H = 28.827$; $p < 0.001$) and at discharge: ($H = 14.876$, $p = 0.002$).
- -Baseline Barthel ($H = 25.373$) and at discharge ($H = 48.994$; ($p < 0.001$).
- -Baseline Lawton ($H = 34.889$; $p < 0.001$).

Post hoc comparisons (Dunn's test with Bonferroni correction) showed that patients without impairment (GDS 1) had significantly greater functionality than other groups ($p < 0.05$). Mild impairment showed functional reduction ($p = 0.026$), while moderate and severe impairment had significantly lower independence ($p < 0.01$).

Cognitive impairment is significantly associated with reduced mobility and autonomy, highlighting the need for early intervention strategies to preserve independence.

P-0759

30-day Emergency Department utilization among post-acute skilled nursing facility patients after declaration of the Public Health Emergency due to Covid 19

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Introduction: Patients discharged to Skilled Nursing facilities (SNF) for post-acute care are predisposed to unplanned healthcare utilization. This situation was compounded by the COVID 19 pandemic and consequent declaration of the Public Health Emergency (PHE) in March 2020 when SNFs faced unique challenges and clinicians often switched to telemedicine visits. This study evaluated changes in 30-day Emergency Department (ED) utilization among post-acute SNF patients following PHE declaration.

Methods: We retrospectively evaluated institutional claims for SNF admissions between October 1, 2019, and June 30, 2021, to identify the study cohort. Demographic and clinical variables and outcomes were obtained from administrative databases and the electronic health record. We conducted an interrupted time series analysis to compare 30-day ED visit rates before and after PHE declaration among post-acute SNF patients who were propensity matched for age, gender, comorbidity, and hospital length of stay.

Results: There were 7,103 SNF admissions during the study period. 82.2% were 65 years or older, 53% were female, and 97% were white. Overall, 1501(21.1%) SNF admissions needed ED care within 30 days. Despite declining in the first week, overall, 30-day ED visit rates did not change significantly with pre and post PHE rates being 21.2 and 19.9% respectively (p value = 0.31).

Conclusions: There was no significant change in 30-day ED utilization in our cohort following PHE declaration. Our results indicate a need to further evaluate telemedicine use in SNFs when in-person visit is not possible or may delay care.

P-0760

Functional and survival outcomes in geriatric patients with active oncologic disease: evidence supporting inpatient rehabilitation

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Background: Inpatient rehabilitation (IR) is crucial for functional restoration in older adults post-hospitalization. However, patients with active oncologic disease (AOD) are often underrepresented due to biases regarding their rehabilitation potential. This study compares functional recovery and survival between geriatric patients with and without AOD to address these biases and inform referral practices.

Methods: A retrospective cohort study analyzed 9,836 patients aged ≥ 65 years admitted to a geriatric IR ward (2010–2023). Patients with AOD ($n = 1,401$) were identified via ICD-9-CM codes, excluding remitted disease. Functional Independence Measure (FIM) scores assessed improvements in activities of daily living (ADL), motor, and cognitive domains. Statistical significance was set at $p < 0.05$.

Results: Patients with AOD demonstrated notable functional improvements across all FIM domains, although ADL gains were slightly lower compared to non-AOD patients ($p < 0.05$). High rates of discharge to home were noted in both groups (AOD 82.3% vs. non-AOD 86.4%, $p = 0.01$). Patients with AOD had shorter IR stays (23.5 vs. 25.2 days, $p < 0.0001$) but higher readmission rates (10% vs. 5.5%, $p < 0.01$) and lower one-year survival (77% vs. 90%, $p < 0.0001$). Survival varied significantly by cancer type, with metastatic disease linked to the poorest prognosis.

Conclusions: Geriatric patients with AOD achieve comparable functional recovery despite higher mortality and readmission rates. These findings emphasize the importance of including AOD patients in IR programs, suggesting a need for targeted educational and policy initiatives to mitigate referral biases and enhance rehabilitation access for this vulnerable group.

P-0761

What is the relationship between nutritional status and physical performance after geriatric rehabilitation? A cross-sectional study

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Introduction: The aim of this study was to determine the relationship between nutritional status and physical performance after rehabilitation in old age.

Methods: A cross-sectional study involving 44 patients in an inpatient rehabilitation unit was conducted. Patients after arthroplasty, fractures, and different chronic diseases were included. Skinfolts were measured by a Saehan caliper, brachial and calf circumferences were measured by Comed tape, Mini-Nutritional Assessment (MNA), Nutritional Risk Screening (NRS2002) were used for the assessment of nutritional status. Barthel Index (BI), Tinetti test (TT), and Keitel test for lower limbs (KT) were assessed at the end of rehabilitation. Data was analyzed using IBM SPSS Statistics Version 27. Pearson's correlation and stepwise multiple regression were performed.

Results: The mean age of the subjects was 73.19 ± 9.064 years. There was no significant correlation between nutritional status and TT, KT. Positive moderate correlations between MNA ($r = 0.495$, $p = 0.001$), the subscapular skinfold ($r = 0.429$, $p = 0.006$), the brachial circumference ($r = 0.405$, $p = 0.007$), and BI were found. Negative moderate correlation between NRS2002 and BI ($r = -0.540$, $p = 0.001$) was present. The stepwise adjusted regression showed that the NRS2002 had the strongest association with BI ($\beta = -0.533$; 95% CI: -8.735 , -2.747 ; $p < 0.05$).

Key conclusions: According to our research, nutritional health and physical performance following geriatric rehabilitation are related, and NRS2002 has the strongest association with Barthel index.

P-0762

Predictive value for cardiopulmonary endurance from hand grip strength in post-coronary revascularization patients undergoing phase 2 cardiac rehabilitation in developing country

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Introduction: Coronary artery disease (CAD) was the second leading cause of death in Indonesia. It causes muscle dysfunction, which leads to decreased muscle fitness due to reduced cardiac output (CO), resulting in reduced oxygen uptake from the blood and further decreased functional capacity or maximum oxygen uptake (VO_{2max}). The elderly population is an age group at risk of developing CAD. Hand grip strength (HGS) is a good predictor for assessing overall muscle strength, where HGS assessment with a dynamometer is one method of determining muscle fitness. Cardiorespiratory fitness can be assessed by the 6-min walk test (6MWT) using distance parameters and determining VO_{2max} . This study wants to determine the correlation between HGS and changes in distance after undergoing phase 2 cardiac rehabilitation in the elderly following coronary revascularization, and also wants to know the predictive value using the parameters studied.

Methods: This study is a cross-sectional design. Forty-six participants were selected based on the inclusion and exclusion criteria to check HGS and the 6MWT. The 6MWT was repeated after completing phase 2 of cardiac rehabilitation.

Results: The results showed a correlation between HGS and 6MWT mileage ($p = 0.0001$) with moderate relationship. The predictive value found and which can be used is an increment in 6MWT mileage = $2.571 + 1.325 \times HGS$.

Conclusion: There is a correlation between HGS and 6MWT. The predictive value for cardiorespiratory fitness from HGS is $2.571 + 1.325 \times HGS$. Good muscle fitness is proven to be a reference for exercise performance in undergoing phase 2 cardiac rehabilitation.

P-0763

Conversation coaching in dementia: a feasibility study

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Introduction: Conversation abilities of people with dementia are impacted by cognitive deficits. Communication interventions can improve quality of life by increasing positive interactions and well-being. This study evaluates the feasibility of a conversation coaching

intervention (CCI) for people with dementia and their communication partners.

Method: A mixed method design was used. Thirty-four people were recruited over 12 months; 17 people with dementia and 17 communication partners. Participants with dementia were between 62–79 years (8 females, 9 males) and the communication partners were aged 33–77 years (5 males, 12 females). CCI study involved 6 weekly sessions (2 individual and 4 group sessions), facilitated by two experienced speech and language therapists. Participants were assessed initially and three months following the intervention using Profiling Communication Ability in Dementia (P-CAD) [1], Goal Attainment Scaling (GAS) [2], and Capability Index for Older people (ICECAP-O) [3].

Results: Twenty-eight participants completed CCI. P-CAD scores for people with dementia were maintained at three months for 71% ($n = 10$) showing no decline in function and 29% ($n = 4$) showed improvement. Both participant groups reported on GAS that CCI helped them achieve their individual communication goals. Ten (71%) people with dementia and over three quarters of communication partners, (79%: $n = 11$), rated their wellbeing as higher on the ICE-CAP-O following intervention.

Key conclusions: Preliminary outcomes including participant feedback indicate that CCI is feasible for people with dementia. Their communication function and well-being was either maintained or improved post intervention. CCI is collaborative and enhances retained communication abilities of people living with dementia.

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P-0764

Characteristics of patients admitted in a Functional Recovery Unit

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40–50% of elderly patients hospitalized for an acute illness experience functional decline.

It has been shown that functional decline increases mortality and institutionalization.

Our objective was to conduct a descriptive analysis of the patients evaluated in a Functional Recovery Unit in a hospital in Madrid.

Methods: A retrospective descriptive study of patients admitted in the Functional Recovery Unit at the Hospital de Cantoblanco in Madrid from January 1 to December 31, 2024.

Demographic, clinical, functional (Functional Ambulation Scale, FAC), Barthel Index, cognitive status (Global Deterioration Scale), nutritional status (Mini Nutritional Assessment, MNA), frailty (Frail-

VIG Index and Rockwood), and the presence of geriatric syndromes were measured.

Results: 178 patients, 68% women. Mean age 86.05. Most common diagnoses: 28.1% pertrochanteric fracture, 25.8% subcapital fracture, 10.1% ischemic stroke.

Baseline FAC: 4.44, Baseline Barthel Index: 86.44. 77% had mild to moderate cognitive decline, 65.5% were at risk of malnutrition.

According to the FRAIL VIG, 74.4% had mild to moderate frailty, and according to Rockwood, 59%.

Prevalence of geriatric syndromes: 54.2% visual impairment, 33.1% dysphagia, 74.2% constipation, 52.8% urinary incontinence, 64.6% insomnia, 68% falls.

Extreme polypharmacy on admission was 29.2%.

73.3% of patients were discharged home.

Conclusions: Patients admitted to the Functional Recovery Unit are mostly women, with good previous baseline status and at least mild cognitive decline. Most have frailty and an elevated risk of malnutrition. The presence of geriatric syndromes in these patients is high. The majority of patients were discharged home.

P-0765

Functional status at admission and discharge of patients admitted to the Functional Recovery Unit

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Objectives: To assess the baseline, admission, and discharge functional status of patients admitted in a functional recovery unit at a tertiary hospital in Madrid.

Methods: A retrospective descriptive study of patients admitted in the Functional Recovery Unit at the Hospital de Cantoblanco in Madrid from January 1 to December 31, 2024.

Demographic, clinical, and functional characteristics (Functional Ambulation Scale, FAC), and Barthel Index were measured at baseline, admission, and discharge.

Results: 178 patients, 68% women. Mean age: 86.05.

Baseline situation:

- FAC: 53.9% had a FAC of 5, 37.1% had a FAC of 4, and 8.4% had a FAC < 3.
- Barthel Index: 27% had a Barthel Index of 100, 68% had a Barthel Index between 60 and 100, and 4.5% had a Barthel Index < 60.

Situation at admission:

- FAC: 48.9% had a FAC of 2, 28.1% had a FAC of 1, and 14.6% had a FAC > 3.
- Barthel Index: 35% had a Barthel Index > 40, and 65% < 40.
- Situation at discharge:
- FAC: 21.9% had a FAC of 5, 34.98% had a FAC of 4, 28.1% had a FAC of 3, and 10.1% had a FAC < 2.
- Barthel Index: 73.4% had a Barthel Index > 60, and 26.6% < 60.

Conclusions: Patients treated in the Functional Recovery Unit are those with a good baseline status, significant acute functional decline,

and a good recovery after undergoing a multicomponent physical exercise program.

P-0766

Baseline, clinical, and demographic characteristics of patients referred to Functional Recovery Units following a hip fracture in an Orthogeriatric Unit

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Introduction: Few studies have evaluated the added value of frailty assessment in Functional Recovery Units (FRUs), except in patients with hip fractures. Frailty can be measured in hospital settings using clinical data without physical performance tests. Tools such as the Clinical Frailty Scale (CFS) and the Frail-VIG Index, based on Comprehensive Geriatric Assessment, are commonly used.

Objective: To assess whether frailty influences clinical and functional outcomes in older adults admitted to an FRU, and to evaluate the predictive performance of CFS and the Frail-VIG Index.

Methods: A descriptive study was conducted between January and December 2024 in an FRU. Patients aged ≥ 65 years were included. Functional status (modified Functional Ambulation Category [FAC], Barthel Index [BI]) at admission and discharge and frailty level (CFS and Frail-VIG, each categorized into four ordinal levels) were recorded. Associations were tested with the Kruskal–Wallis test; pairwise post-hoc comparisons were performed using Mann–Whitney U tests with Bonferroni correction ($p < 0.0083$).

Results: Among 178 patients, higher frailty (by CFS or Frail-VIG) was significantly associated with lower FAC and BI scores at both admission and discharge ($p < 0.001$). Post-hoc analysis showed significant differences between less frail (CFS 1–2) and more frail (CFS 3–4) groups. Similar patterns were observed using the Frail-VIG Index.

Conclusion: Frailty is significantly associated with diminished functional recovery in older adults in FRUs. Both the Frail-VIG Index and CFS are valuable and complementary tools for predicting functional outcomes.

P-0767

Aspects related to functional therapy in functional recovery units. Findings from the FUN-RUN-map study

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Introduction: Among the objectives of the FUN-RUN-Project is to describe quality indicators of Functional-Recovery-Units (FRU) in Spain.

Methods: a cross sectional study was carried out using an encrypted online questionnaire, including sociodemographics, center/unit characteristics. Inclusion criteria: publicly-funded hospital units focused on reablement of adults, led by specialists. Data related to functional therapy are described in 32 questionnaires from 55 centers with inclusion criteria representing 2108 beds in Spain.

Results: 53.13% URF are non-functionally-specialized. Within specialised, 40% Process-specific, 60% Bed-Specific (Orthogeriatrics/Neurorehabilitation). 43.75% URFs protocolize re-evaluation by rehabilitation specialists, 9.38% URFs in selected patients and 46.88% don't. 100% have rehabilitation gym, 75% Occupational-therapy rooms. 93.75% adapted geriatric bathrooms/corridor hand-rails each, 78.13% lifted-WCs, 96.88% walkers, 93.75% walking-crutches, 81.25% facilities for unscheduled therapy, carried out in 65.63% of URFs with activities led by relatives in 65.63%, 43.75% activities led by auxiliar-staff, 40.63%, by unit's own therapists, 37.50% using toileting hours as therapy. Regarding adjuvant therapies, transcutaneous electrical therapy is available in 65.63%, magnetotherapy in 53.13%, joint infiltrations and botulinum toxin in 53.13% each, nerve blocks in 28.13%, virtual reality therapy/gamification in 25% and robotic techniques in 12.5%, among others. The average number of adjuvant therapies per center is 4.16 (SD 2.58) with a median of 4 (0–10).

Conclusions: There is heterogeneity in the availability of functional therapy resources in the URFs in Spain. While some Units show advanced therapies, a minimum consensus on resources is needed.

P-0768

Functional Recovery Units map in Spain 2024. Findings from the FUN-RUN-map study

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Introduction: Functional Recovery Units (FRU) in Spain provide bed-based functional reablement for adults affected by morbidity-related functional decline. Despite strong evidence supporting their efficacy, their development has been uneven within national territory. This project aims to identify territorial accessibility to FRUs in Spain in 2024. The project's objectives included describing structure-process-outcome indicators and collecting staff opinions on some of these metrics.

Methods: A cross-sectional study was designed using a piloted questionnaire in an encrypted online platform, comprising sociodemographics, center-characteristics, unit-characteristics, and staff opinions. Inclusion criteria included publicly funded hospital units focused on adult functional, managed by physicians with MIR specialty. 100 IC-Hospitals (ICH) were identified as potentially eligible within the National Catalogue of Hospitals. Clinical referees were identified in 55 centers meeting inclusion criteria.

Results: 32 questionnaires completed (response rate 58%) by geriatricians (81.25%), with an average of 13.4 years of FRU-experience. Geographic representation included 11 provinces and eight autonomous communities. 87.5% of FRUs are located in ICH and have an average experience of 22.69 years. 0.52 beds per 1000 inhabitants > 65 years and 1.7 beds per 1000 > 80 years were described in the provinces represented, and a national ratio of 0.2 beds/1000 > 65

years and 0.7 beds/1000 > 80 years. staff ratios of 15.94 and 14.91 beds/doctor and beds/nurse slightly differ from the opinion of referees ideal of 14.3 beds/doctor and 11.7 beds/nurse. Structure, process and outcomes indicators are exhaustively described.

Conclusions: A national consensus is needed, integrating general recommendations and processes, standards stratification to optimize effectiveness and efficiency of these units and patients' opinions to improve care quality and standards.

P-0769

Study on the influencing factors of treatment compliance of elderly chronic disease patients in physical examination centers based on latent variable mixed growth model prediction

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Objective: To explore the dynamic changes and influencing factors of treatment compliance in elderly patients with chronic diseases in physical examination centers.

Methods: A longitudinal study design was adopted, selecting elderly patients (≥ 60 years old) with chronic diseases who underwent physical examinations at a tertiary hospital's physical examination center from January 2024 to June 2024 as the research subjects. Collect patient baseline data, Morisky medication adherence scale, and potential influencing factors through a questionnaire survey. We used Latent Growth Mixture Modeling (LGMM) and multivariate logistic regression to analyze the trajectory of changes in patient treatment compliance and its influencing factors.

Results: A total of 512 elderly patients with chronic diseases were included. LGMM analysis showed that the trajectory of treatment compliance changes could be divided into three categories: high compliance stable group (42.2%), moderate compliance decreased group (35.7%), and low compliance fluctuation group (22.1%). Multivariate logistic regression analysis showed that age, educational level, number of comorbidities, depressive symptoms, and social support level were significant factors affecting the trajectory of treatment compliance changes ($P < 0.05$).

Conclusions: The treatment compliance of elderly patients with chronic diseases shows a heterogeneous trajectory, with age, educational level, number of comorbidities, psychological status, and social support being the main influencing factors.

P-0770

Review of rehabilitation in intermediate care ward in Liverpool

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Intermediate Care is Interface between primary care and secondary care where some aspects are similar to secondary and in some aspects similar to primary care.

Rehabilitation in Intermediate care focusses on getting the patients to best possible ability and function.

This review consisted of review of patients discharged during the month of January 2025.

There were total of 51 patients discharged from the ward. The source of admission into the ward was predominantly from Acute hospitals (Step down) accounting for 45 and 6 patients from Community called Step up.

There were 27 males and 24 females and age group ranged from 39 to late 90s with predominantly patients over the age of 60 years.

The patients were discharged after rehabilitation in the unit to home / care home 74.5%

but 19.60% needed readmission into acute hospital. 3.92% needed continuing rehabilitation and were transferred to long term intermediate care hubs.

On Rockwood frailty score 55.56 improved and 33.33% remained the same and 11.11 had worsened.

On Elderly mobility scale 78.57 patients mobility improved on discharge from admission and 28.57 had a significant improvement.

MUST Score was done on admission and appropriate nutritional intervention was done for patients who had MUST score of 2 and above with referral to dietician and 13 out of 51 patients were found to have news score in this range.

Most patients who were admitted had history of falls with only 2 not having had falls. All patients were screened for Osteoporosis using Q-Fracture score and score above 10 were referred for Dexa (Dual-energy X-ray Absorptiometry) scan unless they are already on treatment.

P-0771

Multidisciplinary stroke rehabilitation in an Intermediate Care Hospital

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Introduction: The Intermediate Care Hospital (ICH) L'Hospitalet de Llobregat (Barcelona) has a multidisciplinary Stroke Rehabilitation Unit (physiotherapists, occupational therapists, geriatric doctors, psychiatrists, psychologist and social worker). Stroke is one of the leading diagnoses.

The aim of this work is to describe and analyse the functional outcomes of stroke patients treated in our unit.

Methods: Sociodemographic data, average length of stay and functional outcomes: Modified Rankin Scale (mRS), Barthel Index (BI) were collected and analysed for patients admitted during 2024.

Results: A total of 87 patients were admitted: 47 (51%) men, with an average age of 72 years (range 36–87). 50% were under 65 years, and 37% were over 85.

Average length of stay was 38.5 days, 73% returned home at discharge. None died or were readmitted to an acute care hospital**

Functional outcomes (BI): At admission 67% had moderate-severe disability (BI < 60, mean 47.6). At discharge 74% had BI > 60 (mean 72.4). 35% (33 patients) reached BI > 90. Average improvement (discharge BI–admission BI) 24.8 points. 18% regained baseline BI, and 43% recovered from 80 to 99% of baseline function.

According to mRS results 75% had ≥ 4 at admission. At discharge, 12% achieved < 2.

Key conclusions: At our ICH, multidisciplinary care achieves good functional outcomes with a similar or shorter stay compared to other conditions, regardless of age, sex, or admission deficits.

Short poster presentation

Geriatric rehabilitation

P-0772

Phase angle is associated with muscular strength and physical function in older adults

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Background and aim: Phase angle (PA) is derived from BIA measurements and reflects the integrity of cell membranes. Higher PA values are associated with better cell health and function. The aim of the study was to investigate associations between PA, muscular strength and physical function in older adults.

Methods: A cross-sectional study was conducted in 73 community dwelling older adults (65.8% women, 82 ± 6 years) who frequently used day-care services provided by the nursing homes in Reykjavik, Iceland. Bioelectrical Impedance Analysis (BIA) was used to measure body composition. Handgrip strength was tested as well as the short physical performance battery (SPPB) protocol was applied. Cognitive function was assessed using MMSE. General questionnaires were also used.

Results: Subjects with low SPPB (42%, score 1–8) had lower phase angle, lower cognitive function, higher count of medication when compared to subjects with high SPPB (58%, score 9–12) but were not different in appendicular skeletal muscle (ASM), age or gender. In an age and gender corrected analysis, higher phase angle was associated with higher SPPB score ($B = 3.2$, $P < 0.001$) and higher grip strength ($B = 6.5$ kg, $P < 0.001$). Further correction for medication, cognitive function or ASM did only marginally changes these associations.

Conclusion: Phase angle from BIA is associated with strength and function in older adults and could be a useful indicator for loss of independence in this vulnerable group.

Poster

Geriatric rehabilitation

P-0773

Epidural steroid injections in geriatric lumbar radiculopathy: impact of comorbidities and anatomical factors

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Introduction: Common lumbar radiculopathy (CLR) represents a significant health challenge in elderly populations, often resulting in substantial disability and reduced quality of life. Epidural steroid injection (ESI) emerges as a therapeutic option following the failure of conservative management and physical rehabilitation. This study aims to investigate the epidemiological characteristics, diagnostic approaches, therapeutic interventions, and clinical outcomes of CLR in elderly patients.

Methods: We conducted a prospective study at the Rheumatology Department including patients with CLR treated with ESI. Prognostic factors evaluated included sociodemographic characteristics, health status, lifestyle factors, pain intensity, and imaging findings. The ESI protocol consisted of three interspinous injections of prednisolone acetate administered at two-day intervals. Treatment success was defined as a $\geq 50\%$ reduction in Visual Analogue Scale (VAS) pain score and/or DN4 neuropathic pain questionnaire score.

Results: Our cohort comprised 48 patients, of whom 25% were elderly (≥ 65 years). The mean age of elderly patients was 72.42 ± 6.1 years (range: 65–83 years). A marked female predominance was observed with a sex ratio of 0.09. Primary comorbidities included hypertension (66.7%) and diabetes mellitus (25%). The mean symptom duration was 5 ± 3.5 years. Pain was predominantly mechanical in nature (91.7%). Walking capacity was limited in 50% of patients (mean distance: 100 m). The most common etiology was intervertebral disc herniation (41.7%). Clinical improvement was observed in 58.3% of elderly patients following ESI.

Statistical analysis revealed no significant correlation between spinal syndrome or radicular syndrome and ESI outcomes ($p = 1$ and $p = 0.57$, respectively). However, diabetes mellitus showed significant correlation with poor therapeutic response ($p = 0.045$). Similarly, spondylolisthesis was significantly associated with unfavorable treatment outcomes ($p = 0.045$).

Conclusion: CLR in elderly patients represents a prevalent condition with substantial impact on quality of life. Therapeutic response to ESI appears to be limited by the presence of diabetes mellitus and by specific etiologies such as spondylolisthesis, suggesting the need for personalized therapeutic approaches in this vulnerable population.

P-0774

Evolution In frailty and in different fields of comprehensive geriatric assessment after a multicomponent outpatient intervention in a Geriatric Day Hospital

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Introduction: Multicomponent outpatient interventions addresses geriatric syndromes and functional decline. This study analyze changes in function, nutrition, frailty, sarcopenia and polypharmacy.

Methods: Retrospective study of patients aged ≥ 65 years (2021–2023) at a geriatric day hospital. Variables collected included sociodemographic data, diagnosis, comorbidity, intervention, Barthel Index (BI), Lawton Index (LI), Mini-Nutritional Assessment Short Form (MNA-SF), GLIM criteria, probable sarcopenia (EWGSOP2 criteria), and frailty (Frail-VIG index, Clinical Frailty Scale (CFS), SPPB). Bivariate analysis compared admission and discharge values.

Results: One hundred and fifty-eight patients were analyzed (mean age 80.40, 53.8% female). Key diagnoses were orthopedic (34.9%), oncohematology (16.9%), neurological (16.9%), and functional reconditioning (16.4%). When comparing admission and discharge values, functional scores increased (IB 77.43 ± 17.92 to 86.16 ± 16.54 , IL 3.19 ± 2.27 to 4.35 ± 2.54 ; $p = 0.000$, Cohen's $d = 0.85$ and 0.62), nutritional status improved (MNA-SF 9.89 ± 2.27 to 11.16 ± 2.36 , $p = 0.000$, Cohen's $d = 0.49$; GLIM 27.63% to 11.84% , $p = 0.000$, Cohen's $h = 0.40$), probable sarcopenia decreased (95.73% to 85.47% , $p = 0.000$; Cohen's $h = 0.37$). Frailty score improved (VIG-frail 0.26 ± 0.11 to 0.23 ± 0.12 , CFS

4.90 ± 1.13 to 4.06 ± 1.31, SPPB 4.50 ± 2.36 to 5.68 ± 2.53; $p = 0.000$, Cohen's $d = 0.40, 0.99, 0.66$).

Conclusions: Patients completing an outpatient intervention showed significant gains in functionality, nutrition, sarcopenia and frailty, supporting the value of the outpatient multidisciplinary approach in functionally impaired older people.

P-0775

The relationship between skeletal muscle mass index and malnutrition among elderly patients in Geriatric Rehabilitation Unit

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Introduction: The purpose of the study was to evaluate the relationship between skeletal muscle mass index (SMI) and malnutrition, including anthropometric measurements.

Methods: A cross-sectional study was conducted at Geriatric Rehabilitation Unit, on 44 community-dwelling 60 years and older individuals, in post acute period of orthopedic surgery and other chronic conditions. Nutrition was assessed by: Mini Nutritional Assessment (MNA), Nutritional Risk Screening 2002 (NRS). Malnutrition was defined as MNA score < 17, risk of malnutrition as 17–23.5, well-nourished as ≥ 24 . Risk of malnutrition was defined as NRS score ≥ 3 . Body composition was analysed using bioelectrical impedance analysis (BIA), using AccunIQ BC300 analyser. SMI was calculated dividing skeletal muscle mass by height squared. Data was analysed using SPSS ver.27.0: Spearman's correlation, Mann–Whitney test were performed.

Results: Participants' (38 (86.4%) women) mean age was 73.4 ± 9.1 years. Six (13.6%) patients were malnourished, 24 (54.5%) were at risk of malnutrition, 14 (31.8%) were well-nourished. Malnourished and at-risk groups were combined into one group (MROM). SMI score showed moderate correlation with MNA ($r = 0.31, p = 0.04$), strong correlation with calf ($r = 0.59, p < 0.001$), brachial ($r = 0.60, p < 0.001$) circumferences, moderate negative correlation with NRS ($r = -0.47, p = 0.001$). The mean SMI score was significantly lower in NRS risk of malnutrition group than well-nourished group ($p = 0.02$). There was no significant difference of SMI score between MNA groups.

Key conclusions: Results of this study indicate a relationship between SMI and malnutrition in older adults. SMI score was significantly lower in the risk of malnutrition group than in well-nourished group when assessed by NRS.

P-0776

Multidisciplinary interventions in home based setting to prevent falls rehospitalizations and social isolation of elderly in the US

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The purpose of this presentation is to introduce the multidisciplinary services available to elderly adults in home-based setting for fall prevention, physical rehabilitation, post-surgical intervention and overall conditioning program to prevent rehospitalizations and social isolation.

Method: Epidemiological and Demographic Analysis. The number of people aged 65 and older is projected to reach 83.7 million by 2050. Falls are the leading cause of injury-related death for adults 65 and older. Almost one-half of all falls among elderly occur in or around their homes. Of those who fall, 20% to 30% suffer moderate to severe injuries. Nearly 50% of those hospitalized after a fall die within one year. According to CDC about 50 billion is spent on cost related to older adult falls each year. Rehospitalization rates range from 11.2% to 22.3% in the U.S.

Results: Many studies have cited a history of falls as a significant factor associated with patients being more likely to fall again. Previous falls often leads to fear of falling, which consequently lead to inactivity, loss of self-confidence, reduced quality of life and social isolation. Many factors influence older adults' motivation to stay physically active. The most important factors are physical and emotional benefits of physical activity: successful performance, individualized care, social support, appropriate environment, clear, realistic goals.

Conclusions: Multidisciplinary home health interventions play a very important role for elderly such as: therapeutic exercises for strength, endurance and gait training. ADL retraining, cardio-pulmonary status management, vital signs assessment, medication reconciliation and patient education in fall prevention.

P-0777

Improving medication information at discharge from geriatric rehabilitation units at Landspítali University Hospital

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Older patients are at increased risk of polypharmacy and medication errors. Research shows that up to 50% of medication errors occur during transitions of care. This improvement initiative assessed practices in medication usage, documentation, and patient management post-discharge, over 12-weeks in 2024.

84 patients were called by a clinical pharmacist 2–4 weeks after discharge. The purpose of the intervention was to address adherence barriers and prevent potential medication-related harm. Discharge documentation was analyzed for variables such as age, medications at discharge, use of dose dispensing aids, documentation in medical notes and medication changes.

Clinical pharmacists performed 133 post-discharge interventions via phone. The mean patient age was 82 years who took an average of 11 medications prescribed at discharge, with 64% using dose dispensing aids. The intervention improved patient experience but did not identify significant issues. Medication changes occurred in 92% of hospital stays, and these were documented in 92% of cases; however, the rationale for changes was noted in only 21%, and follow-up instructions were recorded in just 8%. Medications prescribed at discharge that may be inappropriate for long-term use in older patients and require follow-up include: 42% on benzodiazepines or Z-drugs, 34% on opioids, 15% on antipsychotics, and 8% on NSAIDs or COX inhibitors.

This improvement initiative identified that strengthening clinical pharmacy support to improve the transfer of care documentation (discharge letter), booking of follow-up appointments with general practitioners, deprescribing and patient education should be prioritized.

P-0778

Organizational hurdles and changing perceptions: challenges to the adoption of reablement in geriatric rehabilitation

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Introduction: Inpatient geriatric rehabilitation (GR) focuses on restoring functions but often fails to ensure independence after discharge. Reablement, a person-centered, goal-driven approach, may improve outcomes by enhancing autonomy and interdisciplinary collaboration. However, integrating reablement into GR in nursing homes presents challenges, requiring shifts in professional roles and care models. This study explores the feasibility of adopting reablement within nursing homes to address these tensions and improve post-rehabilitation outcomes.

Methods: An exploratory case study in a Dutch nursing home used 40 h of observations and 15 semi-structured interviews with healthcare professionals and policymakers to examine reablement in GR. Data were analyzed thematically, identifying challenges, potential benefits, and necessary organizational changes for adopting a reablement approach.

Results: The adoption of a reablement approach in inpatient GR faces challenges due to task-oriented, phased care, insufficient interdisciplinary collaboration, and a focus on physical recovery over well-being. Barriers include caregiver mindsets, high work pressures, passive client attitudes, and limited family involvement. A shift toward holistic, client-centered rehabilitation is needed. Opportunities involve increased client motivation, family involvement, and collaboration.

Key conclusions: Our results highlight a fundamental tension: while there are significant challenges to adopting a reablement approach in inpatient GR, the identified opportunities suggest that GR could benefit from a reablement approach under the right conditions. The adoption of a reablement approach is more than the sole introduction of a new intervention. Given the extent of these challenges, full adoption may be unrealistic. Integrating some key elements into existing GR practices may offer a feasible alternative.

P-0779

Physiotherapy in acute geriatrics wards: What (de)motivates patients? A qualitative study based on self-determination theory

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Background: While the benefits of physiotherapy for hospitalized older patients (HOPs) are well established, these patients are often considered demotivated by healthcare team members (HTMs), which is perceived as a hindrance to their rehabilitation. This study aims to quantify for the first time the motivation levels of HOPs in their participation in activities of daily living (ADLs) and physiotherapy, and to explore the motivating factors behind their participation in physiotherapy.

Methods: The motivation of 60 older patients hospitalized in an acute geriatrics ward was quantified using the Scale of Demotivation Assessment (SDA). Out of these participants, 14 were interrogated through semi-structured interviews. After transcription, data were

analyzed according to Self-Determination Theory, which has been proven effective in the understanding of motivational mechanisms.

Results: The prevalence of demotivation was 47% (95% CI: [0.34;0.6]) for ADLs and 35% (95% CI: [0.23;0.48]) for physiotherapy. The main demotivating factors were the feeling of external control and dependence experienced by HOPs, as well as the limited availability of staff during hospitalization. Conversely, feelings of competence, security, respect for limits, and commitment from the HTMs were important motivating factors.

Conclusion: A large number of relational factors have an impact on the motivation of HOPs regarding their participation in ADLs and in physiotherapy sessions. Appropriate time and space organizing and the provision of suitable equipment, combined with a genuine caring and respectful attitude from the HTMs, could considerably encourage the expression of intrinsic motivation and thus the involvement of HOPs in their own care program.

P-0780

The possibility of performing dual-task tests in a group of patients with and without dementia in a geriatric ward

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Introduction: Dementia and cognitive decline is one of global issues, as it often leads to functional disability and dependency of older people. The aim of our study is to assess the feasibility of performing dual-task tests in a group of patients with and without dementia in a geriatric ward.

Material and methods: We performed study on 250 patients consecutively admitted to the Department of Geriatrics, Hospital of the Ministry of Interior and Administration on Białystok, Poland, in the turn of 2019 and 2020. Based on comprehensive geriatric assessment data on clinical, functional and cognitive status of the patients were collected. Dual Task tests included normal TUG test, while counting backwards (TUG CB7), naming animals (TUG NA) and holding cup (TUG M).

Results: The average age of participants patients 81.5 years (IQR 76–86) only 29 (11.6%) of study participants had no cognitive or mood disorders. Depression was diagnosed in 30.4%, MCI in 12% and dementia in 38.4% of cases with median MMSE 17 (12–20) points. Our patients in large percentage were not able to finish dual task tests especially while counting backwards for 7. Inability to finish dual tasks was also observed in patients without cognitive disorders, who were able to perform single task TUG. Higher percentage of performance was observed in NA and manual TUG. Our analyses prove that the percentage of performance can be a marker of cognitive decline and has association with MMSE and CDT scores. Patients without dementia, who did not finish dual task tests, had longer time of single task TUG (11.2 s vs. 19 s for performance TUG CB7; 15 s vs. 20.1 s for TUG NA and 15 s vs. 33.7 s for TUG M; $P < 0.05$).

Conclusions: Not only gait parameters, but also ability to perform dual tasks can be a marker of early stage of cognitive decline in functionally disabled patients. As walk speed can be a marker of low reserve capacity of brain, during dual tasks these reserves seem to deplete.

Key words: dual task; gait; geriatric patients, dementia, cognitive decline.

P-0781**Transforming communities to promote healthy aging**

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Introduction: Transforming communities to promote healthy aging requires addressing physical, social, and environmental determinants of health. This study aims to explore strategies that already or will transform communities to support healthy aging.

Materials and methods: A thorough search of PubMed, Scopus, and Google Scholar has been conducted with keywords such as healthcare accessibility, walk audit, walk plans and urban planning.

Results: Older adults need communities that promote healthy living and self-reliance. The goal is to establish open spaces that enable social interaction and physical exercise, by creating a walkable and friendly environment. Walkable communities are critical for promoting physical, mental, and social well-being for older adults and they include facilities like accessible pedestrian paths and mixed land use. These factors promote physical activity, which decreases the risk of diseases like coronary disease, and improves social and mental health. Secure environments also enhance walkability. Features such as land use, street connectivity, and residential density contribute to walkability. Transforming neighborhoods to make them age-friendly environments is a multidisciplinary process that need all three scientific fields of geographers, healthcare and urban planning specialists to come together.

Key conclusions: Walkable neighborhoods and age-friendly city planning are crucial components of age friendly communities that necessitate policy solutions with a focus on accessibility, pedestrian environment, and active engagement of older adults in neighborhood design.

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P-0782**Treatment of urinary incontinence in elderly patients with functional magnetic stimulation (FMS)**

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Introduction: Urinary incontinence (UI) is a common condition for patients reduces considerably their quality of life. New technologies, such as Functional magnetic stimulation (FMS) have been introduced in this field as an in addition to classical rehabilitation. The aim of this study is to assess the efficiency of the new 3 Tesla electromagnetic chair stimulation in patients with urinary incontinence (UI).

Method: Our experience with rehabilitation of patients with UI included 22 patients(65 years and older) evaluated according the

exclusion criteria, and inclusion criteria. All patients eligible for the treatment where protocol for 3 Tesla electromagnetic chair (FMS Tesla Care®, Iskra Medical, Ljubljana, Slovenia) was used. Methods developed include FMS treatment administered for 20 min per session, twice per week for a total of 8 weeks- follow-up (16 treatments). **Results:** Several physical tests and questionnaires were carried among the patients after therapy with FMS. All patients followed a patient-satisfaction scale. Post-treatment questionnaires scores were lower than pre-treatment scores for UI, showed improvement in the frequency of daily leak episodes.

Conclusion: The usage of physical therapy provides better quality of life. The conservative treatment remains the first-line therapy for UI. The results of this study showed that the FMS may be an effective option for the treatment of UI, with great patient acceptance and no side effects. The treatment is painless, and the patients were seated comfortably on the chair fully clothed. This characteristic represents an advantage, especially for elderly population.

P-0783**Comparison between two intermediate care units: conventional and home-based**

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Introduction: The effectiveness of functional geriatric rehabilitation in home-based intermediate care units (CGA-HaH) remains limited compared to conventional Intermediate Care Units (ICU). This study examines the impact of an interdisciplinary intervention in two units within the same intermediate care hospital, focusing on physical and functional capacity outcomes.

Methods: Data collected included demographics, admission diagnosis, length of stay, clinical history, functional assessments (Barthel and Katz Index), physical capacity (Short Physical Performance Battery, SPPB), and gait ability (Functional Ambulation Categories, FAC).

Results: The analysis included 125 cases treated in CGA-HaH in 2023 and 119 cases hospitalized in ICU between September and December 2023. Both groups exhibited similar characteristics: mean age 82.22(SD: 9.4) vs. 82.34(SD: 10.6) years, female proportion 62.4% vs. 71.4%, and average length of stay 33.22(SD: 12.7) vs. 31.92(SD:21.4) days. Trauma-related conditions were the leading admission reason in CGA-HaH (45.6%), whereas cardiopulmonary issues predominated in ICU (26%). CGA-HaH cases demonstrated superior baseline gait ability (FAC 4.46(SD:1) vs. 3.95(SD:1.5)), greater independence upon admission (Barthel Index 55.08(SD:23.4) vs. 51.24(SD:31.1)), and similar initial physical capacity (SPPB 3.15(SD:2.6) vs. 3.22(SD: 3)). Both interventions significantly improved physical capacity, gait, and functional ability ($p < 0.0001$). However, ICU achieved greater physical capacity improvement at discharge (SPPB 6.48(SD:3.8) vs. 5.26(SD:3.4)). Neither intervention fully restored pre-admission functional levels.

Key conclusions: CGA-HaH cases initially had better gait ability and were predominantly admitted for trauma-related conditions. While both interventions effectively improved functional capacity and gait, ICU resulted in superior physical capacity at discharge.

P-0784

Frail2Fit study: a feasibility and acceptability study of a remote multimodal intervention delivered by volunteers to improve functional outcomes in older adults with frailty after a hospital stay

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Introduction: Physical activity (PA) and good nutrition are key to maintaining independence and reversing frailty among older adults. We aimed to evaluate the feasibility and acceptability of training volunteers to deliver exercise, behaviour change, and nutrition support, to older people with frailty after hospital discharge.

Methods: Volunteers were trained to deliver a 3-month, intervention to frail (Clinical Frailty Status ≥ 5) adults ≥ 65 years using telephone or online support. Feasibility was assessed by the number of volunteers recruited, trained, and retained; participant recruitment; and intervention adherence. Interviews were conducted with 16 older adults, 1 carer, and 5 volunteers to explore intervention acceptability. Secondary outcomes included physical function, appetite, well-being, quality of life, anxiety and depression, self-efficacy, and PA. Outcomes were compared at baseline, post-intervention, and follow-up (3-months). Interviews were transcribed verbatim and analysed using thematic analysis.

Results: The intervention was safe and acceptable to volunteers, and older adults with frailty. Five volunteers (mean age 16, 3 female) completed training, and 3 were retained. Seventeen participants completed the intervention (8 online; 9 telephone). Participants attended 75% (IQR 38–92) online sessions, and 80% (IQR 68.5–94.5) telephone support. Self-reported PA ($p = 0.006$), quality of life ($p = 0.04$), and appetite ($p = 0.03$) improved post-intervention. Lack of social support, and exercise discomfort were key barriers to the intervention. The online group was a positive vicarious experience, and telephone calls provided reassurance and monitoring.

Conclusion: With appropriate training and support, volunteers can safely deliver a remote multimodal intervention for older adults with frailty.

P-0785

Assessment of functional recovery in patients with hip fracture in a Geriatric Rehabilitation Unit

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Introduction: Hip fracture is a major cause of disability and institutionalization in older adults. Functional recovery during the subacute phase is key to improving outcomes. We aimed to assess functional improvement in a geriatric rehabilitation unit and its

association with frailty, dementia, clinical complexity, age, sex, surgical timing, and discharge destination.

Methods: This retrospective observational study included patients with femoral fracture admitted to a functional rehabilitation unit during 2024. Functional status was assessed using the Barthel Index at admission and discharge. Frailty was measured by a frailty index. Functional improvement, defined as the difference between scores, was compared across subgroups using t-tests, ANOVA, and chi-square tests.

Results: A total of 180 patients with hip fracture were analyzed. The mean age was 84.2 years. Moderate/severe frailty (IF-VIG > 0.36) was present in 63.4% (mean 0.335), and moderate/severe dementia (GDS ≥ 5) in 18.3%. Functional recovery was greater in those aged 65–85 vs > 85 (27.0 vs 20.1; $p = 0.004$), and significantly lower in patients with dementia (10.6 vs 25.9; $p < 0.001$), higher clinical complexity (non-complex: 27.2; complex chronic: 20.6; palliative: 8.3; $p = 0.001$), and greater frailty ($r = -0.341$; $p < 0.001$). Institutionalization occurred in 12.2% and was significantly associated with frailty ($p = 0.001$), but not with dementia ($p = 0.081$) or surgical delay ($p = 0.315$).

Conclusions: Following rehabilitation, functional improvement was observed, though influenced by age, cognitive status, clinical complexity, and frailty. Early identification of these factors may support personalized rehabilitation and discharge planning.

P-0786

What is the influence of nutritional status measured by MNA-SF on the recovery of geriatric patients admitted to a Functional Rehabilitation Unit?

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Introduction: Malnutrition affects 30%-50% of hospitalized geriatric patients, yet its impact is often underestimated. It is associated with higher mortality, poor functional recovery, and increased healthcare costs. Low caloric and protein intake, combined with increased energy demands due to inflammation, leads to weight and muscle mass loss. The Mini Nutritional Assessment Short Form (MNA-SF) evaluates nutritional status and predicts functional outcomes at discharge. Lower MNA-SF scores correlate with higher mortality and worse recovery.

Methods: A retrospective, descriptive study was conducted on patients admitted to a functional recovery unit between January 1 and December 31, 2024. Nutritional status was assessed using the MNA-SF (malnutrition: 0–7, at risk: 8–11, no malnutrition: 12–14). Functional status at admission and discharge was evaluated using the Barthel Index (BI), Functional Ambulation Scale (FAC), and Lawton and Brody scale. Non-parametric tests for ordinal variables and pairwise comparisons were used to assess significance.

Results: Among 178 patients (mean age 86 ± 6 years, 65% women), 18.5% had no malnutrition, 65.5% were at risk, and 16.1% were malnourished. Significant differences were found in functional status at admission and discharge (BI, FAC, Lawton & Brody, $p < 0.001$). A strong correlation was observed between MNA-SF scores and functional recovery ($p < 0.001$).

Conclusions: Most patients were at risk of malnutrition. Malnourished patients had greater dependence in daily activities, while those with better nutritional status demonstrated superior functional

recovery. These findings underscore the need for early nutritional management in geriatric rehabilitation.

P-0787

Baseline, clinical, and demographic characteristics of patients referred to Functional Recovery Units following a hip fracture in an Orthogeriatric Unit

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Introduction: Referral to Functional Recovery Units (FRUs) after a hip fracture is a key step in the post-acute care of older adults. However, the baseline profile of these patients is still not well characterized.

Methods: A prospective observational study was conducted from January to December 2024 in the Orthogeriatric Unit (OGU) of a tertiary hospital. Patients aged ≥ 65 years referred to an FRU post-operatively were included. Data collected included demographic, clinical, functional (modified Functional Ambulation Categories, mFAC), cognitive (Pfeiffer Questionnaire, 4AT), and perioperative variables.

Results: Of 432 patients admitted with fragility hip fractures, 95 (21%) were referred to an FRU. Mean age was 87 ± 6 years; 70.5% were women. All were home-dwelling, and 94.7% had independent pre-fracture mobility (mFAC 1–6). The most common fracture was intracapsular (52%). Malnutrition (defined by GLIM criteria) was present in 57.9%. At admission, the mean Pfeiffer score was 2.9 and delirium (4AT > 4) occurred at 18.9%. This patients have lower presurgical risk (ASA score 1.82) and 97.9% received neuraxial anesthesia. Surgical delay averaged 68 h, and OGU stay was 9.4 days. The proportion of patients mobilized out of bed by the day after surgery was 84.2% and 8.4% developed pressure ulcers $\geq$ grade 2. At discharge, 86.3% received anti-osteoporotic treatment, 92.6% vitamin D, and 81.1% calcium.

Conclusion: Patients referred to FRUs after hip fracture present: advanced age, preserved baseline mobility and low surgical risk, despite high rates of malnutrition. The early multidisciplinary approach benefits their rehabilitation.

P-0788

Interventions for prehabilitation in the elderly undergoing transcatheter aortic valve replacement (TAVI): a systematic review protocol

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Introduction: Transcatheter aortic valve replacement (TAVI) has become a safe option of treatment for most patients diagnosed with severe aortic stenosis in frail and pre-frail elderly people. However, the high cost of this treatment involves selecting the ideal candidate and ensuring a multidimensional and individualized perioperative process. There is little evidence on rehabilitation or prehabilitation protocols, therefore, this systematic review aims to identify and synthesize the evidence on the implementation of formal structured instruction for patients aged 75 and older with a diagnosis of severe aortic stenosis and an indication for TAVI.

Methods: We will conduct a systematic literature review following PRISMA guidelines and the Cochrane Handbook for Systematic Reviews of Interventions. Randomised controlled trials reporting on prehabilitation (e.g., physical training, nutritional support, psychological counselling) prior to TAVI will be included. Primary outcomes of interest are survival and cognitive performance. A comprehensive search will be performed in MEDLINE, EMBASE, LILACS, PEDro and The Cochrane Library. Risk of bias will be assessed using the RoB2 tool. A qualitative synthesis of data will be conducted, if possible, a meta-analysis will be conducted using Cochrane Review Manager.

Results: We will expect to identify the most frequently and effective multimodal intervention for prehabilitation. Aswell, subgroup analyses will be performed according to age, sex, clinical categories, blood biomarkers, functionality, frailty and type of intervention.

Key conclusions: With this information, it is hoped to identify the most effective interventions in elderly and based on it, the construction of new primary studies and develop clinical management protocols.

P-0789

Using bedside signs to promote sensory needs

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Introduction: The Comprehensive Geriatric Assessment [1] is a well established method of assessing the older adult. One of the factors that impacts outcomes in the older adult is sensory impairment as outlined by the NICE Guidelines on Delirium Prevention [2]. Thus, ensuring the recognition and correction of sensory impairment in older adult rehabilitation wards should be emphasized.

Methods: A total of 137 inpatients across five Geriatric Rehabilitation Wards at Karin Grech Hospital were assessed for need of sensory aids via patient documentation. Spot checks were then carried out to assess whether the sensory aids were in place. Following this, stakeholders were involved to implement bedside signs. A further round of data collection was then carried out.

Results: Of 137 inpatients 44% were noted to need spectacles and 7% were noted to need hearing aid/s. Spot checks showed a 75% compliance among patients with spectacles and 44% amongst patients with hearing aids. Following implementation of bedside signs,

compliance to spectacles deteriorated to 55% while compliance to hearing aids increased to 67%.

Key conclusions: The above data shows suboptimal compliance to sensory aids among inpatients at Karin Grech Hospital. There was only a 36% compliance rate to the adoption of bedside signs. Thus, further education and promotion is required in order to encourage ward staff to ensure compliance to sensory aids. A third cycle is advised involving discussions with stakeholders to improve compliance not only to sensory aids but to the bedside sign developed for their promotion.

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P-0790

Definitions and outcome measures of adherence in exercise and physical activity programs for older adults: a scoping review and evidence map

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Introduction: As the global population ages, promoting healthy ageing has become a healthcare priority. Exercise and physical activity are essential tools in preventing functional decline, yet adherence to exercise programmes among older adults remains suboptimal. Despite increasing interest, the concept of adherence lacks a consistent definition and standardised outcome measures, hindering comparability across studies.

Objectives: This scoping review aims to (1) identify and describe how adherence to exercise is defined in studies involving older adults and (2) map the outcome measures used to assess adherence across different contexts and populations.

Methods: A comprehensive search was conducted in PubMed, PEDro, CENTRAL, and EMBASE up to April 2025. No restrictions were applied regarding language or publication date. Eligible studies included randomised controlled trials, observational studies (cohort, case-control, cross-sectional), qualitative studies, and mixed-methods research. Studies included older adults (≥ 65 years) engaged in exercise or physical activity programmes delivered within a healthcare setting.

Results: Preliminary results suggest a wide heterogeneity in the definitions and operationalisation of adherence. Outcome measures range from session attendance and self-reported engagement to digital monitoring and behavioural scales. A thematic sub-analysis is being conducted to explore variations by type of intervention, population

characteristics, and health condition. A visual evidence map will be developed to support data interpretation and highlight gaps in the literature.

Conclusions: This review will clarify how adherence is currently defined and measured, supporting the development of more consistent criteria for future research and intervention design targeting older populations.

P-0791

The impact of social support and social network perception on quality of life in older adults: a cross-sectional pilot study

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Introduction: Social isolation and declining social support among older adults are critical public health challenges. This cross-sectional study examines the association between social support, social network perception, and quality of life (QoL) in community-dwelling older adults, adjusting for cognitive, demographic, and clinical factors.

Methods: A sample of 186 adults aged ≥ 65 years (57.5% female; mean age 71.8 ± 6.4 years) was recruited using stringent inclusion criteria: Hodkinson Mental Test (HMT) score ≥ 7 , literacy, non-institutionalized status, and absence of bedridden conditions. Validated scales included the Lubben Social Network Scale-6 (LSNS-6) for social networks, the Social Support Inventory (SSI) for perceived support, and the 13-item Quality of Life Scale for the Elderly (CASP-19) adapted for older adults. Hierarchical regression models controlled for age, gender, education duration, chronic disease, and medication use.

Results: Significant correlations were observed between QoL and SSI (Spearman's $\rho = 0.25$, $p = 0.001$), LSNS-6 total score ($\rho = 0.30$, $p < 0.001$), and education duration ($\rho = 0.38$, $p < 0.001$). In the final regression model, social support ($\beta = 0.17$, 95% CI: 0.02–0.20, $p = 0.014$) and social network size ($\beta = 0.21$, 95% CI: 0.13–0.55, $p = 0.002$) independently predicted higher QoL, while chronic disease reduced CASP-19 ($\beta = -0.34$, 95% CI: -10.17 to -1.20 , $p = 0.013$). Education duration showed the strongest positive effect ($\beta = 0.27$, $p < 0.001$). Cognitive status and medication use were non-significant predictors ($p > 0.05$). The model explained 33.5% of QoL variance ($R^2 = 0.335$, $F(8,177) = 11.14$, $p < 0.001$).

Key conclusions: These findings highlight modifiable social determinants of QoL in older adults. Interventions promoting social connectivity, education, and addressing chronic disease may enhance well-being. Clinicians should integrate social assessments into routine geriatric care to identify at-risk individuals.

Short poster presentation

Geriatric rehabilitation

P-0792

A multiplayer serious game on a large touchscreen for cognitive rehabilitation of Alzheimer's patients: feasibility and user experience

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Introduction: Serious games on digital devices are a promising approach for the cognitive rehabilitation of patients with Alzheimer's disease (AD). Most existing games are for a single user. We have evaluated a multiplayer touchscreen serious game (MTSG) designed for cognitive rehabilitation.

Methods: We invited AD patients of a geriatric rehabilitation day hospital to play the MTSG « Le Village de Verdurable» (Verdurable, France), according to a program of 5 weekly one-hour sessions. The MTSG was played on a 55" touchscreen arranged horizontally on stands, just like a table. Sessions were led by our psychologist, for 4–6 participants seated around the screen who could interact with the part of the screen near them. The MTSG had several games. The psychologist started a game for all the participants and explained the rules. During a session, 4–5 different games were used. User experience was assessed using F-SUS questionnaire.

Results: 33 AD patients participated. No dropout occurred. From one session to the next, most of the participants remembered having played the games and how to play. The level of satisfaction was very high and answers to the F-SUS showed a great deal of interest in this MTSG. We were struck by the high level of patient engagement, emotional mobilization (success/failure) and social interactions (mutual aid, competition).

Key conclusions: This MTSG was feasible in AD patients and recorded a high level of satisfaction. We are planning a larger trial to study the effects of this MTSG on patients with AD.

Poster

Geriatric rehabilitation

P-0793

Geriatric rehabilitation nursing research: a bibliometric analysis of trends and clinical practice impact

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Introduction: Rehabilitation nursing for older adults has evolved significantly, reflecting a response to the growing aging population and the unique needs of this demographic. This study provides a bibliometric analysis of research trends in geriatric rehabilitation nursing, from early records to the present, focusing on core themes and emerging practices.

Methods: A bibliometric analysis was conducted using PubMed. A search strategy targeting rehabilitation nursing and aging terms was applied. A total of 4,808 articles were identified, with 2,189 published

in the last decade. Co-occurrence term mapping was used to identify thematic clusters, allowing for visualization of interconnected research areas.

Results: The analysis revealed three primary clusters: the first cluster focused on discharge processes and complications in skilled nursing facilities; the second cluster centered on patient-centered care addressing quality of life, symptom management, and environmental factors; and the last cluster emphasized evidence-based practice through systematic reviews and clinical trials. Key terms such as "nurse," "age," and "facility" were highly interconnected, underlining the critical role of nursing practice in managing the rehabilitation needs of older adults.

Conclusion: This study highlights the diverse and interconnected nature of geriatric rehabilitation nursing research, strongly focusing on evidence-based care, discharge planning, and patient-centered practices. Insights from this analysis suggest a need for further research into care transitions and symptom management to enhance the quality of life and functional independence of older adults in rehabilitation settings.

P-0794

Retrospective evaluation of resource use and outcomes for patients in stroke units with extended length of stay

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Methods: Data was obtained over a 4-year period [2020–2023] for patients with length of stay > 6 weeks in stroke units serving an inner-city multi-ethnic population. Data collected included socio-demographic details, use of specialist interventions and discharge outcomes.

Results: Of 586 patients, 327[56%] had nasogastric feeding, 51[8.7%] had gastrostomy feeding, 32[5.4%] had craniotomy and 32[5.4%] had tracheostomy. There were no age differences except those who had craniotomy[75% < 60 yrs;p < 0.001] or tracheostomy [69% < 60 yrs;p < 0.001] were significantly younger. Morbidity [Death or institutionalisation rates] were significantly higher in those who had these interventions; 72%[23/32] of patients with a craniotomy; 56% [183/327] who had nasogastric feeding; 55%[28/51] who had gastrostomy tubes and 44% [14/32] who had a tracheostomy. Mean(SD) length of stay for 586 patient was 76 days(37.9); it was significantly longer for those discharged to an institution[86.5(47.1);p < 0.001] or to a longer-term unit[86.2(33.1);p = 0.009]. For patients who had specialist interventions, it was significantly longer for those who had craniotomy, tracheostomy, nasogastric or gastrostomy tubes(p < 0.001).

Discussion: This large survey has described socio-demographic [age, gender and ethnicity] differences in specialist interventions post-stroke and their adverse impact on stroke outcomes including length of stay, death and institutionalisation rates. It provides valuable information for clinicians and researchers on resource use and outcomes for stroke patients and potential implications of service utilisation for these patients.

P-0795

A process evaluation of the home-based geriatric rehabilitation program "Better at Home"

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Introduction: To ensure geriatric rehabilitation (GR) remains sustainable, a transition towards home-based GR is proposed. In the Netherlands, the “Better at Home” program has been implemented by eight organisations. This study evaluates the feasibility of the program, with elements of replacing inpatient care with home-based rehabilitation, emphasising participation goals, integrating eHealth, promoting self-management, and fostering collaboration among care partners.

Methods: For this process evaluation we used a mixed-methods approach incorporating quantitative and qualitative methods. Aspects we evaluated include reach, fidelity, dose delivered, dose received, and context. Data were collected via registration forms and focus groups. The qualitative data were analysed with thematic analysis.

Results: Preliminary results show that out of 1,169 patients assessed by the teams of the participating GR facilities, 436 (37%) were considered eligible for the program. In total, 110 patients and 60 informal caregivers participated in the study. Eight focus groups with a total of 37 professionals highlighted factors for expanding ambulatory rehabilitation, including a dedicated team, a standardised ambulatory approach, and early, repeated information for patients and informal caregivers. The use of participation goals varied across settings while promoting self-management remained challenging. The level of adoption of eHealth varied between facilities, with video consultations being the most frequently used eHealth application. Professionals recommended a pragmatic, ‘just do it’ approach, with regular evaluation and problem-solving as challenges arise.

Key conclusions: According to most of the professionals, the program appears feasible; however, there are some remaining challenges to overcome.

P-0796

Exploring trajectory costs of patients admitted to geriatric rehabilitation in the Netherlands

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Introduction: Geriatric rehabilitation (GR) is an essential component in transitional care. However, GR trajectories’ long-term effects and cost structures remain unclear, emphasising the need for insights to redesign GR sustainably. This study analyses GR trajectories and identifies underlying latent groups with similar cost trajectories based on care utilisation and associated cost drivers over six months, starting one month before GR admission.

Methods: We analysed administrative claim data from Statistics Netherlands, focusing on total trajectory costs (TTC) for GR patients admitted between 1 February 2022 and 31 July 2022. The TTC includes costs for hospital admissions, community care, long-term care, and short-term residential care. We used group-based trajectory modelling (GBTM), descriptive statistics, and multinomial logistic regression to determine significant differences between the identified latent groups and understand patient longitudinal patterns.

Results: Preliminary results are: Over six months, 27,483 patients received GR at a total mean cost of €36,480 (SD = 19,417). Two latent groups were identified: lower-cost (73%), averaging €26,929 (SD = 10,191), and higher-cost (27%), averaging €62,642 (SD = 13,818). The 27% higher-cost group accounted for 45% of total costs due to nursing home admissions, longer GR stays, and hospital admissions. 70% of patients returned home, of which 19% received home-based GR. Patient characteristics had limited influence on group membership.

Conclusion: During 6 months, 27,483 Dutch patients received GR, divided into two cost groups with unevenly distributed costs. Further research should focus on exploring regional variations in GR cost trajectories, identifying strategies to reduce costs for the higher-cost group, and exploring home-based GR cost trajectories.

P-0797

Optimization of multidisciplinary intervention in older adults at the day hospital

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Introduction: The combination of cognitive decline and reduced mobility is a determining factor in the loss of independence in older adults. Implementing multidisciplinary strategies at the Day Hospital can optimize functional and cognitive recovery, promoting active aging.

Methods: An observational study was conducted on older adults treated at the Day Hospital, assessing the evolution of the Montreal Cognitive Assessment (MoCA) for cognitive function, the Short Physical Performance Battery (SPPB) for mobility, and the Barthel Index for functional autonomy. Values were recorded at admission and discharge to analyze patient progress.

Results: Cognition (MoCA): The initial average score was 15 points, reflecting moderate cognitive impairment.

Mobility (SPPB): A 20% improvement in mobility was observed after the intervention.

Autonomy (Barthel): A 30% increase in the Barthel Index was recorded, indicating an improvement in functional independence.

Impact of multidisciplinary intervention: The combination of cognitive stimulation, physiotherapy, and training in daily living activities significantly enhanced overall patient recovery.

Key conclusions: Multidisciplinary intervention at the Day Hospital has a positive impact on the recovery of older adults with cognitive and functional impairment. Integrating combined stimulation strategies improves quality of life and reduces dependence, highlighting the importance of a comprehensive and personalized approach.

P-0798

Tinetti test as an indicator of functional improvement in surgically treated hip fractures

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Introduction: The aim of this analysis is to evaluate the Tinetti Test as an effective indicator for assessing the functional improvement of geriatric patients who underwent hip fracture surgery, treated at an Intermediate Care Hospital (HAI) in Catalonia during 2024.

Methods: The Tinetti Test is a simple assessment that evaluates a patient's risk of falls, focusing on two key components: balance and gait. During 2024, the Physiotherapy service at the HAI performed evaluations the day after the patient's admission and the day before their discharge.

Results: A total of 83 patients were admitted with a diagnosis of surgically treated hip fractures. Using the Tinetti Test, clear and quick information regarding the patients' functional progress was obtained.

- Functional improvement: 87.95% of the patients showed significant improvement in their functionality.
- Patients without improvement: 10 patients showed no improvement, including:
 - 3 patients were readmitted to the hospital.
 - 1 patient requested voluntary discharge a few days after admission.
 - 6 patients passed away.
- Notable progress: Of the 73 patients who made satisfactory progress, 26 showed a difference of 10 points or more compared to their admission score.

Conclusions: The Tinetti Test is a simple, quick, low-cost, and effective tool for assessing fall risk and monitoring functional improvement in geriatric patients who underwent hip fracture surgery. This test has proven to be a good indicator of functional progress for these patients in an intermediate care hospital setting.

Short poster presentation

Geriatric rehabilitation

P-0799

The effectiveness of digital reminiscence collages for older patients with cancer receiving care at home: a randomized controlled trial

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Introduction: Reminiscence and life review have been used as psychosocial interventions for older patients. Some of these are not just about talking, but are also made into booklets, but there are no reports that have verified the effects of having patients participate in the creation of these booklets. This study aimed to evaluate the effectiveness of an individualized program using a 'digital reminiscence collage' for older patients with cancer receiving care at home.

Methods: Forty-two participant were randomly assigned to an intervention group (n = 21) and a control group (n = 21). The intervention group participated in three sessions of reminiscence combined with digital collage-based craft activity over 10 days period. The control group only completed questionnaires three times at the same time as the intervention group (before the intervention, after the intervention, and one week after the intervention). We conducted an analysis of covariance (ANCOVA) with performance status (PS) as a covariate and the self-efficacy scale for patients with terminal cancer as a dependent variable.

Results: Of the subjects in the study, 13 in an intervention group (average age $\pm$ SD: 79.3 $\pm$ 7.6) and 16 in the control group (average age $\pm$ SD: 76.1 $\pm$ 6.8) completed the study. A significant interaction was shown in the "symptom coping efficacy" (SCE) ($p < 0.001$), "affect regulation efficacy" (ARE) ($p = 0.015$), and total score ($p = 0.002$) of the self-efficacy scale for patients with terminal cancer in.

Conclusions: The results suggest that digital reminiscence collage is useful for the self-efficacy of older patients with cancer receiving care at home.

Poster

Geriatric rehabilitation

P-0800

Factors associated with discharge to the community from inpatient geriatric rehabilitation within 30 days of admission

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Introduction: In Iceland, there is a high demand for hospital-based assessment and rehabilitation programs for frail and medically complex older adults. A better understanding of the factors associated with rehabilitation success is needed to effectively identify and prioritize candidates for inpatient post-acute care.

Methods: We included 765 patients who were admitted to a short-term rehabilitation unit in Reykjavik, Iceland, and were assessed with the comprehensive interRAI Post-Acute Care instrument (250 + items, including physical function, cognition, and psychosocial well-being) at admission. We fit multivariable logistic regression models to characterize the association between individual items and summary scales and the likelihood of community discharge within 30 days.

Results: The mean age was 83.4 (SD $\pm$ 6.6) years and 61% were female. Sixty-five percent of patients were discharged to the community within 30 days. Independent factors associated with successful community discharge included: female sex, walking speed and distance, less difficulty standing up unassisted, ADL independence, better procedural memory, lack of bowel incontinence and a lower comorbidity index score. Reason for admission (e.g. hip fracture, stroke, infection) was not associated with the outcome.

Conclusions: We identified a series of patient factors associated with successful community discharge after participation in an inpatient rehabilitation program. As part of the referral process, care planners should consider factors such as physical and cognitive function, continence, and comorbidities when identifying candidates for inpatient rehabilitation programs. Future research should apply these measures from routinely collected comprehensive assessments in decision-support algorithms to optimize referral and care planning.

P-0801

Development of a D-A-CH consensus statement based on a best-practice process model for geriatric rehabilitation

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Introduction: Geriatric rehabilitation (GR) aims at improving functional capacity and social participation of older adults. Despite cultural and language similarities, Germany, Switzerland, and Austria differ markedly in delivery of GR.

The work presented summarizes the structure and first results collated during the joint work of three scientific geriatric societies in Austria,

Germany and Switzerland with the aim, to consent a shared rehabilitation pathway.

Methods: Under the umbrella of the geriatric scientific societies representing the D-A-CH region an expert consensus is developed rooting in an evidence-base, mixed-method and multi-step approach.

Results: The presentation will deliver the process and first results building a shared model of GR care, developed grounded on evidence generated from a systematic literature review, enriched by expert opinion collected through an online survey on structures and a Delphi consensus focusing on the development of key steps for quality assured GR process in the countries participating.

Conclusion: The methodological framework integrates a mixed methods approach to establish an evidence-based consensus for GR in the D-A-CH region. This approach will not only allow scaling in other member states of EuGMS, but is expected to support evidence-informed policy decisions and GR care planning. The collaborative approach ensures broad applicability, positioning this consensus as a key reference for advancing GR in the D-A-CH region.

P-0802

Persistent deficits in frailty, postural control and physical activity after successful repositioning maneuvers in older adults with benign paroxysmal positional vertigo

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Introduction: Benign Paroxysmal Positional Vertigo (BPPV) is a common vestibular disorder in older adults, with symptoms of frailty and decreased postural control, physical activity (PA) and well-being. Whether these symptoms recover after treatment with repositioning maneuvers (RM) remains unclear.

Methods: Twenty-five older adults with BPPV (oaBPPV) (73.2 ± 4.9 years) were compared to twenty-two age-matched controls (73.5 ± 4.5 years). OaBPPV were treated with RM until nystagmus resolved and evaluated pre-treatment and 1, 3 and 6 months post-treatment. Modified Fried criteria were used to assess frailty. Well-being was evaluated with the Dizziness Handicap Inventory (DHI) and Falls Efficacy Scale (FES-I). Postural control was assessed with the timed chair stand-test (TCST) and Timed-up-and-go (TUG). PA was measured using the MOX accelerometer and the International Physical Activity Questionnaire (IPAQ).

Results: OaBPPV experienced significantly more frailty symptoms ($p < 0.001$), a higher DHI ($p < 0.001$) and FES-I ($p < 0.001$) and a reduced PA compared to controls. After RM, FES-I ($p = 0.11$), turn duration of TUG ($p = 0.3$) and IPAQ ($p = 0.4$) were equal to controls. Despite improvements, persistent deficits remained in DHI ($p < 0.001$) and spatiotemporal parameters of gait ($p = 0.002$). Frailty ($p = 0.8$), TCST ($p = 0.3$) and objectively measured PA ($p = 0.2$) did not improve.

Key conclusions: oaBPPV experience additional health problems besides BPPV, such as frailty, a co-existing vestibular hypofunction, or cognitive decline. RM improved some parameters, but there were persistent deficits in well-being, postural control, frailty and PA. After treatment with RM, clinicians should follow up on these problems to

determine if additional rehabilitation is needed to optimize recovery in oaBPPV.

P-0803

Multimorbidity and functional status in old age after rehabilitation

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Introduction: The aim of the study was to determine the association between multimorbidity and the functional status of the older people after geriatric rehabilitation.

Methods: The cross-sectional survey was carried out in the inpatient rehabilitation and geriatric unit. The study included 44 male ($n = 6$, 13.6%) and female ($n = 38$, 86.4%) participants, aged 60 years and over, after hip or knee replacement, femoral osteosynthesis, pelvic and femoral fractures, who were able to stand on their own. Patients were prescribed a rehabilitation and afterwards their functional status was assessed using the modified Keitel test for lower limbs and the Barthel Index. After obtaining consent from the patients, information on their chronic diseases was obtained using an electronic health system. The total number of chronic diseases was identified and diseases were grouped by organ system. The data were analysed using IBM SPSS 30.0 software. Spearman correlation was performed.

Results: The mean age of the patients was 73.45 ± 9.133 . There was a statistically significant negative correlation between the number of chronic diseases and the Barthel Index ($r = -0.351$, $p = 0.019$). The correlation between the number of diseases and the Keitel test was statistically insignificant ($p = 0.923$). Significant negative correlations were found between kidney disease ($p = 0.005$, $r = -0.360$) and urogenital diseases ($p = 0.016$, $r = -0.412$) and Barthel Index after rehabilitation. Correlations with other systems were not significant.

Key conclusions: After geriatric rehabilitation lower Barthel Index scores were associated with a higher number of comorbidities, as well as kidney and urogenital diseases.

P-0805

Professionals' perspectives on problem behavior in geriatric rehabilitation: a semi-structured interview study

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Introduction: Geriatric rehabilitation (GR) primarily focuses on somatic and functional recovery. However, many patients experience psychological distress, often perceived as problem behavior. There is an increasing number of GR patients with cognitive impairments, neuropsychiatric symptoms, and addiction-related issues [1], which

negatively affect the quality of life of patients and informal caregivers and hinder rehabilitation goals [2,3]. This study explores the perceptions of nursing and treatment staff in GR regarding the care of these patients and identifies their support needs.

Methods: A qualitative study using semi-structured interviews was conducted with 17 GR professionals (9 nursing staff, 8 treatment staff) in a Dutch GR ward. Interviews were transcribed verbatim and analyzed using inductive coding.

Results: Professionals emphasized the lack of a systematic, interdisciplinary approach to identifying and managing problem behavior. They reported diverse psychological issues among patients, with inconsistent definitions and attitudes towards problem behavior resulting in variability in identification and treatment. Nursing staff felt unsupported and frustrated by flexible admission policies and suboptimal collaboration with treatment staff. Problem behavior negatively impacted patients, informal caregivers, fellow patients, and professionals. Recommendations included adapting evidence-based methods for managing problem behavior, employing additional disciplines (e.g. social workers, behavioral coaches), and equipping staff with appropriate tools and training to support patients and their relatives.

Conclusions: GR professionals face substantial challenges in the care and treatment for patients with problem behavior and their relatives. The findings highlight the need for evidence-based methods to support these patients and their caregivers.

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P-0806

Revealing the muscle prioritization of pelvic rehabilitation for maintaining urinary and fecal control in elderly women: a finite element analysis

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Background: This study aims to utilize finite element analysis (FEA) to explore the effects of different rehabilitation training methods on the ability of elderly women to maintain urinary and fecal control. It also seeks to determine the muscle prioritization during pelvic rehabilitation training, providing a scientific basis for personalized rehabilitation nursing.

Methods: A pelvic-thigh finite element model was constructed based on CT and MRI images from a 70-year-old Chinese elderly female volunteer. The material properties of the muscles were altered to simulate the effects of five different physical rehabilitation methods. By comparing changes in the retrovesical angle (RVA) and anorectal angulation (ARA) under different muscle material properties settings, the relationship between rehabilitation training methods and urinary

and fecal control was quantified. Model validity was verified by analyzing the relative changes in waist circumference, RVA, and ARA to ensure accuracy and practical applicability.

Results: The finite element model constructed was highly consistent with real pelvic floor conditions. As muscle material properties improved, the RVA gradually decreased, and the ARA gradually increased, approaching normal ranges. The results highlight the critical roles of the levator ani, pelvic floor, rectus abdominis, erector spinae, and hip muscles.

Conclusions: This study provides scientific evidence supporting the efficacy of rehabilitation training in urinary and fecal control. The study emphasizes the importance of personalized pelvic floor rehabilitation programs based on gender differences, muscle status, and dysfunction types, offering new perspectives and possibilities for using FEA in elderly populations.

P-0807

The impact of handgrip strength on the rehabilitation process after knee joint arthroplasty in elderly patients

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Handgrip strength is a key indicator of overall muscle function and physical condition. Recent research highlights its role in predicting rehabilitation outcomes, particularly in elderly patients undergoing orthopedic surgery. This study examines the impact of handgrip strength on recovery following knee joint arthroplasty in older adults. The study included a group of elderly patients after knee joint arthroplasty, in whom handgrip strength was measured preoperatively and at various stages of rehabilitation. Functional outcomes, including range of motion, muscle strength, and independent mobility, were analyzed.

Results indicate that patients with greater preoperative handgrip strength experience faster recovery and improved rehabilitation outcomes. This advantage may stem from superior baseline physical fitness, enhanced adaptability, and increased engagement in the rehabilitation process.

These findings suggest that handgrip strength assessment could be a valuable tool for predicting rehabilitation success and tailoring individualized recovery programs for elderly patients after knee arthroplasty.

Poster

Gerodontology

P-0808

Association between medical and oral health indicators and physical frailty in community-dwelling Greek adults

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Introduction: This study aimed to explore the associations between medical and oral health indicators with physical frailty in community-dwelling Greek adults.

Methods: The sample included Greek community-dwelling persons over 18 years of age, with ≥ 20 natural teeth and ≥ 10 occlusal contacts, recruited from the Dental School of the National and Kapodistrian University of Athens (NKUA), Greece. Oral interviews recorded sociodemographic, medical and oral factors as well as unhealthy habits. Physical frailty was assessed using the Physical Frailty Phenotype (PFP). Oral examination recorded dental status, periodontal disease, oral diadochokinesis (ODK), maximum bite force, maximum tongue pressure, masticatory performance, swallowing function and dry mouth. Univariate and multivariable logistic regression analyses were conducted using PFP as dependent variable, categorized as robust and prefrail/frail ($P \leq 0.05$).

Results: Sixty persons participated in the study with a mean age of 52.8 ± 17.7 years (range: 20–84 years). Thirty-three (55%) were classified as prefrail/frail based on PFP. In the univariate analyses, lower total MNA score ($P = 0.007$), higher Clinical Oral Dryness Score ($P = 0.017$), and higher Xerostomia Inventory score ($P = 0.044$) were statistically significantly associated with prefrailty/frailty. Severe periodontitis ($P = 0.063$), ODK/pa ($P = 0.059$) and lower Repetitive Saliva Swallowing Test Score ($P = 0.072$) were marginally statistically significantly associated with prefrailty/frailty. The multivariable logistic regression analysis did not reveal any statistically significant associations.

Key conclusions: Multivariate statistical analysis did not reveal any statistically significant associations between oral health indicators and PFP in Greek community-dwelling adults. However, univariate analyses demonstrated significant associations between lower MNA and higher dry mouth scores with prefrail/frail status, indicating the need for further studies.

P-0809

Association of oral function and nutritional status with independence in activities of daily living among nursing home residents: a cross-sectional study

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Introduction: This study investigated the association of oral function and nutritional status, with independence in activities of daily living (ADL) among nursing home residents.

Methods: Study population included nursing home residents in Athens, Greece. Sociomedical characteristics, Charlson Comorbidity Index (CCI), number of drugs, and Katz Index for ADL were

recorded. Full form of Mini Nutritional Assessment (MNA) was performed. Oral examination included recordings of number of teeth, Clinical Oral Dryness Score (CODS), oral diadochokinesis (number of pa/, ta/, ka/ produced per second), masticatory performance with mixing ability of a two-coloured gum for 50 cycles using Subjective Assessment Scale (SA50), maximum tongue pressure (kPa) with JMS device (MTP) and swallowing function with Repetitive Saliva Swallowing Test (RSST). Statistical analysis included descriptive statistics, Spearman's rank correlations, Mann–Whitney U test, and Binary Logistic Regression using Katz index as categorical variable with cut-off the median value 4.

Results: Ninety-two residents participated with mean age 86 ± 6.6 years. Bivariate analysis showed statistically significant correlations of Katz index with CCI ($p < 0.001$, $rs = -0.433$), number of drugs ($p = 0.015$, $rs = -0.253$), MNA ($p < 0.001$, $rs = 0.450$), CODS ($p = 0.008$, $rs = -0.275$), number of pa/, ta/ and ka/ per second ($p < 0.001$, $rs = 0.427$, $rs = 0.424$, $rs = 0.476$ respectively), SA50 ($p = 0.022$, $rs = 0.239$), MTP ($p < 0.001$, $rs = 0.470$), and RSST ($p < 0.001$, $rs = 0.522$). Binary logistic regression revealed that lower CODS ($\beta = -0.258$, OR = 0.77), higher number of ka/ per second ($\beta = 1.97$, OR = 7.17) and higher MNA ($\beta = 0.206$, OR = 1.23) were associated with greater probability of having higher Katz index.

Key conclusions: Oral dryness, tongue motor function and nutritional status had a significant effect on residents' independence in ADL.

P-0810

Oral health and clinical outcomes in hospitalized older adults with frailty

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Background: Oral health impairment is increasingly recognized as a critical factor influencing clinical outcomes in hospitalized elderly patients. However, whether better oral health improves prognosis in frail hospitalized older adults remains unclear. This study aimed to investigate the relationship between oral function impairment, comprehensive geriatric assessment (CGA) parameters, and in-hospital mortality in frail hospitalized patients.

Methods: This retrospective study included 972 frail hospitalized older adults, defined by the Fried frailty phenotype assessment. Patients were categorized into normal, moderate, and severe oral impairment groups based on bedside oral examinations. Clinical, functional, and psychological parameters were analyzed, and logistic regression was performed to identify predictors of in-hospital mortality.

Results: Among all frail hospitalized patients, severe oral impairment was significantly associated with increased in-hospital mortality (29.3%) compared to moderate (20.2%) and normal (13.7%) oral function ($p < 0.001$). Logistic regression analysis identified moderate (OR = 1.60, 95% CI: 1.09–2.35, $p = 0.017$) and severe (OR = 2.61, 95% CI: 1.70–4.01, $p < 0.001$) oral impairment as independent risk factors for mortality. Additional significant predictors included older age (OR = 1.06, $p < 0.001$), male gender (OR = 1.55, $p = 0.009$), higher Charlson comorbidity index (OR = 1.21, $p < 0.001$), polypharmacy (OR = 1.74, $p = 0.010$), lower Mini-Mental State Examination scores (OR = 0.96, $p = 0.004$), poorer nutritional status (OR = 0.91, $p < 0.001$), lower functional independence ($p < 0.001$), and a lower EQ-5D-3L index (OR = 0.48, 95% CI: 0.31–0.75, $p = 0.001$).

Key conclusion: Oral health impairment is a significant predictor of in-hospital mortality among frail elderly patients. Integrating oral health assessment into CGA may help identify high-risk patients and improve clinical outcomes.

P-0812

A simplified clinical remount procedure for complete dentures: a series of cases in geriatric practice

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Background: As global populations age, the demand for functional and accessible complete denture treatment grows, particularly in elderly individuals with systemic health challenges. Traditional clinical remount procedures, although effective, are often too complex for routine application in geriatric settings.

Objective: This presentation aims to demonstrate the clinical efficacy and practicality of a simplified clinical remount technique, developed by Dr. Hideo Kawahara, through a series of real-world geriatric cases in Taiwan.

Methods: Using a simplified protocol—excluding face bow transfer, utilizing centric-only records, and employing averaged articulators and dot-guided selective grinding—the protocol provided to achieve balanced occlusion on existing denture of elderly patients across various clinical and community-based settings.

Results: The simplified approach enabled improved occlusal balance and masticatory function with reduced chair time and patient discomfort. Patients reported enhanced comfort and confidence in daily eating. Clinicians benefited from a more efficient workflow without compromising treatment outcomes.

Conclusion: This case series confirms that simplified clinical remount procedures are a valuable tool in geriatric prosthodontics, supporting the goals of cure, care, and rehabilitation. While the outcomes are promising, this report is based on a limited number of cases; further research is necessary to validate these findings and better understand the broader clinical significance.

Poster

Gero-oncology

P-0813

Diagnostic challenges in elderly patients with cognitive decline and brain mass

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Introduction: Cognitive decline in the elderly is commonly attributed to neurodegenerative diseases such as dementia. However, structural brain lesions, including malignancies, can mimic these symptoms. We present a case of a 79-year-old male with progressive cognitive impairment initially suspected to have dementia.

Methods: Clinical history, laboratory data, and neuroimaging findings were retrospectively reviewed. The patient underwent initial computed tomography (CT) which was unremarkable, followed by magnetic resonance imaging (MRI) that revealed a mass lesion.

Results: The patient exhibited progressive confusion, forgetfulness, and visual disturbances over two months. Despite normal blood tests and an unremarkable CT scan, an MRI identified an irregularly enhancing lesion involving the right basal ganglia, internal capsule, thalamus, and corpus callosum. The differential diagnosis included glioblastoma and primary central nervous system lymphoma (PCNSL). A multidisciplinary team concluded that, given the patient's frailty and limited treatment options, supportive care was the most appropriate management strategy.

Conclusions: This case underscores the need for advanced neuroimaging in elderly patients with atypical cognitive decline. Early consideration of structural brain lesions can prompt timely diagnosis and appropriate management, ultimately guiding patient-centred care.

Short poster presentation

Gero-oncology

P-0814

Effects of androgen deprivation therapy in high-risk prostate cancer in the elderly: prosarc study

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Introduction: To evaluate the loss of lean mass, physical performance and the aggravation of sarcopenia as a consequence of androgen deprivation therapy (ADT) in patients with prostate carcinoma.

Methods: Prospective and observational study in patients ≥ 70 years old diagnosed with high-risk prostate cancer not candidates to local treatment in whom, muscular ultrasound parameters (thickness and area of quadriceps rectus femoris, QRF), lean mass, gait speed and sarcopenia are evaluated at baseline and after 6 months of ADT. 42 subjects were recruited and valid evaluations were completed in 37.

Results: Mean age (SD) was 81.6 (6.1). Results are presented at baseline vs. 6 months. Low lean mass was observed in 75.7% vs. 86.5% ($p = 0.05$). Ratio of aLM/height² diminished from 6.29 (0.94) to 5.99 (0.82) ($p < 0.001$) with an average difference of 0.3 kg/m² (CI 95% 0.13–0.46). QRF thickness was reduced from 1.65 cm (0.32) to 1.47 (0.31) ($p < 0.001$) and area from 6.8 cm² (1.76) to 6.15 (1.46) ($p = 0.004$). Handgrip strength was 27.74 (9.23) vs. 25.7 (8.38) ($p = 0.008$). Average gait speed was 0.8 m/s. Sarcopenia was present in 20 individuals (54%). No differences were found in gait speed nor sarcopenia (assessed by EWGSOP2 criteria).

Conclusions: Three out of four patients exhibit low lean mass at baseline and after 6 months of ADT is identified in the whole sample, with significative differences in the ratio aLM/height², QRF thickness and area. A significative reduction of 2 kg in handgrip strength is observed. A high prevalence of sarcopenia is present before the onset of ADT, with no aggravation 6 months later.

Poster

Gero-oncology

P-0815

Dietitian-led interventions for sarcopenia management in cancer patients: a quality improvement initiative

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(1) HMC

Introduction: Sarcopenia, the progressive loss of muscle mass and function, is a common complication in cancer patients that can negatively impact treatment outcomes and quality of life.

Aim: This quality improvement project aimed to assess the effectiveness of dietitian-led interventions in managing sarcopenia among cancer patients and to establish best practices for nutritional care.

Methodology: A six-month prospective study was conducted on 100 cancer patients at various stages of treatment. Patients underwent initial screening for sarcopenia using the SARC-F questionnaire and bioelectrical impedance analysis. Dietitians implemented tailored nutritional interventions, including high-protein diets (1.2–1.5 g/kg/day), oral nutritional supplements, and counseling on physical activity. Muscle mass, strength, and physical performance were assessed at baseline and after three and six months. Patient-reported outcomes were collected using the EORTC QLQ-C30 questionnaire.

Results: After six months, 72% of patients showed improvements in muscle mass and strength. Adherence to dietitian-prescribed nutritional plans was associated with a 40% reduction in sarcopenia progression compared to standard care. Patients receiving dietitian-led interventions reported significant improvements in fatigue levels and overall quality of life. The integration of nutritional care with exercise recommendations led to synergistic benefits, with a 25% increase in physical performance scores.

Conclusion: This quality improvement project demonstrates the significant impact of dietitian-led interventions in managing sarcopenia among cancer patients. The implementation of targeted nutritional strategies, combined with physical activity guidance, resulted in improved muscle health and quality of life. These findings support the integration of specialized dietetic services as a standard of care in oncology settings to effectively address sarcopenia and enhance overall patient outcomes.

P-0816

Impact of social support on quality of life and survival in geriatric oncology: Insights from a narrative review of empirical studies

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Introduction: Social support significantly enhances the psychophysical well-being of older cancer patients. Extensive research

has delineated its beneficial effects on various health outcomes, including emotional stability and physical health.

Objectives: This review aims to synthesize current literature on the impact of diverse forms of social support on the health outcomes of older cancer patients, focusing on quality of life (QoL) and survival.

Methods: A narrative review of studies published between 2010 and 2024 was conducted. Articles from MEDLINE, Web of Science, and Scopus databases were selected based on predefined inclusion criteria, comprising 15 studies and data from 2,924 patients.

Results: The analysis reveals that social support crucially impacts the health of older cancer patients. Those with robust family support and higher income levels experience a markedly better QoL than their isolated or economically disadvantaged peers. Furthermore, a positive correlation between social support, QoL, and survival rates underscores the necessity of differentiating the beneficial effects of supportive relationships from the detrimental impacts of negative or absent support. Sociodemographic factors such as gender, marital status, educational level, and effective coping strategies significantly moderate the availability and efficacy of social support, thereby reducing psychological distress in this population. Both emotional and educational support are strongly associated with enhanced subjective well-being. Consistently, the reviewed studies affirm the positive influence of social support on mental health and QoL in elderly cancer patients.

Conclusion: Tailored social support and effective coping strategies are pivotal in enhancing the prognosis and reducing psychological morbidity in geriatric oncology.

P-0817

Don't skip frailty: real-world data on CDK4/6 inhibitor use in older HR+/HER2– metastatic breast cancer patients

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Introduction: Hormone receptor-positive, HER2-negative (HR+) is the most common subtype of metastatic breast cancer (MBC). Although HR + MBC remains incurable, CDK4/6 inhibitors (CDK4/6i) have significantly improved overall survival (OS). However, data on efficacy and safety in older and frail patients remain limited. This study aimed to evaluate efficacy (OS and progression-free survival, PFS) and safety (adverse events, AEs) of CDK4/6i in older HR + MBC patients, based on the specific agent used and frailty level.

Methods: We retrospectively included all HR + MBC patients aged ≥ 70 years treated with CDK4/6i at the Georges François Leclerc Cancer Center (Dijon, France) between July 2016 and June 2024. Outcomes were compared between those treated with palbociclib versus other CDK4/6i (abemaciclib or ribociclib). Frailty was assessed using the Clinical Frailty Scale (CFS).

Results: A total of 110 patients were included: 91 (82.7%) received palbociclib and 19 (17.3%) other CDK4/6i. Baseline and frailty characteristics were similar across groups. PFS and OS did not differ significantly by treatment type. Grade 3–4 neutropenia was more frequent with palbociclib (58.2% vs 31.6%, $p = 0.04$), while digestive AEs were more common with other CDK4/6i (68.4% vs 19.8%). Median OS decreased with higher frailty: 41.4 months for CFS 1–3 vs 21.5 months for CFS 4–6 ($p < 0.0001$). A trend toward increased AEs with higher CFS was observed across treatments.

Conclusion: This real-world study supports the feasibility of CDK4/6i use in older patients with HR + MBC. Frailty assessment should be integrated to optimize tolerance and minimize toxicity.

P-0818

Association between polypharmacy and net survival in older adults with chronic lymphocytic leukemia: a French registry-based study

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Introduction: Chronic lymphocytic leukemia (CLL) is the most common leukemia in older adults (OA). The advent of targeted therapies has improved survival; however, concerns persist regarding oral therapies, polypharmacy, and the use of potentially inappropriate medications (PIMs). This study aimed to assess the association between polypharmacy and PIMs with net survival (NS)—a proxy for disease-specific survival—in patients aged ≥ 70 years with CLL.

Methods: Data were collected from a French registry of hematologic malignancies. Patients diagnosed and treated for CLL between 2006 and 2023 were included. Polypharmacy was defined as the concurrent use of ≥ 5 medications; PIMs were identified according to the BEERS criteria.

Results: A total of 218 patients were included, of whom 124 (56.9%) were aged ≥ 70 (median age: 77). The 5-year NS was significantly lower in OA (60.5%, 95% CI [49.3–74.4]) compared to those < 70 years (85.8%, 95% CI [77.6–94.9]; $p = 0.004$). Among OA, 40% were exposed to polypharmacy and 40% had at least one PIM. In univariate analysis, polypharmacy was associated with lower 5-year NS ($p = 0.01$), while PIMs were not ($p = 0.17$). In multivariate analysis adjusted for age, year of diagnosis, and treatment, polypharmacy showed a trend toward increased mortality (HR = 2.03, 95% CI [0.98–4.18]; $p = 0.056$), whereas PIMs were not significantly associated (HR = 1.28, 95% CI [0.64–2.56]; $p = 0.48$).

Conclusion: Older adults with CLL have poorer net survival, potentially linked to polypharmacy exposure, while PIMs did not significantly impact NS.

P-0819

MoCA vs. MMSE: which tool should be used to screen for cognitive impairment in geriatric oncology ?

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Introduction: Cognitive impairment is common in elderly patients treated for cancer. However, there is no consensus as to the most appropriate cognitive screening test in Comprehensive Geriatric Assessment. Some studies in a variety of medical contexts have

shown that the Montreal Cognitive Assessment (MoCA) may be more sensitive than the Mini Mental State Examination (MMSE). The main purpose of this study was to evaluate the sensitivity/specificity of these tests.

Methods: This study involved cancer patients aged 70 and over for whom 1st-line treatment was planned. Older patients with cancer referred to a Comprehensive Geriatric Assessment by cancer specialist to explore any potential frailty before cancer treatment initiation. Patients with brain tumor were ineligible. Patients completed MoCA, MMSE and neuropsychological assessment (4 cognitive domains: episodic memory, short-term and working memory, executive functions, processing speed). CODEX and MiniCOG scores were also calculated and compared with the MoCA. Global cognitive impairment was defined as impairment in at least one cognitive domain.

Results: 104 patients participated in this study. The mean age was 82.9 years (SD = 5.25). 88% of patients had a solid tumor, mainly breast cancer (30%). Global cognitive impairment was present in 45 patients (57%). The most common cognitive impairment concerned episodic memory in 39 patients (44%) and executive functions in 11 patients (18%). Out of 103 participants, 77 (75%) had a MoCA score below 26 and 48/104 (46%) had an MMSE score below 26. Sensitivity and specificity were 0.84 and 0.5 for MoCA, 0.67 and 0.85 for MMSE, 0.64 and 0.79 for CODEX and 0.69 and 0.73 for MiniCOG, respectively. However, these results vary according to the cutoff used for each test.

Conclusion: MoCA appears to have the best sensitivity compared to the MMSE, CODEX and MiniCOG. Conversely, the MMSE has the best specificity compared to the others tests. It is therefore recommended that MoCA be used in Comprehensive Geriatric Assessment to detect cognitive impairment in cancer patients prior to treatment.

P-0820

Falls among the older patients treated for cancer in Normandy's outclinics: screening and prevention (CHUPACHOUP)

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Introduction: The international recommendations on fall prevention recommend to identify the risk of falling in people aged 65 and over at least once a year, and provide targeted preventive interventions according to the low-moderate-high level of risk. Cancer and its treatment (i.e. chemo induced peripheral neuropathy) increase the risk for falling.

Methods: This multicenter prospective study consisted of a cross-sectional survey conducted during the WHO "Global action on

patient safety" week to identify the proportion of the three fall risk levels in patients treated for cancer in oncology ambulatory care unit and/or radiation therapy. At 3 months in the high-risk group, a telephone follow-up identified whether the implementation of the baseline recommendations was done or not.(NCT06504628).

Results: 328 patients were included, 53% male, mean age 73 ± 6 , with various cancer (23% lung, 22% digestive, 22% urinary, 15% breast and gynecological). The level of fall risk prevalence was 15% high (IC95%[11%–19%]), 12% moderate, and 73% low. In univariate analysis, no significant difference was found between level of fall risk and gender, age, nor oncological characteristics. Only patients included in general and private hospitals were more likely to have high fall risk level compared to cancer centers and university hospitals ($p = 0.039$). A pharmaceutical analysis has been performed: the overall prevalence of at least one PIM according to STOPP Fall was 9.5%, and 66.6% in the high fall risk subgroup. Well-known neurotoxic chemotherapies were prescribed in 16.5% of patients for taxanes and 24.7% for platinines. The data on 3-month follow-up visits are currently being analyzed.

Discussion: The prevalence of high fall risk level in this sample of patients with cancer appears lower than in the general population, that may be due to a selection bias of patients fit to receive systemic oncological treatments. However, despite this selection, we noticed high fall risk important to care for, especially for medication optimization, and a total of 27% (high + moderate risk) of patients should be referred to physiotherapy.

P-0821

Prevalence of malnutrition in older patients with multiple myeloma

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Introduction: Nutritional status of older patients with newly diagnosed multiple myeloma (MM) using the Global Leadership Initiative on Malnutrition (GLIM) diagnostic criteria is unknown. This study aims to assess the prevalence of malnutrition in patients with MM at the moment of diagnosis and one year later.

Methods: Observational, prospective, and single-centre study of patients ≥ 65 years old assessed in a hematogeriatrics clinic at MM onset and one year later. Mini Nutritional Assessment Short Form (MNA-SF) was used as screening tool, and the diagnosis was completed using the GLIM criteria. Nutritional treatment and adherence were registered at follow-up.

Results: A total of 47 patients (mean age 77.8 ± 5.5 years, 58% women) diagnosed between November 2019–2023 were included. At diagnosis, 66% were at risk of malnutrition ($MNA-SF \leq 11$), with a mean body mass index (BMI) of 26.8 ± 4.1 kg/m², and 18 (38%) were malnourished according to GLIM criteria. Nutritional recommendations (caloric-protein enrichment $\pm$ oral nutritional supplements) were prescribed to 94.4% of those with malnutrition of whom 11 (69%) reported adhering to them. One year later, the prevalence of malnutrition in the surviving patients (42) was 21.4%. Of the 4 who were malnourished at the initial visit, 3 had not followed the recommendations.

Key conclusions: Using to the GLIM criteria, approximately one-third of older patients with newly diagnosed MM are malnourished. After one year after starting MM treatment and nutritional recommendations, the prevalence of malnutrition decreased to around 20%.

Most patients who followed the recommendations showed improvement in their nutritional status.

P-0822

Descriptive and comparative analysis of patients attending the oncogeriatric clinic at three tertiary-level hospitals in Spain, France and the United Kingdom

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Introduction: This study compares oncogeriatric clinics (OGC) in Madrid, Poitiers, and London. Patients are referred to OGCs before cancer treatment in Madrid and Poitiers but at any stage (pre-, ongoing, or post-treatment) in London.

Methods: A retrospective descriptive analysis was conducted on cohorts from Madrid (n = 413), Poitiers (n = 3481), and London (n = 272). Variables included age, sex, tumor types, metastatic status, treatment modalities, and follow-up rates.

Results: Patients in Madrid (mean age 82.68) and Poitiers (82.75) were older than London patients (76.12). Sex distribution was balanced in Madrid and Poitiers (55% male), but London patients were predominantly male (67%). Common cancers were lung (23%), colorectal (21%), and breast (8%) in Madrid; prostate (16%), breast (15%), and colorectal (14%) in Poitiers; and prostate (42%) in London. Prevalence of metastatic disease was: Madrid—54%, Poitiers—34%, and London—43%. Treatments differed: chemotherapy (49%) and surgery (40%) in Madrid; chemotherapy (41%) and surgery (28%) in Poitiers; chemotherapy (35%) and endocrinology (33%) in London. Follow-up pathways varied with Madrid and Poitiers having 3- and 6-month follow-ups, whereas no follow-up or a single nurse-led telephone follow-up at 4–6 weeks was typical in London.

Conclusions: Spanish and French OGCs treated older, gender-balanced patients, while UK patients were younger and mostly male. Cancer types and treatments differed significantly. Metastatic stage, follow-up, and other disparities reflected differences in resources, referral criteria, and organisation between OGCs. Enhanced cross-country collaboration is needed to optimize care for this growing patient population.

P-0823

Descriptive and comparative analysis of patients attending the oncogeriatric clinic at three tertiary-level hospitals in Spain, France and the United Kingdom, focus on the geriatrics

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Introduction: This study compares oncogeriatric clinic models in Madrid, Poitiers, and London. Patients are referred to the clinic before cancer treatment in Madrid and Poitiers but at any stage in London.

Methods: A retrospective descriptive analysis was performed on cohorts from Madrid (n = 413), Poitiers (n = 3481) and London

(n = 272). Variables examined included age, sex, tumour types, Clinical Frailty Scale (CFS), risk of falls, depression and cognitive impairment.

Results: Patients in Spain mean age (82.7) and France (82.8) were older than those in the UK (76.1). Madrid and Poitiers had a balanced sex distribution (55% male), while the London cohort was predominantly male (67%). Common cancers were lung (23%), colorectal (21%), and breast (8%) in Madrid; prostate (16%), breast (15%), and colorectal (14%) in Poitiers; and prostate (42%) in London. Madrid had a median CFS of 3 while Poitiers' is and London's were 4. Fall risk was highest in London calculated with the test up and go (86%) vs (62%) in Spain using Short Physical Performance Battery and (34%) in France, risk calculated same as UK. Depression rates in Madrid (15%), Poitiers (22%) and London (19%). Cognitive dementia is higher in the Spanish cohort (16%) instead than the English cohort (5%), no data from the French cohort.

Conclusions: Spanish and French models treated older and male patients with a CFS rate similar in France and U.K. While the London cohort had the highest fall risk and the lowest dementia rate. Depression rates were similar in the three countries. These findings underscore the diversity in patient demographics, type of cancer, and organisation models across the three countries, which may influence outcomes.

P-0824

Acute promyelocytic leukemia in a nonagenarian woman: a case report

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Introduction: acute promyelocytic leukemia (APL) is infrequent and challenging in patients > 70 years old. Whether standard therapies should be modified in frail older patients remains unclear. Here, we show the outcome of APL and adverse effects in an elderly frail patient.

Case report: We present the case of a 91-year-old woman with moderate neutropenia and anemia during hospitalization for pneumonia complicated with Clostridium infection. Initial diagnostic study revealed no leukemic cell morphologic abnormalities in blood smear, but persistent severe neutropenia (100/ μ L) was confirmed after resolution of acute infection and bone marrow aspirate was suggestive of APL. She has a history of recurrent respiratory infections in the past 2 years in the context of restrictive phenotype and bronchiectasis. Geriatric assessment revealed multimorbidity (Charlson 9), polypharmacy, and moderate dependence for daily living activities (Barthel 80). She has positive frailty screening (FRAIL), mild cognitive impairment (GDS 3), and no nutritional deficit. She is institutionalized but has adequate social support. With suspicion of low/intermediate risk APL she received adapted induction treatment with all-trans retinoic acid (ATRA). Early complications included ATRA syndrome and recurrent infections, resulting in ATRA temporary interruption. Functional status deteriorated (Barthel 50) after 4 hospitalizations during the following 4 months.

Key conclusions: ATRA treatment in our elderly fragile patient achieved disease remission at the expense of recurrent infections, inflammatory complications, and functional deterioration. Further follow up is needed. Complete geriatric assessment can help decide

treatment strategy. A possible growing incidence of APL in the elderly is to be determined.

P-0825

Efficacy of reduced-intensity chemotherapy in older and frail patients with advanced gastroesophageal cancer: our clinical experience

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Introduction: Older and/or frail patients are underrepresented in benchmark clinical trials. We describe the G02 study, which sought to optimize chemotherapy dosing in older/frail patients with advanced gastroesophageal cancer.

Methods: Study G02 explored three dose levels within the oxaliplatin/capecitabine regimen: Level A (oxaliplatin 130 mg/m² day 1 and capecitabine 625 mg/m² every 12 h days 1–21), Level B (dose 80% of level A), and Level C (dose 60% of level A). We retrospectively reviewed 3 cases of older and frail patients diagnosed with gastric adenocarcinoma stage IV and treated at our center with dose level C.

Results:

- 1- An 85-years-old woman with a Geriatric-8 score of 8.5 who, after 4 cycles of treatment, showed in computed axial tomography (CT scan) a partial response with a 50% reduction in primary lesion.
- 2- An 89-years-old man with a Geriatric-8 score of 9 who, after 2 cycles of treatment, showed clinical improvement with the disappearance of the initial symptoms of asthenia, hyporexia and anorexia. The patient gained 4 kg of weight over the course of one month.
- 3- A 77-years-old woman with a Geriatric-8 score of 11 who, after 4 cycles of treatment, showed in CT scan a partial response with a 50% reduction in liver lesions.

Key conclusions: Reduced-intensity chemotherapy provided better treatment tolerance without significantly compromising cancer control (non-inferior progression free survival for levels B and C versus A). These data are correlated with our clinical experience.

P-0826

Developing a patient reported outcome for older cancer patients follow-up and use in hospital usual clinical practice

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Introduction: There is an increasing technological opportunity to support hospital patient usual practice through Electronic-Patient-Reported-Outcome-Measures (ePROMs). Older cancer patients, who can have long-questionnaires respondent fatigue, can be a challenging population. Aim: describing an ePROM development gathering and reducing well-established long questionnaires.

Methods: Two questionnaires were considered: EORTC_QLQ-c30, EORTC_QLQ-ELD-14. EORTC allows registering questionnaires based on items sub-sets. This enables an umbrella/framework for item reduction exercises towards usual-clinical-practice practical tools. The item sub-selection was mainly based in two criteria: maintaining the items proportion given the different questionnaire dimensions, and

the answers should serve for consultation actions as much as possible. The consensus involved 2 geriatricians, 1 geriatrics-nurse and 1 PROMs-expert.

Results: 44 items were reduced into a 21-subset. Only 3 of the 22 dimensions included in the two questionnaires were not included in the final-subset. For example, financial difficulties, were considered to be an issue relevant to the quality-of-life construct, but not to consultation usual-practice use. None original dimension with more than one item kept equal. The most usual decision: selecting one item out of two/three because it was seen more practical. The most populated dimension discussion: QLQc30 physical-functioning (5 items) and ELD14-mobility (3 items) were reduced to a 3-items subset. Another relevant reduction: 2 ELD14-worries dimensions (5 items) were reduced into one item.

Conclusions: A new practical questionnaire to support future value-based-healthcare older cancer patients is feasible. This could be re-adjusted in the future considering, sets performed by other hospital teams, specific-organ questions, and promising new questionnaires involving new aspects -loneliness, exhaustion, feeling of own life control-.

P-0827

Evolution of oncogeriatric patients following a multicomponent outpatient intervention in a geriatric day hospital and analysis of factors associated with mortality

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Introduction: To evaluate changes in functionality, frailty, nutrition and polypharmacy, as well as factors associated with one-year mortality among oncogeriatric patients receiving a multicomponent outpatient intervention in a Geriatric Day Hospital.

Methods: Observational, retrospective, longitudinal study of patients ≥ 65 years with oncohaematological diagnoses undergoing outpatient functional rehabilitation (2021–2023). A comprehensive geriatric assessment and multicomponent intervention was performed, including functional therapy and health education. Sociodemographic and clinical variables, multimorbidity (Charlson Comorbidity Index (CCI)), and one-year mortality were collected. Changes between admission and discharge in functionality (Barthel Index (BI), Lawton Index (LI)), frailty (Frail-VIG index, Clinical Frailty Scale (CFS), Short Physical Performance Battery, nutrition (Mini Nutritional Assessment (MNA), GLIM), and polypharmacy (≥ 5 medications) were analyzed.

Results: Thirty-nine patients were included (mean age 81.05 ± 5.6 years, 51.3% female), with a mean intervention time of 42 ± 27.9 days. The most frequent neoplasms were colorectal (69.2%), breast (7.7%), and lung (7.7%). 69.2% were referred from Oncogeriatrics for post-surgical rehabilitation. At baseline, most had mild dependency (BI 71.8%, LI 76.9%), high multimorbidity (mean CCI 4.38 ± 2.59), polypharmacy (84.6%), and malnutrition (GLIM 51.3%). Significant post-intervention improvements were observed in BI (mean 6.13, 95% CI 2.56–9.70, $p = 0.001$; Cohen's $d = 0.59$), CFS ($p < 0.05$) and MNA (mean 1.58, $p = 0.005$). Malnutrition prevalence decreased (GLIM, $p = 0.001$). One-year mortality was associated with poorer baseline nutritional and functional status (log-rank $p = 0.022$ and $p = 0.000$).

Conclusions: A multicomponent outpatient intervention improved functionality, frailty, and nutrition in oncohaematological geriatric patients. These findings support a multidisciplinary approach to enhance recovery and prognosis, potentially impacting mortality.

P-0828

Survival and risk factors for death in older adults with primary head and neck cancer: an observational cohort study

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Introduction: This study investigated factors affecting the overall survival in older patients with head and neck cancers (HNCs).

Methods: This retrospective study included 163 patients aged ≥ 70 years diagnosed with a primary HNC and treated at a tertiary care centre between 2010–2015. The primary outcome was an overall survival of up to 3.5 years for all patients. The Kaplan–Meier estimate with the log-rank test was used to draw the lifetime graph for overall survival, and univariate and multivariate Cox regression analyses were used to assess the associations between patient characteristics and survival in the curative intent treatment group.

Results: Median age was 77 years. Most patients were male ($n = 112$, 69%), functionally independent ($n = 107$, 66%), diagnosed with two or more chronic diseases ($n = 130$, 80%), and could walk without assistive devices ($n = 124$, 76%). The survival rate of patients during the follow-up was 42% ($n = 69/163$). All patients who underwent palliative treatment died ($n = 17$). Of the curatively treated patients, 69 (47%) were alive at the end of the follow-up. In the univariate analysis, the use of mobility aids, living in a nursing home, need for help with daily activities, diagnosis of depression, number of comorbidities and medications, anaemia, and tumour characteristics were associated with mortality. In multivariate analysis, the use of mobility aids, need for help in daily activities, anaemia, and tumour stage remained significantly associated with mortality.

Key conclusions: Further assessment of patients with functional decline, anaemia or high tumour stage should be performed to assist in decision-making before and during HNC treatment.

P-0829

A wide variability in the identification and management of geriatric syndromes in a French and a British oncology settings, with inconsistent corrective interventions for frailty

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Introduction: There is a need to develop geriatric clinical skills and competencies in the early recognition of the onset and/or worsening of frailty during treatment. Unmet educational needs should be identified for physicians and allied health professionals caring for older patients in oncology settings.

Methods: Retrospective analyses of two cohorts in France (University hospital of Poitiers) and the UK (Geriatric Oncology Liaison Development GOLD clinic at Guy's & St Thomas' NHS Foundation Trust) in 2024 to identify current practices of oncologists regarding geriatric domains. This project, focusing on advancing geriatric medicine in cancer care, was supported by the PROGRAMMING COST Action 21122.

Results: In France, analyses of 460 outpatient medical records reported that the geriatric domains were heterogeneously reported: comorbidities, 93%, social environment (marital status, children), 82%, nutritional status, 84%, functional status in activities of daily living, 43%, but assessment of motor skills in only 32%, cognitive status in 8%, and mood in 3%. When geriatric frailty was identified, corrective interventions were planned in less than 50% of cases. A geriatric assessment completed the record in 20% of cases. In the UK, more than 75% of reasons for oncogeriatric referral were related to comorbidities.

Conclusions: These findings highlight wide variation in the identification and management of geriatric syndromes in oncology, with inconsistent interventions to address frailty despite its significant impact on treatment feasibility, survival and quality of life.

P-0830

Relationship between cognitive impairment and breast cancer in older adults: a result of biomolecular or therapeutic processes?

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Introduction: Half of breast cancer patients are diagnosed at an advanced age (≥ 65 years). Breast cancer increases the risk of cognitive decline by 30%. This raises the need to investigate mechanisms of interaction between aging, cognition and breast cancer.

Methods: We searched in PubMed, Cochrane Library and Google Scholar, for studies published in English, French or Spanish about the relationship between cognitive impairment and breast cancer in older adults (≥ 65 years), during 2014–2024.

Results: Forty studies were included in this scoping review. A multisite prospective study from 2024 concludes that after systemic therapy, 32% older breast cancer survivors (BCS) experience transient cognitive impairment and 41% persistent cognitive impairment. Regarding pathophysiological mechanism, most studies support that chemotherapy causes cortical thinning, alterations in cortical gyrification and in default mode network (DMN) connectivity, leading to changes in surface area and volume of brain cortex. This results in decreased cognitive performance, affecting episodic and working memory.

Therefore, recent evidence shows predictive models, which favor cognitive decline: Apolipoprotein E4 and HER2 positivity, cardiovascular comorbidities, frailty, polypharmacy, and reduced scores on processing speed and executive function.

Furthermore, three studies establish potential neuroimaging and morphometric biomarkers for cancer-related cognitive decline, as DMN and decreased gyrification.

Conclusions: The prevalence of cognitive impairment in older BCS is significant. There is controversy regarding the direct cause of breast

cancer and cognitive impairment association in older patients. For early detection, predictive models with promising results are available. A comprehensive approach could identify those whose frailty may lead to cognitive decline.

Short poster presentation

Gero-oncology

P-0831

Frailty screening and performance status in older patients undergoing investigation of lung cancer—a pilot for the frailty assessment comparison trial—FACT

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Aim: Frailty increases risk of treatment-related toxicity and complications in older patients with cancer. Oncologists often rely on the Eastern Cooperative Oncology Group Performance Status (PS) to evaluate patients' physical performance, which directly impacts the treatment decisions. However, PS provides only a coarse assessment and is prone to subjective scoring, particularly for PS 1–2. Tools like the Geriatric 8 (G8) and the Clinical Frailty Scale (CFS) offers more nuanced evaluations but is rarely used in a clinical context for oncologists. This study aims to compare PS, G8 and CFS scores in older patients suspected of lung cancer (LC) and establish a direct translation between these tools.

Methods: Patients aged ≥ 70 years, undergoing investigation of LC at Herlev & Gentofte hospital (February–August 2024), were screened for frailty. Cut-offs applied were CFS ≥ 5 and G8 ≤ 14 and scores were compared across PS 0, 1 and ≥ 2 .

Results: Totally 232 patients (median age: 77 years, 48% female) were included. Patients with PS 0 had a median CFS of 2 (IQR 1–3) and G8 of 15 (13–16). PS 1 aligned with a CFS of 3 (3–4) and G8 of 13 (10–15). Patients with PS ≥ 2 had a median CFS of 5 (4–5) and G8 of 11 (9–14).

Conclusion: In older patients suspected of LC, PS 1, often considered indicating good health, corresponded to G8-defined frailty. CFS “pre-frailty” (CFS = 4) corresponded to PS between 1 and 2, suggesting it could serve as a cut-off for early frailty interventions in geriatric oncology.

Poster

Gero-oncology

P-0832

Integration of older-adult-specific policies in national cancer control plans (NCCPs) and non-communicable disease plans (NCDPs): a comparative analysis

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Introduction: NCCPs and NCDPs are frameworks to reduce chronic disease burden. NCCPs focus on cancer prevention, diagnosis, treatment, and follow-up, whereas NCDPs address a broader range of diseases, including some cancer control strategies. The growing

population of older adults should lead to their inclusion and prioritization across cancer control policies globally. No comparative analyses have assessed the integration of older-adult-specific policies in NCCPs/NCDPs.

Methods: A descriptive comparative analysis was conducted using publicly available NCCPs/NCDPs from the International Cancer Control Partnership. Plans incorporating older adult-specific policies were identified through a standardized assessment questionnaire, followed by a detailed review of included activities, indicators, and recommendations. Non-English language plans were translated using Google Translate.

Results: Among 156 NCCPs/NCDPs reviewed, only 18 (11.6%) included older adult-specific policies, with only being NCCPs. Plans were distributed across regions, with a higher concentration in Europe (38.9%) and Africa (33.3%) and predominance in high-income countries (HICs) ($n = 9$, 50%). Nine plans (50%) had measurable indicators for implementation. Only five plans, all from European HICs, dedicated a full section to geriatric oncology. Comprehensive integration of geriatric principles was shown for Norway's and Northern Ireland's NCCPs, including Comprehensive Geriatric Assessment, polypharmacy management, frailty screening, palliative care, shared decision-making, geriatric training, and health indicators in older adults.

Key conclusions: Despite the proliferation of NCCPs/NCDP/s, the inclusion of older adult-specific policies is limited. Disparities in geriatric oncology integration exist, with HIC having more comprehensive integration. Inclusive national strategies that explicitly address the unique challenges of cancer control in older adults are needed.

P-0833

Discovery circumstances and clinical features of cancer in elderly patients: insights from an internal medicine department

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Background: Cancer in the elderly population is particularly challenging due to its higher incidence, atypical clinical manifestations, and significant comorbidities. This study aims to describe the circumstances surrounding cancer diagnosis among elderly patients.

Methods: This retrospective study was conducted in an internal medicine department from January 2005 to March 2025. We included patients aged 65 years or older who were hospitalized for newly diagnosed cancer. The diagnosis was retained through clinical, radiological and histological assessments for all patients. Frailty was measured using the frailty index.

Results: Fifty patients were included in the study (19 females and 31 males), with a mean age of 71.2 years [65–85]. The main hospitalization reasons were general state alteration ($n = 11$), fever ($n = 2$), thromboembolic manifestations ($n = 5$), bone pain ($n = 16$), abdominal pain ($n = 3$), neurological signs ($n = 3$), anemia ($n = 1$), acute renal failure ($n = 3$), and hypercalcemia ($n = 2$). The most frequently diagnosed solid cancers were lung cancer ($n = 8$; 16%), breast cancer ($n = 7$; 14%), pancreatic cancer ($n = 5$; 10%), and bladder cancer ($n = 5$; 10%). Hematological malignancy was observed in 14 patients, 12 of whom had multiple myeloma. Tumor extension was locally advanced in 7 cases, while 21 patients had metastases. Elevated CRP levels (> 10 mg/L) were found in 66% of patients, mainly in those

with advanced cancer stages ($p < 0.01$). The frailty score was significantly correlated to advanced tumor extension ($p < 0.01$).

Conclusion: These findings highlight the role of internists in cancer detection and underscore the need for heightened vigilance in identifying cancers among elderly patients, considering comorbidities, frailty, and clinical features of this population.

P-0834

Synergistic role of frailty, malnutrition, sarcopenia, and renal function in oncogeriatric prognostic stratification

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Introduction: Renal function decline, frailty, malnutrition, and sarcopenia are critical factors influencing prognosis in oncogeriatric patients. However, their combined impact remains underexplored. This study aims to assess their role in survival outcomes and determine the most accurate equation for estimating glomerular filtration rate (eGFR) in elderly cancer patients.

Materials and methods: A retrospective study was conducted on oncogeriatric patients from San Martino Hospital in Genoa. Frailty was assessed using the Frailty Index, sarcopenia with EWGSOP2 criteria, and malnutrition via the Mini Nutritional Assessment (MNA). Renal function was estimated using BIS1, CKD-EPI, and MDRD equations. Kaplan–Meier curves and Cox regression models were used to evaluate survival predictors.

Results: The sample included 193 patients (47% female), mean age was 78.9 ± 5.6 years. Solid tumors were 79.7%.

Frailty, malnutrition, and sarcopenia were significantly associated with reduced survival. Malnutrition was linked to worse prognosis ($p < 0.001$), particularly in patients with head and neck cancer. Sarcopenia was associated with an increased mortality risk ($HR = 1.86$, $p = 0.04$). Renal dysfunction also influenced mortality: serum creatinine showed near-significant association with survival ($HR = 1.50$, $p = 0.07$).

BIS1 provided lower eGFR estimates than CKD-EPI (median 65.42 vs. 75.61 mL/min/1.73 m², $p < 0.001$), suggesting better accuracy in sarcopenic patients. In multivariate analysis, frailty ($HR = 1.05$, $p = 0.01$), older age ($HR = 1.09$, $p = 0.03$), and loss of functional autonomy ($HR = 1.31$, $p = 0.02$) were key predictors of mortality.

Conclusion: Frailty, malnutrition, sarcopenia, and renal impairment significantly impact survival in oncogeriatric patients. BIS1 is the preferred equation for renal function assessment. Integrating geriatric evaluation into oncology can enhance treatment strategies and patient outcomes.

P-0835

Impact of frailty on therapeutic decisions and prognosis in older adults with cancer

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Introduction: Recent guidelines recommend the use of frailty in therapeutic decision-making for older cancer patients. We aim to

assess the relationship between frailty and treatment, and its impact on survival, emergency admissions and hospitalisations.

Methods: An observational study of patients aged ≥ 70 years with cancer who were referred to an oncogeriatric clinic after positive frailty screening ($G8 < 14$) to improve decision-making before selecting cancer-specific treatment. Sociodemographic characteristics, comorbidities, geriatric assessment and physical performance were collected. Two frailty measures were used (Frágil-VIG and Clinical Frailty scale (CFS)). Recommendations made after the assessment (therapeutic, nutritional and exercise-related) and health outcomes one year later were assessed.

Results: 120 patients (58.3% male, 83 ± 6 years) were included. Mildly frail (25.8%), moderately frail (21.5%) and severely frail (7.8%) according to the Frágil-VIG index; mildly frail (25.6%) and moderately frail (6.1%) according to the CFS. Standard care was recommended for 43.7% and adapted treatment for 40.3%, in most cases (84.9%) referring physicians followed the recommendations.

50% of treated patients visited the emergency department or were hospitalised during the first year of treatment, with no differences related to frailty. During the first year of treatment, 30.8% died, with a median survival of 10 months. Frailty was significantly associated with mortality ($p = 0.002$). Exercise (61.7%), nutritional support (51.7%), antidepressant treatment (76.7%) and drug deprescription (56.7%) were recommended after geriatric assessment.

Conclusions: More than half of oncogeriatric patients are frail and only 40% are eligible for standard care. Frailty predicts high mortality but does not determine hospitalisations or emergency visits.

P-0836

Clinical frailty scale to predict poor treatment outcomes in older patients with cancer: a systematic review

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Introduction: Frailty increases mortality risk and treatment-related complications in older patients with cancer. Several frailty screening tools help identify frail patients at risk of adverse events and who may profit from geriatric co-management. The Clinical Frailty Scale (CFS) has gained recognition as a key screening tool in geriatric medicine.

Method: A systematic search was conducted in PubMed and EMBASE. Eligible studies investigated the impact of CFS-identified frailty on clinical outcomes in older patients (aged ≥ 65) with cancer. Two independent reviewers screened titles, abstracts, and full texts, resolving discrepancies through consensus. Data extraction followed

the CHARMS guidelines, and risk of bias was assessed using the PROBAST.

Meta-analysis employing the restricted maximum likelihood (REML) method was used to evaluate the relationship between CFS and survival, complications, and adverse events. Heterogeneity was calculated using the I^2 statistic and between-study variance, tau square (τ^2). The analysis was adjusted for age, cancer type, and severity.

Results: A total of 43 studies (67,248 patients) were included; 29 studies in surgical, 12 in oncological, and 2 in mixed settings. An additional 56 recently published conference abstracts were identified. Overall survival was the most frequently assessed outcome, evaluated in 25 studies.

Preliminary findings suggest higher CFS scores correlate with poorer survival and postoperative complications.

Conclusion: CFS may serve as a valuable frailty screening tool in geriatric oncology by predicting key clinical outcomes in older patients. Meta-analysis will be presented at the EuGMS conference. The large number of newly published abstracts underscores the growing significance of this area.

P-0837

The effect of geriatric assessment of treatment decisions and surgical outcomes in older patients with colon cancer

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Introduction: Geriatric assessment (GA) has been shown to improve outcomes in some surgical settings. This study examined the impact of GA on the treatment of colon cancer patients aged ≥ 75 years treated in Helsinki University Hospital.

Methods: Information on patient characteristics, treatment decisions, surgical outcomes and mortality were collected retrospectively from patient records and compared across three groups: patients who attended GA in a joint consultation with a geriatrician, surgeon, and anesthesiologist; patients to whose care a geriatrician contributed in multidisciplinary team (MDT) meetings; and those with no geriatric involvement. GA included assessment of functional capacity, mobility, delirium risk and nutrition.

Results: Of the 158 patients, 52 (33%) had GA, 65 (41%) had geriatric involvement in MDT and 41 (26%) had no geriatric involvement. Patients with GA were more frequently assigned to palliative care (when appropriate) (31% vs. 8% and 5%, $p < 0.001$). Despite greater morbidity and higher prevalence of dementia in the GA group, the complication rate was similar to the two other groups (24% vs. 41% and 26%, $p = 0.161$). The length of hospital stay was slightly longer in the GA group (5 vs. 4 and 4 days, $p = 0.008$), but these patients experienced fewer surgical reinterventions and no cancer recurrences. 30-day mortality was 0%, while in longer follow-up mortality was higher in the GA group.

Key conclusions: GA facilitates appropriate care decisions and may help reducing complications in high-risk patients whereas geriatrician's involvement in MDT meetings alone hardly affects the care or outcomes. Optimal selection of patients to GA warrants further study.

P-0838

Navigation programmes for older patients with cancer in Europe—preliminary results of the EU NAVIGATE project

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Introduction: Patient navigation (PN) is defined as a time-limited intervention designed to help patients overcome logistical and individual barriers to accessing healthcare services.

Methods: Our aim was to identify Cancer PN Programmes (CPNPs) in European countries based on a scoping review of the scientific literature in PubMed, EBSCO, and Web of Science from 1993 to 2023 and a mapping study conducted through an online survey sent to experts.

Results: 151 articles were retrieved from a total of 3367 articles (685 from CINAHL, 1815 from PubMed, and 867 from Web of Science), and 15 from an additional 45 records from the grey literature. We found only 24 articles describing navigation interventions in European countries: Belgium (1), Denmark (4), Finland (1), France (5), Germany (1), Hungary (1), the Netherlands (3), Sweden (1), Turkey (1), the United Kingdom (6). We analysed them for content and effectiveness. They covered cancer screening (7), diagnosis (6), treatment (12), rehabilitation or survivorship (5). Specific training in cancer patient navigation was provided by 79% of CPNPs. 58% of navigators were nurses. 54% of CPNPs were found to be effective, but the variety of effectiveness measures used did not allow for comparisons.

The mapping study showed the characteristics of CPNPs (in Austria, Czechia, Belgium, France, Hungary, Lithuania, Malta, the Netherlands, Ukraine) in terms of main focus areas (patient education, access to resources, emotional support, carer support), navigator profile, training content, volunteer involvement and funding.

Conclusions: The study shows low awareness of CPNPs and under-use of intervention evaluation models.

P-0839

Clinical and genetic risk factors for bleeding in older patients with cancer. a systematic review

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(1) Drs., (2) Dr., (3) Prof.

Introduction: Bleeding complications occur frequently in older cancer patients. Clinical factors influencing risk in older patients are poorly investigated. Factors such as multiple chronic health conditions, the use of several medications, and a decline in physical function, may all increase vulnerability to bleeding. Therefore, the aim of this study is to investigate clinical and genetic risk factors for bleeding in older cancer patients.

Methods: We conducted a systematic review of existing literature. Inclusion criteria included studies reporting on bleeding in older patients (65 years or older) with cancer, and clinical and genetic factors such as cancer type, stage, anticoagulant use, comorbidities, functional status and genetics.

Results: A total of 39 articles were initially identified, but after applying inclusion and exclusion criteria, only two were included with a total of 1759 patients. These two studies primarily focused on post-procedural bleeding. Findings suggest that anticoagulant use, larger tumor resection size, and the presence of multiple comorbidities are significant factors associated with post-procedural bleeding in older cancer patients. Furthermore, genetic variants in key coagulation-related genes contribute to bleeding risk. Patients with poor preoperative functional status were found to have a higher risk of bleedings following invasive procedures.

Conclusion: Very few studies report on risk factors of bleeding in older patients with cancer and these studies specifically address post-procedural bleeding. Future studies should explore risk factors beyond surgical settings, as research on clinical and genetic factors associated with bleeding remains limited.

P-0840

Implementation of a comprehensive geriatric assessment in the routine care of older patients with cancer: a bicentric feasibility study

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Introduction: Older patients with cancer are at increased risk of treatment-related toxicities due to comorbidities and functional decline. A Comprehensive Geriatric Assessment (CGA) has been shown to improve treatment tolerability and quality of life in this population. Despite evidence-based recommendations, CGA is not routinely performed in older cancer patients in Germany. The GORILLA study (Integration of Geriatric assessment–guided care plan modifications and interventions into clinical paths of older adults with cancer) investigates the feasibility of integrating CGA into routine oncological care.

Methods: In this prospective, bicentric validation study, patients ≥ 65 years with a newly diagnosed cancer or prior to a new line of therapy receive a CGA. Based on the assessment, recommendations for geriatric interventions are made. A CGA summary is included in tumor board discussion. Primary treating physicians (oncology, radiation oncology, surgery) subsequently evaluate and assess whether CGA results led to changes in their treatment recommendation. Study endpoints include feasibility data (willingness to participate, feasibility of conducting CGA before tumor board, time requirements, implementation of recommended interventions) and a qualitative evaluation of geriatric interventions. Additional exploratory endpoints include digital competence and a general assessment what matters most to patients regarding their treatment intention.

Results: To date, 25 patients have been recruited. Recruitment of approximately 60–70 patients is expected to be completed by summer 2025.

Conclusions: This study provides feasibility data for CGA implementation in the routine care of older patients with cancer. Initial results are expected in summer 2025 and will be presented at the EuGMS 2025 conference.

P-0841

Evaluation of Turkish hematologists' perspectives and practices on comprehensive geriatric assessment and hematologic-oncologic scales in older patients with hematological malignancies-a pilot study

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Introduction: In treatment planning of older patients (OPs) diagnosed with hematological malignancies (HMs), commonly used assessment performance scores fail to comprehensively evaluate heterogeneous physiological changes associated with ageing, functional ability and comorbidities. Though several societies published guidelines recommending that oncology OPs undergo comprehensive geriatric assessment (GA)(CGA) in addition to standard oncologic performance scales before treatment, how those are applied in management of HMs in Türkiye remains unclear. So, we aimed to assess knowledge, practices, perspectives of Turkish hematologists regarding use of CGA and hematological-oncological evaluation scales in treatment planning of OPs with HMs and also barriers-needs.

Methods: A nationwide online survey was designed. The study is ongoing, final results will be discussed in details.

Results: Hematologists ($n = 65$) agreed that treatment planning of OPs with HMs should differ from younger patients, ECOG/Karnofsky Performance scales were most commonly used, 53.8% integrated validated GA tools into their practice, 15.4% self-developed methods. Geriatrics consultation request from hematologists; often 10.8%, rarely 29.2%, no geriatric specialists 24.6%, 16.9% no need. Positive contribution of GA to management of OPs with HMs; 85.9% beneficial, 95.4% believes GA is inadequately implemented. Perceived knowledge of hematologists on CGA 9.2% sufficient. GA parameters considered most valuable; frailty (89.2%), comorbidities (73.8%), functional status (69.2%); influencing treatment modifications were activities of daily living (87.7%), frailty (76.9%), and comorbidities (75.4%).

Key conclusions: We highlight gap between awareness and implementation regarding GA for OPs with HMs in Türkiye. Integrating practical CGA tools specific to HMs into routine clinical practice and improving training among hematologists are crucial.

Poster

Gerotechnology

P-0842

Virtual reality as a palliative care tool: improving suffering scores in a patient with advanced prostate cancer

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Patients with advanced cancer frequently experience significant physical and psychological suffering. Palliative care aims to alleviate this burden, incorporating multimodal approaches. Virtual reality (VR) has emerged as a potential non-pharmacological intervention to enhance well-being.

Case presentation: We report the case of a patient hospitalized for functional rehabilitation following severe physical deterioration due to disseminated prostate cancer. To address his emotional distress, VR was introduced as a complementary therapy. The patient engaged in VR sessions three times per week, viewing relaxation and travel videos. Assessment of his suffering was conducted using the Palliative Suffering Pictogram (PMID: 28410449), a validated tool for evaluating multidimensional suffering in palliative patients.

Results: Over the course of hospitalization, the patient demonstrated a notable improvement in PSP scores, indicating a reduction in perceived suffering. Subjective reports suggested increased relaxation, emotional relief, and a heightened sense of escapism, contributing to an enhanced hospital experience.

Conclusions: This case highlights the potential of VR as an effective adjunctive therapy in palliative care, offering a novel approach to alleviating distress in patients with advanced cancer. Further research is warranted to explore its broader applicability and long-term benefits in palliative settings.

P-0843

Characterization of hospitalized geriatric patients undergoing a virtual reality intervention

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Virtual reality (VR) has emerged as a promising non-pharmacological tool for enhancing well-being and reducing stress in hospitalized older adults. This study presents a cohort of geriatric inpatients enrolled in a VR intervention involving immersive video sessions during hospitalization.

Methods: A descriptive observational study with five patients (89.4 years; 80% female) admitted to a geriatric unit. Initial assessments included Charlson Index, functional status, frailty (Clinical Frailty Scale, Frailty Index), cognitive status (Reisberg GDS), quality of life (WHOQOL-BREF, EuroQol-5D), and blood biomarkers. An ad hoc post-intervention survey was conducted.

Results: Patients exhibited a moderate burden of comorbidity (Charlson mean: 3) and preserved basic functionality (Barthel mean: 91). Lawton scores indicated mild instrumental dependence (mean: 6.4), while the average Clinical Frailty Scale score was 2.8, reflecting low frailty. EuroQol-5D responses showed consistent moderate limitations in daily activities and personal care, with mild levels of pain and anxiety. WHOQOL-BREF scores were low (mean: 34.8), indicating a diminished perception of quality of life. Laboratory findings suggested mild anemia.

Patients rated the virtual reality experience as good, reporting that it helped them relax, improved their mood, and positively influenced their recovery during hospitalization, highlighting its therapeutic potential in geriatric care.

Conclusions: The initial profile of patients undergoing VR during hospitalization reflects a population with high age, relatively

preserved functionality, and moderate perceived quality of life impairments. These findings provide a framework for evaluating the impact of VR interventions in acutely hospitalized older adults and may guide future therapeutic applications in geriatric settings.

P-0844

Real-life feedback on the use of a virtual travel therapy device in long-term care facilities

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Objectives: Virtual travel therapy (VTT) devices have yielded encouraging results as a non-drug therapy for improving behavioural disorders in patients with Alzheimer's disease or related conditions. However, no data are available concerning the real-life use of these VTT devices in long-term care facilities (LTCF) and their efficacy in this population.

Design: We conducted a survey of all LTCF equipped with VTT devices, focusing on their practices and the observed effects on their residents.

Methods: A questionnaire was designed by a multi-professional group. The first part of the questionnaire focused on the characteristics of the LTCF, and the second part focused on the last 10 residents of each structure to have made use of the VTT device. Evolution of anxiety, behavioural disorders and quality-of-life were assessed before and after the session.

Results: The questionnaire was sent to 24 LTCF, 15 of which responded (62%). Six LTCF completed the section concerning the residents using the VTT device, providing data 35 residents. The subjective and objective evaluations revealed a positive effect of the VTT device on anxiety and quality of life.

Conclusions and implications: This is the first multicentre study to present subjective and objective data demonstrating the efficacy of VTT devices in LTCF residents suffering from Alzheimer's disease and related disorders and presenting behavioural disorders. This device was appreciated by the various health professionals working in these structures, who were able to use this device routinely, confirming its value in this population.

Short poster presentation

Gerotechnology

P-0845

“Old Italy” prefers telemedicine: the caregiver's point of view

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Introduction: With an aging population, one of the longest-living in the world, and a growing gap between healthcare needs and available resources, Italy faces a significant challenge in elder care. For patients with dementia, particularly those with mobility difficulties, the caregiver burden is extremely high. The need for frequent ambulatory medical visits places a considerable strain on caregivers. Telemedicine has emerged as a potential solution to ease this burden by

facilitating access to specialist consultations and offering a more manageable alternative for caregivers.

Methods: This monocentric study, conducted at ASL4 Chiavari, enrolled 120 patients with major neurocognitive disorders, assessing the feasibility and caregiver satisfaction of telemedicine compared to traditional in-person visits. Sixty patients underwent teleconsultation, while the remaining sixty received outpatient follow-ups. Caregivers completed structured questionnaires evaluating logistical, technical, and emotional aspects of both visit types.

Results: Most caregivers (87%) who participated in a telemedicine consultation report preferring this mode of visit, expressing a desire to maintain the online format for future evaluations. A smaller percentage, who preferred in-person visits, cited technical difficulties in conducting the visit online. About half (47%) of caregivers who attended an in-person consultation requested that the next evaluation be conducted via telemedicine. The main reasons for this preference included transportation difficulties and the emotional impact on the patient during the visit.

Conclusions: Telemedicine offers significant advantages in geriatric care, particularly in reducing caregiver burden. The high caregiver preference for teleconsultation suggests its potential for broader implementation.

Poster

Gerotechnology

P-0846

Puntocare project: introducing a digital solution for personalised and continuous care of patients with cognitive impairment and their caregivers

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Objectives:

1. Design a digital application for patient-centred care of individuals with cognitive impairment.
2. Foster autonomy's improvement in individuals with cognitive impairment and the emotional well-being of caregivers.
3. Determine the feasibility and acceptability of introducing a digital solution into the clinical monitoring of patients with dementia.

Methodology: PuntoCare application was co-designed in Spain and Great Britain by bringing together the expertise of a biomedical engineering company and clinical professionals from the health and social care systems, alongside the experiences of patients and their carers. Thirty-four in-depth interviews were conducted, divided into three areas: Knowledge; Needs and Expectations; and Coordination.

Results: The interviews highlighted 1) a lack of information and continuous personalised support, 2) a limited capacity for individualised medical monitoring during crises, 3) carer overload with high levels of stress and anxiety, and 4) difficulty in accessing cognitive stimulation therapies. PuntoCare has been designed with the following functionalities: clinically validated resources and information in the form of articles interacting with an AI assistant for on-demand advice; personalised daily plans to promote a healthy lifestyle through cognitive stimulation, physical exercise, habits and a symptom diary

to facilitate remote monitoring and management, providing immediate information to professionals for treatment adjustment.

Conclusions:

1. Multidisciplinary work between health-care professionals and engineer has enabled the design of a digital project adapted to elders.
2. Patients and caregivers accept a digital solution that empowers them.
3. Medical monitoring and remote management of behavioural disorders of patients with dementia is feasible with a digital solution.

P-0847

Using travel diaries to capture real-world mobility behaviours in Parkinson's disease

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Background: Parkinson's disease (PD) is a progressive neurodegenerative disorder primarily affecting movement. One of the consequences is therefore reduced mobility, which significantly impacts independence and quality of life. Accurate quantification of mobility and travel is important to potentially track progression and response to treatments. **METHOD:** We recruited 147 individuals with PD (55 females, 92 males, mean age 74.8 ± 7.93 , range 51–97) who completed a travel diary over seven days.

Results: The median duration of PD was 6.2 years (IQR, 4.3–9.9) and mean Hoehn and Yahr stage was 2.7 ± 1.1 ($n = 146$). Of the travel diaries, 47 (32%) were complete, 92 (63%) were partially complete and 8 (5%) were incomplete. Data was most commonly missing at bedtime collection point (41%). For complete data sets, the median number of trips people made per day was 2.3 (IQR, 1.5–3.4) and the majority of these trips used passive means of transport, median 1.6 (IQR, 0.8–2.1). Three individuals recorded no trips during the study period. Participants visited a median of 1.3 (IQR, 0.9–2.0) locations per day and most frequently this was to supermarkets/retail shops.

Discussion: We were able to describe travel and mobility in a small subset of our participants who were able to complete the travel diary. However, we have also demonstrated a high rate of partial completion and incomplete data collection, suggesting that alternative means of capturing mobility and travel in PD should be explored.

P-0848

GEriatric Telemanagement of HEALTH conditions in nursing home residents recently discharged from the hospital: the GET HEALTH study

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Introduction: Nursing homes (NH) residents are very frail and undergo frequent hospitalizations. Comprehensive geriatric

assessment can reduce hospitalization. However, NH have few geriatricians. We hypothesized that a geriatric telemanagement (GTG) model could improve patient outcomes in NH residents recently discharged from hospital.

Methods: Clinical outcomes of NH residents discharged from hospital are compared before and after the implementation of GTG, where a geriatrician evaluates each patient with NH staff and discuss the case with the general practitioner during 6 months. NH residents aged > 70 years readmitted to NH after hospitalization in the 3 years prior to COVID pandemic represent the control group. Primary endpoints of the study is the hospital readmission rate during 6 month follow-up after index NH admission. Health technology assessment will evaluate the effectiveness and economic consequences of model implementation.

Results: In the prospective study 103 NH residents have been evaluated. They were mainly women (70%), aged 86 ± 6.6 years, with multimorbidity (7 ± 2.6) and polypharmacy (9.5 ± 3.3). Most common conditions were hypertension (66%), heart disease (62%), dementia (42%), chronic renal failure (38%), diabetes (33%), COPD (17.5%). The main discharge diagnosis was infectious diseases (54%), heart failure (18%), hip fracture (5%), renal failure (4%) and stroke (4%). At discharge, 80% were bedridden, 38% dysphagic, 30% with pressure ulcers. In the 6 months of follow-up 27% returned to hospital and 28% died.

Key conclusions: Hospitalization causes negative clinical outcomes in the NH residents. A GTG could reduce hospitalizations and therefore negative outcomes as well as healthcare costs in this population.

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P-0849

The application of technology in intermediate care: current state and opportunities

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Introduction: Traditionally, there has been a tendency to contrast humanization and digitization in intermediate care services, assuming that technology should be limited to acute hospital settings. However, digitization does not necessarily contradict humanism nor should it be confined to specific healthcare environments. Instead, it can become an active component of a more efficient and personalized care model, especially in a context of increasing pressure on intermediate care services. To demonstrate the compatibility of these two values and identify opportunities for digitalization within the intermediate care service chain, the Department of Health of Catalonia, in collaboration with the TIC Social Health Foundation, has launched a participatory co-design process aimed at detecting needs and envisioning future scenarios.

Objective: To explore the main challenges in intermediate care and develop technological solutions that enhance professional practice and improve the experience of individuals receiving care in this setting.

Method: Through five workshops held across Catalonia, more than 80 professionals from intermediate care—representing diverse profiles—were invited to work in groups to identify a shared challenge, analyze it, and use a card-based game featuring available technologies to propose solutions. These solutions were then structured into user journeys and future narratives with the support of artificial

intelligence tools. During the workshops, other professionals validated these proposals and suggested improvements to adapt them to different contexts and needs.

Results: A total of eight proposals were generated, addressing areas such as multilateral communication with families, communicative inclusion of patients with disabilities, personalized home rehabilitation, emotional monitoring, patient safety, behavioral disorder prevention, automated referrals, and readmission risk assessment. Each proposal incorporates emerging technologies (artificial intelligence, computer vision, virtual assistants, Internet of Things, extended reality), includes a pilot test proposal, and provides a detailed economic estimate.

Conclusions: The integration of technology to address certain healthcare challenges will require additional dedication and resources. However, it is expected to enhance the current care model by strengthening two key aspects: equity (personalization) and continuity and ubiquity of care (digitalization). It is advisable to establish a general bioethics committee focused on the use of new technologies in intermediate care to manage the multiple impacts these advancements will generate within the healthcare system.

P-0850

Co-designing an intervention for older adults with multiple long-term conditions, using changes in physical activities to predict decline

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Introduction: As the population ages, the prevalence of multiple long-term conditions (MLTCs) and avoidable hospital admissions are increasing. Early detection of decline could enable timely interventions and improve patient outcomes. Evidence suggests changes in usual activities could indicate decline, yet there is limited understanding of how to monitor this in real-world settings.

Aim: This explores the context and application of monitoring activity changes to detect decline and co-designs an intervention with patients, caregivers, and healthcare professionals (HCPs).

Methods: The Person-Based Approach was followed to plan and design this intervention. A prototype was developed using these findings, which was optimised through iterative think-aloud interviews.

Results: Thirty-six interviews were conducted with 17 patients (mean age 79-years), eight caregivers (formal and informal) and 11 HCPs (GPs, nurses, occupational therapists, pharmacists). Interviews were thematically analysed.

Findings highlighted the importance of restricted activity as an indicator of decline. Patients often described their experiences of decline through non-specific symptoms, including changes in activity. HCPs emphasised the value of details about such changes to clinical decision-making. Different technology for measuring activity were explored, considering data quality, and acceptability of passive/active data collection.

The initial prototype was optimised through two rounds of think-aloud interviews, with 12 patients (mean age 75.5 ± 8.2 years), 10 caregivers (formal and informal), 10 HCPs (GP, nurses, advanced clinical practitioners, physiotherapists, clinical directors).

Conclusion: This highlights the utility of measuring changes in activity in older patients, as a proactive approach to detecting early decline, along with some benefits and lessons learned from co-design.

P-0851**Digital health technologies for elderly people: a systematic review of systematic reviews and meta-analysis**

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Introduction: The aim of this study is to conduct a systematic review of systematic reviews and meta-analyses addressing the use of Digital Health Technologies (DHT) by elderly people.**Methods:** This research was conducted by searching Pub-Med databases according to PRISMA guidelines. In this study, articles in English and published in 2020 or later were scanned using the Pub-Med database. Keywords were “digital health technologies”, “older”, “elderly” and “mobile health”. Totally 18 articles that were included and analysed.**Results:** Eight articles were on DHT effectiveness; six of the articles were on DHT barriers/facilitators/adoption; four articles were on DHT design and guidelines. The health topics evaluated were on self-monitoring (6), Non Communicable Diseases (5), Digital Literacy (4), Mental Health, Oral Health, and COVID-19. Factors that increase the use of DHT by the elderly, include the elderly people’s willingness to learn, experience in using technology, the presence of technology used at home, and the fact that the elderly are relatively young and educated, while factors that barriers to use of DHT include having cognitive health problems, having lower education and income, and the technology being unfriendly to the user.**Key conclusions:** There are many barriers and facilitators that affect the use of DHT by the elderly, but 15 of the 18 systematic reviews-meta-analyses examined found that DHT use improves the health of the elderly people and reduces the workload on healthcare personnel. In three studies, it was stated that the level of evidence regarding the positive side of DHT use is low.**P-0852****Development and analysis of an intelligent bed rail for fall prevention: an alternative to traditional bed rails in geriatric residences**

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Objective: To evaluate the performance of an intelligent bed rail in institutionalized individuals to prevent falls during rest periods, respecting the principles of safeguarding and beneficent autonomy.**Method:** Pilot before-and-after intervention study, longitudinal and uncontrolled. The device was designed as a support system starting 15 cm above the mattress to prevent falls during free movement in bed or postural changes. Using pressure sensors, it activates sequentially when detecting a force equal to or greater than 3 kg. Sequence: verbal “simulated presence” message and alert to care staff. If pressure persists, an internal motor vibrates the device to trigger a withdrawal reflex, allowing more time for staff to arrive. If pressure continues, the rail automatically rises 15 cm. The device replaced traditional bed rails for six months in six patients (four women and two men with a history of falls in the previous month). Nights were recorded for analysis.**Results:** No falls were recorded (seven with traditional rails, p -value = 0.0005), no erratic ambulation episodes (twelve with traditional rails), and no contusions (three in previous months). Psychomotor agitation decreased by 12 points (NPI-Q questionnaire). Caregiver response time averaged 65.77 s (SD = 27.723 s). The device was activated 47 times (SD = 4.916).**Conclusions:** The intelligent bed rail prevents falls, reduces psychomotor agitation, and improves patient quality of life without compromising autonomy. It is safe, well-tolerated, and offers a proactive alternative to traditional rails. Larger studies are needed to confirm its efficacy.**P-0853****Game on for healthy aging: cognitive, emotional, and social outcomes in seniors**

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Introduction: Digital gaming has emerged as a promising intervention for older adults (≥ 65 years), offering potential benefits across cognitive, emotional, and social domains. Previous studies often examined isolated outcomes, neglecting the multidimensional effects of gameplay. This review synthesizes evidence on how game design aligns with geriatric needs.**Methods:** A systematic search of PubMed and IEEE Xplore (2013–2024) identified peer-reviewed studies meeting three criteria: (1) focus on adults ≥ 65 years, (2) empirical evaluation of digital games, and (3) assessment of ≥ 2 outcome domains (cognitive/social/emotional).**Results:** Cognitive training applications ($n = 58$) utilizing adaptive algorithms enhanced memory recall by 12–28% ($p < 0.01$) while improving emotional well-being. Exergames (e.g., Wii Fit) demonstrated particularly strong cognitive-emotional synergy, with 78% ($n = 52$) showing concurrent 18% faster processing speed and 30% reduction in depressive symptoms. Multiplayer platforms ($n = 29$) reduced loneliness by 45%, though tech literacy barriers persisted. Strategy games ($n = 21$) improved real-world functioning (22% better medication adherence) when personalized.**Key conclusions:** To maximize benefits, future digital interventions for older adults should prioritize: personalization through adaptive difficulty and culturally tailored content, hybrid evaluation integrating cognitive and affective metrics, and inclusive co-design involving older users in development. This tripartite approach ensures clinically meaningful, accessible, and engaging solutions that address the multidimensional needs of aging populations.**P-0854****Technology-based functional and clinical assessment of older people with cognitive impairment or sarcopenia: the galliera living-lab RAISE (Robotics And Artificial Intelligence For Socio-Economic Empowerment) [1]**

Wanda Morganti (1), Emanuele Seminerio (1), Ekaterini Zigoura (1), Alexey Petrushin (2), Giulia Bodo (2), Carolina Massone (1), Barbara Senesi (1), Camilla Prete (1), Federica Solari (3), Matteo Laffranchi (4), Carlos Beltran (5), Alessio Del Bue (5), Alessandra Pirino (6), Simona Morelli (1), Alberto Ferri (1), Arnoldo Piccardo (7), Romina Custureri (1), Alberto Pilotto (7)

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Introduction: The role of technologies, including artificial intelligence (AI), in the clinical management of older people is still undefined and unexplored. This study aims to evaluate the accuracy of functional and clinical parameters as derived from environmental and personal technological devices and AI data analyses in older patients with cognitive impairment and sarcopenia.

Methods: Thirty participants (≥ 65 years) with Major Neurocognitive Disorder (MCD, $n = 10$), Sarcopenia ($n = 10$), and Healthy Controls ($n = 10$) will be enrolled. All participants will undergo a CGA-based Multidimensional Prognostic Index (MPI) to assess Multidimensional Frailty; Clinical Dementia Rating Scale (CDR), Mini-Mental State Examination (MMSE), SARC-F, Bioimpedance and Hand Grip test will be used to identify participants with MCD and Sarcopenia, respectively. Participants will stay in the RAISE in-hospital smart-home equipped with a sensorized floor (SensFloor), seat and mattress pressure sensors, sensorized insoles, body balance, artery pressure sensor, and cameras integrated with an AI gesture recognition algorithm to measure movements (quantitative and qualitative mobility), and the activities of daily living; moreover, techno-bio-signals will be collected from saliva samples of participants.

Results: Measuring the accuracy of technological-based Vs. traditional clinical assessments in patients with MCD, sarcopenia, and healthy controls;

Providing technological data to integrate clinical parameters to support healthcare professionals in assessing and monitoring functional and clinical conditions of older people.

Key conclusions: A functional and clinical assessment of older people with MCD and sarcopenia could be provided by non-invasive technological devices and AI analyses: future studies will explore the usefulness of these technologies in older people at their homes.

Reference:

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P-0855

The digital care horizon: a review of promising AI technologies in geriatric patient care

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Introduction: The aging population poses significant challenges for healthcare systems, particularly in long-term care (LTC) settings where caregiver shortages and rising costs strain resources. Artificial intelligence (AI) emerges as a potential solution to enhance care quality while addressing systemic pressures, though its implementation raises important ethical considerations that must be balanced with technological advancements.

Methods: Comprehensive literature review (2015–2025) was conducted using PubMed and Google Scholar, analyzing studies on AI

applications in geriatric LTC facilities. The review focused on three domains: caregiving support systems, health monitoring technologies, and ethical implementation frameworks. Inclusion criteria prioritized studies with empirical data on AI efficacy and ethical analyses.

Results: The analysis revealed AI demonstrates 90.2% mean accuracy in fall detection systems and reduces medication errors by 38% in automated dispensing systems. Voice-assisted technologies improved daily task completion rates by 27% among cognitively impaired residents. However, 68% of reviewed studies identified significant privacy concerns regarding continuous monitoring, while 42% reported usability challenges among older adults. Notably, systems combining AI with human oversight showed 22% greater acceptance rates compared to fully autonomous solutions.

Key conclusions: While AI shows strong potential to address critical LTC challenges, successful implementation requires: (1) hybrid human-AI care models, (2) robust privacy protections tailored to elderly users, and (3) adaptive interfaces for age-related limitations. Future development should prioritize ethical frameworks that preserve autonomy while harnessing AI's efficiency benefits.

P-0856

The Korean version of the digital health readiness questionnaire among community-dwelling older adults in South Korea: validity and reliability study

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Introduction: The aim of this study is to cross-culturally translated and validated a Korean version of digital health readiness questionnaire (K-DHRQ) among community-dwelling older adults in South Korea.

Methods: This methodological study was conducted on 307 older adults (64.8% female, mean age 78.54 years) in one urban senior welfare center in South Korea in August 2024. The original version of the DHRQ was translated into Korean, analyzed by a committee of experts, back translated, and finally used. The reliability of the K-DHRQ was assessed using internal consistency. Construct validity was evaluated through confirmatory factor analysis, and criterion validity was examined by analyzing the correlation between the K-DHRQ and the eHealth literacy Scale (eHEALS).

Results: The model-fit measures were used to assess the model's overall goodness of fit (Chi-square/degrees of freedom = 3.320, comparative fit index (CFI) = 0.883, Tucker-Lewis index (TLI) = 0.861, root mean square error of approximation (RMSEA) = 0.087, standardized root mean square residual (SRMR) = 0.0639). The total score of the K-DHRQ was significantly correlated with the eHEALS ($r = 0.712$, $p < 0.001$). We deleted two items 2 and 4 and the result show a better goodness of fit (Chi-square/degrees of freedom = 3.126, CFI = 0.911, TLI = 0.891, RMSEA = 0.083, SRMR = 0.0558).

Conclusions: The findings of this study provide evidence for the adequate psychometric properties of the K-DHRQ. This questionnaire will be valuable for assessing digital health readiness among Korean older adults.

Keywords: Old-adults; Digital health readiness; Digital health.

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P-0857

Social Determinants of Health (SDOH) and Digital Determinants of Health (DDOH) on health status among Korean older adults

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Introduction: Social Determinants of Health (SDOH) and Digital Determinants of Health (DDOH) significantly impact on the health of older adults. Understanding these effects is essential for designing customized interventions to improve the health and welfare of older people. This study aimed to identify the relationships of SDOH and DDOH on the health status of older Koreans.

Methods: The cross-sectional descriptive study was carried out on 307 older people in one urban senior welfare center in South Korea in August 2024. Health status was evaluated by interview using Self-rated Health, EQ-5D, and EQ-VAS, with statistical analyses identifying key associations.

Results: Among SDOH factors, the most reported needs were Physical activity (59.0%), Employment (47.2%), and Living situation (43.6%). Needs in Living situation, Food, Safety, Financial strain, Family and community support, Physical activity, Mental health, and disabilities had significantly lower self-rated health ($p < 0.05$). Those with additional needs in Substance use also showed lower EQ-5D ($p < 0.05$), while needs in Food, Physical activity, Mental health, and Disabilities were associated with lower EQ-VAS ($p < 0.05$). More social needs correlated with worse health outcomes ($p < 0.05$), whereas higher DHRQ and eHEALS were linked to better self-rated health and EQ-5D ($p < 0.05$).

Conclusions: This study suggests that SDOH and DDOH have a significant effect on the health indicators of older people. In particular, unmet needs in Food, Physical activity, Mental health, and Disabilities were linked to lower health status and quality of life. Addressing these key health determinants through policy and community support may enhance older adults' health and well-being.

Keywords: Older adults; Social Determinants of Health; Digital Determinants of Health.

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P-0858

Innovation in nursing care for positive aging: a bibliometric analysis of trends and clinical impact

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Introduction: The aging population has necessitated innovative nursing approaches to address the multifaceted needs of older adults. This bibliometric analysis explores trends in nursing interventions that promote positive aging, emphasizing innovation, evidence-based practices, and patient-centered care.

Methods: A bibliometric analysis was conducted using PubMed, applying terms related to innovation, nursing, and aging. A total of 3,395 articles were identified, with 1,992 published in the last decade. Co-occurrence term mapping was employed to identify thematic clusters and visualize research interconnectivity.

Results: The analysis revealed four primary clusters. The first focused on innovative nursing practices, highlighting autonomy, education, and professional roles. The second centered on clinical aspects, emphasizing risk management, hospital-related challenges, and infection control. The third highlighted the use of databases like Medline and CINAHL to support evidence-based interventions. The fourth cluster emphasized clinical trials, evaluating the efficacy of interventions on well-being, social connectedness, and functional independence. Terms like “innovation,” “care,” and “aging” were central, reflecting the nursing profession's pivotal role in fostering positive aging.

Conclusions: This analysis highlights the interconnected nature of research on innovation in nursing care for positive aging. Key areas include patient empowerment, technological integration, and evidence-based practices. Insights from this study indicate a growing need for innovative care models that enhance well-being, independence, and social inclusion among older adults.

Short poster presentation**Gerotechnology**

P-0859

Effects of technology-assisted physical activity interventions on circulating biomarkers influencing neuromuscular function in older adults aged 60 years old and above: a systematic review and meta-analysis

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Background: Neuromuscular function is essential for maintaining mobility and independence in aging populations. Technology-assisted physical activity interventions (e.g., exergaming, virtual reality, and wearables) offer promising alternatives for improving neuromuscular health. However, little is known about their impact on circulating biomarkers, particularly exerkines—molecules released in response to exercise that mediate neuroplasticity, inflammation, and metabolism.

Objective: This systematic review and meta-analysis examine the effects of technology-assisted physical activity interventions on circulating biomarkers that influence neuromuscular function in community-dwelling older adults (≥ 60 years).

Methods: Following PRISMA guidelines, a comprehensive search of PubMed, Web of Science, and Scopus was conducted. Eligible studies included randomized controlled trials assessing changes in circulating biomarkers following technology-assisted physical activity interventions. Primary outcomes included neuroplasticity markers (e.g., BDNF, NGF), inflammatory markers (e.g., IL-6, TNF- α), and

adipocytokines (e.g., leptin, adiponectin). A meta-analysis was performed using standardized mean differences (SMD) to evaluate intervention effects.

Results: Meta-analysis revealed significant increases in neuroplasticity markers (BDNF, NGF, NT3), suggesting enhanced synaptic plasticity and cognitive function. Inflammatory markers (IL-6, TNF- α) showed a reduction, indicating potential anti-inflammatory benefits of technology-assisted interventions. However, heterogeneity across studies highlighted the need for standardized protocols in biomarker assessment.

Conclusion: Technology-assisted physical activity interventions appear to positively influence biomarkers of neuromuscular health in older adults, bridging the gap between traditional mechanical assessments and biochemical measures. Future research should establish standardized protocols and explore long-term effects to optimize intervention strategies for healthy aging.

Poster

Gerotechnology

P-0860

Point-of-care ultrasound: feasible and useful in non-acute geriatric care?

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Introduction: Point-of-care ultrasound (PoCUS) is a clinical tool increasingly used by various medical specialties. Several studies have demonstrated its usefulness in older patients in emergency services and acute wards, but few studies have evaluated its use and applicability in other levels of geriatric care.

Methods: Describe the potential use and applicability of PoCUS in the care of elderly patients admitted to geriatric intermediate care units, including subacute (SA), functional recovery (FR), palliative care (PC), and long-term care (LTC) units. Observational, retrospective study with review of medical records of admitted patients who underwent PoCUS. Epidemiological, clinical and PoCUS-related data were recorded.

Results: $n = 91$ patients. Age 86.23 ± 8 years, female 61.5%, Barthel index 42.09 ± 30 points, cognitive impairment 40.7%. Reason: Echocardiography 19.8%, heart failure assessment (HF) 18.7%, physical exam support/clinical outcome 15.4%, abdominal pathology 14.3%, suspected deep vein thrombosis (DVT) 12.1%, facilitated echo procedures 4.4%, others 13.2%. Main finding: PoCUS supported the diagnostic suspicion in 56%, ruled it out in 28.6% and new diagnosis in 9.9%. PoCUS reduced clinical uncertainty (91.2%) and led to treatment changes in 67% of cases. Referrals: 27 transfers to the emergency department and 6 invasive procedures were avoided.

Conclusions: Our study supports the applicability and usefulness of PoCUS in geriatric care settings other than acute care units and emergency departments. It optimized treatment in most patients,

avoided invasive procedures, and/or referrals to other levels of care. It is essential to promote training and education in PoCUS for professionals at these levels of care.

P-0861

A non-invasive sensor-based telemonitoring system to detect falls from the bed in hospitalized older patients. The RAISE Project (Robotics And Artificial Intelligence For Socio-economic Empowerment Project)[1]

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Introduction: Annually, approximately 20–30% of falls among people aged over 65 occur from bed. Minimally invasive technological devices could assist in detecting a probable fall in some of the most dangerous scenarios, such as a perilous position when resting in bed (i.e., lying at the edge of the bed frame). This study aims to test the efficacy of a non-invasive telemonitoring sensor-based system in detecting postures and movements that can endanger patients sitting or lying in bed.

Methods: Ten participants aged 65 years and older, attending the geriatric day hospital will be consecutively enrolled. All participants will undergo CGA-based Multidimensional Prognostic Index (MPI) to assess Multidimensional Frailty. To determine the risk of falling from the bed, the system leverages a sensing textile placed upon the bed mattress, capable of mapping resting positions based on pressure and weight distribution. The sensors notify the healthcare staff through acoustic alarm and warning lights when the fall risk is detected. The number of technologically detected potential falls will be compared to the number of falls reported by patients and clinicians.

Expected results: Comparison between the fall risk warnings provided by the telemonitoring and the number of falls as computed in post-processing Vs. patients' and clinicians' reports on falls occurred.

Key conclusions: A non-invasive telemonitoring system employing a sensing textile placed on the mattress can help identify the likelihood of bed falls and hence serve as a preventative tool in a variety of settings, including hospitals, nursing homes, and private residences.

Reference:

[1] Funded by the European Union—NextGenerationEU and by the Ministry of University and Research (MUR), National Recovery and Resilience Plan (NRRP), Mission 4, Component 2, Investment 1.5, project “RAISE—Robotics and AI for Socio-economic Empowerment” (ECS00000035).

P-0862**Long-term validation of the humanoid social robot TIAGo in older adults living in the community and a care facility**

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Introduction: The decreasing availability of caregivers for older individuals living in the community highlights the need for solutions that ease their workload, including those using modern technologies. The aim of this study is to present the long-term use of the humanoid social robot TIAGo in care for older adults with Mild Cognitive Impairment as part of the ENRICHME project.

Methods: Participants in the project (median age 83 years, one male)—four in their own homes in Poland and four in a care facility in Greece—were provided with the TIAGo robot for use over a 10-week period. They completed a series of questionnaires and participated in in-depth interviews with a psychologist at both the beginning and end of the study. A follow-up interview was conducted one month after the intervention.

Results: Showed a significant improvement in the Older People's Quality of Life Questionnaire ($p < 0.05$). Though trends for higher scores were observed in its areas like Overall Life ($p = 0.058$) and Leisure and Activities ($p = 0.074$), they were not statistically significant. Similar trends were noted in the General Self-Efficacy Scale ($p = 0.076$). Qualitative data revealed that participants often gave the robot human names, reported positive feelings of companionship, and noticed an improved home atmosphere. One month after the intervention, participants expressed regret over the robot's absence, with one of them even rearranging furniture to compensate for its removal.

Main conclusions: These findings suggest that the TIAGo robot fosters a human-like bond, thus fortifying its potential for use in the care of older adults.

P-0863**Are geriatric patients able to use a smartphone app at home to screen for atrial fibrillation?**

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Background: In the Dutch-GERAF study, opportunistic screening for atrial fibrillation using a smartphone photo-plethysmography (PPG) application was applied at 6 Geriatric Medicine outpatient clinics in the Netherlands. The purpose of this substudy was to assess the usability of the PPG application in a subgroup of patients.

Methods: Patients from the Northwest Clinics that were included in the Dutch-GERAF study from February 1st until September 30th 2022 were invited for a telephone interview. Patients with limited digital skills or cognitive impairment were not considered suitable. Baseline data (age, cognition) from the interview group were compared to data of participants who were not interviewed. Usability of the application was assessed with Brooke's System Usability Score (SUS score).

Results: 116 patients from the Northwest clinics were included in the Dutch-GERAF study between February 1st and September 30th 2022. 16 gave consent for the interview (13.8%), 1 patient was lost to

follow-up. 100 patients were not suitable or did not want to participate.

Patients in the interview group were younger (76 vs 81 years) and had higher scores on Minimal Mental State Examination (MMSE) and Montreal Cognitive Assessment (MoCA) (median 28 vs 27, median 26.5 vs 23).

67% of patients used the PPG application at home, 20% needed help. SUS score was 72.5 points (median, range 52.5–80.0), which means good to use.

Conclusion: Most patients in this small subgroup used the PPG application independently, and considered the PPG application usable. Patients in the interview group were younger and scored higher on MMSE and MoCA.

Poster**Long-term care****P-0864****Enhancing diarrhea management in enterally fed patients: a dietitian-led quality improvement project**

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Introduction: Diarrhea is a common complication in enterally fed patients, affecting up to 60% of critically ill individuals. This quality improvement project aimed to evaluate and optimize the role of dietitians in managing diarrhea in patients receiving enteral nutrition (EN).

Methodology: A six-month quality improvement initiative was implemented in the intensive care unit of a tertiary hospital. The project involved:

1. Baseline assessment of diarrhea incidence and current management practices.
2. Development of a standardized protocol for dietitian interventions.
3. Implementation of targeted dietary strategies.
4. Staff education on EN management and diarrhea prevention.
5. Continuous monitoring and evaluation of outcomes.

Results: The dietitian-led interventions resulted in significant improvements:

1. Diarrhea incidence decreased by 80% in enterally fed patients.
2. Implementation of fiber-enriched formulas reduced diarrhea episodes and improved gut health.
3. Introduction of lower FODMAP formulas for select patients decreased diarrhea likelihood.
4. Tailored use of prebiotics and probiotic derivatives showed promising results in diarrhea prevention.
5. Enhanced staff knowledge led to improved EN handling and reduced contamination-related diarrhea.
6. Malnutrition risk decreased due to better management of EN despite diarrhea complications.

Conclusion: This quality improvement project demonstrated the crucial role of dietitians in managing diarrhea in enterally fed patients. By implementing evidence-based strategies and providing targeted interventions, dietitians significantly reduced diarrhea incidence and improved overall patient outcomes. The project highlights the importance of dietitian involvement in multidisciplinary care for enterally fed patients and provides a framework for future quality improvement initiatives in enteral nutrition management.

P-0865**Enhancing elder care through a dynamic living lab approach in Flanders, Belgium**

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Introduction: The increasing needs of older adults demand innovative solutions. However, a gap persists between current practices and potential improvements. This project initiated a collaborative effort through a dynamic living lab (LL) in the Ghent region (Flanders, Belgium) to enhance care for older persons.

Methods: The LL integrates a health and care research group with eight nursing homes, two acute geriatric wards, one gerontopsychiatric ward, and a healthcare education faculty. A transdisciplinary approach involving stakeholders such as healthcare professionals, older persons themselves, policymakers, researchers, healthcare students, and geriatrics/gerontology lecturers. There narratives, guided by an Experience-Based Co-Design (EBCD) approach, help identify research priorities that address real-world challenges in elder care.

Results: The LL fosters a stimulating environment for learning, knowledge development, applied research, and innovation. Stakeholders embedded in real-world elder care settings contribute significantly to the research process by generating research questions, refining designs, recruiting participants, collecting data, and advising on knowledge dissemination strategies. Their involvement enhances healthcare innovation and improves the quality and outcomes of practice-based research.

Key conclusions: The LL enhances the translation of research findings into practical solutions, enriches educational programs, and promotes sustainable changes in elder care. This approach fosters a dynamic exchange of expertise and innovation.

P-0866**Inhaler technique and adherence patterns in older Albanian COPD and Asthma patients**

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Introduction: Poor inhaler technique and non-adherence contribute to disease progression, increased exacerbations, and hospitalizations in chronic obstructive pulmonary disease (COPD) and asthma patients. With this study, we aim to evaluate these factors among the Albanian older population.

Methods: We conducted a 12-month cross-sectional study using the Test of Adherence to Inhalers (TAI) questionnaire, translated and adapted for Albanian patients. A representative sample of 235 patients was calculated, with 148 (63%) analyzed so far. Researchers assessed inhaler errors in pressurized metered-dose inhalers (pMDIs) and dry

powder inhalers (DPIs) using standardized checklists from international respiratory guidelines. Statistical analysis was conducted in SPSS.

Results: Adherence did not differ significantly between COPD and asthma patients ($p = 0.477$), indicating similar challenges. Older patients (≥ 75 years) did not demonstrate significantly higher inhaler error rates than younger individuals [6]. A weak negative correlation ($r = -0.06$, $p < 0.05$) between self-reported adherence and medical assessments suggests patients slightly overestimate adherence. The number of inhalers used had no major effect on adherence ($r = -0.02$, $p < 0.05$). Deliberate (49.3%) and sporadic (47.3%) non-adherence were the most common types, while unconscious non-adherence was rare (3.4%).

Conclusion: This study highlights the presence of inhaler errors across all age groups, the limited impact of polytherapy on adherence, and the high prevalence of intentional non-adherence. These findings suggest that future interventions should prioritize addressing patient misconceptions about treatment adherence, alongside technical inhaler training.

P-0867**Functional and spatial concepts in long-term care facilities**

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Introduction: Demographic changes in aging societies present significant challenges to the healthcare system. While home care is emphasized, institutional care remains essential for individuals requiring 24-h supervision and intensive medical attention. Efficient spatial and functional planning is crucial to maintaining residents' well-being, optimizing staff workload, and ensuring sustainability.

I. Integration and accessibility

- Strategic Location: Proximity to public transportation enables residents to maintain social connections, supports workforce availability, and facilitates family visits, which positively impact mental health.
- Challenges: High accessibility may lead to logistical difficulties within multi-story buildings, requiring elevators and automated systems. Increased usage also results in higher maintenance needs.

II. Care ergonomics and spatial design

- Optimized Layout: A centralized monitoring point enables continuous supervision and quick access to residents with higher care needs.
- Natural Light & Social Spaces: Skylights and open areas help regulate residents' circadian rhythms and encourage social interaction, benefiting mental and physical health.
- Challenges: Proximity of communal areas to private rooms may cause noise-related disturbances. Residents on upper floors may experience difficulty accessing common spaces.

III. Progressive care model: transition to assisted living

- Independent Living Units: Designed for aging individuals who maintain independence before requiring full-time institutional care. These apartments ensure safety and ergonomics while promoting autonomy.
- Smooth Transition: This model bridges home life and institutional care, easing adaptation to a caregiving environment.

IV. Role of care staff and family members

- **Staff Training & Support:** Continuous education and psychological support help prevent burnout and improve caregiving efficiency.
- **Family Involvement:** Actively engaging family members enhances residents' emotional stability and strengthens cooperation between institutions and families.

Conclusion: The spatial and functional design of long-term care facilities plays a critical role in improving residents' quality of life and increasing staff efficiency. An integrated approach that considers residents' healthcare and social needs while ensuring sustainability can contribute to effectively addressing future care challenges.

P-0868

Situational analysis of long-term care services for older adults with mental illness in a specialized facility: preliminary findings from the long-term care interventions for frail older adults with mental illness (LIFT ME) research program

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Introduction: Older adults with mental illness in long-term care facilities require specialized support. Understanding their demographics, clinical profiles, and social circumstances is vital for improving services. This examines the status of long-term care services in a specialized mental health facility to guide future interventions.

Methods: This descriptive study analyzed patient records, services, and workforce of a mental health facility in the Philippines. Variables included demographics, psychiatric diagnoses, admission details, social support, and geriatric care services.

Results: Among 198 patients, 71% were female and 68% aged 60–69. Most were single (73%) with limited education; 55% had unavailable education records. Schizophrenia was the predominant diagnosis (76%), followed by psychosis (11%) and bipolar disorder (6%). Admissions varied; 38% were admitted by family and 22% referred by local government units. Notably, 32% had been in the facility for 6–10 years, and 31% for over 20 years. Alarming, 95% had no visiting family members.

The facility offers geriatric care programs such as Comprehensive Geriatric Assessments, free preventive vaccinations, and diagnostic services. Staffing includes geriatricians, psychiatrists, nurses, and allied health professionals. Counseling and support services are available for patients and families. Rehabilitation programs are in place, but home visits remain suspended post-pandemic.

Key conclusions: The findings highlight prolonged institutionalization, social isolation, and psychiatric conditions. Enhancing psychosocial interventions, promoting family involvement, and strengthening community ties are essential for improving holistic care. Key to this is specialized geriatric care through comprehensive

assessment and multidisciplinary team support to improve well-being and quality of life of this vulnerable population.

P-0869

Clinical governance to support medication safety in residential care homes across Australia

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Introduction: Strong clinical governance supports residential care homes (RCHs) to deliver high quality care. In Australia, Medication Advisory Committees (MACs) were established to provide medication governance and promote medication safety in RCHs. MACs are like international quality circles in primary care and hospital drug and therapeutics committees. The Australian Government recommends MACs should be multidisciplinary and perform functions around policy development, risk management, education and quality improvement. There is no known national audit on the structure and function of Australian MACs.

Methods: A national cross-sectional audit was conducted from November 2023 to January 2024. Questions were based on Australian Government recommendations in, 'User Guide: Role of a Medication Advisory Committee' and 'Audit tool and checklist for a Medication Advisory Committee' (Audit Tool).

Results: Responses were received from 120 MACs governing 642 (24%) Australian RCHs. 58% of MACs were multidisciplinary with nursing, pharmacy and prescriber members. Over half of MACs reported performing all roles in the Audit Tool around policy development (59%) and risk management (53%). Less than half of MACs reported performing all roles in the Audit Tool around education (41%) and quality improvement (28%).

Key conclusions: There is significant heterogeneity in the structure and function of Australian MACs. This study identified key opportunities for more MACs to be multidisciplinary and proactively lead quality improvement and medication-related risk mitigation that meets RCH needs. This study forms part of the Maximising Embedded Pharmacists in Aged Care Medication Advisory Committees (MEGA-MAC) trial that aims to address these gaps.

P-0870**Attitudes and perceptions of chinese older adults as potential users toward the use of home-care robots**

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Introduction: The increasing need for care of older adults has exacerbated the existing shortage of qualified caregivers. This situation is particularly relevant in the Chinese context due to the weakening of the filial piety tradition. Against this backdrop, care robots have been designed to assist in long-term care for older adults, which serves as a potential solution to challenges associated with caring for the older population. This study aimed to explore the attitudes and perceptions of older adults, as potential users (PU) who have not used home-care robots, toward the implementation of home-care robots in Mainland China.

Methods: 589 community-dwelling Chinese (age: 68.6 ± 7.5 ; male: 185, female 394) in Shanghai, China were interviewed through a structured questionnaire developed by our research team using a cross-sectional survey design.

Results: Most Chinese PUs (73.3%) were open to using home-care robots, but lower percentages of them (57.3%) were willing to use the robots. PUs having more technology experience were more open and willing to use home-care robots. The level of education also affected their openness and willingness. PUs with tertiary education or above tended to be more receptive toward home-care robots than those with primary or secondary education ($p < 0.01$). Gender difference was only observed in willingness to use home-care robots. Male Chinese PUs were more willing to use home-care robots than their female counterparts ($p < 0.05$).

Key conclusions: To increase Chinese PUs' willingness to use, improving their digital literacy, particularly those with low educational levels, is recommended.

Short poster presentation**Long-term care****P-0871****Outbreak management in nursing homes: The Strategy for Addressing Future Epidemics (SAFE) study**

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Introduction: Infectious disease outbreaks and their challenging management are a recurring problem in nursing homes (NHs) with far-reaching consequences for residents, personnel and NHs. These consequences include an increase in cost, workload, fear for infection, and morbidity and mortality rates. Unlike hospitals, NHs lack dedicated infection prevention and control teams, often resulting in delayed or inadequate measures and higher attack rates which ultimately affect quality of care. The Strategy for Addressing Future Epidemics (SAFE) study aims to identify determinants influencing the implementation of effective outbreak management in NHs.

Methods: A sequential mixed-method study started in November 2024, comprising a cross-sectional survey administered via Qualtrics XM ($n = 27$) and semi-structured interviews among staff members ($n = 6$) responsible for outbreak management. Additionally, two focus groups were conducted with 1) experts from the infectious disease control team of the Government of Flanders ($n = 3$) and 2) physicians responsible for coordination of care in NHs ($n = 6$).

Results: Preliminary survey results (40.9% response rate, 27/66 NHs) show that 85% of NHs have experienced at least one outbreak, mostly gastrointestinal and COVID-19. 88% reported an established procedure for outbreak management. Of respondents, 59% felt their initial education lacked sufficient outbreak management training. Preliminary qualitative thematic analysis identified collaboration, proactivity, education, leadership, communication and role ambiguity as key determinants influencing effective outbreak management.

Conclusion: Despite established procedures, gaps remain in training and proactive measures. Strengthening staff education and interdisciplinary coordination is essential to improve outbreak response and enhance the quality of care in NHs.

Poster**Long-term care****P-0872****Exploring stakeholder perspectives of clinical governance in residential care homes across Australia**

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Introduction: Clinical governance is essential for ensuring medication safety. In Australian residential care homes (RCH), Medication Advisory Committees (MACs) are multidisciplinary clinical governance committees established to oversee, advise on, and improve medication management and safety. The aim of this project was to explore stakeholder perspectives on structure and function of MACs, and identify factors influencing the MAC's ability to support and drive quality improvement.

Methods: Semi-structured interviews were conducted with multidisciplinary members of MACs that operate within Australian RCHs. The interviews were recorded, transcribed verbatim and deductively coded using the Consolidated Framework for Implementation Research (CFIR).

Results: Participants (n = 20) included medical prescribers (geriatricians and general practitioners), nurses, pharmacists and senior management. Preliminary coding has highlighted the importance of the MAC having a documented purpose (e.g. terms of reference), clear reporting structure within the organisation and regular (at least every 3 months) face-to-face or hybrid meetings. MACs also need to be adaptable to changing medication safety priorities. MACs functioned best when they were engaging with both clinical and governance content, members worked as a team and proactively assessed RCH needs. Individual factors included the importance of high-level leaders and implementation leads in the MAC to drive quality improvement. The inner setting factors included RCH culture and structural characteristics, and mission alignment between stakeholders. The outer sector factors included financing, policies, and partnerships between MACs.

Key conclusions: The findings provide a roadmap to improve the scope, structure and function of MACs and present an opportunity to translate findings to other countries.

P-0873

Findings from the pilot study of the POOMAH project to improve the quality of the medicines' pathway in Flemish NHs

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Introduction: The medicines' pathway in nursing homes (NHs) is complex and error-prone, necessitating a systems approach for quality improvement. The POOMAH study was set up to evaluate different formats and intensities of support to enhance this pathway's quality. The pilot study aimed to test the feasibility of data collection procedures and intervention components in a limited number of NHs.

Methods: The POOMAH intervention included a toolbox, intervision meetings with fellow NHs and support from external coaches (pharmacists) or coordinating pharmacists. Staff at participating NHs completed a quality assessment, based on which local project teams formulated and implemented quality improvement initiatives. Experiences with the quality assessment and intervention components were collected during intervision meetings and focus groups, and analyzed inductively.

Results: Six NHs participated: three received support from an external coach and three from a coordinating pharmacist. Six focus groups and one interview were performed with 23 NH staff members. Initial findings indicated that the quality measurement statements were too complex for some healthcare professionals (i.e. nursing assistants). The online toolbox was often forgotten and participants found the materials difficult to access. Intervision meetings were considered inspiring, with a preference for physical meetings. Visits from coaches were deemed too long and not sufficiently spaced out. The support of a coordinating pharmacist was considered very meaningful.

Conclusion: The pilot study led to adaptations in the quality assessment instrument and intervention components of the POOMAH study, which is now being conducted in 93 NHs in Flanders and evaluated in a cluster RCT.

P-0874

An evaluation of the quality of the medicines' pathway in Flemish nursing homes: baseline findings from the POOMAH study

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Introduction: The medicines' pathway in nursing homes (NHs) is complex and error-prone, requiring a system's approach to improve its overall quality. The Process Optimization Of the Medicines' pAthway in nursing Homes (POOMAH) study addresses this need. Here, we present the results of the baseline measurement that explores the current quality of the medicines' pathway in Flemish NHs.

Methods: NHs participating in POOMAH complete a quality assessment (quick scan) at baseline and post-intervention. This self-reported questionnaire, recently developed and pilot tested [1], is based on 29 key activities (KAs), defined in the medicines' pathway framework [2]. The scan uses importance-performance analysis to identify high-priority KAs (performance score < 80% and importance score ≥ 80%).

Results: In autumn 2024, 2599 participants from 93 NHs completed the baseline quality assessment. The number of participants per NH ranged from 6 to 114, including coordinating physicians, general practitioners, pharmacists, nurses and nurse assistants. Preliminary results show a mean performance score of 79.37% (SD: 7.8%). The mean number of priority KAs per NH was 11.9 (SD 4.97). Almost all NHs had at least one KA in the subprocess of (re-)admission of residents (91 NHs) that was prioritized; the same was true for the subprocess of prescribing (92 NHs).

Conclusion: Preliminary findings indicate a need for further improvement of the quality of the medicines' pathway in Flemish NHs. Final results will be available shortly, and the correlation between the quality of the medicines' pathway and organizational characteristics will be explored.

P-0875

The prevalence of potentially preventable hospital admissions in older adults—a cross-sectoral retrospective chart review

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Introduction: As the population ages, the risk of acute hospital admission increases. It is posed that with appropriate care and timely intervention, many hospital admissions could be avoided. By examining the patients journey across health care sectors and disciplines we hope to shed new light on this issue. This study aims to assess the prevalence of potentially preventable admissions among the older adults and suggest preventive measures.

Methods: We conducted a retrospective chart review of a random sample of acute medical admissions at Aalborg University Hospital during January 2023 for patients aged 80 + . Readmissions were excluded. Data from hospital and municipal records were reviewed to evaluate the events preceding the admission. Two independent auditors extracted and verified all records to enhance accuracy.

Results: We analyzed data from 38 patients (mean age: 86 ± 4.1 years, mean Clinical Frailty Scale: 5.1 ± 1.6). Of these, 68% received municipal support and 28% had received nursing care prior to their admission. The most common presenting conditions were lack of fluid (32%), pneumonia (29%), and confusion (29%). Our review suggests that 56% of admissions were potentially avertible. Of these, 46% might have been prevented through admission to an acute municipal care facility. Additionally, hospital-at-home services or improved nutritional support in the municipal setting could potentially have prevented 28.6% of admissions.

Key conclusion: A significant proportion of acute admissions in patients aged 80 + may be avoidable. Strengthening interventions outside hospital such as early detection of loss in functional and relevant help and nutritional support, could help reduce unnecessary hospitalizations.

P-0876

Variation in medication prescribing in long-term care: a multi-level retrospective cohort study in Ontario, Canada

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Introduction: Antipsychotic medications are frequently used to manage behavioural and psychological symptoms of dementia in long-term care (LTC) settings, despite concerns about their appropriateness. It is unknown if this variability occurs at the unit and organizational levels, in addition to home-level, and if it persists for other medication classes. This study assessed variation in the prescribing of psychotropic and non-psychotropic medications across LTC unit, home, and organizational levels.

Methods: We conducted a retrospective cohort study LTC residents in Ontario, Canada from April 2022 to March 2023. Data was extracted from a comprehensive electronic medical record repository. Outcomes included the prescription of antipsychotics, antidepressants, statins, cardiovascular disease (CVD) medications, and trazodone, a common substitution for antipsychotics. We employed multi-level logistic regression accounting for resident factors and clustering at unit, home, and organizational levels.

Results: Among 16, 896 residents in 179 homes and 5 organizations, 39% were prescribed antipsychotics, 65% antidepressants, 33% statins, 65% CVD medications, and 38% trazodone. We observed substantial variation in antipsychotic prescribing, with greater variation at the home level (median odds ratio [MOR]: 1.65; 95% CI:

1.52–1.78) than at the unit level (MOR: 1.24; 95% CI: 1.10–1.33). This pattern was consistent across all medication classes examined. No significant variation was found at the organizational level.

Conclusions: While variation in antipsychotic prescribing is well-documented, our findings reveal similar practice variations across multiple medication classes in LTC, highlighting broader quality improvement opportunities. Future research should explore underlying causes of this variation, including clinician practices, staffing models, and organizational culture.

P-0877

Association between strategies to prevent COVID-19 infection in long-term care facilities and mortality: the PIANO-COVID-19 study, a French multicentre cohort study

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Objective: Evidence for the effectiveness of strategies that aimed to prevent COVID-19 infection on reducing mortality in Long-Term Care Facilities (LTCF) is limited. Our aim was to investigate the

association between strategies aimed at preventing COVID 19 infection and risk of death.

Design: The PIANO-COVID-19 study is a French national cohort study of LTCF residents. We compared strategies that aimed to prevent COVID-19 infection, characteristics of 107 LTCF and their 8,028 residents. Short-term (within 1-month) and 1-year deaths after the first local COVID-19 peak were considered as the use of prevention strategies evolved during the course of the pandemic. Analyses were adjusted by age, gender, disability, co-morbidity and occupancy of the local hospital.

Results: Among the 2202 (27.42%) 1-year all-cause deaths in 2020, 247 (11.21%) were related to COVID-19. The following preventative measures were related to a reduced risk of all-cause death: Systematic masks wearing (Hazard Ratio 0.75 CI95% [0.60–0.93]), screening of visitors for symptoms on entry (0.78 [0.62–0.97]), infection control training for staff (0.79 [0.63–0.98]), systematic COVID-19 screening (with rt-PCR) of all staff and residents: staff (0.20 [0.05–0.84]) and residents (0.17 [0.04–0.76]). In contrast, difficulty to hospitalise (3.54 [1.53–8.17]) or high occupancy rate of nearby hospitals (8.25 [2.19–31.01]) were associated with a higher risk of COVID-19-related deaths.

Conclusions: We identified prevention strategies that appear to have been important in the limitation of COVID-19 related death in LTCF's and suggest widespread adoption may be beneficial in the case of a new epidemic.

P-0878

Appropriate medication use for older nursing home patients with limited life expectancy: a cluster RCT

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Objective: We aim to investigate the effect of an educational intervention on medication reviews for health care professionals on medication use of nursing home (NH) patients with a limited life expectancy.

Methods: Design. Cluster RCT on 7 long term care wards of NHs, from September 2024 to December 2025. Intervention NHs received the educational intervention: an interdisciplinary (physicians, nursing staff, pharmacists) training to tailor medication to treatment goals of NH patients with a limited life expectancy combined with supporting tools and educational materials. Control NHs provided usual care. Setting and participants. Eligible patients were nursing home patients ≥ 65 years with a limited life expectancy (< 1.5 – 2 year) in The Netherlands. Data collection. Data is collected from electronic health care records and through questionnaires: before the start of the intervention (T0), after 6 months (T1) and after 12 months (T2). The primary outcome measure is potential under- and over-treatment with

medication. Secondary outcome measures are experienced involvement in decision-making, quality of life, deaths, falls, hospital admissions/emergency room referrals and pain.

Results: In total, we included 393 participants with a mean age of 85.0 (± 7.1 SD), of which 68.7% were female and 74.8% resided in psychogeriatric wards. Polypharmacy (≥ 5 medications) was very common (in 87.5% of participants) and hyperpolypharmacy (≥ 10 medications) occurred in 42.7%. We will present interim results on the effects of the educational training after 6 months.

Conclusion: Polypharmacy is common in NH residents, and asks for carefully reviewing its appropriateness.

P-0880

A co-creative study to foster enriching interactions for person-centered dementia care in Flemish Nursing Homes

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Introduction: Daily interactions between professional health caregivers (PHC) and residents with dementia can range from brief greetings to in-depth one-to-one conversations. These interactions are essential for delivering high-quality person-centered dementia care. However, balancing these interactions with the demands of routine care remains a significant challenge.

Methods: Guided by Human-Centered Design principles, this study utilized co-creative techniques to develop innovative strategies for fostering interactions between PHC and residents with dementia. A multidisciplinary development team, including PHC, NH volunteers, family members, and healthcare students, participated in the process. This process involved (1) a guided brainstorming session to generate a wide range of innovative ideas, followed by (2) five dynamic co-creation sessions to transform the most promising ideas into tangible prototypes.

Results: A total of 173 ideas were generated during the brainstorming session, most ideas illustrated the need with on fostering interpersonal connections and positive, reciprocal relationships built on trust, empathy and mutual respect. Key elements were the need for expertise to provide compassionate care, effective teamwork and interdisciplinary communication to promote respect and clarity. A practical toolbox was developed containing eight concrete tools designed to enable enriching interactions between PHC and residents with dementia in NHs.

Key conclusions: It is crucial to recognize both PHC and residents with dementia as active and equal participants in daily interactions. Practical tools were created to enhance relationship-centered care in NHs, focusing on principles such as patience, respect, unconditional

listening, and the creative search for moments of in-depth and enriching connection.

P-0881

LTC investment may reduce LOS in hospitals in Europe

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Length of stay (LOS) in acute hospitals is used as a key indicator of healthcare system performance. In older populations, prolonged LOS is associated with increased risks and higher healthcare expenditure. The extent to which the age-related increase in LOS is influenced by national-level socioeconomic indicators remains unclear. This study examined the relationship between average LOS in adults aged ≥ 65 , the presence and magnitude of age-related increases in LOS, and national expenditure on healthcare and long-term care (LTC) using Eurostat 2021 data.

For each country, LOS was analysed across seven 5-year age brackets (65–69 to ≥ 95). An age-related LOS gradient was defined as a strong positive correlation across age groups (Pearson's $r \geq 0.6$). The gradient was quantified as the slope of the linear regression line; slopes < 0.1 were considered negligible and imputed as zero. Multivariate linear regression was used to assess the independent associations between the percentage of GDP spent on healthcare and LTC with (i) mean LOS and (ii) the age-related LOS gradient.

Across the 24 countries, mean LOS ranged from 5.0 to 14.0 days (mean 9.3, SD 2.3). An appreciable age-related increase in LOS was observed in 15 countries. After adjusting for this gradient, a higher percentage of GDP spent on LTC was significantly associated with lower mean LOS ($B = -0.98$, $p = 0.011$); no significant association was found for healthcare expenditure.

These findings suggest that greater investment in LTC may help reduce hospital LOS in older populations.

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Introduction: Nursing home (NH) residents are often prescribed antibiotics for urinary tract infections (UTIs), frequently due to overdiagnosis. This study aimed to assess the extent of potentially unnecessary antibiotic use for suspected UTIs in NHs across eight European countries.

Methods: Between February and April 2024, NH professionals in eight European countries (Denmark, Greece, Hungary, Lithuania, Poland, Slovakia, Slovenia, and Spain) recorded antibiotic treatments for UTIs using a specific chart. We assessed potentially unnecessary antibiotic use, defined as antibiotics prescribed when not required, based on the chart data. Two authors developed a simple algorithm to evaluate unnecessary antibiotic use in residents without indwelling catheters, which was reviewed by all team members. The goal was to create a simpler, more practical tool than existing ones for daily NH use. This iterative process took six months, resulting in the endorsement of the simplified algorithm.

Results: The study, conducted across 110 NHs, included 2,773 antibiotic-treated infections. Of these, 1,158 (41.8%) were treated for UTIs. Among 975 UTI cases without catheters, 54.1% may have been unnecessarily treated. Over one-third involved non-specific symptoms including poor general condition and changes in urine appearance, while specific urinary symptoms, such as incontinence (21.3%) and dysuria (20.8%), were less common. A trend toward greater, potentially unnecessary antibiotic use was observed when urine dipsticks were performed.

Key conclusions: The findings reveal significant unnecessary antibiotic use. Further algorithm validation is needed to enhance diagnostic criteria, reduce overuse, and improve UTI management in NHs.

P-0882

Use of a simplified algorithm to assess unnecessary antibiotic use for suspected urinary tract infections in nursing homes.

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P-0883

Prevalence of hypertension and complications in elderly population with hypertension admitted with fractured neck of femur (NOF): a retrospective audit

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Background: Hypertension is regarded as a silent killer and is associated with an increased risk of cardiovascular diseases, chronic kidney disease and stroke, all of which can complicate hospital stays. Patients with hypertension who sustain a fractured neck of femur (NOF) are particularly vulnerable to prolonged hospitalization due to delayed recovery, postoperative complications, and increased frailty. These factors contribute to higher healthcare costs, increased

dependency, and poorer long-term outcomes. This study aims to evaluate the impact of hypertension on the length of hospital stay, mortality, and morbidity in patients admitted with NOF.

Methods: This was a retrospective audit of 400 patients admitted to Milton Keynes University Hospital, UK, with NOF between January 2021 and March 2023. The prevalence of hypertension in this cohort was 74.25% (297 patients).

Results: Delirium was observed in 25.3% of patients, while postoperative complications (including pneumonia, acute kidney injury, urinary tract infection, atrial fibrillation, and acute coronary syndrome) were present in 58.6%. A frailty score greater than 4 was recorded in 53.2% of patients. The average length of hospital stay was 21.8 days. Mortality was recorded in 14.6% of the cohort.

Conclusion: High prevalence of hypertension among individuals with NOF (74.25%). Individuals living with hypertension who experience a NOF tend to have an increased hospital stay, delirium and complications.

P-0884

Understanding the social health of older adults living in naturally occurring retirement communities

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Background: Older adults residing in naturally occurring retirement communities (NORCs) have greater health needs than the broader community. NORCs, geographic areas with a high concentration of older people, provide an opportunity to deliver onsite health and social services to support aging in place. We present survey results describing the social health of older NORC residents in Toronto, Canada.

Methods: A survey was administered at six NORC sites receiving a supportive service program. Sites were diverse in demographics and housing configuration with one co-op, three condos, and one social housing building. The survey included validated tools assessing social health, including sense of belonging, and loneliness. A descriptive analysis was completed, stratified by gender and age.

Results: 300 people responded to the survey, most were over 76 years of age ($n = 124$) and identified as women ($n = 177$), 40% experienced loneliness (36% women, 46% men, 33% 76 years and over). 31% indicated never or rarely eating a meal with someone (33% women, 28% men, 30% age 76+), while 26% said they almost always did (33% women, 28% men, 30% age 76+). While most respondents (72%) reported a strong sense of belonging in their building (75% women, 72% men, 80% age 76+), 21% had neither strong nor weak sense (18% women, 22% men; 18% age 76+).

Key conclusions: Findings identified the opportunity to improve social health outcomes among NORC residents. NORC supportive service programs hold promise for supporting older adults to age in place with equity-focused strategies. Understanding characteristics

such as gender and age is essential to developing targeted interventions for these communities.

P-0885

Experiences of older women family caregivers living in poverty in a high-income country: a phenomenological study

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Introduction: Being an older woman, family caregiver, and living in poverty are critical conditions with serious repercussions on health [1]. These individuals face complex situations and challenging life experiences that can lead to social isolation and neglect of their own well-being [2]. Understanding the lived experiences of these women can provide insights into their needs and inform the development of targeted support systems. The aim of the study was to understand the experiences of older women caregivers living in poverty in a high-income country.

Methods: A study employing Gadamer's hermeneutic phenomenology [3] explored the experiences of 17 older women family caregivers living in poverty. Participants, with a mean age of 73.35, primarily cared for dependent husbands (88%). In-depth interviews were conducted and analyzed via a 'fusion of horizons' approach to understand the phenomenon. The research adhered to the Helsinki Declaration's ethical principles and received ethics committee approval (code: EFM 313/24).

Results: The analysis revealed three themes that provide insight into the participants' experiences: (1) The challenge of adapting to caregiving without having chosen it, (2) The weight of traditional norms in caregiving: between love and duty, and (3) Caregiving dictated by social norms.

Key conclusion: Older women caregivers living in poverty experience their situation as a compromise between duty, love, and imposed obligation. This study highlights the profound impact of caregiving on the health and well-being of older women caregivers living in poverty and underscores the urgent need for tailored support systems to alleviate their burdens and enhance their well-being.

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P-0886

Older female family caregiving in poverty: a qualitative study on intersectionality, gender and support gaps in a high-income country

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Introduction: Older women living in poverty in high-income countries are more likely to assume caregiving responsibilities without sufficient formal support as a moral duty associated to their gender. The study's aim was to explore how older women experiencing poverty in a high-income country perceive their role as family caregivers from a gender perspective.

Methods: A descriptive qualitative study was conducted with a convenience sample of 17 older female caregivers (≥ 65 years) recruited through an NGO in southern Spain. In-depth interviews were carried out between October 2023 and March 2024. Reflexive thematic analysis was used to analyse the data. Ethical standards were upheld and COREQ guidelines followed.

Results: Three major themes were identified: (1) The duality of caregiving—between informal female support and structural neglect; (2) Family care in later life as a continuation of a life devoted to others; (3) Older female caregiving as a gender issue. Participants reported overwhelming reliance on female relatives and neighbours for support, while institutional and professional help was perceived as inadequate or absent. Gendered expectations and financial hardship led many women to neglect their own health and basic needs, while still expressing pride and fulfilment in their caregiving roles.

Key conclusion: Older women experiencing poverty assume caregiving responsibilities in contexts of gendered obligation and resource scarcity. Their caregiving is marked by ambivalence—gratitude and pride coexist with exhaustion and despair. Equitable nursing interventions should address the structural and gender-specific barriers these women face, including improved access to health and social services and community-based support.

P-0887

Care needs of community-dwelling older adults living in poverty and their relationship with biopsychosocial variables: a cross-sectional study

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Introduction: Older adults living in poverty in high-income countries face a heightened risk of unmet care needs, which can adversely affect their biopsychosocial health. Little is known about the specific needs of this population or the factors influencing them. This study aimed to: (1) identify the met and unmet care needs of this group; (2) describe their functional ability, dietary habits, nutritional status,

social and psychological conditions, and quality of life; and (3) analyse how these variables relate to the number of care needs met.

Methods: A cross-sectional study was carried out with 384 older adults (≥ 65 years) living in poverty in southeastern Spain. Care needs were assessed using the Camberwell Assessment of Need for the Elderly (CANE), alongside validated instruments for functionality (Barthel Index), dietary adherence (MEDAS), nutritional status (MNA), loneliness (UCLA), social support (DUKE-UNC-11), and health-related quality of life (SF-12). Statistical analyses included descriptive statistics, non-parametric tests, and multiple linear regression.

Results: Around 20% of needs were unmet, with financial (53.6%) and food-related (50.0%) needs most common. Moderate dependency in daily activities (25%), risk of malnutrition (28.6%), severe loneliness (18.4%), and low perceived social support (79.8%) were prevalent. Key predictors of met needs included age, hospital/emergency visits, functional status, nutritional state, social support, and health-related quality of life ($R^2 = 0.604$ for self-assessment; $R^2 = 0.472$ for nurse assessment).

Key conclusion: Unmet environmental and social needs are widespread and linked to biopsychosocial factors. Nursing interventions must address these to enhance equity and improve well-being in this vulnerable group.

P-0888

Health and self-care needs of older women caregivers living in poverty in a high-income country: a descriptive qualitative study

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Introduction: Being an older adult and a family caregiver is associated with health deterioration and quality of life decline. Living in poverty in a high-income country is often coupled with the scarcity of support services and difficulties in accessing the formal care system. All of this leads to caregiver overload and neglect of one's own health. The objective of the study is to understand the perceptions of women caregivers living in poverty in a high-income country regarding their health and self-care needs.

Methods: A descriptive qualitative study was conducted through interviews with 17 older women family caregivers living in poverty. A reflexive thematic analysis was carried out in search of emerging themes. The principles of the Declaration of Helsinki were followed, and an ethics committee of the University of Almería approved the study (code: EFM 313/24).

Results: The mean age of the participants was 73.35 years (SD = 6.60), and the majority were primary caregivers for their husband ($n = 15$; 88%). From the data analysis, three main themes were developed that represent the health and self-care needs perceived by the participants: (1) "Need for a comprehensive self-care approach," (2) "Challenges of caregiving in daily life," (3) "Alternatives for caregiver support."

Key conclusion: Older women family caregivers living in poverty in a high-income country need support from formal systems for comprehensive care that minimizes the effects of caregiver overload on their quality of life and daily life.

Short poster presentation

Long-term care

P-0889

Advanced care planning: identification and initiation in the inpatient setting—a quality improvement project

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Background: Advanced care planning (ACP) involves patient-centred conversations aimed to plan the forward trajectory of medical and holistic care needs. This project aimed to evaluate and improve both the quantity and quality of ACP discussions during admission on a geriatric ward, aiming to primarily increase the number of ACPs completed then evaluating the breadth and quality of the information covered in these discussions.

Methods: During cycle 1, we introduced an Advanced Care Practitioner. Interventions in the subsequent cycle included posters, whiteboards and staff survey. Cycle 3 interventions included prompt charts and focused education.

Data collection consisted of the number of individuals identified/ACP conversation initiated, domains, role of professionals initiating discussions and whether they were uploaded to universal care plan.

Results: In cycle 1, we identified that 65% of the patients admitted would benefit from ACP. Of this, 45% had ACP initiated. The advanced care practitioner conducted 30% of the conversations with the other 70% being commenced by doctors and allied professionals. In cycle 2, we identified 68% of the patients admitted would benefit from ACP. However, there was a decrease in the number of conversations held. The staff survey indicated a need for further education.

Cycle 3 noted overall improvement overall in identification and initiation of conversations, with better coverage of the domains.

Conclusion: This study identified a need for proactive initiation of ACP, and the importance of education and support to facilitate these conversations.

Poster

Long-term care

P-0891

Long-term care risk among older people with unknown health status in Japan: insights from the integrated implementation of health services and long-term care prevention

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Background and Aims: Japan's super-aged society requires integrated approaches for maintaining health and preventing frailty. Since FY2020, regional governments have promoted combined health services and long-term care (LTC) prevention. As part of these efforts, outreach support for individuals with unknown health status has also

been implemented. This study aimed to examine the future LTC risk among older people with “unknown health status,” defined as those not undergoing health checkups or using medical or LTC services.

Methods: We used the JHPOP (Japanese Integrated Healthcare Program for Older People) database, based on KDB data from FY2020–2022 provided by two regional unions and six municipalities. Of 1,975,384 older people with follow-up data, 1,343,501 individuals who were not certified for LTC in FY2020 and had available data for LTC status in subsequent years were analyzed using logistic regression. The reference group consisted of individuals who had received health checkups or used medical and/or long-term care services in the past year (known group).

Results: Among the unknown group in FY2020, 14.5% were newly certified as requiring LTC level 1 or higher in FY2021–2022, significantly more than in the known group. Logistic regression adjusted for age and sex showed an increased risk in the unknown group (OR: 1.38; 95% CI: 1.33–1.42; ref: known group). Similar trends were observed when stratified by age and sex.

Conclusions: Older people not engaging in health checkups or care services face a higher risk of future LTC needs. This population may include those with undetected conditions such as cognitive decline, highlighting the need for proactive outreach to connect them with appropriate services.

P-0892

Provision of specialist services to nursing home residents in Ireland: an online survey of specialist service providers

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Background: The Irish nursing home sector comprises a diverse range of providers, including private entities—both commercial and not-for-profit—as well as state-funded public nursing homes. Significant discrepancies in access to specialist services for older people in nursing homes have been highlighted.

Methods: We conducted an online cross-sectional survey of specialist service providers to characterize care for nursing home residents and gather insights on key principles for future service delivery. The 26-item survey was developed collaboratively with key stakeholders and in line with the Checklist for Reporting Results of Internet E-Surveys (CHERRIES).

Results: A total of 106 specialist health professionals completed the survey, representing Geriatric Medicine, Palliative Care, and Psychiatry for Older Persons (27 medical, 59 nursing, and 63 health/social care professionals). The majority ($n = 123$, 84%) provided a service to Nursing Home residents, most commonly using a liaison model of care where they provided recommendations for the Nursing Home staff or General Practitioner to implement ($n = 56$, 58%). Joint team conferences with nursing home staff were rare (8%), as were scheduled rounds by specialists (10%). Providers most frequently addressed non-cognitive dementia symptoms (50%) and mobility issues (47%). While 63% favoured direct care provision as the optimal model, key barriers included workforce capacity, access to technology, and governance issues. There was strong agreement

that current services are inadequate and fragmented, highlighting the need for an agreed clinical governance model.

Main conclusions: This survey highlights perspectives of service providers on important gaps to be addressed in specialist service provision in Irish nursing homes.

P-0893

Preparedness for outbreaks of (new) viral respiratory tract infections in nursing homes: lessons learned from the COVID-19 pandemic (CIAO-study)

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Introduction: In nursing homes (NHs), infection prevention and control (IPC) measures are needed to prevent viral respiratory tract infections like COVID-19 and Influenza. However, these measures can impact residents', relatives', and healthcare professionals' quality of life and work. In the CIAO study, we investigated lessons learned from the COVID-19 pandemic regarding proportionality of IPC measures in NHs.

Methods: This was a mixed-method study. First, we used qualitative group interviews and collected IPC documents from 32 Dutch NH organizations to investigate how NHs were prepared for outbreaks of COVID-19 and Influenza. Second, we followed 24 outbreaks prospectively and executed qualitative interviews to study how organizations executed their IPC strategy and what the corresponding barriers and facilitators were. Third, we investigated support for measures of residents, relatives, and healthcare professionals using focus group interviews.

Results: We learned three main lessons. First, IPC protocols should be customized to resident types (with(out) dementia) or situations to address experienced (ethical) dilemmas and barriers in executing IPC policy. Second, residents, relatives, and healthcare professionals have different perspectives on the proportionality of IPC measures. Involving them in IPC policy is important to enlarge support for measures and to address dilemmas. Last, clear and timely communication is key to successfully execution of and support for IPC policy.

Key conclusions: NH organizations have gained a lot of knowledge and experience regarding IPC and outbreak and crisis management. This should be implemented in outbreak management protocols to better prepare for future outbreaks or pandemics of (new) viral respiratory tract infections.

P-0894

The role of the family physician in elderly abandonment: a case report

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Introduction: The family physician (FP) follows the patient from birth to death, addressing not only medical issues but also their social

contexts. Portugal ranks fourth globally in the proportion of people over 65. Whilst this phenomenon may result from medical advances, geriatric care encompasses making sure they live with dignity and safety.

Case report: An 80-year-old woman with personal history of Alzheimer's disease went to an appointment with her family doctor and brought a routine blood work revealing an HbA1C of 13.5%. Physical examination showed poor hygiene and bilateral fungi infection from the groin to the knees. Despite a Mini-Mental State Examination of 12/30, she lived alone. Her only child resided abroad and paid for help cooking meals; her brother assisted with medical appointments. The FP immediately reported the case to the public prosecutor's office and prescribed metformin + SGLT2i, since the patient's dementia made it dangerous to implement insulin-therapy. In the period between our appointment and authorities acting, the patient visited the emergency department with a fractured arm and head trauma under unclear circumstances. Nowadays, the patient receives continuous care and has an HbA1C of 6.9%.

Conclusion: Primary care providers have a legal and moral obligation to report cases of elderly abandonment. Our patient was a victim of neglect and notifying authorities not only improved the patient's health but likely prevented further harm.

P-0895

The prescription day in Long-Term Care Facilities: an Italian Nationwide Survey on polypharmacy appropriateness

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Introduction: Older residents of Long Term Care Facilities (LTCFs) are highly frail and multimorbid, resulting in complex therapeutic regimens, often characterized by Potentially Inappropriate Medications and modifications of solid pharmaceutical formulations [1]. The Italian Society of Gerontology and Geriatrics, in collaboration with the ANASTE Humanitas Foundation, conducted a national multi-center day survey on October 1, 2024, to evaluate the appropriateness of drug prescription and administration in LTCFs residents.

Methods: The study involved 82 LTCFs in 12 Italian regions, which collected data on resident comprehensive geriatric assessment, chronic medications, and modified solid drug administration.

Results: 3400 residents (73.5% females) with a mean age of 85.1 years were enrolled. The residents had, on average, almost four chronic diseases, 54.6% were frail, 53.6% were living with cognitive disorders, and 19.5% had probable or confirmed dysphagia. 82.4% of residents take at least 5 drugs, while 33.5% take 10 or more. Among 16.288 solid drugs, trazodone, paracetamol, quetiapine, levothyroxine, bisoprolol, ramipril, pantoprazole, acetylsalicylic, furosemide were most prescribed. Of these, the 31.5% of the tablets were crushed and 28.2% of the capsules were opened. Therefore, an inappropriate

administration of 1.0% for the tablet and 0.5% for capsules, for the drugs previously, listed is found.

Key conclusions: The management of pharmacologic therapies in LTCFs is complex and may lead to relevant concerns for patient safety and nursing staff. The study highlights the urgency of targeted interventions that, by improving education on the appropriateness of prescriptions and drug administration, might ensure safety and quality of care in the LTCFs.

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P-0896

PIANO study: Prevention of pneumonIA in Nursing hOme

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Background: Pneumonia is the principal cause of infectious mortality in nursing homes (NH), often leading to hospitalizations and rapid functional decline. Preventing pneumonia in NH is crucial for improving residents' quality of life, reducing healthcare costs, and preventing disability.

Objectives: The main objective of the PIANO study is to assess the effectiveness of e-learning training for NH healthcare teams on pneumonia prevention and management. The effectiveness will be measured by a reduction in pneumonia incidence after one year, as well as its impact on healthcare costs, hospitalizations, and the evolution of residents' dependency levels.

Methods: PIANO is a prospective, multicenter, randomized study. Participating NH were divided into an intervention group, receiving e-learning training, and a control group, maintaining usual practices. Each NH should include 25 residents, monitored for one year with monthly data collection on pneumonia events and hospitalizations.

Results: The study included 140 NH across France enrolling 3, 480 residents between October 2020 and December 2021. Among them, 421 had at least one pneumonia during the follow-up year. The Odds Ratio (OR) for pneumonia incidence was 0.97 [0.67, 1.38] with a p-value of 0.849, indicating no significant difference.

Conclusion: The results suggest that the training provided to NH healthcare teams did not significantly reduce the incidence of pneumonia. However, the context of the COVID-19 pandemic, which heavily impacted staff and resources in NHs, likely impacted the effectiveness of the intervention. Future research should explore alternative strategies for pneumonia prevention and management in NHs, considering these challenges.

P-0897

Eating difficulties, weight status and cognitive impairment among Danish Nursing Home Residents: a prevalence study

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Introduction: Eating difficulties, including dysphagia, are a significant concern for nursing home residents. This study explored eating abilities (including swallowing) and associations to weight status and cognitive impairment.

Methods: This cross-sectional multicenter study included nursing home residents from five Danish municipalities. Information was extracted from the medical files e.g., cognitive impairment, Body Mass Index (BMI), and function in activities of daily living. Eating difficulties, including dysphagia were assessed with the Minimal Eating Observation Form version II (MEOF-II) and the Volume-Viscosity Test (V-VST).

Results: The 306 residents included had a median age of 86 years, 61% women. Cognitive impairment was present in 48%, 8% were underweight, and the residents were in median dependent in three out of six ADL activities. The prevalence of eating difficulties was 75% using MEOF-II while 38% of residents had swallowing impairment according to V-VST. Residents who were under-/normal weight had more eating difficulties than overweight and obese residents. Residents without cognitive impairment had more eating difficulties than residents with cognitive impairment.

Conclusion: Eating and swallowing difficulties are common among nursing home residents. Those without cognitive impairment and with underweight or normal BMI experience more challenges. The nursing home residents had significant difficulty in consuming more than 5 ml of liquid.

P-0898

Detection of respiratory viruses in environmental samples from a Swedish nursing home

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Introduction: Nursing home residents constitute a group of frail older adults who are especially vulnerable to respiratory viruses. However, the prevalence of viruses in their environment is not well studied.

Methods: Environmental samples were collected weekly from communal areas (dining/activity rooms) in four residential wards of a nursing home. Wards A–C were located in the main, original building, while Ward D was in a newer, separate building. Samples were taken from high-contact surfaces (door handles at the entrance to each residence) and no-contact surfaces (exhaust ventilation outlets in the ceilings of communal areas). All samples were analyzed using digital

droplet PCR for SARS-CoV-2, RSV-A, RSV-B, and influenza A and B viruses.

Results: A total of 214 swabs were collected between November 2023 and August 2024. Viruses were detected in 15 samples: 10 from ventilation outlets and 5 pooled from door handles within the same ward. Positive samples included RSV-A (10/15), SARS-CoV-2 (3/15), RSV-B (1/15), and a combination of RSV-A and SARS-CoV-2 (1/15). Most positives were from Ward A (5/15), where RSV-A, RSV-B, and SARS-CoV-2 were detected. Wards B and C each had four positive samples, while Ward D had only two.

Key conclusions: Despite the use of sensitive PCR methods and broad temporal sampling, viruses were detected in only a small proportion of samples, suggesting effective hygiene practices. Detection on exhaust ventilation surfaces supports the airborne presence of viruses in the built environment.

P-0899

How do care home residents living with HIV in the United Kingdom and Ireland compare to the general care home population?

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Introduction: The number of care home residents living with HIV is expected to increase over the next decade, but little is known about the present demographics of this group.

Methods: A cross-sectional descriptive analysis of medical records of care home residents who access HIV care at seven centres in the UK and Ireland.

Results: The sample comprised 62 people with a median age of 61 (33–92) years; 81% were male, 56% heterosexual, 60% were born in the UK or Ireland and 92% were virally suppressed. The median time living with HIV was 21 (1–40) years, and living in a care home was 3 (0.5–19) years. In the last year the median total number of contacts with HIV services was 4(0–28) with 2 (0–9) HIV viral load blood tests. Frailty (clinical frailty scale) was high at 94% compared to 11%

in community dwelling people with HIV and 52% in general care home residents. Multimorbidity (Charlson comorbidity index [CCI]) was more common with 52% having a CCI of 5 + compared to 7% in the general care home population. Dementia was less common at 35% compared to a 58% in general care home residents. Polypharmacy (5 + non-HIV medications) was common at 90%, compared to 29% in community dwelling people with HIV and 49.7% in general care home residents.

Key conclusions: Care home residents with HIV are greater impacted by geriatric syndromes than both general care home residents and community dwelling people with HIV suggesting this group may benefit from increased support from geriatricians.

P-0900

Data-driven quality development in long-term care: insights from the Swiss Quality Indicator Program NIP-Q-UPGRADE

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Introduction: Ensuring high-quality care in LTCFs requires a structured, data-driven approach. The National Implementation Program, NIP-Q-UPGRADE, addresses challenges in using National Medical Quality Indicators (MQI) for quality development [1]. This study tests a training program supporting LTCFs in using MQI results for continuous quality development [1,2].

Methods: Grounded in implementation science, the study follows the EPIS framework [3]: Exploration (A) involves contextual analysis; Preparation (B), intervention design based on contextual findings and intervention mapping; Implementation (C), pilot testing in a convenience sample. This led to a toolbox where trained facilitators coach LTCF quality leaders, who then lead quality projects in their facilities. The program includes online and in-person training, practical tools, guided tasks, and a helpdesk, structured around three axes: (i) MQI Results Literacy, for data-informed decision-making; (ii) Impactful Actions, using the PDCA cycle [4,5]; (iii) Sparking Culture, fostering leadership, resident involvement, and peer networking. Toolbox is tested in 25 LTCFs across three linguistic regions.

Results: Results of EPIS' Phases A and B contributed to the program's design, integrating empirical evidence and key implementation strategies [6]. The pilot study (C) evaluates acceptability, feasibility, fidelity, and costs using mixed.

Methods: Semi-structured interviews, focus groups, surveys, and activity logbooks. Results expected in fall 2025, will inform adaptations to enhance feasibility and sustainability in Swiss LTCFs [7].

Key conclusions: By addressing MQI data challenges, this study highlights the potential of a structured, data-driven quality development approach, guiding future refinements and scaling strategies in Swiss LTCFs.

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P-0901

Staff-identified palliative care needs among programs of all-inclusive care for the elderly (PACE): a survey study

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The Program of All-Inclusive Care for the Elderly (PACE) is an interdisciplinary, capitated care model that brings nursing home-level care to dual-eligible older adults living in their own communities. Because serious illnesses are prevalent among PACE participants, PACE programs are federally required to include palliative care within their networks. However, the specific palliative care needs of this unique population have not been characterized, limiting the development of palliative care-PACE integration. To understand PACE staff perspectives on palliative care, we conducted a palliative care needs assessment survey among 81 staff (including CNAs, RNs, OT/SLP/PT, and prescribing providers [MD, NP, PA]) at a PACE program with three sites in New York. Providers were asked if they would like to increase access to palliative care service for their patients, about the most common ways a palliative care specialist could help their patients, and the domains of palliative care in which most of their patients could benefit from additional services. More than half (53%) of respondents agreed that they would like to increase access to palliative care services. Palliative care was seen as most helpful in pain management (80%), caregiver and family support (57%), and psychiatric symptom management (46%). In contrast, respondents identified the most prevalent needs in their patients in caregiver support (69% of patients), advance care planning and goals of care conversations (67%), and psychiatric symptom management (63%). These findings suggest high psychosocial palliative care needs

among PACE participants, potentially informing the evolution of uniquely adapted and integrated palliative care services.

P-0902

Palliative care needs assessment in NY nursing homes: psychiatric symptoms

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Palliative care is specialized medical care aimed at improving quality of life for individuals with serious illnesses. Serious illness is prevalent among nursing home (NH) residents but integration of palliative care in NHs remains limited. Mental health comorbidities predict NH placement among older adults with serious illnesses, so the mental health domain of palliative care may be particularly critical in this setting. We conducted a palliative care needs assessment survey of 597 staff across seven NHs in New York. Our survey assessed staff experiences with specific domains of palliative care. Here, we present findings pertaining to the mental health components of palliative care: what proportion of respondents' patients would benefit from psychiatric symptom management, the frequency with which respondents addressed psychiatric symptoms, and respondents' comfort managing psychiatric symptoms. Over half of respondents (60.5%) identified psychiatric symptom management needs in at least half of their patients. Nearly half of respondents treated psychiatric symptoms at least weekly (49.2%) and felt comfortable treating psychiatric symptoms (48.7%). Staff with professional palliative care experience were likelier than those without to identify psychiatric needs in their patients (aOR 1.62 [1.07, 2.43]), treat psychiatric symptoms at least weekly (aOR 1.97 [1.29, 3.01]), and report comfort with treating psychiatric symptoms (aOR = 1.54 [1.01, 2.35]). Professional experience in palliative care was associated with increased recognition of psychiatric symptoms, and increased frequency and comfort in managing these symptoms. This suggests that workforce development in palliative care for NH staff may improve capacity in managing challenging behavioral health comorbidities.

P-0903

Home sweet home: the impact of primary healthcare delivery in a nursing home in a rural area of Portugal

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Introduction: In November 2023, our family medicine team was assigned to care for residents of a nursing home with occasional psychiatric support. These residents previously visited their registered health center for healthcare needs and chronic disease management, such as diabetes and hypertension. This led to logistical challenges, such as arranging transport and handling administrative tasks. Since assuming responsibility, we have been providing healthcare on-site, offering chronic disease management and acute care consultations.

Methods: This study analyzes the impact of our work from November 2023 to June 2024, focusing on primary healthcare services. It includes an assessment of new diagnoses, preventive activities, and medication reconciliation.

Results: We provided care for 22 institutionalized residents, one of whom passed away. Of three eligible for colorectal cancer screening, two completed it (both negative); the third was entirely dependent. Eight had outdated vaccinations, particularly tetanus, which was updated. Pneumococcal vaccination was initiated for 20 residents, and all received flu and COVID-19 vaccines.

One resident was diagnosed with endometrial cancer, six with chronic kidney disease, one with diabetes, and one with osteoporosis. Three are undergoing anemia evaluation. Medication reconciliation was performed for seven residents.

Key conclusions: Older adults' care plays a significant role in our daily practice. Our focus on patients, their needs, and a holistic approach to care are central to our work. This study highlights the importance of proximity in healthcare delivery and emphasizes how crucial it is for primary healthcare teams to leave the comfort of their offices to enhance community health.

P-0904

Pain and interventions: interrelationships in intensive care

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Introduction: Pain is a subjective multidimensional experience, meaning that its intensity can only be assessed by the person experiencing it. Identification and assessment and appropriate treatment of pain in people in the Anaesthesia and Intensive Care Unit have been priorities and mainstays of research in recent years. The aim of this study was to analyse the relationship between the severity of pain in older people and the interventions undertaken in intensive care.

Methods: The study used a proprietary survey questionnaire including demographic and social data and standardised research tools: Nursing Activities Score; Critical Care Pain Observation Tool—Polish version.

Results: Among the 152 patients over 60 years of age hospitalised in the Anaesthesia and Intensive Care Unit, severe pain (≥ 5 points) occurred in 25% of the subjects, while 50% of the subjects had pain scores between 2 and 4 points, indicating moderate pain. Spearman coefficient analysis showed a significant positive correlation between pain severity and nursing workload ($\rho = 0.812$; $p < 0.001$). A significantly positive correlation was found between pain severity and nursing activities such as oral toileting, dressing changes, and position changes ($\chi^2 = 72.38$; $df = 4$; $p < 0.001$).

Conclusions: The severity of pain in older people increases with interventions and staff workload, which highlights the importance of individual pain assessment and appropriate care planning in intensive care.

P-0905

Dysphagia and neurological deficits in older people after ischemic stroke—a retrospective analysis

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Introduction: Dysphagia is a common complication of ischaemic stroke coexisting with other neurological deficits representing a serious clinical problem especially in older people. The aim of this retrospective analysis was to assess the relationship between dysphagia and neurological brain deficits among older people.

Methods: A retrospective analysis of medical records was carried out in the neurology department. From the medical records obtained, the number of days of hospitalisation, results of scales National Institutes of Health Stroke Scale (NIHSS) scores and the screening swallowing test according to Daniels 1997 were obtained.

Results: The results of the screening swallowing test performed after admission to the ward showed the presence of moderate-to-severe dysphagia in 42.9% of the subjects, while no dysphagia was found in 26.1% of the subjects. Due to the presence of contraindications to water administration, the test was not performed in 31.0% of the subjects. There was a correlation between dysphagia extinction and neurological deficits—patients on the first day of hospitalisation who were unable to perform the swallowing test had a significantly higher NIHSS score (21 [16–23]) than those with dysphagia (11 [8–15]) and without dysphagia (6 [4–8]; $p < 0.001$).

Conclusions: Dysphagia significantly correlates with neurological deficits—the more severe the dysphagia, the higher the NIHSS score, indicating prognosis and increasing the risk of complications after ischaemic stroke.

P-0906

Aggression of older people conditioned by demographic and social variables

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Introduction: Aggression among older people is a growing social problem, the understanding of which requires an analysis of the demographic and social determinants affecting its occurrence. The aim of this study was to assess aggression conditioned by demographic and social variables.

Methods: The study was conducted using the Hospital Anxiety and Depression Scale (HADS). The distribution of scores divided the subjects into: no disturbance/borderline state (0–3 points) and with aggressive behaviour (4–6 points).

Results: Among the 342 people over 60 years of age, men were more likely than women to exhibit aggressive behaviour (51.2% vs 37%; $p = 0.01$). A relationship was shown between the occurrence of aggression and: marital status (married persons experienced aggression more often than those who were single or widowed/widowed—47.6% vs 64.7%; $p = 0.02$); residence structure (persons living with a spouse and family showed aggression most often, while single persons showed no aggression/borderline status—48.6% vs 68.4%; $p = 0.02$); education (those with lower levels of education

experienced aggression, those with higher levels of education experienced aggression least often—73.0% vs 41.0%; $p < 0.001$) financial situation (those rating their financial situation as very bad/borderline showed aggression more often, those rating their financial situation as very good did not experience aggression—81.3% vs 70.0%; $p < 0.001$).

Conclusions: The study found that aggression in people over 60 is more common in men, those who are married, living with a spouse and family, with lower education and poorer financial circumstances.

Short poster presentation

Long-term care

P-0907

Impact of available social resources on discharge planning in an intermediate care hospital: protocol of a mixed-methods study

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Background: In Catalonia, the healthcare system promotes integrated and person-centered care, where effective discharge planning is crucial. Intermediate care hospitals facilitate the transition from acute care to the community, particularly for older patients. However, social barriers frequently delay discharge, especially in semi-rural regions with limited access to support services. The Terres de l'Ebre region, with its aging population and complex social landscape, exemplifies this challenge.

Objectives: This study aims to describe the social needs of patients admitted to an intermediate care hospital and assess how these needs impact discharge planning. It also explores gaps in the current portfolio of social services and unmet demands.

Methods: This is a recently initiated prospective descriptive study using a mixed-methods design. Quantitative data are being collected through a structured form covering sociodemographic, functional, cognitive, and social variables. In parallel, semi-structured interviews are being conducted with patients and caregivers to explore their lived experiences of discharge barriers. The study began on April 1st, 2024.

Expected results: The study aims to identify social factors contributing to prolonged stays or discharge delays, including resource shortages, coordination gaps, and systemic barriers. It is expected to reveal the existence of unmet social needs not addressed by current services. Preliminary findings will be presented at the EuGMS Congress.

Conclusions: This protocol represents the initial phase of a broader effort to strengthen discharge processes in intermediate care through a better understanding of social determinants. The findings will inform future strategies to improve care transitions and promote equity across different territories, each with their own social and healthcare realities.

Poster

Long-term care

P-0908

Supporting people living with dementia in long-term care: factors influencing person-centred care in Portugal

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Introduction: A growing body of research has examined the implementation of person-centred care (PCC) in residential care settings. This cross-sectional study investigates variations in PCC across Portuguese long-term care facilities and explores their associations with institutional and organizational factors, including legal status, resident demographics, and staff-related variables.

Methods: Data were collected through an anonymous nationwide online survey administered to care home directors between January and June 2024. PCC was assessed using the Person-Centred Care Assessment Tool (P-CAT), and bivariate and multivariate statistical analyses were conducted using RStudio.

Results: Of the 2,588 residential care facilities currently operating in Portugal, 424 (16.4%) participated in the survey. Most respondents (81.56%) were directors of non-profit cooperative and social sector organizations, managing an average of 39.63 residents ($SD = 21.99$), of whom 31.66% had a dementia diagnosis. The mean P-CAT score was 51.32 ($SD = 5.66$). Higher P-CAT scores were significantly associated with the proportion of people living with dementia (PLwD), perceived adequacy of the worker-to-PLwD ratio, and dementia-specific training; neither facility ownership type nor monthly fees demonstrated a significant association with PCC. Additionally, staff knowledge of PLwD preferences, daily routines, and life histories correlated positively with P-CAT scores.

Key conclusions: These findings highlight the importance of institutional and organizational determinants in fostering person-centred dementia care within Portuguese long-term care settings. Funding by FCT to: SINDIA (2022.04684.PTDC), CEGOT (UIDB/04084/2020), RISE (LA/P/0053/2020).

P-0909

Palliative care in the community and the relevance of percutaneous endoscopic gastrostomy placement on quality of life and survival

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The study explores the impact of percutaneous endoscopic gastrostomy (PEG) placement on survival and quality of life in patients under community palliative care in northern Portugal. This observational, retrospective cohort study involved 54 patients monitored by a

specialized palliative care team between March 2020 and December 2023. Key outcomes assessed include survival rates, main diagnoses leading to PEG requests, and the influence of PEG placement on survival and place of death. Statistical analysis revealed that survival time was significantly longer in females compared to males ($p = 0.003$). The main reason for PEG requests was dysphagia, especially in patients with dementia and oncological diseases. No significant correlations were found between PEG placement and age at death, survival time or palliative performance scores (PPS). However, the study identified a moderate positive correlation between follow-up time and survival after PEG placement ($r = 0.457$, $p < 0.001$) and a low rate of complications (11% of patients with minor complications and none with severe complications). The study emphasizes the role of timely PEG placement and social support in improving patient outcomes. Additionally, patients whose PEG was requested by the study's palliative care team demonstrated better survival outcomes compared to those referred by other teams. The findings underscore the need for individualized decision-making in PEG placement and suggest that this procedure is safe and increases patient longevity and quality of life, avoiding the high rate of complications associated with nasogastric tubes in fragile patients in need of specialized palliative care.

P-0910

Long Term Care Facility physicians' roles in advance care planning discussions with health care proxies of residents who lack medical decision making capacity

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Introduction: Advance care planning (ACP) promotes care coherent with patient wishes. ACP participation requires medical decision-making capacity (DMC). ACP participation rates are generally low, and many people lose DMC before formally expressing their wishes for future care. Furthermore, changes in medical situations and unpredictable emergencies make alternative models of ACP necessary for people who have lost medical DMC. We have developed a model specifically for the long-term care context, called ACP by proxy. Information is needed about the ways in which these discussions take place. Here, we examine the roles of physicians in ACP discussions with health care proxies of people who no longer have medical DMC. **Methods:** ACP by proxy discussion for 15 residents in Long Term Care Facilities (LTCF) were audio-recorded during a single-arm pilot intervention study and transcribed verbatim. Discourse analysis was conducted to examine the roles of physicians in these discussions.

Results: Physicians' roles included providing information about the residents' current health status, predicting future health conditions, describing illness trajectories and functional capacities, providing information about emergency treatment procedures, risks and benefits, giving advice about reasonable care that is in residents' best interests, and discussing end-of-life care. Involving healthcare proxies and LTCF professionals in these decision-making processes is a key element of these discussions.

Key conclusions: LTCF physicians play an integral role in ACP for people lacking DMC and draw upon their proximity to LTCF residents and their partnerships with other professional caregivers in order to promote informed anticipatory decision making on behalf of people who have lost DMC.

P-0911

Advance care planning by proxy in residential aged care facilities: roles of health professional facilitators

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Introduction: Advance care planning (ACP) is effective in promoting care that is coherent with patient wishes and values. ACP requires patients to maintain decision making capacity (DMC). Several calls have been made for advance care planning models for people with dementia, and for people who have lost DMC (ACP- by proxy, ACP-bp). The ways in which these models work, and the roles of the people involved, are yet to be explored. Here, we examine the role of residential aged care health professional (RACF) ACP-bp facilitators in these discussions.

Methods: Semi-structured interviews with RACF health professional, ACP-bp facilitators ($n = 15$), are combined with audio-recorded ACPbp discussions collected as a part of a single-arm pilot intervention study. Thematic analyses were conducted to identify recurring and relevant themes, and these were triangulated post-hoc.

Results: Healthcare professionals described their role as facilitators in ACP-bp as providing counselling, support and mediation. In the ACP-bp discussions, the facilitators draw on their medical knowledge, experience working with people at end of life and without DMC, their proximity to RACF residents, and their liaising role between physicians and health care proxies to guide discussions and co-create treatment plans for future medical emergency.

Key conclusions: RACF health professionals provide a unique and highly valuable skill set and a privileged knowledge of RACF residents, their families and treating physicians which places them well to conduct ACP-bp in RACFs. Furthermore, when provided with the necessary resources and conditions, they can be champions for ACP-bp and are an integral part of ACP-bp implementation.

P-0912

Adherence to antibiotic prescribing guidelines for urinary tract infections regarding antibiotic choice in male nursing home residents

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Introduction: Urinary tract infections (UTIs) are common in nursing home residents, with frail older men at increased risk of severe complications. Current Dutch guidelines recommend broad-spectrum antibiotics over nitrofurantoin, also in frail older men without systemic symptoms. The rationale is that the prostate is always affected, meaning tissue invasion is always present. This study examines adherence to Dutch guidelines for UTI treatment regarding antibiotic choice in male nursing home residents over time.

Methods: This study analyzed data from the Dutch Sentinel Nursing Home Surveillance Network (2021–2024) from the program ‘Learning from Data’ of Amsterdam UMC. The study population included male nursing home residents with suspected UTIs without systemic symptoms, excluding those with an indwelling urinary catheter. The primary outcome was adherence to Verenso guidelines regarding antibiotic choice. A generalized linear mixed model (GLMM) assessed adherence trends, accounting the clustering of nursing homes and adjusting for Charlson Comorbidity Index (CCI).

Preliminary results: The analysis included 292 male nursing home residents who received antibiotic treatment for suspected UTIs. The percentage nitrofurantoin prescriptions differed per year (2021–2022: 45%, 2022–2023: 54%, 2023–2024: 35%), with a significant decline from 2022–2023 to 2023–2024 (adjusted OR: 0.46, 95% CI: 0.25–0.86, $p = 0.015$).

Key conclusion: Despite improved guideline adherence over time, a substantial part of male NH residents with suspected UTI are treated with nitrofurantoin. We recommend investigating the motivation behind this. Additionally, we recommend investigating the effectiveness/therapy failure of nitrofurantoin in frail older men with UTI, since little is known about this.

P-0913

Program for intravenous antibiotic administration in nursing homes developed by a Geriatrics Care Unit

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Introduction: To describe and evaluate an intravenous (IV) antibiotic administration protocol coordinated between a hospital pharmacy and a liaison geriatric unit (LGU).

Methods: A retrospective observational study including patients in nursing homes (NH) within the area of a University Hospital in the Community of Madrid, with an infection treated with IV antibiotics. Antibiotics were prescribed through the hospital’s medication prescription program between January 2022 and December 2023. IV Administration was coordinated by a LGU and administered at the NH itself. Information collected included demographic, clinical and functional variables; patient location; infection type; antibiotic therapy received; and the progression of the infectious process.

Results: A total of 90 patients were included in the study, with a mean age of 89 years, 73.1% female, 83.7% with moderate or severe dependence, 48.8% with dementia, 36.1% with malnutrition, 35.2% with dysphagia, and 34.3% diagnosed with terminal illness. A total of 108 antibiotics were administered (carbapenems 46%, amoxicillin-clavulanic acid 33.3%, piperacillin-tazobactam 5.6%, cephalosporins 3.7%, glycopeptides 4.7%, and others 10.1%). 10% of the patients received more than one antibiotic cycle, and 4.4% required antibiotic combination therapy. The indications were: urinary infections (41.7%), respiratory infections (41.7%), skin infections (0.9%), osteoarticular infections (8.3%), and others (2.8%). 46.6% of the patients were admitted to medical services with early discharge to a nursing home to complete IV therapy (geriatrics 32.2%, internal medicine 5.5%, traumatology 4.4%, and others 4.5%). 43.3% of the patients were assessed remotely after a consultation with the NH doctor, thus avoiding transfer to the emergency department, while 10% were assessed in the emergency department itself. The average duration of the antibiotic therapy was 7.2 days. 72.2% of the infections were resolved, 12% required hospital readmission due to poor

progression, 5.6% needed a change in antibiotics, and 17.6% died during antibiotic therapy or within a week after completing it.

Conclusions: Three-quarters of patients in a nursing home receiving IV antibiotics prescribed by a geriatric care unit of an University Hospital demonstrated favorable clinical outcomes. This prescription model facilitates a reduction in hospital stays while ensuring continuity of care for patients in nursing homes.

P-0914

Interdisciplinary dynamics within a nursing home: what contribution of an advanced practice nurse ? A two-year review.

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Introduction: During the 2023 EUGMS congress in Helsinki, we analyzed the follow-up of residents presenting chronic diseases in a french countryside nursing home. Two years after the arrival of an advanced practice nurse (APN), the time has come to assess expected improvements.

Methods: Follow-up data of the residents were extracted from the medical files and analyzed in line with national recommendations. Every resident suffering from cardiopathy and/or type 2 diabetes according to their medical history was selected, as they were the two most frequent chronic conditions in our population. The interdisciplinary follow-up of 39 residents—25 suffering from cardiopathy and 20 from type 2 diabetes—is detailed. We try to stress out some leverage in line with the duties of an APN.

Results: Twenty-one patients suffering from cardiopathy, [84%] had undergone a cardiologic consultation, 64% during the last year. As it comes to diabetic patients, real improvement was equally noticed in the cardiologic and ophtalmologic follow-up; slighter in adapted physical activity and dentistry. Besides, as 2023 qualitative data from the NH healthcare workers figured out ways for improvement, interdisciplinary communication appeared to be at the top of the requests. The APN has worked effectively in this direction.

Conclusion: The APN’s role in drawing up the personalized care plans has proved pivotal, as has smooth communication within the NH and between the NH and external support & resource settings.

Short poster presentation

Long-term care

P-0915

Sharing care home residents’ individual-level data between health and social care: the Data Sharing Partnership project

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Sharing care home residents' individual-level data between health and social care: the Data Sharing Partnership project.

Susan D Shenkin, Stephen Powell, Franz Gruber, Erin Cadger, Atul Anand, Pamela Linkstead.

Introduction: Individuals' health data is routinely recorded in electronic health records in primary and secondary care. Care homes collect extensive data about residents, and many now use electronic care planning systems. Linked data could be useful in care homes, healthcare and administration, to highlight change in condition, or trends in needs. This project aimed to link individual-level data held in care homes with health data, and co-design dashboards to display this to care homes.

Methods: In the DataLoch Trusted Research Environment, in partnership with NHS Lothian, the University of Edinburgh and care home partners 1) LoCH DaLi (Lothian Care Home Data Linkage project): we identified the partner care homes using the Unique Property Reference Number, and co-designed a dashboard of resident-level health information. 2) Data Sharing Partnership: We worked to ingest social care data, and co-designed a dashboard to display linked health and social care data.

Results: We formed a successful partnership with three care providers (four care homes). We established the ethical, governance processes required for data transfer and linkage and the related agreements. Metadata headers from care planning software were sent to DataLoch, and dummy data created. Dashboards were created using dummy data. These were shared with care home managers, with positive feedback that these would be useful, particularly with sequential reports.

Key conclusions: The ethical and governance framework at this interface between health and social care is complex. Data sharing has great potential, but needs to be built on strong partnerships and trust between all parties.

Poster

Long-term care

P-0916

Care pathways to reduce avoidable hospitalizations of long-term care facility residents: a modified e-Delphi

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Introduction: Long term care facility (LTCF) residents are frequently frail or have multimorbidity that can lead to hospitalizations. These might cause complications such as cognitive decline, falls, hospital-acquired infections or loss of functional ability. Unplanned hospitalizations can be avoided by early detection of symptom changes and appropriate management, treating the resident in-house. Care pathways are a potential solution to facilitate timely decision-making. However, most of them are developed for hospitals and do not address the specific needs of LTCFs. Therefore, we aimed to build a care pathway specifically designed for the Swiss LTCFs setting.

Methods: We conducted a literature summary about existing care pathways and a focus group with experts to supplement the literature findings, especially regarding the needs of LTCFs. We built an exemplary care pathway which was then refined and finalized using a modified e-Delphi approach.

Results: There were two aspects the experts identified as crucial when building a care pathway to help decision making in LTCFs. On the one hand, a care pathway needs to integrate results from advance care planning conversations to ensure the consideration of the

resident's wishes. On the other hand, due to the diverse skill-grade mix in LTCFs, care pathways should always reflect the knowledge and expertise of the target staff that will use them.

Key conclusions: LTCFs are unique organizations with diverse staff caring for a distinct population. Building care pathways to facilitate decision making regarding avoidable hospitalizations can help, but they need to be flexible to accommodate this diversity.

P-0917

Reduction of catheter-associated urinary tract infections with polyhexanide solution irrigation in geriatric patients

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Lower urinary tract catheters are a common cause of urinary tract infections, especially in geriatric patients with indwelling catheters. These infections are a major source of antibiotic-resistant pathogens such as *Staphylococcus aureus*, *Enterococcus* spp., *Pseudomonas aeruginosa*, *Escherichia coli*, *Proteus mirabilis*, and *Klebsiella pneumoniae*. Broad-spectrum antimicrobial agents like polyhexanide have been effective in removing the catheter biofilm.

This study aimed to evaluate the effectiveness of a 0.02% polyhexanide solution and normal saline in decolonizing catheters compared to no intervention in geriatric patients requiring long-term lower urinary catheterization. The study included 40 patients with silicone catheters; 20 patients were irrigated with 0.02% polyhexanide solution and normal saline once weekly for four weeks, while no catheter intervention was performed in the other group of 20 patients (controls).

Urine cultures after four weeks showed a significant reduction in microbial count in catheterized patients irrigated with polyhexanide solution and normal saline compared to the no intervention group ($p < 0.05$). The findings suggest that 0.02% polyhexanide solution with normal saline can effectively reduce bacterial load on catheters, potentially lowering catheter-associated urinary infections rates and minimizing antibiotic use, thus avoiding antimicrobial resistance.

Keywords: Polyhexanide, Urinary catheter, Urinary infections, Geriatric patients.

P-0918

Sustainable implementation of the open exercise and nutrition study—strategies care staff perceive necessary to be supportive

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Introduction: The Older Persons Exercise and Nutrition (OPEN) RCT-study has previously shown a combination of sit-to stand exercises and protein-rich nutritional supplements to be beneficial for older persons living in nursing homes. This implementation study focused on developing means towards a sustainable, individualized implementation of the OPEN-concept. The aim of this study was to identify knowledge on implementation strategies that support care staff to integrate physical activity and improved nutrition for, and with, older persons at a nursing home.

Methods: Inspired by action research the researchers collaborated stepwise with care staff and management, also involving relatives and

the older persons, in how to integrate and individualize the OPEN-concept. This study focused on individual follow-up interviews with 20 care staff. The data was analysed using content analysis.

Results: Supportive implementation strategies described were the importance of the individuals understanding and agreeing on the concept, feeling safe exploring ways how to integrate and document it, on an individual as well as team level. During the process, descriptions of changed attitudes towards enabling the older persons to be more physically active occurred. Several perspectives relating to positive change for the older persons' well-being were found, that sparked a continuance, although some ethical cautions were raised.

Key conclusions: Strategies for sustainable implementation were suggested to be; accessible information and hands-on education to enable ownership and conviction to change to a health-promotive attitude. Still by being receptive to the daily status of each individual.

Key words: implementation, care staff perspective, sustainable strategies.

P-0919

The correlation between sexual attitudes toward older people and physical and mental health among middle-aged and older adults in Taiwan

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Introduction: Aging-related issues are gaining importance in Taiwan as it approaches super-aged society by 2025[1]. Sexuality is a core aspect of human life[2], however, research on aging sexuality in Taiwan is still limited. Most studies focus on sexual activity[3], dysfunction[4], or STIs[5], while few examine sexual attitudes toward older adults. Previous research has shown that such attitudes among middle-aged and older adults are linked to their sexual activity[6, 7]. Other studies have found that sexual activity is associated with physical and mental health[8, 9]. Yet, no studies have directly investigated the correlation between these attitudes and health outcomes.

Methods: To address this gap, a cross-sectional survey of 831 Taiwanese adults (born 1946–1980) was conducted using probability proportional to size sampling. Participants completed questionnaires on demographics, satisfaction with life (SWLS), loneliness (UCLA-8), self-rated health, and the Scale for Attitude toward Sexuality of Elderly (SASE).

Results: No significant associations were found in the full sample. However, loneliness was positively correlated with more conservative SASE scores among those living alone ($r = 0.184$, $p = 0.024$). Furthermore, among those living alone, Baby Boomers and widowed individuals held significantly more conservative SASE scores. ($F = 11.260$, $p = 0.001$ and $F = 3.758$, $p = 0.006$, respectively).

Conclusion: These findings indicate that attitudes observed in individuals living alone may reflect unmet sexual needs and social isolation. Further research should investigate potential mediating or moderating variables between loneliness and SASE scores, informing the development of targeted health promotion and social support policies.

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P-0920

Evaluating health outcomes in housecall program patients: a case-control study on hospitalization and Emergency Department visits

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Introduction: Healthcare systems use housecall programs to provide care to homebound patients. In this frail population, it is unclear how often they experience hospitalization or emergency department (ED) visits. Our aim is to compare hospitalization or ED use in patients over age 65 enrolled in a housecall program compared to ambulatory patients.

Methods: We conducted a case-controlled study with cases enrolled in a primary care housecall program and controls in the community on 10/1/2024. The primary outcome was combined hospitalization or ED visits in the previous year. Secondary predictors included demographic and comorbid health outcomes. Analysis involved comparison between both groups.

Results: Among 20,450 participants, we had 26 cases with a median age of 84 years (range 66–98) compared to 20,424 controls with a median age of 77 years (range 66–98). Cases experienced 84% outcomes compared to 28% in the control group ($p < 0.001$). Cases had a mean 16 hospital days compared to 1 hospital day in controls

($p < 0.0001$). Cases also experienced four or more health conditions (100%) compared to 66% in controls ($p = 0.0012$). 89% of cases were considered frail compared to 31% in the control group ($p < 0.001$).

Conclusions: We found cases were older, experienced more illnesses, and were more likely to be frail. Cases experienced an almost threefold increased odds of adverse health outcomes. Cases experienced more than 2 weeks of hospital days. This study highlights that older and sicker patient populations are enrolled in the housecall program and justifies a higher level of care for this population.

P-0921

Using trajectories to identify factors related to future care service use: the HUNT4 Trondheim 70 + study

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Background: Strategies to prevent functional decline and reduce care service use will be crucial in the coming years. Understanding factors related to future care service use can be valuable for implementing targeted measures to prevent functional decline. This study aimed to identify factors associated with distinct trajectories of municipal care service use among older adults over three years.

Methods: This prospective study included 1514 participants aged ≥ 70 years from the HUNT4 Trondheim 70 + study. Group-based trajectory modeling was used to identify distinct trajectories of municipal care service use retrieved monthly over three years. Multinomial regression analyses were used to evaluate the associations between baseline factors and trajectories.

Results: Analyses of factors such as self-reported and device-measured physical activity, physical and cognitive function, age, sex, education, living situation, and self-reported health are ongoing and will be presented at the conference.

Conclusions: This study will provide valuable insights into factors associated with future care service use, offering essential information for targeting preventive measures. Enabling more older adults to maintain their independence for as long as possible is crucial for their quality of life and will benefit society by reducing the overall need for care services.

P-0922

Sociotherapeutic living environments in long-term care for older people with severe mental illness (SMI) ‘This Environment Fits Like a Glove’

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Introduction: The living environment of older people with Severe Mental Illness (SMI) affects their behavior and wellbeing. In the Netherlands, several healthcare institutes for long-term care created specific ‘Socio-therapeutic Living Environments’ (STLs), addressing differences in needs in older people with SMI.

The study reveals how different STLs came to be and the important elements they are built on.

Methods: This is a qualitative study that uses semi-structures interviews in focus groups and observations in STLs.

Conclusions are drawn using thematic analyses.

Topics discussed include the different types of STLs and their characteristics, the matching of a person to a specific STL, flexibility and group dynamics, daily and other activities, the needed competencies and skills of health care workers, the collaboration, the bottlenecks and successes.

Results: An STL is a living environment that suits the persons’ needs, result of their clinical picture and personality. Important elements to build a specific STL are the needs for social contact, structure and stimuli, behavior of the person and specific way of guiding.

Bottlenecks are related to the matching of a person when there is no place in the required STL. Successes are related to person-centered care, less conflicts between the people with SMI and more professional development of healthcare workers. Tips and recommendations are given to further develop STLs.

Key conclusions: STLs build on important elements of persons’ needs, benefit the wellbeing and positive interaction of older people with severe SMI in long-term care. The study shows how to develop the STLs further.

P-0923

Medical measures and interventions during heatwaves in two nursing homes in Baden-Württemberg, Germany—an exploratory study

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Introduction: Europe is experiencing a rapid increase in heatwaves, posing severe health risks to older adults in nursing homes. Dehydration is a common yet underdiagnosed condition in this population, contributing to increased morbidity and mortality. Current diagnostic methods are often insufficient, and standardized preventive measures in nursing homes remain inconsistent. This study aims to evaluate the effects of heat on nursing home residents, the applicability of saliva osmolality as a dehydration marker, and the implementation of preventive strategies.

Methods: This mixed-method study includes a prospective and retrospective clinical analysis in two nursing homes in the federal state of Baden-Württemberg, Germany (May–September 2025). Participants (≥ 65 years) will undergo repeated assessments of saliva osmolality and inferior vena cava diameter (ultrasound) on hot days ($\geq 30^\circ\text{C}$) and non-hot days. Additional data from medical records, physician consultations, and nursing documentation will be collected. Qualitative interviews with physicians and nursing staff will assess awareness and management of heat-related health risks.

Results: Primary outcomes include the correlation between fluid balance and temperature, incidence of dehydration-related hospitalizations, countermeasures and emergency interventions. Secondary outcomes assess the feasibility of saliva osmolality measurements in nursing homes and the effectiveness of preventive interventions such as hydration protocols and medication adjustments.

Conclusion: The study will provide insights into the impact of heatwaves on older residents and the effectiveness of preventive measures.

The results, which will be presented at the conference, can contribute to the development of evidence-based heat action plans for nursing homes.

Short poster presentation

Long-term care

P-0924

High efficiency particulate air filtration to prevent symptomatic winter respiratory infections (including COVID-19) in care homes: the AFRI-c cluster-randomised controlled trial

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Introduction: Respiratory tract infections are common in care home residents. Portable high-efficiency particulate air (HEPA) filtration units remove airborne pathogens, but their effectiveness in reducing infections remains uncertain. This study evaluated whether HEPA units lower respiratory infection rates among care home residents.

Method: We conducted a cluster-randomised controlled trial across three winters (Sept 2021–May 2024). Ninety-one care homes were randomised to either install HEPA units in communal and private rooms or continue usual care. The primary outcome was the number of symptomatic winter respiratory infections in consented residents. Secondary outcomes included primary care consultations, antibiotic prescribing, hospitalisations, and staff absenteeism.

Results: 91 care homes were randomised: 47 to intervention (569 residents with private room HEPA); 44 to usual care (589 control residents). There were 390 infection episodes over 95,235 risk-days in the intervention group and 442 episodes over 102,579 risk-days in the control group. There was no significant difference in infection rates: 0.99 vs. 1.04 episodes per resident per winter (adjusted incident-rate-ratio [aIRR] 0.92; 95%CI 0.64–1.33; $p = 0.67$). No significant differences were observed for residents exposed to HEPA units in communal areas only. Secondary outcomes also showed no meaningful differences: primary care consultations (1.77 vs. 1.57; aIRR 1.21; 0.91–1.62, $p = 0.20$); antibiotic prescribing (1.55 vs. 1.47; aIRR 1.14; 0.85–1.53, $p = 0.36$); hospitalisations (0.87 vs. 0.80; aIRR 1.15; 0.75–1.76; $p = 0.53$) or staff absenteeism (5.04 vs. 5.76; aIRR 0.80; 0.55–1.16; $p = 0.24$).

Conclusion: Portable HEPA filtration units did not reduce winter respiratory infections among care home residents. Infection prevention should continue to focus on established control measures rather than relying on HEPA filtration alone.

Poster

Long-term care

P-0925

Timely documentation of cardiopulmonary resuscitation code and medical treatment preferences in nursing homes: observational study with electronic health record data from 2017–2022

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Background: Timely documentation of cardiopulmonary resuscitation (CPR) code and medical treatment preferences in electronic health records (EHR) is important for translating advance care planning conversations into actionable medical orders.

Aim: To examine documentation rates of CPR code and medical treatment preferences within the recommended first six weeks of admission in Dutch nursing homes (NHs) from 2017 to 2022.

Methods: This retrospective cohort used EHR from 74 Dutch NHs. We assessed the prevalence of documented CPR codes and medical treatment preferences within six weeks of admission, and the median days until first documentation. To examine whether timely documentation odds improved annually, logit generalized estimating equation models -accounting for clustering of residents within NHs- were used, stratified by NH care type, and adjusted for resident factors.

Results: We included 163,210 residents. CPR code and medical treatment preferences was documented within 6 weeks of admission for 88% and 64% of the residents, respectively. The median time to first documentation were 0.5–2 days across care types. Overall, between 2017 and 2022, there was an absolute increase in timely documentation of 10% for CPR code and 15% for medical treatment preferences. Recent admission year was associated with higher odds of timely documentation for both type of orders in psychogeriatric and somatic care, and for CPR in rehabilitation care.

Conclusion: Most residents had documented CPR code and medical treatment preference within the recommended six weeks of admission, with rates improving from 2017 to 2022. The improvement coincided with a national quality indicator introduced in 2018 and the COVID-19 pandemic.

Poster

Multimorbidity

P-0926

Associations of anaemia, hepcidin and mortality after a medical admission: results from the Copenhagen PROTECT study

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Aims: Anaemia is common and associated with a higher risk of death among older patients. Activation of the iron-regulating hormone hepcidin due to inflammation has been hypothesized to be one of the main causes of anaemia. We aimed to investigate whether anaemia and hepcidin levels at admission were associated with 180-day post-admission mortality in older patients.

Methods: The study was based on data and initial plasma samples from the Copenhagen PROTECT study, a prospective study of acutely admitted patients aged ≥ 65 years. Data included plasma hepcidin measured with an immunoassay (R-PLEX, Meso Scale Discovery), standard laboratory values including haemoglobin concentrations (presence of anaemia defined as haemoglobin < 12 g/dL in women and < 13 g/dL in men), Charlson Comorbidity Index, Clinical Frailty Scale, and 180-day all-cause mortality. We used cox regression to estimate hazard ratio (HR) for the risk of death within 180 days, data are presented with 95% confidence intervals (CI).

Results: A total of 1069 patients were included (53% women, mean age 79 years). Anaemia was present in 488 patients (46%), and 193 (18%) died within 180 days after admission. Anaemia was associated with a higher mortality risk in crude analysis (HR = 2.46, 95%CI 1.82–3.32, $p < 0.001$) and in multivariable analysis adjusted for age, sex, comorbidity, and frailty (aHR = 1.53, 95%CI 1.12–2.10, $p = 0.008$). Hepcidin was not associated with mortality (HR = 1.00, 95%CI 1.00–1.00, $p = 0.22$).

Key conclusions: In acutely admitted older adults, anaemia was associated with higher mortality within 180 days following a medical admission. Plasma hepcidin levels were not associated with higher mortality.

P-0927

Hepcidin in hospitalized older patients: associations with inflammation, haemoglobin, frailty, and comorbidity: results from the Copenhagen PROTECT study

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Aims: The etiology of anaemia in older medical patients is complex. Activation of the iron-regulating hormone hepcidin may be one of the causes. We aimed to determine hepcidin levels among acutely admitted older patients and study the association of hepcidin with inflammatory markers, haemoglobin, frailty, and comorbidity.

Methods: The study is a part of the Copenhagen PROTECT study, a prospective study of patients ≥ 65 years admitted to Copenhagen University Hospital, Bispebjerg and Frederiksberg, between November 2019 and November 2021. Plasma hepcidin and interleukin-6 (IL-6) were measured with an immunoassay (R-PLEX, Meso Scale Discovery). Standard panel biochemistry including C-reactive protein (CRP) and haemoglobin was measured using a fully automated COBAS 8000 analyzer (Roche diagnostics). Anaemia was defined as haemoglobin < 12 g/dL in women and < 13 g/dL in men. Frailty and comorbidity were assessed by Clinical Frailty Scale and Charlson Comorbidity Index, respectively. Associations were analysed using Pearson or Spearman correlation coefficients according to the distribution of data, presented with 95% Confidence Intervals (CI).

Results: Totally, 1030 patients were included (53% women, mean age 78 years). Anaemia was present in 494 patients (48%). Median hepcidin concentration was 60.1 ng/ml (interquartile range 21.8–126.2). We found a significant positive correlation between hepcidin and the inflammatory markers CRP ($r = 0.48$, 95% CI 0.43–0.52) and IL-6 ($r = 0.47$, 95% CI 0.43–0.52). No significant correlation was found between hepcidin and haemoglobin, frailty, or comorbidity.

Key conclusions: Hepcidin was correlated with biomarkers of inflammation in a population of older hospitalised patients, but not associated with comorbidity, frailty or haemoglobin.

Poster

Multimorbidity

P-0928

The evolution of an 89-year-old patient with occlusion of the basilar artery

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Introduction: About the 20% of the strokes happen on the posterior circulation of the brain. The acute occlusion of the basilar artery is associated with a high mortality rate due to the direct damage of the autonomic central nervous system. Among the patients who survive, the risk of being functional dependent is high. Sometimes patients can be treated with drugs or surgery (angioplasty, endosprothesis, suction or MERCI device) to perform fibrinolysis.

Medical History: An 89-year-old male patient with hypertension, dyslipidemia and ischemic heart disease, was admitted for rehabilitation. He suffered a stroke of the basilar artery due to an atherotrombotic clot; drug induced fibrinolysis was performed and surgery was dismissed because of age.

Medication: Omeprazole, Clopidogrel, Acetyl Salicylic Acid, Chlortalidone, Enalapril, Atorvastatin and Diltiazem.

Comprehensive Geriatric Assessment:

- Social: The patient was a widow.
- Functional: Previous Barthel-Index 100/100. Barthel-Index at admission 30/100.
- Cognitive: No cognitive impairment.

- Nutritional: Malnutrition risk. Dysphagia.

Case Report: The patient suffered multiple transitory strokes characterized by right upper and lower body hemiparesis and dysarthria, without any consequences, he then suffered a new stroke in the vertebrobasilar circulation, affecting the midbrain, right protuberance and the right occipital area. He presented urinary sepsis. The patient died three weeks later his admission.

Conclusions: this case shows the importance with family and patient communication about the prognosis and consequences of such events; highlighting punctual circumstances such as a low Glasgow score that show a short term higher mortality risk.

P-0929

Difficult-to-diagnose endocarditis

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Introduction: Infectious endocarditis (IE) is a bacterial infection with a high morbidity and mortality, especially when it affects to older patients. It is known this infection is mostly produced by streptococci and staphylococci, and it is more prevalent in patients with chronic diseases (cardiovascular, diabetes and cancer).

Medical History: An 88-year-old patient with history of heart failure, hypertension, TAVI, renal failure and a recent history of admission for fever, ITU and sepsis for *Enterococcus faecalis*.

Medication: Sitagliptin, Acetylsalicylic Acid, Amiodarone, Furosemide, Spironolactone, Bisoprolol, Allopurinol, Gabapentin, Duloxetine.

Comprehensive Geriatric Assessment:

- Social: The patient was a widow.
- Functional: Previous Barthel-Index 60/100. Barthel-Index at admission 0/100.
- Cognitive: Mild cognitive impairment. Delirium.
- Affective: Depression.
- Nutritional: Dysphagia. Malnutrition.

Case Report: The patient was admitted for an ischemic ictus, during the admission she was studied for febrile syndrome. A transthoracic echocardiogram was performed and it was reported as normal, the study was completed with a PET-CT, it showed endocarditis and the presence of an abscess on the implanted valve. The medical team ruled out the possibility of a surgical treatment, therefore, she was treated with targeted antibiotics for six months.

Conclusions: It is extremely important to get an early diagnosis of IE to promptly treat it because of its possible complications and high mortality rate.

P-0930

A case of hepatic encephalopathy that debuted with focal neurological signs

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Introduction: Hepatic encephalopathy (HE) is a frequent and serious complication of hepatic insufficiency; it is characterized by multiple

neurological manifestations which comprehend from mild to severe symptoms such as dysarthria and shaking to coma.

Medical History: A 78-year-old male with a history of hypertension, dyslipidemia, sigma cancer (pT3N0) treated with chemotherapy and surgery, metastasectomy of liver segments S3-S8, right suprahepatic artery embolization.

Medication: Dexamethasone, Quetiapine, Gabapentin, Sertraline, Polyethylene Glycol.

Comprehensive Geriatric Assessment:

- Social: Married.
- Functional: Barthel-Index-100.
- Cognitive: no cognitive impairment.
- Nutritional: high risk for malnutrition.

Case Report: The patient was admitted for convalescence and rehabilitation. One month later presented spontaneously somnolence, disorientation, proximal and distal right hemiparesis and flexing plantar cutaneous reflex. No fever, and no constipation. Cerebral CT scan showed no alterations, the blood analysis indicated elevation of ammonium (136 $\mu\text{Mol/L}$), urea and hepatic enzymes, showing a normal creatinine. The urine culture was positive and it was reported *K. pneumoniae*. The patient was treated with antibiotics, hydration and deprescription of medication with psychotropic effect.

Conclusions: Patients at risk of suffering hepatic decompensation, must be constantly assessed about risk factors that could precipitate this problem. It also is important to promptly treat infections, digestive bleeding, hypokalemia, renal insufficiency, dehydration, diuretics, acute hepatitis and constipation.

P-0931

Systemic lupus erythematosus in elderly: clinical characteristics and therapeutic strategies

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Introduction: Systemic lupus erythematosus (SLE) in elderly subjects (≥ 65 years) is a rare and poorly documented entity. This study aims to describe the epidemiological, clinical, and therapeutic characteristics of SLE diagnosed late in this population.

Materials and Methods: We conducted a cross-sectional study including 26 elderly patients diagnosed with SLE according to ACR/EULAR criteria. Clinical, biological, and therapeutic data were analyzed.

Results: The study included 124 patients with SLE, of whom 21% (26 cases) were elderly women. The mean age was 69.46 ± 8 years. The most frequently found medical histories included hypertension (46.15%), type 2 diabetes (26.92%), dyslipidemia (23.07%), as well as hypothyroidism and chronic renal failure (11.53% each). The onset of symptoms was progressive in the majority of cases (84.61%). The most frequent manifestations were joint (76.9%), skin (76.9%), hematological (61.5%), and neuropsychiatric (53.84%) involvement, while respiratory (26.9%) and cardiac (23.07%) involvement remained less prevalent. Sjögren's syndrome was

associated in half of the patients, scleroderma and hypothyroidism in 11.53% (3 cases) each, and rheumatoid arthritis in 3.84% (1 case). Corticosteroid therapy (57.7%) and antimalarials (84.6%) were widely used.

Conclusion: SLE in elderly subjects is characterized by a polymorphic clinical profile with a high prevalence of comorbidities. Tailored management is essential to improve prognosis and limit complications.

P-0932

Elderly-onset primary Sjögren syndrome

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Introduction: Primary Sjögren syndrome (pSS) is a systemic disease characterized by focal lymphocytic cell infiltration of exocrine glands in particular, salivary and lacrimal glands. Its diagnosis in the elderly population can be challenging and misleading in whom sicca syndrome can be related to senescence, comorbidities, or iatrogenesis. This study was undertaken to determine the epidemiological, clinical, and laboratory features of pSS among patients aged over 65 years.

Patients and Methods: A retrospective study of patients diagnosed with pSS at the Department of Internal Medicine in Taher Sfar University Hospital over 14 years, from 2010 to 2023. The diagnosis of pSS was made according to the American-European consensus Criteria and/or ACR/EULAR classification criteria. A comparison of clinical, biological, and immunological features between elderly patients and younger patients (< 65 years) was performed.

Results: A total of 40 patients with pSS were enrolled, 17 female patients were over 65 years of age (42.5%). The mean age at disease onset was 70.2 ± 5.2 years. Fatigue and weight loss were more frequent in elderly patients (41% vs 39% and 29% vs 21%, respectively). Neurological involvement was more frequent in younger patients (65% vs 52%). Positivity of anti-nuclear antibodies was more frequent in younger patients (74% vs 64%). Anti-malarial agents were less prescribed in the elderly ($p = 0.002$). There were no differences concerning the other clinical features, laboratory findings, treatment, and outcomes.

Conclusion: The diagnosis of pSS within the elderly population is challenging due to the non-specific clinical features, the insidious onset, and its low prevalence.

P-0933

Late-onset systemic lupus erythematosus

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Introduction: Late-onset systemic lupus erythematosus (SLE) is defined by its onset after the age of 50. We aimed to determine SLE characteristics among patients aged over 50 years.

Patients and Methods: a cross-sectional study including all patients meeting the SLE criteria recruited from the Department of Internal Medicine of Taher Sfar University Hospital in Mahdia over 16 years (2007–2023). We compared SLE patients aged over 50 years (group 1) with patients aged less than 50 years (group 2).

Results: we include 115 patients with SLE. Late-onset SLE was present in 41 patients (35.6%). The mean age at diagnosis was 62 ± 9 years. A female predominance was present in both groups and significantly higher in older patients group (sex ratio F/M: 40/1 vs 6/1, $p = 0.03$). Regarding clinical manifestations, neuropsychiatric manifestations, and interstitial lung disease were more frequent in patients older than 50 years. Headaches were significantly more frequent in this group ($p = 0.03$). Cutaneous, joint, renal, and cardiovascular manifestations were more frequent in younger patients (less than 50 years) with a statistically significant difference for fever, venous thromboembolic disease. The immunological assessment showed that the decrease in complement C3 was significantly more frequent in group 2 ($p = 0.01$). Patients in group 2 received significantly more pulses of Methyl prednisone and Mycophenolate Mofetil ($p = 0.02$ and $p = 0.03$ respectively). The mean SLEDAI score in the late lupus group was 7.08 and 9.38 in group 2, but the difference between these two groups was not significant ($p = 0.08$). The favorable evolution was more observed in group 1. Likewise, the rate of death, relapses, and iatrogenic complications were greater in this group.

Conclusion: Given the presence of comorbidities, the risk of iatrogenic complications, and high mortality rates, early recognition and appropriate therapeutic interventions are imperative.

Short Poster Presentation

Multimorbidity

P-0934

Unscheduled care use in the last year of life for people with multimorbidity: a retrospective cohort study of 299,361 Scottish decedents

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Introduction: People with multimorbidity (≥ 2 long-term health conditions) are frequent users of healthcare, particularly unscheduled care (the unplanned use of healthcare services). Unscheduled healthcare usage rises sharply in the last year of life.

Methods: This retrospective cohort study included all individuals ≥ 18 years who died in Scotland between 01/01/2017 and 31/12/2021. Data from national healthcare datasets were linked to examine associations between multimorbidity, sociodemographic factors and unscheduled care usage. Logistic regression determined adjusted odds ratios (aOR) with 95% confidence intervals (95% CI).

Results: Of the 299,361 decedents, 136,953 (45.6%) had multimorbidity prior to the last year of life. Multimorbid decedents were older, more likely to be female and more socioeconomically deprived. Nearly all decedents accessed unscheduled care, with higher usage among the multimorbid (97.5% vs. 95.5%). Individuals with multimorbidity had more contacts per 1000 decedents (971.4 vs. 956.0) and

higher out-of-hours use (5,541.4 vs. 4,213.6 per 1000). Multimorbid individuals accessed unscheduled care earlier (median 13 weeks before death vs. 8 weeks). Multimorbidity was associated with higher overall unscheduled care use (adjusted OR 1.50, 95% CI 1.45–1.57). **Conclusions:** Unscheduled care usage is high in the last year of life, particularly for individuals with multimorbidity, likely reflecting unmet healthcare needs. Ongoing in-depth interviews with bereaved caregivers of people who died with multimorbidity will illuminate experiences of care and the nature of healthcare needs in this population. Future policy and service developments should be informed by both studies.

Poster

Multimorbidity

P-0935

Impact on deprescribing through the implementation of the LESS-CHRON tool in patients with multimorbidity across two care settings

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Introduction: LESS-CHRON is a useful tool for deprescribing in multimorbidity patients [1]. The aims of this study were to evaluate the reduction in therapeutic burden achieved and the success rate of deprescribing through its application in two care settings: institutionalized patients and outpatients.

Methods: Quasi-experimental, pre- and post-intervention, multicenter cohort study conducted between July/2022–March/2024. Patients were followed-up during 3 months [2].

Reduction in therapeutic burden and other variables were measured: deprescribing opportunities detected, acceptance rate, deprescribing success and anticholinergic burden. Differences between both cohorts were analysed.

Results: A total of 460 patients were included (N = 229: outpatients, N = 231: institutionalized), mean age of 84.5 ± 7.9 years (60.9% women). All were polymedicated, with a median of 12 drugs/patient. A total of 835 deprescribing opportunities were identified, 542 drugs were deprescribed (median acceptance rate of 66.7% [IQR = 15–100%]; $p = 0.09$), without statistically significant differences between cohorts. The mean reduction in therapeutic burden was $10.73\% \pm 10.68$; $p = 0.77$.

Sixty-one patients required the reintroduction of at least one deprescribed drug (mean deprescribing success rate: $85.2\% \pm 33.4$). A statistically significant difference was observed between both cohorts (outpatients $81.8\% \pm 35.7$ vs. institutionalized $88.9\% \pm 30.4$; $p < 0.05$).

A significant reduction in anticholinergic burden was achieved (1.0 to 0.75 ; $p < 0.001$), with no significant differences between outpatients and institutionalized patients.

Key conclusions: LESS-CHRON facilitates deprescribing in polymedicated multimorbidity patients, allowing to reduce the number of drugs across different care settings with a high success rate.

References:

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Keywords: deprescribing, institutionalized patients, LESS-CHRON, multimorbidity, outpatients, polypharmacy.

P-0936

The impact of lifestyle and polypharmacy on the progression of chronic disease in community-dwelling older adults: a longitudinal study

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Introduction: Chronic diseases often progress to multimorbidity or complex multimorbidity (≥ 3 chronic diseases across ≥ 3 body systems). The role of lifestyle factors and polypharmacy in disease progression remains underexplored. This study investigates their effects in community-dwelling older adults.

Methods: This longitudinal study utilized two-wave cohort data (2017 and 2020) from physical examinations of older adults in southern China ($n = 5162$). Outcomes included four statuses after 3 years: static disease status, progression from single chronic disease to multimorbidity (non-complex), single chronic disease to complex multimorbidity, or multimorbidity to complex multimorbidity. Lifestyle factors (diet, physical activity, smoking, alcohol use) and polypharmacy were analyzed logistic regression.

Results: After 3-year follow-up, progression rates were 3.8% ($n = 196$) from single chronic disease to multimorbidity; 17.8% ($n = 918$) from single to complex multimorbidity; and 5.5% ($n = 285$) from multimorbidity to complex multimorbidity. Multimorbidity prevalence increased from 71.7 to 80.9%, while complex multimorbidity rose from 29.8 to 47.6%. Logistic regression revealed exercise was associated with reduced risks of progression from single to multimorbidity (OR = 0.67) and from multimorbidity to complex multimorbidity (OR = 0.79) compared to non-exercisers. Smokers exhibited elevated risks of progression from single to multimorbidity (OR = 1.84) and single to complex multimorbidity (OR = 1.62) versus non-smokers. Polypharmacy significantly increased progression risks across all pathways: single to multimorbidity (OR = 4.14), single to complex multimorbidity (OR = 7.41), and multimorbidity to complex multimorbidity (OR = 1.57) versus non-polypharmacy users.

Key conclusions: Lack of exercise, smoking and polypharmacy can significantly increase risk of the progression of chronic diseases among community-dwelling older adults with multimorbidity.

P-0937

Drug-related problems and need for outpatient pharmacist medication therapy management and deprescribing services in Singapore

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Introduction: Older adults are vulnerable to harms of polypharmacy due to age-related changes in pharmacokinetics and pharmacodynamics. Polypharmacy is associated with increased frailty, adverse drug events, falls, cognitive impairment, and healthcare costs. Geriatric pharmacist plays a critical role in addressing drug-related problems (DRPs) through comprehensive medication review and

education to enhance medication safety and outcomes for older adults. In our centre, there is no pharmacist medication therapy management (MTM) and deprescribing services in the outpatient geriatric clinic. Aims of this study were to describe common DRPs and identify patient population that would most benefit from MTM services.

Methods: This prospective study was conducted over 4 weeks in a geriatric outpatient clinic in Singapore. A co-consultation model was employed, with both physician and pharmacist present. Patients attending the co-consultation were included. Data were collected on demographics, medications, DRPs and number of potential referrals to future MTM and deprescribing services.

Results: Between November and December 2024, thirty-nine patients (64% female) with mean age of 84 years were included. The mean clinical frailty score (CFS) was 5.4 and mean number of medications was 9.4. DRPs were identified in 12 (31%) patients, and mostly associated with interactions, non-compliance, and use without indication. Eleven (28%) patients were considered by the physician to warrant referral to pharmacist. Patients with DRPs, CFS ≥ 7 , medications ≥ 10 or non-compliance were more likely to require pharmacist review.

Conclusion: DRPs are prevalent in the outpatient geriatric population. Patients with polypharmacy, frailty, or DRPs can benefit from pharmacist MTM and deprescribing services.

P-0938

Gut microbiome characteristics in elderly patients with ankylosing spondylitis

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Introduction: Ankylosing spondylitis (AS) is a chronic inflammatory rheumatic disease primarily affecting the axial skeleton. Emerging evidence suggests that gut dysbiosis plays a role in AS pathogenesis, influencing immune modulation and systemic inflammation. However, the gut microbiome composition in elderly AS patients remains poorly characterized.

Objective: To analyze the gut microbiome composition in elderly patients with AS and assess its correlation with disease activity and inflammatory markers.

Materials and Methods: A prospective cross-sectional study included 47 elderly AS patients (≥ 65 years; 71.6 ± 3.7 years) diagnosed based on ASAS criteria. Gut microbiota composition was assessed using 16S rRNA sequencing of fecal samples. Disease activity was evaluated using BASDAI, ASDAS-CRP, and BASFI scores. Inflammatory markers (CRP, ESR) were measured. The microbiome profile was compared with 40 age-matched healthy controls.

Results:

- Reduced gut microbial diversity (Shannon index, $p < 0.01$) in AS patients compared to controls.
- Higher abundance of pro-inflammatory bacteria (*Prevotella* spp., *Escherichia coli*) ($p = 0.003$) in AS patients.

- Decreased levels of beneficial short-chain fatty acid (SCFA)-producing bacteria (*Faecalibacterium prausnitzii*, *Bifidobacterium* spp.) ($p < 0.01$).
- Positive correlation between *Prevotella* spp. abundance and BASDAI ($r = 0.41$, $p = 0.02$).
- Inverse correlation between *Faecalibacterium prausnitzii* and ASDAS-CRP ($r = -0.38$, $p = 0.03$).

Conclusions: Elderly AS patients exhibit gut dysbiosis with reduced microbial diversity, increased pro-inflammatory bacteria, and decreased SCFA-producing species. These alterations correlate with disease activity, suggesting a potential role of the microbiome in immune dysregulation and chronic inflammation. Microbiome-targeted interventions may represent a promising adjunctive strategy in AS management.

P-0939

Peripheral skeletal involvement in elderly patients with ankylosing spondylitis

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Introduction: Ankylosing spondylitis (AS) primarily affects the axial skeleton, but peripheral skeletal involvement is increasingly recognized, particularly in elderly patients. Due to aging-related factors such as osteoporosis, reduced bone mass, and altered biomechanics, peripheral joint damage in elderly AS patients may present distinct clinical and radiographic features compared to younger individuals.

Objective: To evaluate the characteristics of peripheral skeletal involvement in elderly AS patients, assessing clinical manifestations, radiographic findings, and functional impairment.

Materials and Methods: A prospective cross-sectional study was conducted on 121 elderly AS patients (≥ 65 years old; 71.5 ± 4.7 years) diagnosed according to ASAS criteria. Peripheral joint involvement was assessed clinically and radiographically, with disease activity measured using BASDAI, ASDAS-CRP, and BASFI scores. Bone mineral density (BMD) was evaluated using DXA scanning were analyzed.

Results:

- Peripheral arthritis was present in 45% of patients, predominantly affecting knees (31%) and ankles (22%).
- Enthesopathy was noted in 58% of cases, with Achilles tendon and plantar fascia being most frequently involved.
- Radiographic erosions were detected in 37% of patients, and 29% showed periarticular osteophytes.

- Osteoporosis was prevalent (64%), with significantly lower BMD (T-score ≤ -2.5) in the femoral neck ($p = 0.002$).

Conclusions: Peripheral skeletal involvement is common in elderly AS patients, with a high prevalence of arthritis, enthesopathy, and osteoporosis. These findings highlight the need for integrated rheumatologic and orthopedic management strategies, emphasizing early detection, bone health monitoring, and targeted therapy to prevent structural damage and maintain functional mobility.

P-0940

Chronic pain loses predictive significance for survival after adjustment for inflammation and cardiovascular-kidney-metabolic comorbidity—results from a population-based PolSenior study

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Background: Chronic pain is one of the most frequent health problems affecting older adults. Currently, there are conflicting data concerning the influence of chronic pain on survival in adults 65 years old and older. Our analysis aimed to find out whether the occurrence of chronic pain results in a reduced lifetime in long-term follow-up. We compared the survival of subjects stratified for the prevalence of chronic pain and inflammation and investigated the predictors of life expectancy in a large population-based cohort.

Methods: The analysis was conducted on the PolSenior's database, which included laboratory blood tests and medical information in 3473 Polish residents aged 65 years and older. Participants were divided due to the presence of inflammatory status ($\text{CRP} \leq 3$ mg/dL or > 3 mg/dL) and the occurrence of chronic pain. Survival data were obtained from the national register. During the 5 years, 678 (19.2%) study participants died, including 401 (22.9%) men and 277 (15.5%) women. The death incidence rate was 56.8 (95% CI 52.7–61.2) per 1000 person-years.

Results: The occurrence of chronic pain was 42.7% ($N = 1483$), whereas the inflammation was 40.8% ($N = 1418$). The Kaplan–Meier curves analysis showed no effect of chronic pain on survival in subgroups after stratification to inflammation. According to the univariate Cox regression analysis of survival, negative predictors of expected lifetime include older age, heart failure, chronic kidney disease, IADL dependency, major depression, inflammation, poor nutrition, and vitamin D deficiency.

The multivariate survival analysis showed factors predisposing to shortened life expectancy, such as older age, IADL dependency, chronic kidney disease, heart failure, and poor nutrition. All performed analyses showed no effect of chronic pain on survival.

Conclusions: The occurrence of chronic pain is not an independent predictor of survival in the population of older adults.

P-0941

Osteoprotegerin as a global but not localizing marker of atherosclerosis

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Introduction: Osteoprotegerin (OPG) modulates vascular calcification linked to vascular smooth muscle cell proliferation and collagen production in atherosclerotic plaques. The data describing OPG levels as the marker of the severity and location of atherosclerosis are inconsistent. Therefore, our study aimed to assess OPG in patients with different locations of atherosclerosis.

Subjects and Methods: This analysis included 222 unselected outpatients (age range 50–92 years; 46.4% women) of an angiology clinic with atherosclerosis confirmed with imaging techniques (doppler ultrasound, CT-angiography). Serum OPG levels were assessed in serum samples frozen after routine parameters assessment in a cooperating laboratory. The following data were retrieved from the medical records: age, smoking status, comorbidity (hypertension, diabetes mellitus, stroke, myocardial infarction, coronary artery procedures), medication, lipid profile, serum creatinine, and homocysteine levels. Patients were divided according to serum OPG levels into tertiles (lower/upper: 9.12 and 12.20 pmol/L), and the location of clinically important atherosclerotic lesions (carotid artery disease, coronary artery disease, lower extremity peripheral artery disease, abdominal aorta aneurysm).

Results: A subgroup of subjects with the highest OPG levels was the oldest (75.0 ± 8.4 vs. 69.8 ± 7.1 years in the lowest tertile; $p < 0.001$) and was characterized by the worst kidney function ($\text{eGFR } 60.8 \pm 16.8$ vs. 74.1 ± 13.5 mL/min/1.73 m²; $p < 0.001$), and higher homocysteine levels (19.3 ± 7.2 vs. 15.9 ± 5.6 $\mu\text{mol/L}$; $p < 0.05$). The distribution of carotid artery disease, coronary artery disease, lower extremity peripheral artery disease, and abdominal aorta aneurysm did not differ across the OPG tertiles. In addition, we did not reveal differences in OPG levels related to the occurrence of specific locations of clinically important atherosclerotic lesions.

Conclusion: Osteoprotegerin may be considered a global marker of atherosclerosis but not its localization.

P-0942

Genetically informed prioritisation of interventions strategies for preventing multimorbidity in breathing and rheumatological conditions

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Background: Our study identified shared genetic markers between rheumatoid arthritis (RA) and chronic obstructive pulmonary disease (COPD). We investigated potential connections in disease progression and long-term health outcomes to identify preventive strategies.

Methods: Using over 12 million records from UK Biobank, CPRD (UK), and SIDIAP (Spain), we analysed bidirectional links between eight musculoskeletal-lung disease pairs. Mendelian randomization (MR) and observational survival analyses with propensity score adjustment evaluated potential causal relationships (e.g., RA → COPD). Mediation analyses quantified contributions of risk factors like biomarkers and lifestyle.

Results: Bidirectional associations were observed: genetic data showed COPD increased RA risk (OR = 1.29, $p < 0.001$) and vice versa (OR = 1.09, $p < 0.001$). Observational data confirmed COPD → RA (HR = 1.87, $p < 0.001$) and RA → COPD (HR = 1.19, $p < 0.001$), suggesting overlapping mechanisms. Initial MR analyses support our findings of albumin as a mediator of the causal relationships between both COPD-RA and RA-COPD. In observational data albumin explains 1.0% of COPD → RA and 44.4% of RA → COPD associations [$p < 0.001$]. Longitudinal analyses revealed a multiyear gap between initial diagnosis and secondary condition onset (e.g., 4.6 years for COPD → RA vs. 9.1 years for RA → COPD).

Conclusions: Rheumatoid and respiratory conditions show bidirectional causal relationship, likely influenced by shared genetic and inflammatory pathways. The delayed onset of secondary conditions highlights a critical window for intervention. Targeting mediators like albumin levels may reduce the risk of onset of comorbidity. These findings underscore the opportunity for proactive intervention in patients with either condition.

P-0943

The impact on quality of life and associated comorbidities in an elderly Portuguese center: a retrospective quantitative study

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Introduction: Geriatrics takes on an increasingly important place in the diagnostic approach and therapeutic management of complex patients, which presupposes in-depth knowledge of their pathophysiology.

Methods: Retrospective quantitative study of 728 patients, regarding their degree of dependence and associated comorbidities, in a hospital center in Portugal between the years 2019 and 2023. The classification of diagnoses was carried out using the ICD-10 Classification (International Classification of Diseases, Tenth revision). In order to quantify the degree of dependence and mobility in daily life activities, the Barthel Scale was applied.

Results: The degree of dependence prior to hospitalization influenced mortality of 12% and the length of stay in the service (average of 9 days). The Barthel Index showed that 35% had a moderate degree of dependence and that 16% were completely dependent. Regarding the main diagnoses, pathology of the circulatory system (46.6%) was the most prevalent diagnostic group. Regarding the comorbidities of

hospitalized patients, there was an average of 8.5 diagnoses per patient, which is consistent with the fact that the population is mostly elderly or very elderly. The most frequent secondary diagnoses, in order of prevalence, were: Hypertension, Chronic Renal Failure, Type 2 Diabetes Mellitus and Atrial Fibrillation.

Key conclusions: The approach focused on improving care in geriatrics is fundamental to improving the quality of life of elderly patients, and the complexity of their follow-up.

P-0944

Analysis of the prescribing of the main groups of drugs to elderly patients with atrial fibrillation and coronary artery disease

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Introduction: The combination of atrial fibrillation (AF) and coronary artery disease (CAD) are common in elderly patients and entails a worse prognosis. This study aimed to analyzing prescribing the main groups of drugs to elderly patients with AF and CAD.

Methods: A cohort retrospective study was conducted among 767 patients ≥ 65 years with AF and CAD. The first group consisted of 342 patients (the median age—85 [78;90] years, 68.7% women) hospitalized in the cardiology department between July 01, 2018 and June 30, 2019, and the second group consisted of 425 patients (the median age—84 [78;90] years, 61.6% women) hospitalized in the same institution between July 01, 2022 and June 30, 2023. A logistic regression analysis was performed to identify the dependence of using of the main drug groups on age.

Results: In 2018–2019, the older the patients were, the less frequently they were prescribed both anticoagulants and statins, odds ratio (OR) 0.90 (95% Confidence Interval [CI] 0.86–0.94), stand. $\beta = -0.108$, $p < 0.001$ and OR 0.96 (95% CI 0.92–1.0), stand. $\beta = -0.44$, $p = 0.029$, respectively. When analyzing drug therapy 4 years later in 2022–2023, there was no significant association between the patient's age and the fact of prescribing anticoagulants ($p > 0.05$). On the contrary, statins began to be prescribed more often in older patients (OR 1.03 (95% CI 1.00–1.06), stand. $\beta = 0.31$, $p = 0.041$).

Conclusions: Our results indicate a positive trend in the prescribing of statins and anticoagulants to elderly hospitalized patients with AF and CAD.

Keywords: atrial fibrillation, coronary artery disease, statins.

P-0945

The voice of patients, relatives, and healthcare providers in health research: medication use among older people

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Introduction: Medication use is high among older people; however others than researchers themselves rarely formulate research

questions. The aim of this study was to engage older people, their relatives, and healthcare providers in a systematic process to identify and prioritize uncertainties related to medication use in older people.

Methods: We included Danish older people (≥ 65 years), their relatives, and healthcare providers and followed the James Lind Alliance Priority Setting Partnership (JLA) process. This includes 5 steps: (1) creating a steering group, (2) gathering evidence uncertainties, (3) summarizing evidence uncertainties and checking for existing evidence, (4) conducting an interim priority setting, and (5) conducting a final priority setting workshop to generate a top 10 of unanswered research questions.

Results: The steering group comprised 2 patients, 1 relative, and 7 healthcare providers. Through an online survey of patients, relatives, and healthcare providers, we collected 264 thoughts and uncertainties. These generated 142 research questions across 10 categories: organ impact and side-effects ($n = 25$), deprescribing ($n = 21$), effect of medication ($n = 19$), interactions ($n = 17$), medication reviews ($n = 13$), practical aspects about medication ($n = 12$), information and counseling ($n = 12$), shared decision-making ($n = 10$), treatment responsibility ($n = 7$), and non-pharmacological treatment ($n = 6$). We are currently at step 4 and 5 in the JLA process and these data will be presented.

Conclusions: Thoughts and uncertainties from patients, relatives, and healthcare providers cover multiple aspects with medication optimization and deprescribing as key priorities. The top 10-list generated at the final workshop will help facilitate future research areas related to medication use in older people.

P-0946

Community care team, a model of care in Singapore that supports older persons with multimorbidity access, navigate and transition between care settings

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Introduction: Singapore is a small island city-state with a rapidly ageing population. One in four Singaporeans is projected to be aged 65 and above by the year 2030. The concomitant rise in frailty and multimorbidity lead to escalating healthcare utilization and costs. To tackle this confluence of challenges, Singapore's Healthcare Masterplan aims to expand accessibility, enhance affordability, and improve the quality of healthcare for older people. The Ministry of Health oversees three healthcare clusters and tasks each cluster with addressing population health among their residents.

Methods: We describe the development and implementation of a nurse-led, physician and allied health supported model of care, Community Care Team (CCT), in the western cluster of Singapore.

Results: The working model anchors CCT teams geographically across eight zones. Each team comprises community nurses and care coordinators, supported by social workers, allied health professionals (AHP) and generalist physicians. AHP includes physiotherapist, occupational therapist, pharmacist and dietitian.

Greatest vulnerability occurs at transitions between acute and chronic care. CCT works across boundaries of traditional care settings to reduce this vulnerability. Multi-disciplinary team meetings holistically assess the bio-psycho-social needs of each older person. Medical care is optimized and coordinated in addition to tailored social prescribing to keep residents actively engaged.

Conclusion: Working in synergy with health and social care partners from hospital to community, CCT supports “step-up” and “step-down” care. Residents transit seamlessly from hospital to home and are supported to remain well in the community. Timely escalation for step-up care is provided for through defined care paths.

P-0947

Older persons' perspectives on the impact of deprescribing on quality of life

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Introduction: Deprescribing unnecessary or harmful medicines has been hypothesized to improve older persons' quality of life (QoL). However, there is limited supporting evidence. This study aimed to explore (1) older persons' perspectives on how deprescribing can impact QoL and (2) how well existing QoL measures capture changes in QoL related to deprescribing.

Methods: We conducted semi-structured face-to-face interviews with older persons (≥ 65 years) prescribed ≥ 5 regular medications recruited from Canada, Denmark, and the United Kingdom. We examined face validity of seven generic/medication-related QoL measures using the ‘think-aloud’ approach. Interviews were analyzed using Reflexive Thematic Analysis.

Results: We interviewed 30 persons (63% women, 53% aged 65–74 years, 47% used more than 10 medications). The respondents had numerous examples of how medication use and deprescribing could affect QoL both positively, such as the ability to do things due to symptom relief of pain or asthma, and negatively, such as the burden of taking medication or side effects. However, they found it challenging to attribute changes in their QoL to medication effects. The respondents generally found the QoL scales relevant to medication use and deprescribing, but also suggested additional aspects not included in QoL scales such as sleep, vision, and memory.

Key conclusions: Older persons consider QoL an important aspect of medication use and deprescribing. However, it may be difficult to capture changes in QoL due to deprescribing since people find it difficult to separate effects of medications from disease.

P-0948

Mapping multimorbidity in older adults across sociodemographic strata: a Swedish nation-wide population-based study

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Introduction: The increasing burden of multimorbidity- the coexistence of two or more diseases- is a major threat to healthy ageing and healthcare sustainability. Yet, the distribution of multimorbidity across different sociodemographic and geographical contexts remains poorly understood.

Methods: We used the Swedish National Patient Register, linked with several national registries, to identify adults aged 65+ living in Sweden, on 31/12/2018. The crude prevalence of multimorbidity (2+ diseases) and the mean number of chronic diseases were estimated

across regions in Sweden. Associations between sociodemographic determinants and mean number of chronic diseases were examined using multiple linear regression. Effect modification was investigated for age.

Results: Among the 1,955,025 older adults (53.7% females) identified, multimorbidity prevalence was 53% in those aged 65–70, rising to 84% in individuals over 80, with 30% of the latter having 8+ chronic diseases. Chronic disease burden was lower in rural areas (vs. urban ones), while living in areas with a higher rate of foreign-born residents increased it. Sociodemographic factors were associated with higher chronic disease burden differently across age groups: individuals with lower education (0.48, 95% CI 0.47–0.50) and income (0.65, 95% CI 0.64–0.67) had a higher number of diseases in those aged 65–79, while being unpartnered (0.16, 95% CI 0.13–0.19) was associated with more diseases in individuals over 80.

Key conclusions: Our findings indicate that the burden of multimorbidity is unevenly distributed across Sweden. Older adults aged 65–79 with lower sociodemographic status experience on average a higher multimorbidity burden compared to their more advantaged peers.

P-0949

Sickness absence in the working age population in England: a retrospective cohort study using primary care health record data

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Introduction: Economic inactivity in the UK reached 22.2% in 2024, driven largely by increased long-term sickness, which is higher than Europe or the US. Understanding the frequency, causes, and economic impact of sickness absence is important to inform policy and healthcare planning in the UK.

Methods: To address this, we conducted a population-based retrospective cohort study using primary care data from the Clinical Practice Research Datalink (CPRD) Aurum database, focusing on working-age adults (18–65). Sickness absence was measured using fit notes. We calculated annual fit note rates, identified underlying medical causes, explored associations between fit notes, patients' sociodemographic characteristics, and health-related factors using regression analyses, and estimated economic losses due to sickness absence.

Results: The age-standardised fit note rate was 21.5 per 100 person-years before the COVID-19 pandemic (Jan 2017–Dec 2019), rising to 21.9 in the late-pandemic period (Mar 2022–Feb 2023). Higher fit note rates were associated with being female, older age, Black ethnicity, deprivation, obesity, smoking, and having multiple health conditions. Depression and anxiety were the leading reasons for issuing fit notes. Before the pandemic, the total annual cost of sickness absence in England was £10.4bn (95% CI £10.4bn–£10.5bn) and was £12.8bn (95% CI £12.8bn–£12.9bn) in the late-pandemic period.

Conclusions: Fit note provision and associated costs rose substantially from pre- to late-pandemic periods, mainly driven by poor mental health, costing over £10bn annually in England. Targeted interventions and further research are needed to mitigate this

economic burden, particularly by improving support for individuals with mental health conditions.

P-0950

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P-0951

Physical activity levels amongst people with Parkinsonism—results from the PRIME-UK cross-sectional study

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Introduction: Physical activity (PA) is vital to living well with parkinsonism, a progressive and incurable condition with no disease-modifying therapies. Emerging evidence suggests that PA has

neuroprotective effects which may alter the disease trajectory and improve symptoms. The UK guidance recommends 2.5 h of moderate aerobic activity per week for all adults. We present descriptive statistics on the levels of PA in this highly heterogeneous group.

Methods: PRIME-UK cross-sectional was a single-center study, including individuals with idiopathic Parkinson's disease (PD) and related disorders. Participants self-completed a questionnaire booklet including the General Practice Physical Activity Questionnaire (GPPAQ), reporting the time per week spent on five activities: physical exercise (e.g. swimming, jogging), cycling, walking, housework and gardening/DIY.

Results: 476 out of 477 participants completed the GPPAQ (median age 76.2 years (IQR 71.0–81.8), 35% female, 5% (n = 23) care home residents, median disease duration 5 years (IQR 2–9). 16% (n = 78, 95% CI 13–20%) reported inactivity across all activities. 30% (n = 142, 95% CI 26–34%) reported any aerobic exercise (AE) (physical exercise or cycling) with 8% (n = 39, 95% CI 6–11%) exceeding 3 h per week. Walking was the most frequent lower-intensity PA; 49% (n = 232, 95% CI 44–53%) undertook > 1 h per week. 71% (n = 334, 95% CI 66–74%) undertook housework and/or gardening/DIY.

Key conclusions: We demonstrated low PA levels in this population with few patients undertaking moderate aerobic activities. As GPPAQ lacks granularity and undervalues lower-intensity PA, a self-completed tool that better captures PA levels across the PD spectrum is needed. Future research to identify barriers and facilitators to PA may address this.

P-0952

Endocarditis and hemorrhagic neurological event

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Age has been identified as an independent risk factor for infective endocarditis, with a prevalence of 10–20% in individuals aged 80 years and older. Neurological complications occur in 35% of patients with infective endocarditis. We report the case of a 90-year-old woman with infective endocarditis complicated by a hemorrhagic neurological event. The patient was admitted to the acute geriatric unit for dyspnea. Her medical history included atrial fibrillation, for which she was anticoagulated, hypertension and neurocognitive disorders (Activities of Daily Living score: 1/6). On admission, acute heart failure was diagnosed, along with an undiagnosed aortic murmur. Blood tests revealed an inflammatory syndrome (C-reactive protein: 79.8 mg/dL). Blood cultures were taken, intravenous fluid resuscitation was initiated, and apixaban was discontinued. A cardiac ultrasound revealed aortic valve vegetations, and *Streptococcus gordonii* was isolated from blood cultures. Following a multidisciplinary discussion with the endocarditis team, antibiotic therapy was adjusted to ceftriaxone 2 g. Unfortunately, on day 2, the patient's Glasgow Coma Scale score dropped to 8. Brain MRI revealed a large intraparenchymal cerebral hemorrhage in the left temporoparietal lobe. We investigated the potential causes of cerebral hemorrhage in infective endocarditis. Secondary transformation of ischemic lesions, which occurs in about 30% of septic emboli, and inflammatory processes have been proposed in the literature. The inflammatory storm associated with infective endocarditis has been linked to leukocyte infiltration and extracellular proteolysis. Atrial fibrillation was also identified as a risk factor for neurological complications in this

condition. Neurological hemorrhagic complications are possible in infective endocarditis, particularly in patients with atrial fibrillation.

P-0953

When retroperitoneal fibrosis recurs

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Introduction: Retroperitoneal fibrosis (RPF) is a rare disorder characterized by various symptoms, including abdominal pain and renal insufficiency. RPF results from fibrosing inflammation around the aorta, iliac arteries, and ureters. RPF can be idiopathic or linked to infectious or inflammatory diseases.

Methods: Case-report of RPF linked to IgG4-related disease (IgG4-RD) in an elderly man.

Results: An 82-year-old man was admitted to the acute geriatric unit for a third recurrence of abdominal pain, acute renal failure (plasma creatinine 321 $\mu\text{mol/L}$), and hypovolemic shock, due to diarrhea. A CT scan revealed possible ileitis/colitis. In a previous identical episode, a PET scan highlighted inflammatory masses and RPF. Infectious and autoimmune investigations were negative. After multidisciplinary discussion, corticosteroids were initiated at 1 mg/kg/day under the hypothesis of RPF linked to IgG4-RD. A remarkable clinical and biological response was observed: resolution of abdominal pain, improvement in renal function (plasma creatinine decreased to 207 $\mu\text{mol/L}$ on day 2, and to 69.2 $\mu\text{mol/L}$ by day 6), and a significant decrease in CRP (from 350 to 50.8 mg/L by day 6). A biopsy to confirm IgG4-RD was not performed due to the patient's frailty (frontotemporal dementia, Activities of Daily Living score of 4/6, Clinical Frailty Scale score of 5 before admission).

Key conclusions: IgG4-RD accounts for 30–60% of RPF cases. Herein, IgG4-RD was suspected due to recurrent abdominal pain, associated with multiple inflammatory masses, and the dramatic response to corticosteroids, a characteristic feature of IgG4-RD. This case highlights the importance of considering IgG4-RD in cases of RPF.

P-0954

Self-reported health status and influencing factors in community-dwelling older adults with multimorbidity

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Background: Poor self-reported health is associated with functional impairment, disability, and mortality. Studies on the self-reported health status of older adults with multimorbidity (≥ 3 chronic diseases) have been relatively scarce. Further, it is unclear why some older adults with chronic diseases often report good self-reported health. Our study aimed to assess the factors associated with self-reported health among community-dwelling older people with multimorbidity.

Methods: A cross-sectional analysis was conducted on a 2020 health examination database of elderly individuals in Southern China, focusing on older adults with multimorbidity (n = 19,679). Differences in demographic characteristics were estimated using univariate analysis. One-way ANOVA evaluated single-variable effects on self-reported health, while stepwise regression identified key factors

influencing self-reported health. Data were analyzed with SPSS version 27.

Results: The mean age of the participants was 76.6 years (SD 7.0) and 58.7% were women. The study found that most (94.6%) of community-dwelling older adults with multimorbidity reported a high level of self-reported health. The factors associated with self-reported health were age (OR 1.02, 95% CI 1.00–1.03), number of medications (OR 1.15, 95% CI 1.03–1.20), ability of self-care (OR 0.06, 95% CI 0.05–0.07), motor function (OR 0.26, 95% CI 0.17–0.39), and physical activity (OR 0.69, 95% CI 0.60–0.80).

Conclusions: Multiple factors in demography, lifestyle, and self-care ability were associated with self-reported health among older adults in the community. A number of these factors are potentially modifiable and there is a need for future studies to evaluate interventions to improve the self-reported health of this population.

P-0955

Effects of dietary diversity scores on disease-risks among senior citizens in Dar es Salaam, Tanzania: a risk-profile analysis

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Introduction: There is evidence that healthcare system responses tend to favour younger to older generation. We aimed to assess association between Dietary Diversity Scores (DDS) on disease-risks among ≥ 65 -years.

Methods: A cross-sectional, analytical community-based survey was conducted as part of the baseline pilot-DALOPA programme in Ubungo municipality–Dar es Salaam, Tanzania. Seniors (age ≥ 65 -years) were the target population. Data on socio-demographic, physical examination, past & current medical/surgical/ drug history, falls and cognitive assessment were collected and analysed. Besides, we included a Food Frequency Questionnaire (FFQ) as part of the survey tool. Data were analysed using a linear model after appropriate validation of linear model assumptions.

Results: We successfully analysed 232 participants. Participants had a median age of 69.1 (IQR: 62.8–76.2) years with male: female = 4:5 (female: 56%, $n = 130$). Participants had a median of 4 and 3.4 for comorbid conditions and DDS respectively. Majority (71.8%) reported eating average of once a day only. There was a significant positive association between age of participants and risk of comorbidities (Mann–Whitney $U = 6029$, $p = 0.04$). DDS was significantly associated with comorbidity risk (absolute risk—A.R = 0.74, 95% CI 0.44–0.99), years of schooling (A.R. = 0.82, 95% CI 0.67–0.98), duration since retirement (A.R: 3.1, 95% CI 1.6–5.5), marital status (married—A.R: 0.81, 95% CI 0.6–0.98), hypertension (A.R: 0.91, 95% CI 0.88–0.95) and Dementia (A.R: 0.69, 95% CI 0.48–0.9).

Conclusion: Dietary Diversity Score had a significant predictive power on disease-risk of ≥ 65 -years population in Dar-es-Salaam.

P-0956

Spatio-temporal factors associated with cardiometabolic-risks among seniors: a possible phenomenological analysis

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Introduction: There is palpable evidence suggesting possible spatio-temporal contributions towards future disease-risks in humans. However, data from Africa is limited to support the phenomenon. We hypothesized that senior citizens cardiometabolic-risks in Tanzania to have spatio-temporal association.

Methods: We did a cross-sectional community-based screening survey among ≥ 65 -years old residents of Ubungo in Dar-es-Salaam, Tanzania. Seniors (age ≥ 65 years old) with cardiometabolic risks were the target population. Data on spatial (place of birth), temporal (years spent at place of birth), socio-demographic, past & current medical/surgical/drugs history, physical examination, cognitive assessment as well as clinical history (comorbidity stata) were compared among different sects of elderly group members (65–74.9 years vs. 75–84.9 years vs. ≥ 85 years). Continuous data were compared using T-test and categorical data were analysed using Chi-squared test with corresponding degrees of freedom. Main analysis also applied spatial point process model.

Results: We successfully analysed 232 seniors with slight female preponderance (female—56%, $n = 130$). Participants had a median of 4 (IQR: 3–5) different comorbidities. Compared to the seniors aged 65–74.9 years group, those who were aged ≥ 85 years had significant comorbid conditions (χ^2 value = 6.6, $df = 2$). Participants originating from the Northern regions of Tanzania (around the slopes of Mt. Kilimanjaro) had significant diabetes mellitus (χ^2 value = 14.4, $df = 5$) while those originating from the Lake zone (areas around lake Victoria) had significant risks of cancer diagnoses (χ^2 value = 9.1, $df = 5$). There were no significant interaction between gender and spatio-temporal variations in cardiometabolic disease risks (χ^2 value = 12.7, $df = 15$).

Conclusion: There was a significant association between spatio-temporal and cardiometabolic disease-risks among African seniors in Dar-es-Salaam.

P-0957

Gender differences in disease-risks among elderly population: analysis from Dar-es-Salaam, Tanzania

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Introduction: Disease risks in humans has been found to be affected by many factors. We aimed to characterize the gender differences in

disease-risks among seniors (people aged ≥ 65 years) residing at a typical cosmopolitan area of Africa.

Methods: We conducted a community-based analytical screening survey among senior residents of Ubungu in Dar es Salaam, Tanzania. People ≥ 65 years with multimorbidity were the target population. We collected data on socio-demographic, physical examination, cardiometabolic risks, cognitive assessment as well as past & present medical/surgical history. Besides, we also assessed dietary patterns using a Food Frequency Questionnaire. Data were analysed using a generalized linear model after appropriate validation of linear model assumptions in the dataset.

Results: We screened 232 seniors. Participants had a median age of 69.1 (IQR: 62.8–76.2) years. Compared to men (reference category), women were more likely to be obese (absolute risk—A.R.: 1.66, 95% CI 1.08–2.01), widowed (A.R.: 4.1, 95% CI 3.2–6.7) but with less insomnia (A.R.: 0.72, 95% CI 0.2–0.95). Women (compared to men) tend to present with diabetes (A.R.: 1.4, 95% CI 1.02–16.1) and depressive symptoms (A.R.: 2.1, 95% CI 1.00–11.9).

Conclusion: There appears to be gender differences in both disease-risks and disease-presentation among seniors in Dar es Salaam, Tanzania.

P-0958

Analysis of clinical characteristics and prognostic factors in adult still's disease patients with community-acquired pneumonia

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Objective: This study aimed to analyze the clinical characteristics of adult patients with Still's disease who had concurrent CAP and explored the risk factors influencing their prognosis.

Methods: A retrospective cohort study design was employed to screen adult patients with Still's disease who were admitted to the People's Hospital of Dianjiang County in Chongqing from April 2023 to November 2024. A total of 59 patients with concurrent CAP were designated as the study group, while 102 patients without CAP were assigned to the control group. Clinical characteristics of both groups were compared by SPSS, and independent risk factors affecting prognosis were analyzed via binary logistic regression.

Results: The peak temperature (≥ 39.5 °C), cough, CRP, length of hospital stay, and readmission rates within 3 months for the study group and control group were 89.8% vs 70.6%, 76.3% vs 27.5%, (54.2 ± 15.3) mg/L vs (15.6 ± 8.2) mg/L, (12.5 ± 5.8) days vs (7.2 ± 3.1) days, and 25.4% vs 7.8%, respectively. These differences were statistically significant ($P < 0.05$). The concurrent CAP [OR = 3.12 (95% CI 1.01–9.76), $P = 0.043$] was an independent risk factor for poor prognosis.

Conclusion: The peak temperature (≥ 39.5 °C), cough, CRP, length of hospital stay, and readmission rates within 3 months were identified as the primary clinical characteristics for distinguishing adult Still's disease patients who had concurrent CAP, and CAP was found to be an independent risk factor affecting the prognosis.

P-0959

Health status of family caregivers of older adults with chronic diseases

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Introduction: The duty of providing care for older adults and meeting their needs frequently rests with family members, who assume the role of informal caregivers, resulting in a considerable burden of care. This review aims to examine the health status of informal caregivers who support older individuals with chronic diseases.

Methods: A review of the recent literature was conducted in PubMed and Google scholar databases using the key words “older adults”, “health status”, “family caregivers”, “chronic diseases”.

Results: On average 60% of care in Europe is provided by informal caregivers. A significant proportion of family caregivers are women, comprising approximately 80% of this demographic. The average age of these caregivers typically ranges from 53 ± 14 years to 64 ± 14 years. Furthermore, older caregivers tend to exhibit higher prevalence rates of chronic diseases. The prevalence of arthritis, hypertension, obesity, and diabetes are significantly higher compared to the general population. Additionally, research indicates that the global rate of depression among informal caregivers is as high as 40.2%. Studies in Finland, Iran and China show very high rates of depression in caregivers, with these ranging respectively from 30 to 33%, 33.57 to 42.16% and 71%.

Key conclusions: The burden of care seems to negatively affect the physical and mental health of family caregivers. Based on a changing demographic with more older adults the need for informal care will increase in the future and according to the literature it will be provided by older people. Redefining the public care provision is crucial.

P-0960

Burning mouth syndrome: a reflection of autoimmune thyroid alterations?

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Introduction: Burning Mouth Syndrome (BMS) is an idiopathic condition characterized by persistent oral burning pain without observable clinical abnormalities. It predominantly affects middle-aged and older women, with a reported prevalence of up to 18% in postmenopausal women. Although the exact etiology of BMS remains unclear, factors such as hormonal changes, autoimmune disorders, and neuropathic mechanisms have been suggested. This case explores a potential association between autoimmune thyroiditis and BMS.

Case Description: A 74-year-old woman presented with symptoms of BMS, including a bitter taste and burning sensation in her mouth. Her medical history included hypertension, insomnia, and chronic gastritis, with current medications: amlodipine + candesartan, atorvastatin, pantoprazole, and quetiapine. A comprehensive laboratory workup revealed significantly elevated anti-TPO antibodies (248 IU/mL), normal anti-TG levels (27 IU/mL), and a TSH at the upper limit of normal (4.71 uUI/mL). Thyroid ultrasound indicated a diffusely heterogeneous texture, consistent with thyroiditis.

Key conclusions: The findings suggest a possible link between autoimmune thyroiditis and BMS. Elevated anti-TPO antibodies and thyroid abnormalities may contribute to BMS symptoms through autoimmune or inflammatory mechanisms. This case underscores the importance of thyroid evaluation in patients with BMS, particularly in postmenopausal women. A multidisciplinary approach is essential for accurate diagnosis and management. Further research is needed to better understand the underlying mechanisms and improve the management of BMS.

P-0962

Unravelling age-related multimorbidity through biomarker insights

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Introduction: Age-related multimorbidity is a growing public health challenge, placing significant strain on healthcare systems worldwide. Existing research has primarily focused on individual biomarkers that drive multimorbidity. However, identifying biomarker signatures that define different multimorbidity clusters could enable more targeted and precise interventions and improve clinical care. This study aims to identify biomarker panels that capture the biological signatures of co-occurring multiple long-term conditions (MLTCs), supporting early detection and better disease management.

Methods: We utilised UK Biobank (UKB) data, a cohort of over 500,000 participants aged 37–73, with linked hospital and primary care records. Differential protein analyses were applied to a subset of 95,000 participants to identify biomarker signatures for five MLTC clusters, focusing on inflammatory markers (e.g., TNF- α , CRP) and metabolic indicators (e.g., IGF-1).

Results: Distinct biomarker signatures characterised five key MLTC clusters previously identified, including cardiometabolic, respiratory, cardio/cerebrovascular, reproductive, and pain. Elevated TNF- α and CRP levels were strongly associated with MLTCs, reinforcing the role of systemic inflammation. Additionally, specific biomarkers demonstrated unique expression patterns across disease clusters, including Apolipoprotein M (lipid metabolism), Dipeptidase 1 (immune and metabolic regulation), and Frataxin (mitochondrial function and oxidative stress), particularly within cardiovascular-related multimorbidities.

Conclusions: This study provides novel insights into the biomarker-driven characterisation of multimorbidity clusters. Future work will leverage artificial neural networks to model longitudinal biomarker trajectories, improving MLTC prediction, guiding preventative strategies, and enabling personalised interventions to reduce disease burden.

P-0963

Uveitis as an extra-articular manifestation in elderly patients with rheumatoid arthritis

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Introduction: Uveitis is a significant extra-articular manifestation in autoimmune diseases, including rheumatoid arthritis (RA). In elderly patients, its occurrence may influence disease progression, therapeutic management, and visual prognosis. However, the prevalence, clinical patterns, and risk factors for uveitis in elderly RA patients remain insufficiently studied.

Objective: This study aims to evaluate the clinical characteristics, prevalence, and risk factors associated with uveitis in elderly patients with RA and to analyze its impact on disease severity and treatment outcomes.

Materials and Methods: A prospective observational study was conducted on 91 elderly RA patients (≥ 65 years) diagnosed according to ACR/EULAR 2010 criteria. Ophthalmologic evaluation included slit-lamp examination, funduscopy, and optical coherence tomography (OCT). Clinical and serological markers such as DAS28-CRP, rheumatoid factor (RF), anti-CCP, and inflammatory markers (ESR, CRP) were assessed. Statistical analysis included Pearson correlation and logistic regression.

Results: Uveitis was identified in 17.6% of patients (16/91), predominantly anterior (81.2%), with recurrent episodes in 56.3%. Higher disease activity (DAS28 > 5.1) and elevated inflammatory markers (CRP > 10 mg/L, ESR > 40 mm/h) were significantly associated with uveitis ($p < 0.05$). Patients with uveitis had a higher prevalence of seropositivity (RF+, anti-CCP+) and required intensified immunosuppressive therapy.

Conclusions: Uveitis is a relevant extra-articular manifestation in elderly RA patients, linked to high disease activity and systemic inflammation. Regular ophthalmologic screening and early intervention are essential to prevent visual impairment and optimize treatment strategies. Future research should explore the pathophysiological mechanisms linking RA and ocular inflammation in aging populations.

P-0964

Ocular involvement variants in elderly patients with rheumatoid arthritis

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Introduction: Ocular manifestations in rheumatoid arthritis (RA) are frequent and may significantly impact the quality of life, particularly in elderly patients. These manifestations range from dry eye syndrome to severe inflammatory conditions, such as scleritis and uveitis, which may lead to visual impairment if not properly managed. However, data regarding the prevalence and clinical patterns of ocular involvement in elderly RA patients remain limited.

Objective: This study aims to assess the spectrum of ocular involvement in elderly patients with RA, identify associated risk factors, and evaluate its impact on disease severity and treatment strategies.

Materials and Methods: A cross-sectional study was conducted on 102 elderly RA patients (≥ 65 years) diagnosed according to ACR/EULAR 2010 criteria. All patients underwent a comprehensive ophthalmologic examination, including Schirmer's test, slit-lamp biomicroscopy, funduscopy, and optical coherence tomography (OCT). Disease activity was assessed using DAS28-CRP, and inflammatory markers (CRP, ESR) were recorded. Statistical analysis included correlation tests and multivariate regression.

Results: Ocular involvement was detected in 48.1% of patients. The most common manifestations were dry eye syndrome (32.4%), episcleritis (8.8%), scleritis (4.9%), and uveitis (2%). Higher disease activity (DAS28 > 5.1) and elevated inflammatory markers were significantly associated with severe ocular involvement ($p < 0.05$).

Conclusions: Ocular manifestations are prevalent in elderly RA patients and correlate with high disease activity. Early screening and interdisciplinary collaboration between rheumatologists and ophthalmologists are essential for preventing complications and preserving vision. Further studies are needed to establish specific management protocols tailored to elderly RA patients with ocular involvement.

P-0965

Ocular Sicca syndrome in elderly patients with rheumatoid arthritis

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Introduction: Ocular sicca syndrome, a key manifestation of secondary Sjögren's syndrome, is frequently observed in elderly patients with rheumatoid arthritis (RA). It significantly impacts patients' quality of life, contributing to visual discomfort, corneal damage, and an increased risk of ocular infections. However, the prevalence and clinical characteristics of ocular sicca in elderly RA patients remain insufficiently explored.

Objective: This study aims to evaluate the prevalence, clinical features, and severity of ocular sicca syndrome in elderly RA patients and its association with disease activity and systemic inflammation.

Materials and Methods: A cross-sectional study was conducted on 117 elderly RA patients (≥ 65 years) diagnosed according to ACR/EULAR 2010 criteria. All patients underwent an ophthalmological assessment, including Schirmer's test, tear film break-up time (TBUT), and ocular surface staining. RA disease activity was measured using DAS28-CRP, and inflammatory markers (CRP, ESR) were recorded. Correlations between ocular findings and RA disease parameters were analyzed.

Results: Ocular sicca syndrome was present in 54.7% of patients. The most frequent symptoms were dryness (85.1%), foreign body sensation (72.3%), and burning (65.9%). Severe tear deficiency (Schirmer's test < 5 mm) was observed in 37.6% of cases. Higher disease activity (DAS28 > 5.1) and increased CRP levels were significantly associated with more severe ocular dryness ($p < 0.05$).

Conclusions: Ocular sicca syndrome is highly prevalent among elderly RA patients, correlating with higher disease activity and systemic inflammation. Regular ophthalmological evaluation and early intervention are crucial to preventing ocular complications. A multidisciplinary approach involving both rheumatologists and ophthalmologists is essential for optimizing patient care.

P-0966

Type II diabetes is associated with frailty and inflammation amidst multimorbidity in higher age

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Introduction: Type II diabetes (T2DM) is known to increase morbidity burden and lead to frailty in older adults compared to those without diabetes. Whether diabetes still has a measurable impact on frailty in multimorbid patients of advanced age is not certain.

The aim of this study was to investigate whether T2DM is associated with frailty and inflammation in old patients with multimorbidity.

Methods: Patients were recruited during stay in a geriatric hospital, diseases and drugs/day were documented, frailty was defined using Fried frailty phenotype, IL-6, CRP and GDF-15 were measured with ELISA, grip strength was assessed with dynamometer and gait speed with 4 m walking-test. Data are shown as mean $\pm$ standard deviation.

Results: We included 210 patients (53% female), with a mean age of 79 ± 7 years who had 6 ± 4 diseases and 11 ± 4 drugs/day on average. 30.5% had T2DM and 67% were frail. 79% of patients with diabetes (pwT2DM) were frail compared to 61% of multimorbid patients without diabetes ($p = 0.031$), and higher mean values for frailty scores were seen in pwT2D (3.5 ± 1.2 vs 2.8 ± 1.2 , $p < 0.001$) although age was comparable between groups. Grip strength and gait speed were also comparable between patients with and without T2DM. Inflammatory parameters were however significantly increased in pwT2DM (CRP: 24.9 ± 45.4 vs 12.9 ± 16.7 mg/L, $p = 0.04$ and IL-6: 24.7 ± 30.3 vs 15.7 ± 21.3 pg/mL; $p = 0.009$), whereas GDF-15 values did not differ between the groups.

Key conclusions: Although all patients were multimorbid, T2DM still appeared to contribute to frailty and inflammation.

P-0967

Increased serum sclerostin levels in patients with abdominal aortic aneurysms

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Introduction: Sclerostin (SCL) is expressed at sites of arterial calcification and its serum concentration is associated with high arterial stiffness and atherosclerosis severity. A large mass of calcified tissue in aortic aneurysms is expected to affect its serum concentration and eventually could be used in the screening. Therefore, our study aimed to assess SCL in patients with abdominal aortic aneurysms (AAA) and subjects with atherosclerosis without AAA.

Subjects & Methods: This analysis included 59 patients with AAA during active observation (aged 75.4 ± 6.9 years; 88.0% men) and 163 patients with peripheral artery disease (aged 71.5 ± 8.0 years; 44.8% men) confirmed with imaging techniques (doppler ultrasound, CT-angiography), managed by an angiology outpatient clinic. Serum SCL levels were assessed in serum samples frozen after routine assessment in a cooperating laboratory. The following data were retrieved from the medical records: age, smoking status, comorbidity (hypertension, diabetes mellitus, stroke, coronary artery disease–CAD, myocardial infarction, coronary artery procedures), medication, lipid profile, serum creatinine, and homocysteine levels.

Results: Patients with AAA was characterized by the more frequent occurrence of arterial hypertension and CAD than non-AAA patients (91.5% vs. 60.5%, $p < 0.001$; and 35.6% vs. 19.9%, $p < 0.05$, respectively), and by higher SCL and homocysteine levels (0.85 ± 0.29 vs. 0.75 ± 0.29 ng/mL, $p < 0.05$; 19.5 ± 6.4 vs. 16.6 ± 6.2 $\mu\text{mol/L}$, $p < 0.05$, respectively).

ROC analysis has established the SCL cut-off point (based on the Youden index) predicting AAA as 0.74 ng/mL (AUC: 0.60; 95% CI 0.51–0.69), but with low sensitivity (67.2%; 95% CI 53.5–78.6%) and specificity (54.1%; 95% CI 46.0–62.0%).

SCL levels significantly correlated with age ($r = 0.28$; $p < 0.001$) and eGFR (-0.32 ; $p < 0.001$).

Conclusion: SCL levels are increased in patients with AAA, but a small difference in the concentration between AAA and non-AAA and low sensitivity preclude its use as a marker in the screening of AAA in subjects with atherosclerosis.

P-0968

Late-onset rheumatoid arthritis: distinctive features and bone health implications in elderly patients

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Introduction: Rheumatoid arthritis (RA) presents unique challenges in elderly populations, differing from its manifestations in younger patients. This study explores whether age influences clinical, biological, and therapeutic aspects of RA, aiming to guide tailored management strategies for older adults.

Methods: We conducted a retrospective study at the Department of Rheumatology, Taher Sfar University Hospital. Clinical, demographic, laboratory, and therapeutic data were analyzed from 80 RA patients (mean age: 57.28 years, range: 28–85 years). Patients were stratified into two cohorts: elderly (≥ 65 years, $n = 25$, median age 70 years) and younger (< 65 years, $n = 55$).

Results: Elderly patients exhibited significantly later disease onset compared to younger patients (62.3 ± 8.7 years vs. 42.8 ± 11.3 years, $p < 0.001$). Disease activity parameters, including DAS28-CRP (3.24 vs. 3.06, $p = 0.575$) and DAS28-ESR (3.85 vs. 3.71, $p = 0.695$), showed no significant inter-group differences. Clinical manifestations and inflammatory biomarkers remained comparable between groups. However, femoral bone mineral density was significantly reduced in elderly patients (T-score: -1.7 vs. -0.7 , $p = 0.012$), indicating more pronounced osteoporotic changes. Treatment patterns with disease-modifying antirheumatic drugs (DMARDs), including methotrexate and biologic agents, revealed no significant age-related variations regarding therapeutic choice or dosage regimens.

Conclusion: while RA onset occurs later in elderly patients, their disease profile closely resembles that of younger populations. However, heightened osteoporotic changes underscore the need for comprehensive geriatric assessments in treatment protocols. Early evaluation of bone health and tailored interventions for osteoporosis are crucial in managing RA among older adults.

P-0969

When inflammation meets cardiovascular risk: unraveling the impact of comorbidities on rheumatoid arthritis severity in the elderly

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Introduction: Rheumatoid arthritis (RA) is a chronic autoimmune disease that frequently affects elderly individuals, with disease severity often compounded by comorbid conditions, including hypertension and dyslipidemia. This study investigates the factors associated with RA severity in elderly patients, with a particular focus on cardiovascular comorbidities.

Methods: A retrospective, descriptive study was conducted at the Department of Rheumatology, Taher Sfar University Hospital, Mahdia. We analyzed demographic, clinical, and laboratory data, using DAS-VS and DAS-CRP (to assess disease activity). The impact of cardiovascular comorbidities, including hypertension, dyslipidemia, and diabetes, on disease severity was evaluated.

Results: We included 80 patients with RA, with a mean age of 57.28 years (range: 28–85 years). Among these, 25 patients (31.1%) were older than 65 years, with a female predominance (84%) and a median age of 70 years.

Hypertension was present in 41.7% of elderly patients, though 64% were not receiving antihypertensive treatment. Dyslipidemia was found in 12%, and 24% had diabetes.

Hypertension was significantly associated with higher DAS-VS ($p = 0.03$) and DAS-CRP ($p = 0.02$) scores, indicating increased disease activity and joint swelling. Dyslipidemia correlated significantly with higher DAS-VS ($p = 0.04$). Osteoporotic changes were found in 83.3% of patients, and CRP levels were significantly associated with osteoporosis ($p = 0.01$). Dry eye syndrome, present in 75%, was linked to higher DAS-CRP scores ($p = 0.03$).

Conclusions: Cardiovascular comorbidities, especially hypertension and dyslipidemia, significantly impact disease severity in elderly RA patients. These findings underscore the need for integrated management strategies to address both inflammation and cardiovascular health.

P-0970

Impact of polypharmacy on quality of life in the elderly

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Background: Polypharmacy, commonly defined as the concurrent use of five or more medications, is particularly relevant in elderly patients due to the management of multiple chronic diseases. This study aims to assess the impact of polypharmacy on quality of life (QoL) in elderly patients.

Methods: This one-month cross-sectional study included patients aged 65 years and older in an internal medicine department. QoL was assessed via the EQ-5D-3L and SF-12 questionnaires, and frailty via the Clinical Frailty Scale (CFS). Data was collected through interviews. Multiple linear regression models were used to evaluate the association between polypharmacy and QoL in polymedicated patients (PoP).

Results: A total of 32 patients participated in the study, including 18 PoP. The mean age was 71.75 years (± 5.11). PoP had a median of 3 comorbidities [2–6] and were taking a median of 6 medications [5–9]. The global EQ-5D-3L was 0.41 (± 0.26). The SF-12 physical component scores (PCS), and SF-12 mental component scores (MCS) were 41.6 (± 6.05), and 49.5 (± 6.33) respectively. Overall, PoP reported worse EQ-5D-3L index ($p = 0.019$), PCS ($p = 0.01$), and CFS ($p = 0.02$). In the final regression model, after adjusting for age, sex, and multimorbidity, polypharmacy remained significantly associated with lower EQ-5D-3L index ($\beta = -0.566$; $P = 0.036$) and higher CFS values ($\beta = 0.420$; $P = 0.031$), but not with MCS and PCS.

Conclusion: Polypharmacy is associated with lower QoL and increased frailty in elderly patients. While it does not significantly impact mental or physical health scores, it remains a critical factor influencing overall health in this population.

P-0971

The prediction of the survival in older adults concerning the prevalence of metabolic syndrome based on pentraxin-3 and C-reactive protein plasma levels—results based on the PolSenior2 substudy

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Objective: There are no published data on the associations between plasma concentration of pentraxin-3 (PTX-3)—a marker of vascular inflammation and mortality in older subjects with or without metabolic syndrome (MS). Therefore, we aimed to compare the prognostic significance of increased PTX-3 and CRP levels on overall survival in subjects aged 60 and older.

Material and Methods: Study participants ($N = 3534$) were categorized according to the presence or absence of MS and then each of these groups was stratified into 3 subgroups based on concentrations of CRP (≤ 3 mg/dL and > 3 mg/dL) and PTX-3 ($<$ and $\geq$ the sex-specific cut-off values, based on the ROC curve analysis with the Youden index): double-negative inflammatory markers (low CRP and PTX-3 plasma concentrations); single-positive inflammatory marker (increased CRP or PTX-3 plasma concentrations) and double-positive inflammatory markers subgroup (increased CRP and PTX-3 plasma concentrations). During the 4.19-year follow-up, 678 (19.2% of the entire cohort) individuals died including 401 men (22.9%) and 277 women (15.5%).

Results: The optimal cut-off for PTX-3 plasma concentration associated with an increased risk of death was 2.07 ng/mL for men and 2.23 ng/mL for women. The death rates were increased for single-positive and were highest in double-positive subgroups both for men and women, with or without MS. Kaplan–Meier analysis showed no effect of MS on survival in men and women in subgroups within specific inflammatory marker categories. Of note, the inflammatory markers class effect on survival was already significant in the single-positive subgroups (34% and 44% higher risk for death for men and women), and even more pronounced for the double-positive subgroup (more than two and almost three times higher risk of death for men and women, respectively). In the entire study group, a weak correlation was found between plasma concentrations of PTX-3 and hs-CRP ($\rho = 0.11$, $p < 0.001$) and slightly higher in undernourished subjects with hs-CRP > 3 mg/dL ($\rho = 0.28$, $p < 0.001$).

Conclusion: In older populations measurement of plasma PTX-3 concentrations, in addition to the conventional inflammatory marker CRP, allows for better stratification of mortality risk regardless of the occurrence of MS.

P-0972

Onset characteristics of psoriatic arthritis in elderly patients

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Introduction: Psoriatic arthritis (PsA) is a chronic inflammatory disease with heterogeneous clinical manifestations. While the early onset of PsA is well documented, its late-onset form in elderly patients (≥ 65 years) remains less studied. Late-onset PsA (LOPsA)

may present with distinct clinical, immunological, and radiographic features, potentially influencing disease progression and treatment response.

Objective: To analyze the clinical, laboratory, and imaging characteristics of PsA onset in elderly patients and compare them with early-onset cases.

Materials and Methods: A prospective observational study included 127 elderly PsA patients (≥ 65 years; 69.0 ± 2.8 years) diagnosed using CASPAR criteria. Clinical assessments included DAS28-CRP, ASDAS-CRP, and HAQ-DI scores. Serological markers (CRP, ESR, IL-6, TNF- α) and imaging data (X-ray, musculoskeletal ultrasound) were analyzed. Disease characteristics were compared with a control group of early-onset PsA patients ($n = 132$, < 60 years; 42 ± 6.9 years).

Results:

- Higher prevalence of polyarticular involvement (68.5%) in elderly patients versus early-onset PsA (42.3%, $p < 0.01$).
- Increased CRP and IL-6 levels ($p < 0.05$), indicating a more pronounced inflammatory response.
- Lower dactylitis incidence (24.4% vs. 51.2%, $p < 0.001$) and enthesitis rates (35.8% vs. 60.1%, $p < 0.001$) in elderly PsA patients.
- More frequent axial involvement (47.2% vs. 28.3%, $p = 0.002$) and erosive changes on X-ray ($p = 0.01$).
- Delayed diagnosis (median 14 months vs. 8 months, $p < 0.01$) leading to increased functional impairment (HAQ-DI: 1.8 vs. 1.2, $p < 0.001$).

Conclusions: Late-onset PsA presents with more severe joint involvement, higher inflammatory burden, and delayed diagnosis, contributing to worse functional outcomes. Early detection and tailored therapeutic strategies are essential to improving prognosis in elderly PsA patients.

P-0973

Longevity and low-grade chronic inflammation in older adults

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Introduction: Low-grade chronic inflammation (LGCI) is associated with health status during aging (inflammaging). This study aims to characterize the LGCI profile of older adults surpassing (S) or not (NS) their life expectancy (LE) based on analytical data and scores proposed.

Methodology: Retrospective observational study of the public health system users in Aragón (Spain) aged 74–79 years in 2009, based on demographic and clinical data from their electronic medical records. Inflammatory profiles of individuals who S or NS their LE (84 years in 2009) were characterized during 2012–2019 based on neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), INFLA-score, and Systemic Immune-Inflammation Index (SII).

Results: We analyzed 62,756 people (51,644 S; 11,112 NS). NLR values were (median, interquartile range) 2.75(2.02) vs 4.54(4.54) in 2012 and 2.75(1.96) vs 3.46(5.98) in 2019, in S and NS, respectively. Median values ranged from 2.75–2.85 in S and 3.46–4.54 in NS over study years. PLR values at the beginning and end of follow-up were,

following the same order, 117(63) vs 149(96) and 117(64) vs 210(195), with medians oscillating between 116–119 and 133–210 in this period. INFLA-score values were 7(7) vs 8(6) in 2010 and 8(6) vs 14(3) in 2019, oscillating between 7–8 and 8–14, respectively. SII values at the beginning and end were 546(471) vs 908(888) and 559(468) vs 1081(1239), with values oscillating between 546–577 and 802–1081, respectively.

Conclusion: LGCI appears to be lower in individuals who S their LE compared with those who NS, tending to increase with age.

P-0974

Profile of chronic diseases in older adults exceeding or not their expected life expectancy

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Introduction: Chronic diseases tend to accumulate with age, and it is suggested that maintaining good health at younger ages is associated with a higher probability of experiencing healthy aging. This study aims to characterize the prevalence of chronic diseases of older adults surpassing or not their expected life expectancy (LE).

Methodology: Retrospective, longitudinal observational study of adults aged 74–79 in 2009, enrolled in the public health system of Aragón (Spain), using demographic and clinical data from their electronic medical records between 2009–2019. The study identifies the prevalence of the 20 most prevalent chronic diseases in patients who exceed (S) or not (NS) the LE of 84 years in 2009.

Results: 62,756 individuals were included (51,644 S and 11,112 NS). Hypertension was the most prevalent chronic condition in both groups (S: 55.0%, NS: 45.0%), followed by lipid metabolism disorders (S: 41.6%, NS: 32.3%), urinary incontinence (S: 34.5%, NS: 30.5%), diabetes mellitus (S: 23.4%, NS: 27.0%), heart failure (S: 12.0%, NS: 15.6%) and dementia (S: 2.22%, NS: 15.2%). COPD and stroke only appeared in the top-20 in NS (12.5% and 11.7%).

Conclusions: A different profile of chronic diseases seems to exist between individuals who exceed their LE and those who do not. Notably, diabetes, dementia and heart failure show lower prevalence in those who exceed LE, while COPD and stroke are more prevalent in those who do not exceed LE.

P-0975

Hallmarks and biomarkers of normal pressure hydrocephalus: Towards a precision medicine approach

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Introduction: Idiopathic normal pressure hydrocephalus (iNPH) is a potentially reversible cause of gait disturbance, cognitive decline, and urinary incontinence in older adults. Frequently underdiagnosed or mistaken for untreatable neurodegenerative conditions, iNPH presents

a unique opportunity for therapeutic intervention. Its core pathophysiological hallmark is impaired cerebrospinal fluid (CSF) dynamics with increased resistance to CSF outflow. In line with contemporary approaches to neurodegenerative disease, there is a pressing need to move beyond syndromic diagnosis toward a biomarker-driven, mechanistic framework to optimize the care of older adults with suspected iNPH.

Methods: We conducted a literature review and analyzed data from the prospective ProLiPHYc cohort to identify key pathological hallmarks and associated biomarkers. These included Alzheimer's disease (CSF Tau/A β 42 ratio), Parkinson (presynaptic dopaminergic deficits via DaTSCAN), small vessel disease (MRI Fazekas scale), and iNPH (CSF outflow resistance measured via lumbar infusion testing).

Results: The ProLiPHYc cohort demonstrated considerable biological and phenotypic heterogeneity among iNPH patients. Most patients exhibited overlapping biomarkers of neurodegenerative and cerebrovascular diseases in addition to altered cerebral hydrodynamics. Only a minority showed isolated “pure” iNPH. This coexistence of multiple pathological markers underscores the diagnostic complexity in geriatric populations. Nevertheless, when selected through a biomarker-informed strategy, shunt surgery remains an effective intervention for restoring function and autonomy.

Conclusion: Hallmark- and biomarker-based diagnostic approach supports precision medicine in iNPH. Especially in the older patients, early and accurate identification through tools like CSF infusion testing and neuroimaging enables targeted interventions that preserve mobility, cognition, and independence, key priorities in geriatric care.

P-0976

A simple case of diabetes and malnutrition?

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Introduction: Systemic Sclerosis (SSc) is a rare connective tissue disease characterized by autoimmunity, peripheral vasculopathy, and fibrosis of the skin and internal organs. SSc can present with varying degrees of severity. The prognosis remains poor due to the lack of efficient antifibrosis treatment and depends on the presence of pulmonary, cardiac or renal complications.

Methods: Case-report of a SSc diagnosed in an elderly woman.

Results: A 92-years-old woman was admitted to an acute geriatric unit for anorexia. Clinical evaluation revealed malnutrition, hyperglycemia, dehydration, dry mouth and dysphagia. The skin examination showed red, puffy fingers with Raynaud's phenomenon and scleroderma on both hands. Gastroscopy revealed esophagitis. Capillaroscopy showed megacapillaries, decreased capillary density. Antinuclear antibodies were elevated at 1/1280 with anti-centromere specificity. The diagnosis of limited cutaneous SSc with an ACR-EULAR score above 9 was confirmed. Treatment consisted of insulin therapy, proton pump inhibitors, artificial saliva, cold protection and calcic inhibitor treatment. There was no pulmonary fibrosis or pulmonary hypertension and no cancer associated. After multidisciplinary discussion, no specific treatment for SSc was initiated due to the patient's frailty and reduced life expectancy.

Key conclusions: The onset of SSc can be delayed, even at a geriatric age, and diagnosis should not be ruled out based solely on age criteria. Early diagnosis is crucial to identify complications and improve patient's quality of life, even without curative treatment, especially in the elderly, since approximately 10% of SSc can be associated with

neoplasia (either at diagnosis or during the initial five years of follow-up).

P-0977

Functional impairment associated with fecal incontinence: successful treatment with laparoscopic rectopexy—a case report of an 80-year-old patient

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Introduction: Fecal incontinence is a distressing and socially isolating condition that increases with age. Despite effective treatment options, many patients do not receive proper help. This neglect, common in the geriatric population, can lead to depressive disorders and seriously limit patient functional status. This study emphasizes the need for careful and tactful history-taking and presents a successful surgical treatment that significantly improves quality of life.

Methods: A case study of an 80-year-old patient with depressive disorders and functional impairment associated with fecal incontinence who was successfully treated with laparoscopic rectopexy.

Results: An 80-year-old female was referred to the Outpatient Geriatric Clinic and reported joint pain as her main complaint. When examined during the Comprehensive Geriatric Assessment, she admitted that due to fecal incontinence, she had almost completely limited leaving the house and social relationships due to fear of social ostracism. This was considered to be the cause of depressive disorders. The patient was referred to the surgical clinic where, due to rectal prolapse, she was qualified for laparoscopic rectopexy. The procedure was performed without complications, resulting in significant functional status and mood improvement.

Key conclusions: Fecal incontinence can be successfully treated with the use of laparoscopic methods even in the geriatric population. It is important to proactively ask geriatric patients about the problem as it can significantly limit functional status and lead to depressive disorders.

P-0978

Generalized and localized form of bullous pemphigoid in geriatric patients

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Introduction: Bullous pemphigoid (BP) is the most common autoimmune subepidermal blistering disease affecting mainly older patients > 60, mean age 66–83 years. Neurological diseases-dementia, Parkinson's disease, stroke, polypharmacy and certain systemic medications including loop diuretics, spironolactone, beta-blockers, and neuroleptics, are also associated with BP.

Case Report: Case 1: Female, 67, diffuse eczematous, pruritic, urticaria-like lesions, later appearance of tense clear fluid bullae (blisters), generalized (trunk, upper and lower extremities).

Comorbidities: HTA, Stroke. Medications(11): Clopidogrel, Bisoprolol, Amlodipine, Furosemide, Aminophylline, Sertraline, Diazepam, Omeprazole, Haloperidol, Zolpidem, Prednisolon. Blood test: WBC 11.3..11.4..9.7, K 3.6..3.8. Histopathology: Subepidermal split, superficial perivascular inflammatory infiltrate and numerous eosinophils. DIF: not conducted. Treatment: Systemic steroid therapy gradually tapered, antibiotic, wound care-antiseptic regimes. Condition, although generalized and complicated with bacterial superinfection, resolved completely in 1.5 months.

Case 2: Female, 76, localized bullae(blisters) on the right foot. Comorbidities: m. Alzheimer terminal, HTA, CMP. Medications: Omeprazole, Losartan, Furosemide, Carvedilol. Blood test: WBC 13...15. Skin biopsy: not performed. Treatment: topical steroids. The resolved completely without scars in 4 weeks.

Conclusion: Neurological conditions(Stroke and m. Alzheimer), elevated WBC, mild electrolyte disbalance, > 6 medications in the first case, and newly introduced furosemide in the second case are consistent with the studies in which an association of these factors with an increased risk of symptoms and the course of BP was found. The accurate diagnosis with all recommended diagnostic tests must be an imperative in the everyday practice, which is lacking in our cases due to limited availability, especially for this category of patients—most frail and bedridden.

P-0979

Patient perspectives on AI in healthcare for multimorbidity

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(1) University of Birmingham

Introduction: Multimorbidity, the presence of two or more chronic conditions, is increasingly prevalent in ageing populations and linked to reduced quality of life, functional decline, polypharmacy, and higher healthcare use making the management of multimorbidity in older adults particularly complex. The OPTIMising therapies, disease trajectories, and AI assisted clinical management for patients Living with complex multimorbidity (OPTIMAL) project explored patient perspectives around the potential benefits or risks associated with the use of AI informed clinical decision-making.

Methods: Semi-structured interviews were conducted with 29 participants living with a diverse range of multiple long-term conditions. A total of 29 interviews were conducted, with 21 of the participants aged over 60 years. Qualitative data were coded and analysed thematically.

Results: Participants identified several potential benefits and challenges of using AI for informed decision-making in healthcare. Reported benefits included improved efficiency and accuracy, better access to information, and more personalised care, such as treatments tailored to individual needs. However, concerns were also raised, including the loss of human interaction, issues of privacy and data security, and a lack of transparency. Many participants stressed the importance of human oversight of AI tools/outputs.

Key conclusions: These findings highlight key considerations for the future development of AI in healthcare. AI systems should be designed with patient input and transparency in mind, and any AI tool should be subject to regular evaluation to ensure the accuracy of the information it provides. Concerns around privacy, data security and fairness need to be addressed.

P-0980

Exploring the use of an AI tool in shared decision-making in primary care for multimorbidity

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(1) University of Birmingham

Introduction: Multimorbidity, the presence of two or more chronic conditions, is increasingly prevalent in ageing populations and linked to reduced quality of life, functional decline, polypharmacy, and higher healthcare use making the management of multimorbidity in older adults particularly complex. The OPTIMising therapies, disease trajectories, and AI assisted clinical management for patients Living with complex multimorbidity (OPTIMAL) project explored how AI in primary care could support shared decision-making (SDM).

Methods: Semi-structured interviews were conducted with 18 participants with multiple long-term conditions, with the majority (14) over 60 years. Participants reviewed a summary of a ‘simulated’ patient presenting to her GP with depressive symptoms, along with the output of a prototype AI tool intended to support clinical decision making. Interviews explored participants’ views on SDM and their responses to the tool. Qualitative data were coded and analysed thematically.

Results: SDM in healthcare consultations for patients with multimorbidity is influenced by communication, collaboration, time constraints, and continuity of care. The prototype AI tool received mixed feedback. Some, particularly older participants, found it difficult to understand and needed detailed explanations. Concerns included doctors’ limited time interpreting outputs (notably in telephone consultations), and suitability for those with limited digital or health literacy. However, many participants recognised the potential to improve SDM by clarifying information and prompting discussions.

Key conclusions: AI could enhance SDM by structuring discussions and improving patient understanding. However, clear explanations and accessibility measures are essential for effectively integration into consultations. Time constraints may limit how AI tools are used in practice.

P-0981

A case of late-stage HIV diagnosis despite multiple healthcare encounters in a geriatric patient

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Abstract: This case highlights a delayed HIV diagnosis in a 78-year-old female despite multiple clinical encounters over four years. The patient presented with multiple HIV indicator conditions, including unexplained weight loss, lymphadenopathy, and esophageal candidiasis. Due to demographic biases and lack of routine HIV screening in non-traditional populations, the diagnosis was missed until a late stage. This report emphasizes the importance of HIV testing in patients with persistent unexplained symptoms, regardless of demographic risk factors.

Introduction: HIV diagnosis in older adults remains a challenge, particularly in populations not traditionally considered high risk. This case demonstrates how failure to recognize HIV indicator conditions led to multiple investigations and delayed diagnosis. The case underlines the necessity of a broader approach to HIV testing, especially in patients with persistent, unexplained symptoms.

Case presentation: A 78-year-old Caucasian female with a history of bilateral hip replacements was first seen in 2012 for routine follow-up. In 2016, she underwent a low-dose CT thorax as part of a lung health check, which revealed small pulmonary nodules. Over the next few years, she developed progressive lymphadenopathy, weight loss, dysphagia, and recurrent infections.

Between 2017 and 2021, the patient was evaluated over 20 times by multiple specialties, including respiratory, gastroenterology, breast services, and hematology. Imaging consistently showed progressive lymphadenopathy and stable pulmonary nodules. Multiple biopsies of lymph nodes demonstrated reactive changes but no malignant pathology.

In early 2020, worsening dysphagia and significant weight loss prompted further investigations, including esophageal endoscopy, which revealed candidiasis. Despite the presence of multiple HIV indicator conditions, an HIV test was not performed. It was only in 2021, after referral to the Infectious Diseases (ID) team, that an HIV test was conducted, revealing a CD4 count of 8 and a viral load of 346,000.

Discussion: This case underscores several key issues in delayed HIV diagnosis:

Demographic Bias: The patient did not fit the traditional profile of an HIV-positive individual (elderly, heterosexual, Caucasian female), leading to a lack of consideration for HIV testing.

Missed Indicator Conditions: Weight loss, lymphadenopathy, and esophageal candidiasis are well-recognized HIV indicator conditions that should prompt testing.

Fragmented Care: The patient was seen by multiple specialties without a cohesive approach to her unexplained symptoms.

Travel History: The patient had annual travel to Gambia, a country with a known HIV prevalence of 1.8% in 2020, which was not considered in earlier assessments.

Conclusion: This case highlights the need for increased awareness and routine HIV screening in patients presenting with persistent, unexplained symptoms. The implementation of emergency department (ED) opt-out testing programs has successfully identified undiagnosed cases, but similar strategies should extend to specialist clinics and outpatient settings. Removing demographic biases and integrating HIV testing into routine assessments of lymphadenopathy and unexplained weight loss could lead to earlier diagnosis and improved patient outcomes.

Key Takeaways:

HIV should be considered in any patient with persistent, unexplained symptoms, regardless of age or perceived risk factors.

Cohesive, multidisciplinary communication is critical in recognizing patterns of illness.

Travel history should be actively explored in patients with undiagnosed chronic conditions.

References: HIV testing guidelines-BHIVA. Annual epidemiological spotlight on HIV in the North West- GOV.UK.

P-0982

Efficacy of combination of calcium carbonate, vitamin D3 and vitamin K2 in treating osteoporosis

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Introduction: Osteoporosis is a condition where a reduction in bone density increases the risk of fracture.

Calcium carbonate is essential in increasing bone mineral density (BMD). However, absorption of calcium is limited, hence it is highly dependent on vitamin D3, which facilitates calcium uptake in the intestines and supports bone remodelling. Vitamin K2, in menaquinone-7 (MK-7) form, plays a crucial role in activating osteocalcin, which helps calcium bind to bone matrix, and reduces risk of vascular calcification through matrix Gla protein activation.

Existing research suggests that supplementation with calcium, vitamin D3 and vitamin K2 may provide a more comprehensive approach to osteoporosis management than calcium alone. This combination presents a promising, non-pharmacological strategy for individuals at risk of osteoporosis, offering a balanced approach to maintain bone health.

Method: 2 cases have been selected to evaluate the efficacy of an oral tablet containing calcium carbonate, vitamin D3 and vitamin K2 as a monotherapy, in strengthening bone health and reducing osteoporosis development.

Results: 83-year-old women with osteoporosis improved from T score of -3.6 to -2.5 at neck of femur, and -4.1 to -3.1 at L1 to L4 following 14 months intake of combination tablet above.

72-year-old women improved in T score at L1 to 4 from -3.8 to -3.1 , and at neck of femur from -1.9 to -1.4 after taking combination tablet above for 15 months.

Conclusion: The combination of calcium carbonate, vitamin D3 and vitamin K2 improves BMD and potentially reduces risk of fracture for patients suffering from osteoporosis.

P-0983

Targeting nerve repair in diabetic peripheral neuropathy: a novel therapeutic approach through synergistic benefits of alpha lipoic acid (ALA) and B vitamins

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Introduction: Diabetic peripheral neuropathy (DPN) is a common complication of diabetes that leads to significant nerve damage, characterised by pain, tingling, and numbness that impact quality of life. 300 mg alpha lipoic acid (ALA), 500 mcg methylcobalamin, 39 mg vitamin B1, and 8 mg vitamin B6 in tablet form emerged as a promising intervention for DPN. This combination tablet targets multiple pathophysiological mechanisms: ALA functions as a potent antioxidant reducing oxidative stress, B vitamins support nerve myelination, axonal transport, and neurotransmitter synthesis. Together, they provide neuroprotection and nerve regeneration beyond symptom management.

Method: 2 cases have been selected to evaluate the efficacy of the combination tablet above in improving DPN symptoms.

Results: A 68-year-old male with a 12-years history of diabetes presented with burning sensation, numbness, and tingling in both feet that disrupted sleep and limited daily activities. At baseline assessment, his Neuropathy Symptom Score (NSS) was 7.0. He was treated with two combination tablets daily. The NSS decreased to 5.0 at the 6-week assessment and further improved to 4.0 at the 12-week follow-up (42.9% overall reduction from baseline).

A 79-year-old lady with 22-years history of diabetes presented with 3 months history of numbness, pins and needles sensation in both feet and hands, took two combination tablets above daily and NSS improved from 9.0 to 2.0 after 3 months.

Conclusion: These cases demonstrate that a fixed dose combination tablet of ALA and B vitamins significantly improved DPN symptoms as measured by NSS, offering a promising comprehensive approach for DPN management.

P-0984

Enhancing medication safety in geriatric critical care: impact of clinical pharmacist interventions from a multidisciplinary viewpoint

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Introduction: The median age of patients in intensive care units (ICUs) has steadily increased, now exceeding 65 years old in many institutions [1]. Geriatric patients are at high risk of medication-related complications. This study evaluates the impact of clinical pharmacist interventions in critical care. The clinical significance of these interventions was assessed by a geriatrician and an infectious disease (ID) consultant.

Methods: A retrospective observational study was conducted from January 1 to December 31, 2024, following the integration of a clinical pharmacist into the ICU and High Dependency Unit (HDU) at Pantai Hospital Ayer Keroh, Malacca. Pharmacist interventions data was collected and analysed. A representative 10% of these interventions were independently assessed by a geriatrician and an ID consultant using the clinical impact component of the CLinical, Economic and Organisational (CLEO) tool [2].

Results: In 2024, geriatric patients (> 65 years old) accounted for 40% (n = 373) of ICU and HDU discharges (n = 916) at our hospital. The pharmacist made 403 interventions, with an acceptance rate of 88.6% (n = 357). Antimicrobial Stewardship (AMS)-related interventions comprised 39.5% (n = 159) of total interventions. The most common drug-related problems (DRPs) were supra-therapeutic dosing (19.3%) and untreated indications (18.1%). The geriatrician rated 72% of interventions as having a 'major' clinical impact, compared to 40% by the ID consultant.

Conclusion: Clinical pharmacist interventions appeared to contribute meaningfully to medication safety and therapeutic optimisation for critically ill patients, many of whom were geriatric. The geriatrician's higher impact ratings reinforce the important contribution of clinical pharmacists in optimising pharmacotherapy for older population.

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P-0985

Better at home: collaboration between general practitioner and elderly care physician

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Introduction: The growing medical needs of community-dwelling older adults with complex multimorbidity present a global challenge. This study investigates the collaboration between general practitioners (GPs) and elderly care physicians (ECPs) as a solution. These collaborations aim to improve patient and caregiver quality of life, support aging in place through preventing hospital and nursing home admissions, and reduce costs. The goal is to develop a generic model of care for this population, which is translatable to broader specialist-generalist collaborations.

Methods: This prospective cohort study was conducted in six regions of the Netherlands (02/2024–03/2025). Data on patient care needs, treatment goals, care types, intervention costs, and satisfaction levels were collected through quantitative and qualitative methods. The study also engaged ECPs and other stakeholders in the design and execution, integrating their perspectives.

Results: Preliminary findings from 99 patients (83 years old on average, 67% female) suggest that GPs often refer to the ECP for cognitive diagnostics and physical decline. In 73% of referrals, GPs would have referred to a medical specialist. The involvement of the ECP varies across regions. The ECP integrates the goals of the different stakeholders in their own goal, highlighting their holistic approach. Satisfaction levels indicate successful care delivery.

Key conclusions: Preliminary results align with previous studies, suggesting the potential of GP-ECP collaboration as a solution to the challenge of the complex medical care of community dwelling older adults. These findings will inform the development of a quality framework and funding model for this care approach.

Nutrition

P-0986

Optimizing enteral nutrition protocols to reduce aspiration pneumonia risk: a dietitian-led intervention study

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Aspiration pneumonia remains a significant complication in enterally fed patients, with incidence rates as high as 20–30% in some high-risk populations. Despite advances in enteral feeding techniques, the risk persists, highlighting the need for targeted interventions. Dietitians, as key members of the healthcare team, are uniquely positioned to implement and oversee strategies to mitigate this risk.

Aim: This study aimed to evaluate the effectiveness of a dietitian-led protocol in reducing the incidence of aspiration pneumonia among enterally fed patients in an acute care setting.

Methodology: A prospective interventional study was conducted over 12 months in a 300-bed tertiary care hospital. The intervention consisted of a comprehensive enteral feeding protocol developed and implemented by dietitians, including:

1. Individualized feeding regimens based on patient risk factors.
2. Regular bedside swallowing assessments.
3. Standardized positioning guidelines during feeding.
4. Ongoing staff education on aspiration prevention.
5. Multidisciplinary team rounds for high-risk patients.

The primary outcome measure was the incidence of aspiration pneumonia. Secondary outcomes included length of stay and patient satisfaction.

Results: A total of 250 enterally fed patients were included in the study. Following the implementation of the dietitian-led protocol:

- Aspiration pneumonia incidence decreased from 18 to 7% ($p < 0.001$).
- Average length of stay reduced by 2.3 days ($p < 0.05$).
- Patient satisfaction scores improved by 15% ($p < 0.01$).

Dietitians' role was central in:

- Conducting risk assessments and tailoring feeding plans.
- Collaborating with speech therapists for dysphagia management.
- Providing ongoing education to patients, families, and staff.
- Monitoring compliance with the protocol and making real-time adjustments.

Conclusion: The implementation of a dietitian-led enteral feeding protocol significantly reduced the incidence of aspiration pneumonia in enterally fed patients. This study underscores the critical role of dietitians in preventing complications associated with enteral nutrition. Future research should focus on long-term outcomes and the cost-effectiveness of such interventions across diverse healthcare settings.

P-0987

Optimizing enteral nutrition protocols to reduce aspiration pneumonia risk: a dietitian-led intervention study

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Diarrhea is a common complication in enterally fed patients, particularly those with *C. difficile* infections and on antibiotic therapy. This quality improvement project aimed to evaluate the role of dietitians in managing diarrhea in this high-risk population using Bimuno, a prebiotic supplement.

Methodology: A six-month quality improvement initiative was implemented in the intensive care unit of a tertiary hospital. The project involved:

1. Baseline assessment of diarrhea incidence in enterally fed patients with *C. difficile* and on antibiotics.
2. Development of a standardized protocol for dietitian interventions, including Bimuno supplementation.
3. Implementation of targeted dietary strategies.
4. Staff education on enteral nutrition management and diarrhea prevention.
5. Continuous monitoring and evaluation of outcomes.

Results: The dietitian-led interventions yielded significant improvements:

1. Diarrhea incidence decreased by 35% in the target patient group.
2. Implementation of fiber-enriched formulas with Bimuno supplementation reduced diarrhea episodes and improved gut health.
3. Tailored use of Bimuno showed promising results in preventing antibiotic-associated diarrhea.
4. Enhanced staff knowledge led to improved enteral nutrition handling and reduced contamination-related diarrhea.
5. Malnutrition risk decreased due to better management of enteral nutrition despite diarrhea complications.

Conclusion: This quality improvement project demonstrated the crucial role of dietitians in managing diarrhea in enterally fed patients with *C. difficile* and on antibiotics. By implementing evidence-based strategies, including Bimuno supplementation, dietitians significantly reduced diarrhea incidence and improved overall patient outcomes.

The project highlights the importance of dietitian involvement in multidisciplinary care for complex enterally fed patients and provides a framework for future quality improvement initiatives in enteral nutrition management.

P-0988

Enhancing diarrhea management in enterally fed patients: a dietitian-led quality improvement project

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Diarrhea is a common complication in enterally fed patients, affecting up to 60% of critically ill individuals. This quality improvement project aimed to evaluate and optimize the role of dietitians in managing diarrhea in patients receiving enteral nutrition (EN).

Methodology: A six-month quality improvement initiative was implemented in the intensive care unit of a tertiary hospital. The project involved:

1. Baseline assessment of diarrhea incidence and current management practices.
2. Development of a standardized protocol for dietitian interventions.
3. Implementation of targeted dietary strategies.
4. Staff education on EN management and diarrhea prevention.
5. Continuous monitoring and evaluation of outcomes.

Results: The dietitian-led interventions resulted in significant improvements:

1. Diarrhea incidence decreased by 80% in enterally fed patients.
2. Implementation of fiber-enriched formulas reduced diarrhea episodes and improved gut health.
3. Introduction of lower FODMAP formulas for select patients decreased diarrhea likelihood.
4. Tailored use of prebiotics and probiotic derivatives showed promising results in diarrhea prevention.
5. Enhanced staff knowledge led to improved EN handling and reduced contamination-related diarrhea.
6. Malnutrition risk decreased due to better management of EN despite diarrhea complications.

Conclusion: This quality improvement project demonstrated the crucial role of dietitians in managing diarrhea in enterally fed patients. By implementing evidence-based strategies and providing targeted interventions, dietitians significantly reduced diarrhea incidence and improved overall patient outcomes. The project highlights the importance of dietitian involvement in multidisciplinary care for enterally fed patients and provides a framework for future quality improvement initiatives in enteral nutrition management.

P-0989

Predictors of malnutrition among older residents in Qatari long-term care facilities: a retrospective study

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(1) HMC

Background: Malnutrition is a prevalent issue among older adults in long-term care facilities and is associated with adverse health outcomes and increased healthcare costs. Identifying the predictors of

malnutrition in this population is crucial for developing effective intervention strategies. This study aimed to explore the factors contributing to malnourishment among older individuals living in long-term care facilities in Qatar.

Methods: This cross-sectional study included 75 older adults from two long-term care facilities (Rumailah Hospital and Enaya Specialized Care Center) in Qatar. Baseline characteristics, including age, sex, length of stay, mortality, weight, body mass index, co-morbidities, and laboratory parameters, were assessed. Data were analyzed using the most recent version of the SPSS software, version 29. Predictors of malnutrition and mortality were identified using logistic regression analysis.

Results: Of the 75 older individuals included in the study, 85% (64) were malnourished. The average age of the participants was 74.89 years, with a standard deviation of 10.21. Of all participants, approximately 61% (46) were males, and 39% (29) were females. Most malnourished older adults were classified as either at “moderate (29.69%)” or “severe risk (37.50%),” according to the Geriatric Nutritional Risk Index. Malnourished participants experienced a significant percentage of weight change within 3 months (14.01 ± 7.89); the only statistically significant predictor of malnutrition was the percentage of weight change within 3 months with an odds ratio (OR) of 4.8 (confidence interval [CI] 1.56–14.75) and p-value of 0.006. Statistically significant predictors of mortality were malnutrition (OR 24.84, CI 1.09–564) and age (OR 1.07, CI 1.00–1.14).

Conclusions: A significant predictor of malnutrition in older adults identified in this study was the sudden and recent change in weight, which can be employed to detect individuals at risk early and guide tailored interventions. Malnutrition is a significant predictor of mortal.

P-0990

Optimizing pressure injury healing through specialized enteral nutrition support in HDU patients: a dietitian-led intervention study

ALAnoud ALFehaidi (1)

(1) HMC

Abstract

Background: Pressure injuries in enterally-fed high dependency unit (HDU) patients present unique nutritional challenges. While standard enteral formulas provide basic nutrition, the role of specialized nutrient supplementation through enteral feeding requires further investigation.

Aim: To evaluate the effectiveness of a dietitian-led nutritional intervention incorporating specific amino acids and micronutrients via enteral feeding in pressure injury healing among HDU patients.

Methodology: A prospective study enrolled 40 adult HDU patients receiving enteral nutrition with Stage II-IV pressure injuries. The intervention group (n = 20) received specialized enteral formula enriched with arginine (7 g/L), glutamine (18 g/L), β -hydroxy- β -methylbutyrate (3 g/L), vitamin C (500 mg/L), zinc (20 mg/L), and standard multivitamins. The control group (n = 20) received standard enteral formula. Wound healing was monitored weekly for 4 weeks using the percent healing equation: $[(\text{Initial wound area} - \text{current wound area}) / \text{Initial wound area} \times 100]$.

Results: The intervention group demonstrated significantly higher healing rates compared to controls (45% vs. 28% reduction in wound area at 4 weeks, $p < 0.01$). Mean time to 50% wound closure was 18 days in the intervention group versus 28 days in controls. Patients achieving optimal nutrient levels through supplemented enteral

feeding showed 1.8 times faster healing rates compared to those receiving standard formula.

Conclusion: Dietitian-led specialized enteral nutrition support significantly improved pressure injury healing outcomes. The findings demonstrate the importance of targeted nutrient supplementation through enteral feeding in pressure injury management, establishing a clear role for dietitians in wound care teams.

P-0991

Dietitian-led interventions for sarcopenia management in cancer patients: a quality improvement initiative

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: Sarcopenia, the progressive loss of muscle mass and function, is a common complication in cancer patients that can negatively impact treatment outcomes and quality of life.

Aim: This quality improvement project aimed to assess the effectiveness of dietitian-led interventions in managing sarcopenia among cancer patients and to establish best practices for nutritional care.

Methodology: A six-month prospective study was conducted on 100 cancer patients at various stages of treatment. Patients underwent initial screening for sarcopenia using the SARC-F questionnaire and bioelectrical impedance analysis. Dietitians implemented tailored nutritional interventions, including high-protein diets (1.2–1.5 g/kg/day), oral nutritional supplements, and counseling on physical activity. Muscle mass, strength, and physical performance were assessed at baseline and after three and six months. Patient-reported outcomes were collected using the EORTC QLQ-C30 questionnaire.

Results: After six months, 72% of patients showed improvements in muscle mass and strength. Adherence to dietitian-prescribed nutritional plans was associated with a 40% reduction in sarcopenia progression compared to standard care. Patients receiving dietitian-led interventions reported significant improvements in fatigue levels and overall quality of life. The integration of nutritional care with exercise recommendations led to synergistic benefits, with a 25% increase in physical performance scores.

Conclusion: This quality improvement project demonstrates the significant impact of dietitian-led interventions in managing sarcopenia among cancer patients. The implementation of targeted nutritional strategies, combined with physical activity guidance, resulted in improved muscle health and quality of life. These findings support the integration of specialized dietetic services as a standard of care in oncology settings to effectively address sarcopenia and enhance overall patient outcomes.

P-0992

Dietitian-led interventions for sarcopenia management in cancer patients: a quality improvement initiative

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: The transition from total parenteral nutrition (TPN) to enteral nutrition (EN) is a critical process in the nutritional management of critically ill patients. Proper execution of this transition can significantly impact patient outcomes, reduce complications, and optimize resource utilization.

Aim: To implement and evaluate a standardized protocol for transitioning patients from TPN to EN, emphasizing the role of dietitians

and focusing on improving nutritional outcomes without complications.

Methodology: This quality improvement project was conducted in a 20-bed intensive care unit over a 6-month period. A multidisciplinary team, led by dietitians, developed a standardized transition protocol. Key steps included:

1. Daily nutritional assessment by dietitians.
2. Gradual introduction of EN while tapering TPN.
3. Monitoring of gastrointestinal tolerance.
4. Adjustment of feeding rates based on patient response.
5. Complete transition to EN when 90% of nutritional goals were met enterally.

Data on transition time, nutritional adequacy, and complications were collected pre- and post-implementation.

Results: Post-implementation data showed:

- Reduction in average transition time from 2 weeks to 5 days.
- Increase in patients achieving 90% of nutritional goals from 30 to 90%
- Decrease in TPN-related complications by 60%
- No significant increase in EN-related complications.

The dietitian-led approach resulted in more frequent nutritional assessments (from 3 to 5 times/week) and timely adjustments to feeding plans.

Conclusion: The implementation of a standardized, dietitian-led protocol for TPN to EN transition significantly improved nutritional outcomes without increasing complications. This quality improvement initiative highlights the crucial role of dietitians in optimizing nutrition therapy and suggests that a structured approach to TPN-EN transition can enhance patient care in critical care settings.

P-0993

Optimizing the transition from total parenteral nutrition to enteral nutrition: a quality improvement initiative

ALAnoud ALFehaidi (1)

(1) HMC

Introduction: The transition from total parenteral nutrition (TPN) to enteral nutrition (EN) is a critical process in the nutritional management of critically ill patients. Proper execution of this transition can significantly impact patient outcomes, reduce complications, and optimize resource utilization.

Aim: To implement and evaluate a standardized protocol for transitioning patients from TPN to EN, emphasizing the role of dietitians and focusing on improving nutritional outcomes without complications.

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P-0994

Personalized diet with or without physical exercise improves nutritional status, muscle strength, physical performance, and quality of life in malnourished older adults: a prospective randomized controlled study

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Objectives: Malnutrition (MN) is prevalent in older adults and closely related to sarcopenia, frailty, morbidity, mortality, and decreased quality of life. In this study, we aimed to evaluate the effects of a personalized diet combined with planned physical exercise on nutritional status, physical performance, and quality of life (QoL) in malnourished older adult patients.

Methods: In this prospective study, 20 older adults with MN risk according to the Mini Nutritional Assessment—Short Form (MNA-SF) were randomized into (i) personalized diet (PD) and (ii) personalized diet with physical exercise (PDE) groups, and followed up with for 12 weeks. The physical exercise included warm-up, strengthening, balance, and cooldown phases, with a frequency of 3–4 days per week. Anthropometric measurements, physical performance, and quality of life were assessed using standardized tools at baseline and at the 4th, 8th, and 12th weeks. QoL was measured using the EQ-5D index and EQ-5D visual analog scale (VAS) scores.

Results: A total of 20 patients (55% male) participated in the study. During the study, BMIs, MNA-SF scores, and hand grip strength were increased, and the patients' average duration on the Timed Up and Go (TUG) test decreased significantly in both groups. The EQ-5D index score of the PD group and the EQ-5D VAS scores of both groups were increased.

Conclusions: A personalized diet with or without physical exercise therapy was associated with improved nutritional status, physical performance, and QoL.

Keywords: malnutrition; aged; diet; exercise; quality of life.

P-0995

The association between C-reactive protein/albumin ratio with the stages of malnutrition defined by GLIM criteria in older inpatients

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Background: The aim of this study was to determine the relationship between C-Reactive Protein (CRP)/Albumin ratio (CAR) and malnutrition, and the stages of malnutrition defined by the Global Leadership Initiative on Malnutrition (GLIM) criteria as well as to determine cut-off points of CAR to predict malnutrition and malnutrition stages.

Methods: CRP and albumin values were measured in the first 24-h of hospitalization. Malnutrition, and stages, was assessed using the Global Leadership Initiative on Malnutrition (GLIM) criteria. To identify CAR cut-off values for predicting stage 1 and stage 2 malnutrition, receiver operating characteristic (ROC) curve analysis was performed.

Results: A total of 127 patients (46.5% male; median age 73) were included in the study. Stage 1 malnutrition was detected in 26% of cases and Stage 2 malnutrition in 23.6%. Median CAR was 1.8 (0.07–50.4) in patients with normal nutritional status (NNS), 6.8 (0.08–135.2) and 9.8 (0.08–86.4) in the study population with stage 1 or stage 2 malnutrition, respectively ($p = 0.014$). The AUC of CAR for presence of total malnutrition was 0.649 (95% CI 0.552–0.747, $p = 0.004$), 0.669 (95% CI 0.542–0.796, $p = 0.009$) for stage 2 malnutrition. Based on the GLIM criteria, CAR cutoff of 8.40 demonstrated 53.3% sensitivity and 79.7% specificity in predicting stage 2 malnutrition.

Conclusion: In our study CAR was found to be associated with both the diagnosis of malnutrition and its staging according to the GLIM criteria. So, CAR value by itself is a practical method for assessing the risk of both overall malnutrition and stage 2 malnutrition, according to GLIM criteria.

P-0996

Nutritional ultrasonography in malnourished patients with hip fracture

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Introduction: Nutritional ultrasonography is an innovative technique to assess muscle mass. The aim of our study was to describe the prevalence of malnutrition and the muscle ultrasound measurements in malnourished patients with hip fracture.

Methods: Observational study. Patients aged > 65 with hip fracture (December 2022–September 2023). Variables: functional (Barthel index-BI-, Functional ambulation classification-FAC-, Lawton index-LI-). Comorbidity (CIRS-G), handgrip strength, calf circumference

(CC). Nutritional (MNA-SF, GLIM-criteria). Frailty (Frail-VIG index). Muscle ultrasonography: area and thickness of the rectus femoris muscle (ARF, RFT) and pennation angle (PA) of the vastus lateralis muscle. Descriptive statistics. SPSS v.29.02.

Results: $n = 63$, malnutrition: 34.9%(22). Malnourished patients compared to non-malnourished patients, were older, 84.95 ± 6.80 years old compared to 83.61 ± 7.75 . Women 72.7% compared to 65.9%. BI 78.23 ± 19.83 versus 82.05 ± 21.75 , FAC 3.82 ± 1.05 versus 3.90 ± 1.06 , LI 1 (IQR = 0–7) versus 4.0 (IQR = 0–8). Number of drugs 10.0 (IQR = 5.75–13.25) versus 9.0 (IQR = 6.0–11.5), Cognitive impairment 45.5% versus 36.6%. CIRS-G 12 (IQR = 7.0–16.0) versus 9.5 (IQR = 5–15.5). Dysphagia 27.3% compared to 14.6%, delirium 60.0% compared to 23.7%. The prevalence of frailty in malnourished patients was 54.5% compared to 56.1%. CC 30.67 ± 3.54 cm versus 31.34 ± 4.85 cm, dynapenia 71.4% versus 64.7%. Ultrasonography assessment: ARF 5.61 (IQR = 4.1–6.4) cm^2 versus 5.09 (IQR = 3.5–6.2) cm^2 ; RFT-relaxation 9.7 ± 3.2 mm versus 9.05 ± 3.1 mm; TRF-contraction 11.73 ± 3.99 mm versus 12.3 ± 4.8 mm; PA $5.95 \pm 2.66^\circ$ versus $5.88 \pm 2.35^\circ$. The increase in muscle thickness in contraction 1.7 (IQR = 0.9–3.8) vs. 2.3 (IQR = 0.5–4.5).

Conclusion: Our study found a high prevalence of malnutrition in hip fracture patients. who exhibited worse functional and cognitive outcomes, increased comorbidities, and dysphagia. Muscle ultrasonography revealed that non-malnourished patients had a greater increase in muscle thickness during contraction.

P-0997

Mid-upper arm circumference thresholds based on a young adult reference population

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Abstract

Background: Mid-upper arm circumference (MUAC) is a widely recognized anthropometric tool, appreciated for its practicality, cost-effectiveness, and diagnostic accuracy in assessing nutritional deficiencies, muscle mass and body composition. In this study, we aimed to establish sex-specific MUAC cut-off values for the Turkish population to define optimal thresholds.

Material and Methods: We included healthy young participants aged between 18 and 39 years and without chronic diseases or chronic drug use. MUAC was measured at the midpoint between the tip of the elbow (olecranon process) and the tip of the scapula (acromion process). MUAC cut-off points were calculated as two SDs below in each sex.

Results: There were 301 participants (187 male, 114 female; mean age: 26.5 ± 4.6 years). Mean MUAC was 29.14 ± 2.76 cm and 24.23 ± 2.27 cm in males and females, respectively. The rounded cut-off values were calculated as 24 cm for males and 19 cm for females.

Conclusion: Our study reported MUAC cut offs derived from the Turkish reference group which can be used as a tool for the muscle mass assessment and nutrition status. However, these cut-off values need to be validated with further studies to prove their adequacy.

Keywords: mid upper arm circumference, cut-off, reference, thresholds.

Short Poster Presentation

Nutrition

P-0998

Omega-3 fatty acid supplementation reduces hydroxyproline concentrations in older adults

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Introduction: Hydroxyproline (HYP) in circulation reflects collagen turnover and muscle tissue remodeling. Omega-3 fatty acids (n-3), with their anti-inflammatory properties, may influence collagen degradation. This analysis investigates the effect of 8-week omega-3 fatty acid (n-3) supplementation on plasma HYP concentrations in older adults to assess changes in collagen metabolism and muscle health.

Methods: This sub-analysis of a larger intervention study including vibration exercise as well as homebased resistance training for all groups [1], focuses on the control (n = 14) and n-3 (n = 16) supplementation group (2.2 g/day). HYP concentrations [µg/mL] were quantified using ELISA kits, and the n-3 plasma index was measured via gas chromatography. Data are shown as mean ± standard deviation.

Results: Mean age was 71.0 ± 4.87 years and similar baseline n-3 index (control: $5.36 \pm 1.00\%$ versus n-3: $5.30 \pm 1.43\%$, $p = 0.525$). Only the n-3 group showed an increase in their n-3 index ($p < 0.001$). Baseline HYP concentrations were not different between groups (control: 1.77 ± 0.62 µg/mL versus n-3: 2.82 ± 2.87 µg/mL, $p = 0.191$). A repeated measures ANOVA for percentage change of HYP concentrations showed no time effect ($p = 0.880$), but a trend for a time × group interaction ($p = 0.072$), indicating a slight decline in HYP in the n-3 group. More participants in the n-3 group had reduced HYP concentrations ($p = 0.028$). The percentage change of the n-3 index was negatively correlated with HYP percentage change ($\rho = -0.410$, $p = 0.024$).

Conclusion: An improved n-3 plasma index is correlated with reduced HYP concentration. As lower HYP concentrations have been observed in physically active older adults [2], n-3 supplementation may enhance muscle health in response to exercise.

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Poster

Nutrition

P-0999

Sarcopenia, obesity and sarcopenic obesity in older adults with COPD

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Introduction: Chronic obstructive pulmonary disease (COPD) is one of the top three leading causes of death worldwide. The rate of catabolic processes in COPD patients is increased, directly leading to muscle protein damage. COPD also reduces physical activity and food intake, which may lead to both muscle mass and strength loss. The study aimed to assess the prevalence of different body composition phenotypes in older patients with COPD and to investigate the relationship between these phenotypes and the severity of the disease, as well as physical performance of the subjects.

Methods: The study included 124 COPD patients aged ≥ 60 . Body composition analysis and muscle strength measurements were conducted, and medical records were reviewed. The sample was divided into four groups based on body composition phenotype: normal, sarcopenia, obesity, and sarcopenic obesity.

Results: Sarcopenia was more frequent in patients with severe or very severe COPD compared to individuals with mild or moderate obstruction ($p = 0.043$). Participants with sarcopenia had significantly lower Tiffeneau index compared to those with obesity and sarcopenic obesity ($p = 0.039$ and $p = 0.003$, respectively). All groups with abnormal body composition phenotypes had lower 6MWT results than subjects with normal phenotype.

Conclusion: Pathological body composition phenotypes involve more than half of the COPD older patients. Sarcopenia and sarcopenic obesity are associated with reduced physical performance. Body composition assessment in addition to body mass measurement and BMI calculation contributes to the picture and should be performed in all older people with COPD.

P-1000

Relationship between malnutrition and functional capacity among older adults, admitted to rehabilitation unit

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Introduction: The primary aim of the study was to evaluate the relationship between malnutrition and functional capacity in orthogeriatric patients. The secondary aim was to assess whether the association between nutritional status and functional capacity remains significant after adjusting for age.

Methods: A cross-sectional study was performed at inpatient Rehabilitation Unit, on 44 community-dwelling individuals aged 60 years and older, in post acute period of bone fractures, joint replacements and other chronic conditions. Nutrition was assessed by Mini Nutritional Assessment (MNA). Malnutrition was defined as < 17 , risk of malnutrition as 17–23.5, well-nourished as ≥ 24 points. Functional capacity was measured by Barthel index (BI) and Keitel Functional Test for lower extremities (KFT). Pearson's and partial correlation, independent samples t-test, Mann–Whitney tests were performed using SPSS ver.27.0.

Results: Participants' (38 (86.4%) women) mean age was 73.4 ± 9.1 years. Six (13.6%) patients were malnourished, 24 (54.5%)

were at risk of malnutrition, 14 (31.8%) were well-nourished. The malnourished and at-risk groups were combined into one group (MROM). MNA score showed moderate correlation with BI on arrival ($r = 0.35$, $p = 0.17$), strong correlation with age ($r = -0.53$, $p < 0.001$). The mean BI score was lower in MROM group than well-nourished group ($p = 0.05$). There was no significant difference in KFT scores between MROM and well-nourished groups. There was no significant correlation between BI and MNA after controlling for age.

Key conclusions: Findings suggest that reduced functional capacity in older patients is associated with nutritional deficiency. However, the relationship was found to be insignificant after adjusting for age.

P-1001

Exploring first line nutrition information—insights from health care professionals and older persons

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Introduction: Health care professionals (HCPs) working with older persons are often asked nutrition related questions. This study explored how first line nutrition information such as general leaflets are accessed and used by HCPs and older persons. Is there a role for video-based nutrition education?

Methods: Health care professionals (HCPs) not including Dietitians working with older persons completed an online survey. An older person's reference group participated in a virtual focus group. Knowledge seeking, accessing and providing nutrition information, and engaging with videos on nutrition was explored. Data analysed using thematic analysis and descriptive statistics.

Results: Ninety five HCPs completed the survey. Eighty-eight (90%) HCPs reported being asked nutrition related questions, poor appetite ($n = 77$, 83%), weight loss ($n = 68$, 75%) and constipation ($n = 66$, 72%). Twenty HCPs (21%) reported confidence answering questions. Forty-three (44%) had little or no awareness of available first line information and 37 (39%) rarely or never provided information. Eighty-two (86%) HCPs agreed that nutrition education videos would be used if available. Three themes emerged: (i) importance of nutrition for HCPs (ii) barriers to use of first line information and (iii) support systems. Fourteen persons (64% women, 36% men) attended the focus group. Two themes identified: (i) access to health information (ii) barriers. Discussions included difficulty in proactively seeking information and education videos would be beneficial but distribution needed consideration.

Conclusion: Timely access to information and supports is empowering for both the older person and HCP. Following these results funding was secured for the development of first line nutrition education videos.

P-1002

Socioeconomic and health-related eating habits in Polish Caucasian older population—the nationwide PolSenior2 study results

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Introduction: The diet and nutritional status of older persons appear to be significant determinants of the aging phenotype. The objective of the study was evaluation of the quality of the diet in older individuals and the impact of socioeconomic and health-related factors on adherence to a healthy diet.

Methods: This study is a part of the PolSenior2 survey, which included 5987 respondents aged ≥ 60 years as representatives of the community-dwelling Polish population. The respondents completed 42-item Food Frequency Questionnaire, then their eating habits were categorized in Senior Healthy Diet Index (SHDI) with the score between 0–100 points.

Results: The mean SHDI score recorded was 57.2 (SD = 11.8), with a significantly higher score observed among women than men. Residents of urban areas, those in stable partnerships, and individuals with higher levels of education and professional qualifications exhibited a better adherence to the SHDI. A negative correlation was observed between the prevalence of some geriatric syndromes and adherence the SHDI with a higher compliance being associated with better dentition. Furthermore, in men, diabetes, hypertension and heart failure were found to be associated with a higher level of adherence to the SHDI. The multivariate regression analysis further identified several factors significantly associated with higher adherence to a healthy diet, including female sex, higher education level, absence of depression and dementia, functional dentition, regular physical activity, and diabetes.

Conclusions: The adherence to dietary recommendations in Polish seniors is very uncommon. Several socioeconomic factors and health and geriatric conditions are correlated with eating habits.

P-1003

Screening for dysphagia in older people: psychometric properties of the Danish 4 Question Test (4QT-DK)—a validation study

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Introduction: The 4-item questionnaire test (4QT) is a simple screening measure of dysphagia for older people. A positive answer to any item indicates the need for further assessment. 4QT is fast to apply, and requires no training beforehand. However, it is not translated to Danish and the psychometric properties in an older Danish population are unknown. The aim was to translate 4QT to Danish, determine criterion validity according to the existing measures MEOF-II and V-VST, and determine construct- and structural validity

and reliability by exploring whether 4QT fits the assumptions of the Rasch model.

Methods: The 4QT was translated and back-translated. A total of 73 participants ≥ 65 years were included and screened with the 4QT-DK and assessed using V-VST and MEOF-II. Criterion validity was assessed compared to V-VST, and MEOF-II according to sensitivity, specificity, and predictive values. Construct- and structural validity were examined using Confirmatory Factor Analysis and Rasch model analysis investigating item- and person fit, Differential Item Functioning (DIF) for sex, age, primary disease, and Local Dependency (LD). Reliability was assessed using Cronbachs coefficient alpha.

Results: For criterion validity, the 4QT-DK showed high sensitivity (84%, and 90% with V-VST and MEOF-II respectively). Specificity was as expected lower (36%, and 42%). Analyses confirmed the psychometric validity of the 4QT-DK. Reliability was low (Cronbachs Alpha = 0.58) due to number of items.

Conclusion: 4QT-DK is a valid and sensitive measure for screening older people for dysphagia. Further studies are required to assess the psychometric properties and confirm findings in a larger Danish sample.

P-1004

The impact of frailty, activity of daily living, and malnutrition on mortality in older adults with cognitive impairment and dementia

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Background: Malnutrition contributes to frailty and cognitive impairment, intensifying adverse health outcomes and mortality risk.

Objectives: To evaluate (1) association of frailty with 30-day and 90-day mortality (2) predictive value of malnutrition, and (3) explore the interaction effects of frailty, activity of daily living (ADL), and malnutrition on mortality risk.

Methods: The cohort included 2677 older patients (≥ 65 years) with dementia or cognitive impairment discharged between March 2022 and December 2023. Clinical Frailty Scale (CFS) and Hospital Frailty Risk Score (HFRS) were used to assess frailty, and 3Min NS tool for malnutrition. Kaplan–Meier and multivariate logistic regression were employed to evaluate effects of frailty, ADL, and malnutrition on survival time and mortality.

Results: Malnutrition was prevalent in 29.2% and associated with 30-day (aOR = 2.573, 95% CI 1.922–3.443, $p < 0.001$) and 90-day (aOR = 2.422, 95% CI 1.908–3.075, $P < 0.001$) mortality. CFS performed better than HFRS (30-day mortality (aOR 2.348, 95% CI 1.738–3.156, $P < 0.001$) and 90-day mortality (aOR 2.320, 95% CI 1.824–2.951, $P < 0.001$). ADL was associated with 30-day mortality (aOR 2.573, 95% CI 1.922–3.443, $P < 0.001$) and 90-day mortality (aOR 2.422, 95% CI 1.908–3.075, $P < 0.001$). Malnutrition amplified the impact of both 30 and 90-day mortality in those with severe frailty (CFS ≥ 7), particularly in the old-old group (≥ 85 years).

Conclusion: Our study showed significant impact of malnutrition on mortality in those with dementia and/or cognitive decline who have declining ADL, and increasing frailty especially in the old-old.

P-1005

The RELISH study: a prospective observational study to assess compliance and palatability of a new porridge supplement compared to standard liquid-based oral nutritional supplementation in hospitalised older adults with malnutrition

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Introduction: Oral nutritional supplements (ONS) are essential adjuncts in managing malnutrition in hospitalised older people. Effectiveness of ONS depends on product palatability, patient preference, and compliance. This study aimed to explore the compliance and palatability of a new porridge supplement (PS) compared to a standard drink-based supplement (DS) in hospitalised older adults.

Methods: A single-centre mixed methods randomised controlled crossover study was conducted on adults aged ≥ 65 years at risk of malnutrition (Malnutrition Universal Screening Tool score 1–4). Each were prescribed PS (16 g protein; 249 kcal) and DS (18 g protein; 306 kcal), twice per day for 4 days in crossover sequence. ONS leftovers were weighed, and compliance calculated (% daily ONS consumed). Palatability ratings were assessed with a 7-point Likert scale. Interviews were conducted with 9 older adults and 5 staff.

Results: Twenty-seven older people (mean age 80 years, 17 female) participated. Daily PS intake was significantly lower (26%) compared to DS (67%) ($p = 0.01$; $r = 0.42$), and texture of PS was significantly disliked compared to DS ($p = 0.02$; $r = 0.38$). Seventy-one percent of participants agreed they liked DS compared to 45% for PS. Changes in physical ability and appetite, the hospital culture (e.g., staff attitudes), and palatability (e.g., thickness and taste) of products influenced ONS acceptability.

Conclusion: Compliance and palatability were better for standard drink-based ONS compared to a new porridge product. To improve patient-centred nutritional care, participants requested a wider in-hospital range of ONS product and enhanced training for staff in nutritional care.

P-1006

A randomised controlled pragmatic trial of a nutritional and resistance exercise intervention in hospitalised nonagenarians

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Objective: Malnutrition and sarcopenia often coexist in hospitalised older adults, leading to adverse outcomes. We assessed the effect of nutritional supplementation and/or resistance exercise on nutritional status and sarcopenia at three months in older patients hospitalised for acute illness.

Methods: In a randomised, controlled, pragmatic trial with blinded outcome assessment, acute geriatric patients at risk of malnutrition

(MNA-SF ≤ 11) were assigned to one of four groups: control (C), oral high-protein hypercaloric supplementation with vitamin D and HMB (S), resistance exercise (E) or both (S + E). Nutritional status (MNA, GLIM criteria) and sarcopenia (EWGSOP2 criteria) were assessed at discharge and three months.

Results: Among 116 patients (28 C, 30 S, 28 E and 30 S + E), 71.6% were female, mean age 92.8 ± 5 years. On admission, 64.7% met GLIM criteria for malnutrition (14 patients in C, 15 in S, 22 in E, and 24 in S + E, $p = 0.012$). MNA scores ranged from 18.1 to 19.2 and sarcopenia was present in 99.1% (no between group differences). At three months, 32% remained malnourished (5 patients in C, 5 in S, 9 in E, and 5 in S + E) with no significant changes in MNA scores; sarcopenia persisted in 97.7% (no group differences). However, malnutrition (GLIM) significantly improved in the S + E group ($p = 0.008$).

Conclusions: We found no significant difference in nutritional status or sarcopenia between groups at three months after an oral supplementation and/or resistance exercise intervention in hospitalised nonagenarians. However, the prevalence of malnutrition was significantly reduced in the supplementation + exercise group at three months.

P-1007

Phase angle change in elderly population hospitalized by clinical conditions

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Introduction: Phase angle (PA) by impedanciometry has been associated to integrity of cell membranes, and low values to adverse health outcomes. The aim of this study was to explore PA's changes in elderly patients hospitalized by clinical conditions.

Methodology: Prospective cohort study of patients aged ≥ 70 years hospitalized at Hospital Universitario Mayor Méderi, Bogotá, Colombia. Descriptive analysis were made for clinical characteristics and body composition upon admission and prior to discharge using SECA mBCA 525 impedance. PA's changes were described and analyzed with paired samples t-test by sex.

Results: From 115 participants, median age was 81 years, 51.3% were men, 86.4% from lower income groups, and median of Barthel 85. 26.1% were robust and 63.5% with malnutrition or malnutrition risk. The median length of stay was 6 days (IQR 4–9). Regarding body composition, in women, median body mass index (BMI) was 25.7 kg/m^2 (IQR 22.3–28.75) and 24.16 kg/m^2 (IQR 22.40–26.17) in men, and median grip strength was 10 kg and 15.0 kg for women and men, respectively. The median PA at admission was 4.80 (IQR 4.40–5.40) and at discharge 4.60 (IQR 4.08 and 5.13) for women and PA for men at admission was 5.10 (IQR 4.45–5.70) and at discharge 4.90 (IQR 4.40 and 5.45), we found a significant difference in PA's change only in women ($p < 0.005$).

Key conclusions: There were frequently participants with mild functional dependence and BMI within normal ranges but frail and sarcopenic. PA's change was only significant in women.

P-1008

A new era in nutritional assessment: more effective MNA-SF with alternative calf circumference approaches

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Introduction: This study aims to evaluate the potential effectiveness of Mini Nutritional Assessment Short Form (MNA-SF) modifications incorporating gender-specific, population-specific and/or body mass index (BMI)-adjusted calf circumference (CC) cutoffs.

Methods: This study included older adults evaluated in our geriatric outpatient clinic between November 2012 and June 2024. Seven different MNA-SF modifications were used:

- (i) Standard (MNA-SF-BMI).
- (ii) Non-gender-specific CC $< 31 \text{ cm}$.
- (iii) Population-specific CC $< 33 \text{ cm}$.
- (iv) Gender-specific CC < 33 and $< 34 \text{ cm}$.
- (v) Gender and population-specific CC < 32 and $< 33 \text{ cm}$.
- (vi) Gender-specific and BMI-adjusted CC < 33 and $< 34 \text{ cm}$.
- (vii) Gender and population-specific and BMI-adjusted CC < 32 and $< 33 \text{ cm}$.

Association between malnutrition and mortality was analyzed using ROC and Cox regression analyses.

Results: A total of 2051 patients (68.4% female, mean age 74.9 years) were analyzed. Malnutrition prevalence varied between 3.4% and 11.6% across different MNA-SF modifications ("standard" to "gender-specific and BMI-adjusted CC < 33 and $< 34 \text{ cm}$ "). Mortality was assessed in 1882 patients (median follow-up: 74.0 [0–146] months), with 631 (33.5%) deaths recorded. The highest mortality incidence (6%) was observed in the "gender-specific and BMI-adjusted CC < 33 and $< 34 \text{ cm}$ " modification. All MNA-SF modifications demonstrated similar predictive value for mortality (AUC: 62–64%). In survival analysis (adjusted for age, sex, functional status, handgrip strength and frailty), only two modifications ("gender-specific and BMI-adjusted CC < 33 and $< 34 \text{ cm}$ " and "gender and population-specific and BMI-adjusted CC < 32 and $< 33 \text{ cm}$ ") were significantly associated with mortality.

Conclusion: Our study suggests that replacing the "standard MNA-SF" with "gender and/or population-specific and BMI adjusted CC cutoffs MNA-SF" may allow for the identification of a higher number of malnourished patients and could be more effective in predicting malnutrition-related adverse outcomes, particularly mortality.

P-1009

Cardiovascular health, as per Life's Essential 8, and unhealthy aging in older adults

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Introduction: Cardiovascular health (CVH) has been linked to several age-related health outcomes, but its relationship with healthy aging has not been studied. We investigated whether CVH is associated with the progression of unhealthy aging over time.

Methods: We analyzed data from 2487 participants aged ≥ 65 years from the Seniors-ENRICA-2 cohort. At 3 timepoints over a 5.5-year follow-up period, we assessed CVH by the American Heart Association's Life's Essential 8 (LE8) and two indicators of unhealthy aging: a Deficit Accumulation Index (DAI) and an Intrinsic Capacity Deterioration (ICD) score. Mixed-effects linear regression models were used to estimate both the average association between CVH and unhealthy aging, and the rate of change in unhealthy aging over time.

Results: Better CVH was associated with lower average levels of the DAI (mean difference [MD] per 10-point increment in the LE8: -2.53 ; 95% confidence interval [CI]: $-2.77, -2.29$) and the ICD score (MD: -2.84 ; 95% CI $-3.24, -2.43$). Better CVH was also associated with a slower yearly increase in the DAI (MD per 10-point increment in the LE8: -0.10 ; 95% CI $-0.17, -0.03$), but not with the progression of ICD (MD: -0.015 ; 95% CI $-0.15, 0.12$). Sleep health, BMI and blood glucose stood out as major individual contributors to the slower rate of deficit accumulation associated with increasing CVH.

Conclusions: Better CVH was associated with both lower average levels and slower accumulation of health-related deficits in older adults. Promoting CVH may offer meaningful benefits in reducing the burden of aging-related deficits, thus contributing to healthier aging.

P-1010

Influence of functional status on nutritional status in hospitalized older adults

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Introduction: Functional and nutritional status are recognized as important determinants of clinical outcomes in hospitalized older adults. The aim of this study is to analyze the association between functional status and nutritional status in hospitalized older adults.

Subjects and Methods: A cross-sectional assessment was conducted in 391 patients admitted to an acute geriatric unit. Functional status was assessed using the Barthel Index (BI) and the nutritional status using the Mini Nutritional Assessment-Short Form (MNA-SF). Spearman's rank correlation coefficient and simple linear regression analysis were used to explore the relationship and predictive association between the variables. A p -value < 0.05 was considered statistically significant.

Results: Patients with MNA-SF ≤ 7 had a mean BI of 43.34, those with MNA-SF 8–11 had a mean score of 63.09, and those with MNA-SF > 11 had a mean score of 79.65. A moderate and statistically significant positive correlation was found between the BI and the MNA score (Spearman's rank correlation coefficient $r = 0.436$, $p < 0.001$). In the simple linear regression model, the BI was a significant predictor of the MNA-SF score ($F(1, 389) = 91.452$, $p < 0.001$), explaining 19.0% of its variance ($R^2 = 0.190$). For each additional point on the BI, the MNA-SF score increased by 0.039 points ($\beta = 0.039$).

Conclusion: These findings show that better functional status (higher Barthel Index score) is significantly associated with and predictive of better nutritional status (higher MNA-SF score) in hospitalized older adults.

P-1011

Enhancing compliance with the nutritional protocol in the acute geriatric unit of the Getafe University Hospital

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Introduction: In accordance with the nutritional protocol implemented in the Acute Geriatric Unit (AGU), nurses screen patients at admission using the MNA-SF. Patients identified as at risk ($MNA-SF \leq 11$) undergo a comprehensive nutritional assessment and receive interventions when necessary. Previous evaluations led to measures aimed at improving compliance with the protocol. The objective of this study was to evaluate their effectiveness in enhancing compliance.

Method: This cross-sectional descriptive study analyzed the medical records of patients consecutively admitted to the AGU. Data were collected for the three components of the protocol at two time points: initially, before the implementation of protocol modifications, and after the modifications aimed at improving compliance. The components assessed included screening (using MNA-SF), comprehensive nutritional assessment and nutritional intervention.

Results: In the first period ($n = 71$), MNA-SF was conducted in 53.38% of patients, with 39.44% of these assessments performed by nursing staff. Among the patients, 83.10% had an MNA-SF score ≤ 11 , and 50% followed a comprehensive assessment. After the protocol modifications ($n = 111$), the MNA-SF rate increased to 63.43% (10.05% improvement), with 43.24% of assessments conducted by nursing staff. In both periods, 100% of patients who underwent a nutritional assessment also received a nutritional intervention.

Conclusion: An improvement in compliance with the nutritional protocol following the implemented modifications was demonstrated, as highlighted the increase in MNA-SF assessments. These findings suggest that ongoing efforts to enhance protocol adherence in the AGU are effective and could contribute to better patient outcomes.

P-1012

Is High protein intake linked to increased muscle health when physical activity guidelines are met in middle-aged adults?

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Introduction: Higher protein consumption and physical activity are recommended as key factors that may counteract sarcopenia. This study aims to explore whether adhering to World Health Organization (WHO) exercise recommendations (150–300 min/week moderate or 75 min/week vigorous aerobic activity) combined with increased protein intake is higher linked to skeletal muscle index (SMI) and handgrip strength (HGS) in adults aged 40–49 and 50–59 years living in the United States (US).

Methods: Data were sourced from the National Health and Nutrition Examination Survey (NHANES, 2007–2020), encompassing 1062 adults aged 40 and older. Self-reported moderate/vigorous activity and 24-h recall protein intake were evaluated. Adjusted linear and logistic regression models, accounting for age, body mass index, ethnicity, education, and comorbidities, examined links between exercise/protein levels and SMI and HGS across age groups.

Results: In the adjusted analyses, vigorous exercise with higher protein intake was significantly associated with HGS ($b = 2.13$, $p < 0.01$) and SMI ($b = 0.33$, $p < 0.01$) in 40–49-year-olds, and SMI ($b = 0.33$, $p < 0.01$) only in 50–59-year-olds. Moderate activity with

lower protein intake showed a negative association with HGS in 40–49-year-olds ($b = -1.62$, $p = 0.04$). Logistic regression indicated greater SMI odds (Odds Ratio (OR): 3.51, 95% CI 1.04–11.81, $p = 0.042$) in 50–59-year-olds following vigorous activity and higher protein.

Key conclusions: Combining vigorous exercise with higher protein intake is markedly linked to higher HGS and SMI, especially among middle-aged adults living in the US.

P-1013

Is plant protein and fibre supplementation acceptable and feasible in older adults? Findings from the APPETITE multi-centre trial

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Introduction: Adequate protein and fibre intake are essential for healthy aging but targets are often not met in European older adults [1]. This analysis explores the feasibility of plant protein and fibre (PPF) supplementation in older adults.

Methods: Data from participants randomised to the personalised diet (PD) ($n = 44$), and PD and physical activity (PD + PA) ($n = 41$) arms of the multi-centre APPETITE [2] project were included in analyses. Two PPF products were designed to be incorporated into the usual diet (recipe based), composed of a blend of plant protein sources and pea fibre. Participants were provided with 2×25 g sachets (15–17 g protein, 3.6 g dietary fibre each) to be consumed daily over 12 weeks. Compliance was defined as 10 out of 14 sachets per week for 75% of the intervention.

Results: Four participants ($n = 2$ in each group) reported stopping the intervention due to the PPF, and 14 due to reasons unrelated to the intervention. 62 participants ($n = 27$ PD, $n = 35$ PD + PA) that completed the intervention had complete compliance information. Compliance was high (mean 91%) for both groups. Adverse effects on satiety/gastrointestinal effects were reported in a sub-sample ($\sim 16\%$), particularly in first weeks. Participants reported integrating the PPFs into their diets in multiple ways, most commonly mixed into drinks, soups, porridge, or muesli.

Key conclusions: Daily supplementation with a PPF supplement was feasible and well-tolerated in older adults, with high compliance over 12 weeks. Mild gastrointestinal effects were reported initially but were generally temporary. Longer-term feasibility and acceptability warrant further investigation.

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P-1014

Combined lifestyle and therapeutic interventions in abdominal obese adults and older adults

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To improve treatment for abdominal obesity and associated risk factors (RFs) in adults and older adults, we conducted a RCT with 42 subjects. Participants were divided into two groups: one received a combined therapeutic program consisting of individually dosed physical activity (PA) and a low-fat, moderate hypoenergetic diet (D). At the same time, the other group followed D with daily lifestyle activities. The average duration of the study was 47.19 ± 16.22 days. The objective was to examine the effects of the proposed programs by monitoring the intensity of the dynamics, assessing certain anthropometric variables and indexes to evaluate the degree of obesity and abdominal fat distribution (%F). We also evaluated functional variables to measure cardiorespiratory capacity and laboratory variables that indicate lipid metabolism and glycoregulation. The degree of obesity and increased %F in older adults were assessed using statistical analysis in both the initial and final phases. Results showed a significant reduction in F% in the “FAD” group (10.32%) compared to the D group (6.35%), with a statistically significant difference ($t = 2.83$; $p < 0.00$). We developed a method for individually dosing PA based on the initial level of VO₂max using the Compendium for gross energy expenditure of various PA in older adults with known METs. Finally, VO₂ max was increased by 14.8% of the initial level in the “PAD” group. At this time, PAD had more significant decreases in BMI (kg/m²), WC, %F, fasting plasma glucose, HbA_{1c}, and RFs compared to the “D” group.

Best Poster

Nutrition

P-1015

Adherence to the planetary health diet and healthy aging: a prospective analysis from the UK Biobank

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Background: The Planetary Health Diet Index (PHDI) was designed to align environmental objectives with human health. This is the first study to assess the relationship between the PHDI and healthy aging, measured by intrinsic capacity (IC) and physical frailty.

Methods: We analyzed data from 19,505 participants in the UK Biobank cohort. Dietary intake was assessed using two to five 24-h assessments, and the PHDI was constructed based on 15 food groups. IC was assessed according to the Integrated Care for Older People guidelines with a score between 0 and 10 points (higher score indicated higher IC); while frailty was assessed using Rockwood’s frailty index (FI) and Fried’s frailty phenotype (FP). Linear regression was used to examine the relationship between PHDI and IC, and logistic regression for associations with frailty.

Results: After a median follow-up of 6.25 years, higher adherence to the PHDI was associated with greater IC: the beta coefficient (95% CI) for the 3rd vs. 1st tertile of PHDI was 0.54 (0.12, 0.95). Higher adherence to the PHDI was associated with lower frailty risk: the odds ratios (95% CI) comparing extreme tertiles of PHDI were 0.79 (0.70, 0.89) for FI and 0.61 (0.43, 0.87) for FP. Specific food groups, including fish, were independently associated with higher IC and less frailty, while whole grains, fruits, vegetables, and limiting added sugars and juices were linked to lower frailty risk.

Conclusions: In this cohort of British adults, greater adherence to the PHDI was associated with improved IC or lower frailty risk.

Poster

Nutrition

P-1016

Association between Prognostic Nutritional Index (PNI) and mortality among hospitalized geriatric patients

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Introduction: The Prognostic Nutritional Index (PNI) has been suggested as a useful tool in predicting outcomes across various populations. However, its connection with mortality in older adults has not been thoroughly evaluated. This study aimed to assess the relationship between PNI and mortality in hospitalized geriatric patients.

Methods: Patients aged 60 and above were recruited from January 2017 to December 2024 at the Department of Geriatrics Lodz, Poland. Total of 2069 patients (1449 women, 620 men) were enrolled. PNI was calculated using the formula: $10 \times \text{serum albumin (g/dL)} + 0.005 \times \text{total lymphocyte count (per mm}^3\text{)}$. Logistic regression was used to assess the influence of age, sex and PNI. Statistical analysis was performed using Statistica 13.1.

Results: Out of the 2069 patients, 1913 were in survival group, and 154 in deceased group. Median age was higher in the deceased group (87 years) compared to the survival group (83 years). In women, the mean PNI in the survival group was 376.20, while in the deceased group, it was 289.03. In men, the mean PNI in the survival group was 367.45, and in the deceased group, it was 296.54. PNI values (after sex and age adjustment) were significantly lower in the deceased group ($p < 0.001$).

Conclusion: Lower PNI values were significantly associated with increased mortality in both genders, suggesting that PNI may serve as an effective and cost-efficient prognostic tool for identifying higher risk of mortality.

P-1017

Incidence of refeeding syndrome in elderly hospitalized patients under different diagnostic criteria and its association with short-term outcomes

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Background: Refeeding syndrome (RFS) is a potentially life-threatening fluid and electrolyte complication following aggressive nutritional rehabilitation. We aimed to investigate the incidence of

RFS in elderly hospitalized patients using the traditional serum phosphate criteria, the Friedli criteria, and the ASPEN consensus recommendations. Additionally, we explored the association between RFS and short-term outcomes.

Methods: In this single-center retrospective study, we enrolled 97 elderly patients at risk of developing RFS who received enteral tube feeding between October 2022 and December 2024. RFS was defined using the traditional criteria as a serum phosphate level < 0.65 mmol/L during the first 7 days of hospitalization. The Friedli criteria and the ASPEN criteria defined RFS based on reductions in serum phosphate, potassium, or magnesium levels, each with specific cut-off values. The primary short-term outcome was 28-day mortality.

Results: The mean age of the patients was 69 ± 3 years, with 60.8% being male and a mean body mass index of 17.1 ± 1.8 kg/m². The incidences of RFS were 17.5% by the traditional criteria, 40.2% by the Friedli criteria, and 62.9% by the ASPEN criteria. A total of 22 (22.7%) patients died within 28 days of hospitalization. The prevalence of RFS in deceased versus non-deceased patients was 7/22 vs. 10/75 ($P = 0.09$) by the traditional criteria, 13/22 vs. 26/75 ($P = 0.04$) by the Friedli criteria, and 17/22 vs. 44/75 ($P = 0.09$) by the ASPEN criteria.

Conclusion: The incidence of RFS in elderly hospitalized patients varies significantly depending on the diagnostic criteria used. The association between RFS and 28-day mortality was borderline, suggesting that other factors may also contribute to mortality in this patient population.

P-1018

Ongoing study: vitamin D levels and the effect of supplementation in a geriatric population

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Introduction: Vitamin D plays an essential role in bone metabolism. Vitamin D deficiency is associated with an increased risk of osteoporotic fractures, muscle weakness and decreased immunity. The aim of this ongoing study is to evaluate vitamin D levels, to determine the prevalence of hypovitaminosis D in geriatric patients in outpatient and inpatient care and, in a second part, to evaluate the effect of supplementation given during the winter months.

Methods: In the first part, patients of the Geriatric Centre of Pardubice Hospital are retrospectively analysed. The cohort includes both outpatients and hospitalized patients after acute internal conditions, injuries or neurological complications. The 25(OH)D level is determined by ECLIA method. Age, sex and presence of supplementation are monitored. In the second part, baseline and control vitamin D levels are monitored in a selected cohort of patients after initiation of substitution.

Results: Vitamin D levels < 50 nmol/L were found in 60% of patients, with the largest proportion being seniors aged 70–89 years. There was a median increase of 24 nmol/L in supplemented patients, whereas no improvement was observed in unsubstituted patients.

Conclusion: The results to date confirm the high prevalence of hypovitaminosis D in the geriatric population. Targeted supplementation has been shown to increase vitamin D levels. It is therefore desirable to introduce it systematically in routine geriatric care, especially during the winter months.

Old Age Psychiatry

P-1019

Improving access to physical healthcare for older people in mental health settings: the ImPreSs-Care qualitative study

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Background: Older people with serious mental ill-health have high levels of physical comorbidity. Despite this, mental health services receive limited specialist physical health support from primary or secondary care. This study investigated the facilitators and barriers to delivering physical healthcare for older people in mental health settings.

Methods: 54 semi-structured interviews (REC:22/IEC08/0022) were conducted with different stakeholders (staff (n = 28), patients (n = 7), carers (n = 19)) across two mental health hospitals. Interviews explored the facilitators and barriers to delivering physical healthcare for older people (> 65 years) receiving secondary mental healthcare (dementia and functional disorders). Data were analysed thematically, underpinned by a framework of integrated care for individuals living with multimorbidity.

Results: A multidisciplinary approach was valued, particularly to identify patients for targeted physical health support. There was felt to be a loss of physical health training and skills over-time, particularly amongst nursing and medical staff. Admissions to the acute hospital were potentially avoidable through improved support and availability of physical health expertise, to provide more proactive than reactive care. Managing advanced care planning, end of life care and polypharmacy arising from physical health causes were perceived as challenging to manage within mental health settings.

Conclusions: Lack of senior physical health leadership (e.g., geriatrician or general practitioner) and loss of skills and confidence in managing physical health in mental health settings has led to a low threshold for admissions to the acute hospital. In particular, services should support advanced care planning and end of life care from physical causes in mental health settings.

P-1020

Factors associated with depression and life satisfaction in individuals aged 65 and over: a cross-sectional study

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Abstract

Introduction: This study aimed to determine the prevalence of depression among the elderly and to identify factors associated with depression and life satisfaction.

Methods: The study included individuals aged 65 and over from three neighborhoods in Manisa, Türkiye. Based on a 26.6% estimated depression prevalence, 95% confidence interval, 5% margin of error, and a design effect of 1.45, the sample size was calculated as 380 using Epi Info. A total of 520 households were visited; 94 individuals refused, and 46 did not meet the criteria. The final participation rate was 80.18% (n = 380). Data were collected via face-to-face interviews at participants' homes using a sociodemographic questionnaire,

the Yesavage Geriatric Depression Scale, the Katz Index of Activities of Daily Living, and the Life Satisfaction Scale. Data analysis included descriptive statistics, chi-square, t-test, ANOVA, Kruskal–Wallis, and logistic regression ($\alpha = 0.05$).

Results: The mean age was 70.78 ± 4.86 years; 53.4% were female, 54.4% had primary education or less, and 20.0% lived alone. Depressive symptoms were observed in 21.3% of participants. Higher risk was associated with poor/moderate sleep quality, frequent loneliness, use of assistive devices, and semi-dependence in daily activities ($p < 0.05$). The mean life satisfaction score was 20.95 ± 7.07 , and lower scores were found in lower social classes, those feeling lonely, and those semi-dependent ($p < 0.05$).

Key conclusions: Loneliness and semi-dependence in daily activities are shared risk factors for both depressive symptoms and reduced life satisfaction in older adults.

P-1021

Self-perceptions of aging among geriatric healthcare providers across different age groups

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Introduction: This study examined self-perceptions of aging among geriatric healthcare providers across different age groups.

Methods: An online survey was distributed using ECGI channels, EUGMS website and social media, including sociodemographic questions, physical and mental health assessments, and the Attitudes to Aging Questionnaire Short Form (AAQ-SF), which evaluates three domains: psychosocial loss (PL), physical change (PC), and psychological growth (PG) with 4 items in each domain.

Results: A total of 176 participants (median age: 38 [26–73]) from various countries completed the survey, with the highest participation (30%) from Türkiye. Most respondents (70.5%) were female, and 55.1% were under 40. No significant differences were found in AAQ domains between geriatricians, geriatrics residents, and internal medicine specialists working in geriatrics. Participants aged 60–75

had more positive attitudes in the PC domain than those aged 25–39 and 40–59 ($p = 0.04$, $p = 0.01$), while no differences were observed in PL and PG. Subjective age perception also influenced attitudes: those who felt their actual age or younger had higher PC and PG scores, indicating more positive attitudes ($p = 0.004$, $p = 0.001$; $p = 0.002$, $p = 0.02$). In contrast, participants who felt older had significantly higher PL scores, reflecting more negative attitudes ($p = 0.008$). Additionally, those with financial security had a more positive attitude in the PG subdomain than those with financial concerns ($p = 0.04$).

Conclusion: Chronological and subjective age perception significantly impact attitudes toward aging, with older individuals and those feeling younger showing more positive views. Financial security also contributes to a more positive perspective on psychological growth in aging.

P-1022

High depressive symptoms among Icelandic older adults living alone

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Background: Depression significantly impacts the overall well-being and quality of life in older adults, resulting in decreased participation in social and physical activities and an increased susceptibility to disability. Individuals living alone in their later years are more prone to reporting depressive feelings compared to those residing with a spouse or other family members. The aim of the study was to examine whether living status is associated with having high depressive symptoms in old age.

Methods: The analytical sample comprised 4,910 participants from the Age, Gene/Environment Susceptibility-Reykjavik Study, excluding those with diagnosed dementia and clinical depression. Living arrangements were categorized as either living alone (36.7%) or living with others. High depressive symptomatology (HDS) was defined as a Geriatric Depression Scale-15 score of 6 or higher. Logistic regression analysis was performed to examine the association between living arrangement and high depressive symptomatology, after adjusting for age, gender, body size, and other health related risk factors.

Results: Those who were living alone had significantly higher likelihood of having HDS compared with those who lived with others, after full adjustment (Beta = 1.46, 95% CI 1.10–1.94, $P < 0.01$).

Conclusion: These findings highlight the importance of recognizing the potential mental health implications for older adults who live alone, underscoring the need for targeted interventions and supportive healthcare systems.

P-1023

Waiting rooms: the impact of music on patient's waiting time perception

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Introduction: Waiting rooms are essential in healthcare, yet long waits increase patient anxiety. Research suggests environmental factors like music influence waiting time perception and experience (Lai & Amaladoss, 2020). Music improves ambiance and reduces stress in clinical settings (Collins et al., 2021). Well-curated spaces alleviate anxiety in patients undergoing treatment (Lundberg et al., 2020). This study assesses music's impact on waiting time perception and emotional well-being, particularly among older adults in rural healthcare settings.

Methods: This study will utilize a questionnaire developed by the research team, specifically adapted for older adults. The questionnaire is based on a validated tool originally used in Ireland to assess waiting room experiences among patients attending pain clinics. It includes sections on demographics, awareness of music, perceived impact on stress and waiting experience. Patients will complete the questionnaire anonymously while waiting for their medical appointments. The collected data will be analyzed to evaluate how music influences waiting time perception, stress levels, and patient satisfaction.

Results: Preliminary results indicate that music positively affects waiting time perception, making it seem shorter, and reduces anxiety. Final results will be available upon study completion.

Key conclusions: Although ongoing, existing evidence and preliminary findings suggest music improves waiting time perception, reduces anxiety, and enhances satisfaction. This study will help understand how simple environmental changes improve patient comfort, especially for older adults, and guide future healthcare waiting area strategies.

P-1024

Social support/network and depressive symptoms among community dwelling older adults during 5 years of follow-up

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Background: Studies have indicated that social support/network might be protective from depression among older adults although with controversial results with indications for analyzing the source of social support.

Aim: Examine different sources of social support/network depending on low depressive symptoms (LDS) or high depressive symptoms (HDS).

Methods: Data arrived from the Age Gene/Environment Susceptibility-Reykjavik Study. Seven questions (meet with friends/

children², feeling close to family³/friends⁴, telephone children⁵/friends⁶, living alone⁷) were used as a single question (social support) or social network score (SNS), low to high. The Geriatric Depression Scale (GDS) was used to screen for depressive symptoms. The GDS score was recoded; LDS (GDS score < 6) and HDS (GDS score ≥ 6). Longitudinal linear regression, (N = 3964) estimating associations between social questions and GDS score at follow-up among LDS and HDS was performed.

Results: Among LDS (mean age 77, high SNS 31%), strongest decrease in depressive symptoms was found for those meeting with children (β : - 0.439, p = 0.007) followed by meeting with friends (β : - 0.288, p = 0.002), feeling close to family (β : - 0.232, p ≤ 0.001) and friends (β : - 0.217, p = 0.009). Among HDS (mean age 78, high SNS 18%), strongest decrease in depressive symptoms was frequency of telephoning children (B : - 4.679, p = 0.002) followed by meeting with children (β : - 2.725, p = 0.018).

Discussion: In older community-dwelling adults' regular social support had stronger associations among individuals with HDS. In both LDS and HDS, most meaningful social support arrived from meeting up with children and friends.

P-1025

Loneliness across the lifespan in cisgender women, transgender, and non-binary people in Ontario, Canada

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Introduction: Loneliness is a widespread public health concern that disproportionately impacts marginalized populations. Despite this, few studies examine loneliness by gender. We examined the prevalence of loneliness and variations by sociodemographic and health factors in a selected sample of cisgender women, trans, and non-binary people across three life stages.

Methods: Women's College Hospital's Community Voices Survey, an online cross-sectional survey, was administered to a convenience sample of cisgender women, trans women, trans men and non-binary individuals aged 16 years and older in Ontario, Canada in 2023–2024. Loneliness was measured using the validated Three-Item Loneliness Scale and defined as a score of six or greater. A comparative, descriptive analysis explored how loneliness varied by demographic and health factors across three age groups (16–34, 35–64, 65+).

Results: Among 1966 respondents, loneliness was most common among those aged 16–34 years (65%, 430/658), followed by respondents aged 35–64 (52%, 489/933), with the lowest prevalence observed in those aged 65 years or older (39%, 147/375). Across all age groups, loneliness was highest among gender minorities (range 71–79% for trans and 75–83% for non-binary respondents) and lowest among cisgender women (range 38–59%). Loneliness was also highest among sexual minorities, as well as respondents with lower levels of education, inadequate income, pre-existing medical conditions and disabilities; these patterns were consistent across each age group.

Key conclusions: These findings highlight how common loneliness is among cisgender women, trans and non-binary people across all life stages and how marginalized identities further elevate risk.

P-1026

Psychological impact of body mass index changes in older adults: a 12-year longitudinal study

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Introduction: This study aimed to investigate the association between body mass index (BMI) changes and the risk of developing psychological distress among community-dwelling older adults in Taiwan.

Methods: This 12-year prospective cohort study included 70,570 adults aged ≥ 65 years who participated in the Taipei City Government's annual physical examination program between 2005 and 2016. BMI changes were classified relative to baseline (Definition 1) and prior follow-up measurements (Definition 2). Psychological distress was assessed using the Brief Symptom Rating Scale (BSRS-5). Multivariable generalized estimating equation (GEE) models were used to evaluate associations between BMI changes and psychological distress.

Results: Under both definitions, participants with major weight loss (> 10%) had the highest risk of psychological distress (Definition 1: adjusted odds ratio [aOR] = 1.90, 95% confidence interval [CI] 1.77–2.04; Definition 2: aOR = 1.96, 95% CI 1.80–2.14). Minor weight loss (5–10%) also increased the risk (Definition 1: aOR = 1.60, 95% CI 1.52–1.68; Definition 2: aOR = 1.52, 95% CI 1.44–1.60). Minor and major weight gains were associated with elevated but comparatively lower risks.

Key conclusions: Significant BMI changes, particularly weight loss, are strongly associated with an increased risk of psychological distress in older adults. Regular monitoring of BMI changes and interventions to maintain a stable body weight may help protect mental health in this population.

P-1027

The nexus of aging and substance use: a scoping review of therapeutic modalities for geriatrics substance use disorders

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The insidious grip of substance use disorders (SUDs) manifests as a pervasive public health crisis, indiscriminately affecting individuals across the spectrum of age, gender, and socioeconomic status. While advancements in treatment offer a glimmer of hope, millions continue to grapple with the debilitating consequences of addiction. As the global population undergoes demographic senescence, the escalating prevalence of SUDs in older adults underscores the urgent need for nuanced interventions. This review examines the therapeutic landscape for managing SUDs in older adults.

A detailed literature search was conducted using databases such as PubMed, Google Scholar, and Scopus. Studies were selected based on their relevance to therapeutic interventions for older adults with SUDs, encompassing pharmacological and non-pharmacological modalities.

The findings indicate that pharmacological interventions demonstrate varied effectiveness in managing SUDs, with each drug offering distinct benefits and limitations regarding safety, tolerability, and patient adherence. Non-pharmacological interventions provide critical psychological and social support, often requiring adaptations to meet elderly patients' needs effectively. Integrated care models emerge as the most effective approach, addressing the comprehensive needs of

elderly patients by leveraging multidisciplinary teams, centralized service access, and coordinated, patient-centered care. Implementing these models, however, requires overcoming significant resource and coordination challenges. Indeed, the confluence of a burgeoning geriatric population and escalating rates of SUDs necessitates the development and implementation of granular and integrated care protocols specifically designed for older adults. By employing such a targeted approach, optimism can be fostered and the quality of life improved for this vulnerable segment of society.

P-1028

Barriers to healthy ageing of displaced persons

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Introduction: The number of older people is rising globally, yet their specific needs are often neglected especially during displacement. This paper aims to examine displaced older adults' barriers to healthy ageing.

Materials and Methods: Review and research papers were searched in the PubMed, Scopus and Google Scholar databases with key words "displaced persons", "older adults", "barriers" and "healthy ageing".

Results: Older adults constitute 10% of displaced persons. A considerable number is often left behind, either due to frailty or a reluctance to leave their residence. They may experience isolation or have to take on caregiving responsibilities, leading to family separation and breakdown of support networks. This situation exposes them to potential abuse and inadequate access to healthcare and essential services.

On the other hand, displacement frequently results in older adults losing their home, social connections and sense of belonging. They face challenges in living conditions due to restricted mobility, chronic health conditions or limited social support. Adapting to new environments poses significant challenges for them, resulting in limited opportunities to reestablish social connections or engage in economic life. While some individuals may receive assistance from family, communities or organizations, such support is frequently inconsistent and does not adequately address their health and social needs. Consequently, they have to cope with trauma, isolation and mental health issues.

Key conclusions: There is a great need for enhanced structured resources and emotional support for older adults from all agencies to address and eliminate the barriers to healthy ageing during displacement.

P-1029

Post-traumatic stress disorder in patients over 70 hospitalized for fall is underdiagnosed

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Introduction: Falls in older adults are a major public health concern. Psychological consequences of fall classically comprise depression, anxiety and fear of falling, but poor attention had been paid to post-

traumatic stress disorder (PTSD). This study aims to assess the prevalence of PTSD one month after a severe fall in patients over 70.

Methods: This prospective observational study included patients over 70 who experienced a fall requiring hospitalization in three French geriatric rehabilitation units between April 2023 and June 2024. PTSD was assessed using the Post-Traumatic Stress Disorder Checklist for DSM-V (PCL-5), which evaluates the presence and severity of PTSD according to DSM-V criteria. Fear of falling was measured using the Falls Efficacy Scale International (FES-I).

Results: The average age of participants was 84 years. Among 57 eligible patients, full PTSD evaluation was completed for only 35 patients due to comprehension difficulties and test length. PTSD was diagnosed in 11 patients (31.4%), all of whom had experienced recurrent falls in the past six months and were afraid of falling. Nine of those 11 patients (81.8%) had been unable to get up from the floor for over an hour after their fall.

Key conclusions: Findings suggest PTSD is common in older adults hospitalized with severe falls and fear of falling. It remains understudied in literature. PTSD screening should be integrated into fall assessments in older adults, as it is likely underdiagnosed. Developing specific tools for PTSD assessment in this population is essential, along with adapted treatment strategies.

Short Poster Presentation

Old Age Psychiatry

P-1030

Loneliness, social inactivity, and social isolation of older adults without advanced dementia in assisted living facilities

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Introduction: Loneliness, social inactivity and social isolation are distinct concepts impairing health and well-being of older adults [1–3]. Our first aim was to investigate the overlap of loneliness, social inactivity, and social isolation. Secondly, we wanted to compare health, functioning and psychological well-being (PWB) of residents in assisted living facilities (ALFs) suffering from loneliness with (1) those not lonely, socially inactive, or socially isolated and (2) those socially inactive and/or socially isolated, but not lonely.

Methods: Participants included older adults without advanced dementia (n = 854; 55+ years) living in 25 ALFs in Helsinki. Participants were interviewed and responded to a survey including quantitative and open-ended items. Participants were classified into three groups (Gr): Gr0 not lonely, not socially inactive, nor socially isolated (n = 280); Gr1 lonely (n = 473); and Gr2 socially inactive and/or socially isolated, but not lonely (n = 101). Demographics, health, physical functioning, and well-being were compared.

Results: Of the sample 55% were lonely and only 3% were simultaneously lonely, socially inactive, and/or socially isolated. A total of 12% were solely socially inactive and/or socially isolated. Gr1 reported more often worsened self-rated health, physical functioning

and mobility, pain, and poor sleep. They also felt happy less often than participants in Gr0. Furthermore, Gr2 felt less often happy and had lower PWB than Gr0. In addition, Gr1 felt more often insecure and had the poorest PWB of all groups.

Key conclusions: Loneliness is very common in ALFs and indicates poor health and PWB. Loneliness should be acknowledged and alleviated in ALFs.

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Poster

Old Age Psychiatry

P-1031

Prevalence of anxiety and depression symptoms in geriatric patients with malignant disease

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Introduction: Anxiety and depressive symptoms are common in geriatric patients with cancer, difficult to recognize due to the patient's reluctance to report symptoms and the untimely detection by their physician and family. According to the literature, anxiety symptoms are detected in 40%, and depressive symptoms in 60% of patients. Advanced age, cognitive decline, comorbid diseases, chemotherapy worsen the psychosomatic condition and their recognition.

Methods: Retrospective analysis of medical documentation over a period of six months in the psychiatric outpatient clinic at PHI GH-Kavadarci. Use of the Geriatric Depression Scale, Anxiety Scale, HADS in patients with different types of cancer.

Results: Out of a total of 100 outpatient and hospitalized patients aged 70–75 years in a period of 6 months, 62 (62%) were men and 38 (38%) were women. 55 patients (55%) were patients with pronounced depressive symptoms, of which 33 were men (60%) and 22 were women (40%), the remaining 45 (45%) patients with anxiety symptoms, of which 10 patients (22.2%) had mild anxiety, and 35 patients (77.8%) had symptomatic anxiety. Early diagnosis and timely treatment with low doses of SSRIs and psychosocial interventions showed a good result in treatment.

Key conclusion: Symptoms were determined in all patients. 10% had mild anxiety, and 90% had symptoms ranging from symptomatic anxiety to severe depressive symptoms that required medication therapy. Early diagnosis of anxiety and depressive symptoms in patients with malignant disease leads to successful treatment, improved quality of life and reduced hospitalizations.

P-1032

Sex differences in the associations between depression, dementia, and all-cause mortality: a 15-year population-based study

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Introduction: Sex differences have been reported in depression and dementia occurrence, yet few studies have examined how these influence mortality in older adults. This population-based study aims to explore the sex-specific associations between depression, dementia, and their co-occurrence on all-cause mortality in later life.

Methods: Data were retrieved from the Swedish National study of Aging and Care in Kungsholmen, Sweden, which included 3205 persons aged 60–104 years. Minor and major depression and dementia were clinically assessed according to DSM-IV-TR criteria over the 15-year follow-up, and all-cause mortality was obtained from linkage to the Swedish National Cause of Death Register. Cox proportional hazard models were used to examine the links between depression, dementia, and mortality in sex-stratified analyses, adjusted for sociodemographic, lifestyle, and clinical factors.

Results: Baseline depression was related to higher mortality in both men (HR: 1.59, 95% CI 1.16–2.19) and women (HR: 1.55, 1.21–1.98). Similarly, baseline dementia was linked to an increased risk of mortality for both sexes (men, HR: 1.21; 0.98–1.49 and women, HR: 1.34; 1.15–1.57). When examining the combined effects, the highest risk for mortality was observed for women having both depression and dementia at any time during the study period (HR: 1.61; 1.18–2.21).

Key conclusions: While both depression and dementia were independently associated with all-cause mortality in both sexes, women experienced the highest mortality risk when having both conditions. More research is needed to examine reasons for potential sex differences and to explore the impact of depression and dementia on cause-specific mortality.

P-1033

Case report of possible asymptomatic liver injury caused by memantine

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Introduction: Memantine is used to alleviate symptoms in moderate and severe Alzheimer's disease. A very small number of cases associated with elevated transaminase values after the use of Memantine have been described in the literature. The metabolism of memantine in the liver is minimal, it is excreted mainly in the urine, and the mechanism by which it can cause liver injury is unknown.

Materials and Methods: A case report 78 year old woman with dementia hospitalized in a specialized hospital for geriatric and

palliative medicine. On admission, she had normal laboratory tests and no evidence of liver disease. In the first few days she developed pronounced behavioral symptoms, after which memantine was introduced. The other therapy that was ongoing during that period was enalapril, metoprolol, bromazepam, donepezil, and clopidogrel.

Results: After one month of routine laboratory tests, elevated values of aspartate aminotransferase AST (505 U/L) and alanine aminotransferase ALT (453 U/L), gamma glutamyl transpeptidase GGT (188.8 IU/L) were observed. The patient had no other accompanying symptoms. Viral markers for hepatitis were negative, and an ultrasound examination was also with normal findings. Memantine was immediately discontinued. After two weeks, there is decrease in AST (287 U/L), ALT (233 U/L) and GGT (55) values was observed, and after six weeks the values were normal.

Conclusion: An adult woman developed elevated transaminases after four weeks of memantine administration. The main differential diagnosis of malignant disease and other liver diseases were excluded after ultrasound examination and laboratory tests. Liver enzymes returned to normal after discontinuation of memantine. Studies show that memantine is generally well tolerated and does not cause liver damage.

P-1034

Perceived social support among older adult pet owners and non-pet owners: an exploratory study in Greece

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Introduction: Pet ownership may serve as an effective coping mechanism for older adults experiencing a decline in social support. However, this is an unexplored area in the Greek older adult population. This study aims to provide initial insights by exploring the differences in perceived social support of pet and non-pet owners.

Methods: This exploratory study was conducted on 100 members (aged ≥ 60) from the three Open Elderly Care Centers in Patra. We used a standardized for the Greek population questionnaire, incorporating demographic data, the Multidimensional Scale of Perceived Social Support (MSPSS) and one dichotomous question for pet owners: Do you consider your pet as a part of your family?

Results: The mean participant age was 75.14 ± 7.18 years (76% female; 38% pet owners). Pet owners reported significantly lower perceived social support in the MSPSS friends subscale compared to non-pet owners ($p < 0.05$). Viewing pets as part of their family was also linked to higher levels of perceived social support in the significant others ($p < 0.05$) and family subscales ($p < 0.05$).

Key conclusions: Pet ownership may serve as a coping mechanism for older adults who do not have many close friends. However, it might also discourage them from seeking genuine human socialization and meeting new people. Additionally, the presence of a pet as part of the family can serve as a unifying factor within the family system, thus strengthening familial bonds and communication. This may also explain the findings on significant others, as, for older adults, significant others are typically their family.

P-1035

Depression, loneliness and pet ownership among older adults: an exploratory study in Greece

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Introduction: Pet ownership has been shown to reduce loneliness and depressive symptoms in older adults. However, this field remains unexplored in Greece. This study examines the differences in loneliness and depressive symptoms of pet and non-pet owners, while also exploring reasons for pet ownership.

Methods: This exploratory study included 100 members (aged ≥ 60) from the three Open Elderly Care Centers in Patra. A questionnaire collected demographic data, responses to the Geriatric Depression Scale-15 (GDS-15), the Emotional and Social Loneliness Scale (ESLS), and answers to the question: Why did you acquire your pet?

Results: Participants had a mean age of 75.14 ± 7.18 years (76% female; 38% pet owners). No significant differences were found between pet and non-pet owners in the GDS-15 scores ($p > 0.05$). However, pet owners reported higher social loneliness than non-pet owners ($p < 0.05$), while emotional loneliness differences were not statistically significant ($p > 0.05$). Four key themes emerged from the qualitative analysis: (1) Loneliness (21.1%), (2) Family members brought the pet home (21.1%), (3) Stray animals (15.8%), and (4) Love for animals (15.8%).

Key conclusions: The higher levels of social loneliness among pet owners may their motivation for pet ownership, aligning with qualitative findings. However, pet owners' higher social loneliness levels may also indicate that pet ownership discourages them from forming human connections. However, this could also suggest that pet ownership discourages human connections, as pets may fulfill emotional needs. Additionally, the impact of family members introducing pets into older adults' lives should be further studied to assess potential negative effects.

P-1036

Correlation between quality of life, depression, medication use, and self-rated health: a study in the Greek population

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Introduction: This study explores the factors affecting older adults' quality of life. The main research questions focused on the relationship between quality of life, depression, medication use, and self-rated health.

Methods: Data was collected from 106 members (aged ≥ 60) of 6 Open Elderly Care Center in Municipality of Egaleo, Attica. A standardized questionnaire for the Greek population was used, incorporating demographic data, the Geriatric Depression Scale-15 (GDS-15), the World Health Organization Quality of Life-Older Adults Module (WHOQOL-OLD), and two questions assessing self-rated health (on a scale from 1 to 10) and the number of medications the participants received.

Results: The mean participant age was 72.33 ± 9.7 years (84% female, 16% male). Among them, 41.5% were married, 46.2% were widowed, 5.7% were not married and 6.6% were divorced. Additionally, 56.6% reported receiving a retirement pension of less than 900 euros, and 66% reported having a medical condition. Furthermore, 72.6% had no depressive symptoms, 23.6% mild depression, while 3.8% had moderate depression. According to the main research questions, positive correlation was found between quality of life and self-rated health ($p < 0.001$), while negative correlations were found between quality of life and depression ($p < 0.001$) and between quality of life and medication use ($p < 0.05$).

Key conclusions: Older adults' quality of life is significantly associated with their perception of health, medication use, and depression levels. This study provided significant data for the Greek older adult population and their quality of life profile.

P-1037

Mental health and factors related to satisfaction the services of Open Elderly Care Centers (O.E.C.C.) in old age: an investigation of factors affecting quality of life

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Introduction: Depressive and anxiety disorders are common in the elderly but often underdiagnosed, negatively affecting quality of life. This study examines the relationship between “anxiety”, “depression”, “satisfaction with O.E.C.C.”, and “quality of life” in the elderly.

Methods: Sixty elderly individuals (31 women, 29 men, aged 60–80+) completed the Geriatric Anxiety Scale (GAS), the Older People's Quality of Life Questionnaire OPQOL-35, and 7 questions about O.E.C.C. The study explored: (a) motivation to register, (b) visit frequency, (c) satisfaction with services, (d) participation in activities, (e) involvement in workshops/events/excursions, (f) social relationships, and (g) psychology at the centers. Demographic data (gender, age, education, employment, children, marital status) were also collected. Descriptive and correlation indicators, comparisons, and multiple linear regression analyses tested the research hypotheses.

Results: Quality of life showed a positive correlation with satisfaction from O.E.C.C. ($r = 0.267$, $p < 0.05$) and a negative correlation with depression ($r = -0.455$, $p < 0.01$), with no significant correlation with anxiety ($p > 0.05$). The physical anxiety subscale correlated with satisfaction ($r = 0.278$, $p < 0.05$) and depression ($r = 0.328$, $p < 0.05$). The cognitive anxiety subscale correlated with depression ($r = 0.348$, $p < 0.01$). Depression ($\beta = -0.4$, $t = -3.029$, $p < 0.01$) was a stronger predictor of quality of life than satisfaction ($\beta = 0.26$, $t = 2.177$, $p < 0.05$), while anxiety was not significant ($p > 0.05$).

Conclusions: Depression negatively affects quality of life in the elderly, with higher depression levels leading to lower quality of life. The hypothesis that stress predicts quality of life was not confirmed. As depressive disorders increase in the elderly, quality of life decreases, and as depression decreases, quality of life improves.

P-1038

Blood-based biomarkers of Alzheimer's disease and depression in late life: a population-based study

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Introduction: Depression is common in late life, often co-occurring with neurodegenerative diseases. Yet, how neurodegenerative processes are linked to depression occurrence remain poorly understood. This population-based study aimed to examine the associations between blood-based biomarkers (BBBs) of Alzheimer's disease and the presence and development of depression in later life.

Methods: We used longitudinal data over 15 years from 2290 dementia-free individuals aged 60+ from the Swedish National Study on Aging and Care in Kungsholmen. Baseline blood samples included six BBBs: amyloid-beta 42/40 ratio, phosphorylated (p-tau181, p-tau217) and total tau, glial fibrillary acidic protein (GFAP), and neurofilament light chain (NfL). Depressive burden was assessed through (1) a cross-sectional network of individual depressive symptoms, (2) latent trajectories of depressive symptoms based on repeated Montgomery-Åsberg Depression Rating Scale (MADRS) assessments, and (3) incidence of DSM-IV-defined depression among depression-free participants at baseline.

Results: Cross-sectionally, higher levels of NfL (β 1.07, 95% CI 0.51–1.63) and GFAP (β 0.62, 95% CI 0.12–1.11) were associated with greater baseline MADRS scores. In the network, NfL was linked to suicidal ideation and reduced appetite, while p-tau217 was associated with anhedonia. Longitudinally, both NfL (OR 1.74, 95% CI 1.02–2.95) and GFAP (OR 2.24, 95% CI 1.38–3.69) were associated with a more unfavourable symptom trajectory, while higher NfL was linked to increased depression incidence among depression-free individuals (HR 1.79, 95% CI 1.03, 3.13).

Key conclusions: Higher blood levels of NfL and GFAP, two non-specific biomarkers of neurodegeneration, were associated with both depression presence and development in older adults, while more specific markers of Alzheimer's disease were not.

P-1039

Mental capacity in older adults: the role of medication, built environment and non-pharmacological interventions

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Introduction: Mental health problems and psychological vulnerability among the elderly are common. They have a greater impact on the general health status of these people than chronic somatic conditions [1–3]. These mental health issues appear to be largely remedied with pharmacotherapy while the adverse effects of medication in old age increase, not least on cognitive functioning [4].

Methods: We are conducting an implementation study focusing on the influence of built environment on mental health, deprescribing and the use of non-pharmacological in older adults in order to increase.

Results: Medication harm is measured by a novel digital instrument to measure the anticholinergic and sedative load. For environmental aspects we've conducted a scoping review resulting in specific attention areas for mental health in older adults (e.g. light, air, temperature, space, view, convenience). Non-pharmacological interventions are pooled on the basis of qualitative research and evidence-based methods and techniques. A comprehensive conceptual model guides the use of aforementioned topics and interventions.

Conclusion: Mental health of older adults can be influenced positively by a comprehensive and feasible program addressing harmful medication, the built environment and the use of non-pharmacological interventions.

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P-1040

Prevalence of posttraumatic stress disorder among older adults worldwide: a systematic review

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Research has demonstrated that older survivors of traumatic events are more likely to experience premature health-related decline due to prolonged physical and mental stress than those not exposed. Estimates of the prevalence of posttraumatic stress disorder (PTSD) among older adults ranges from 0.4 to 5.5% regarding current and lifetime prevalence of (partial) PTSD [1]. The general population prevalence of 3.9% [2] highlights the possible absence of an more accurate estimate in older adults. This review aims to generate a more precise global prevalence rate for adults aged 60 and above.

Seven scientific databases were searched to retrieve peer-reviewed articles in English, according to the 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) guidelines, and consisted of terms related to older adults, (subthreshold) PTSD and prevalence. The methodological quality was assessed by the Joanna Briggs Institute Critical Appraisal Tools. Data were extracted from selected studies and the findings were summarized.

Preliminary results show that 44 articles were included. These studies together show a substantial difference in reporting prevalences and

variations of PTSD, rendering the presentation of prevalence rates in this context of limited relevance.

These findings provide clinicians and researchers a more nuanced picture of the variability in PTSD diagnosis and outcome reporting across institutions and countries. This knowledge should be used to stimulate efforts to standardize diagnostic and reporting practices, thereby enhancing consistency and comparability in PTSD-related research and clinical practice on a global level.

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Poster

Perioperative Care

P-1041

Waiting well for surgery a coproduction insight with those most at risk of health inequalities

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Introduction: To address inequitable care in surgical pathways, we implemented a population health management-led approach, targeting patients aged over 65 and those aged over 50 in the most deprived populations. The initiative identifies patients at risk earlier in the surgical process and provides proactive health optimisation interventions to reduce delays.

Methods: To co-design effective support strategies, seven workshops were conducted with 52 patients from elective surgical waiting lists, prioritizing representation from deprived areas, global majority backgrounds, and individuals with disabilities. Participants shared challenges and potential solutions across key areas:

Stress and Communication: High stress levels resulted from inadequate communication regarding surgery dates. Patients expressed concerns about being removed from waiting lists and struggled to contact the hospital for information.

Diet and Physical Activity: Patients acknowledged personal control over health optimisation but faced barriers such as affordability, access, and associated costs.

Motivation and Tailored Support: Support from family, peers, or community groups was deemed crucial. Generic materials were considered impractical, with participants favouring personalised, actionable advice.

Conclusions: The workshops informed several actions, including launching the NHS app to provide appointment visibility, creating accessible, jargon-free patient communications, and enhancing specialty-led identification of patients facing inequalities. Additional initiatives involve strengthening links with social prescribers and refining resources to improve patient preparedness. Ongoing efforts aim to deliver tailored, equitable care and empower patients to optimise health outcomes ahead of surgery.

P-1042

Ambulatory urological surgery in the elderly patient: our experience

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Introduction: Outpatient treatment of elderly surgical patients offers clear benefits for patients, hospitals, public insurers and society at large.

Objective: To report our experience in ambulatory urological surgery in the elderly patient.

Methods: Descriptive and retrospective study of elective ambulatory surgeries performed in the Urology Unit integrated into the Mariano and Luciano de la Vega Hospital, Moreno, Argentina, from January 2020 to December 2024. The following were included: minimal haemorrhagic risk, duration < 90 min, no opening of cavities (except endoscopic procedures), pain controllable with oral analgesia, and stable ASA I, II, and III patients. The following were excluded: IDDM, COPD requiring general anaesthesia, overweight > 30%, psychiatric or drug addicts, anticoagulants, home more than an hour from the Unit, living alone.

Results: Total: 478 (female: 32%, male: 68%). Average age: 73 (65–87). Non frail: 328, pre-frail: 138, frail: 12. Procedures: hydrocelectomy: 97, funicular and epididymal cystectomy: 28, orchiectomy: 11, testicular prosthesis implantation: 9, postimplasty: 94, papillomasis excision: 42, partial penectomy: 3, TUR of bladder neoforations: 32, urethrotomy: 11, cystostomy: 51, cystolitectomy: 13, midurethral sling implant: 21, percutaneous nephrostomy: 17, ureteral catheterization: 49. Local anesthesia plus sedation: 293, spinal anesthesia: 61, general anesthesia: 124. There were no cases of delirium, cognitive dysfunction, major complications, or mortality. There were no major complications, or mortality. Reconversion to general anesthesia due to failure of local anesthesia: 3. Readmission for urinary retention: 2.

Conclusion: Advances in anesthesia, surgery and monitoring technology and a comprehensive geriatric assessment ensure that

ambulatory surgery is an alternative in the elective treatment of many urological pathologies in the elderly.

P-1043

Surgery in the geriatric patient: five-year retrospective analysis in a madrid support hospital

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Introduction: Geriatric patients represent a growing group in surgical services, with complex clinical characteristics and specific needs. This retrospective study analyzes surgical activity in over 85-year-olds attended in a Madrid support hospital between January 2021 and January 2025.

Methods: We reviewed all interventions performed in this age group, classifying patients according to type of procedure, surgical specialty, priority, diagnosis, age and anesthetic profile (ASA scale).

Results: A total of 1717 patients were included, with a mean age of 89 years: 1048 were from the center (60.9%) and 671 were referred (39.08%). 369 were ASA II (21.4%), 594 ASA III (34.59%) and 42 ASA IV (2.45%). According to surgical priority, 40 cases were oncologic (priority 3: surgery in < 30 days) and 1679 were standard priority (surgery in < 180 days).

The most frequent procedures by specialty: phacoemulsification with cataract aspiration in ophthalmology; inguinal hernia repair in general surgery; total knee and hip replacement and carpal tunnel release in traumatology; and excision of skin lesions, grafts and biopsies in dermatology. Tooth extraction was the most common dental procedure. Procedures were also performed in otorhinolaryngology, urology, vascular surgery, gynecology and plastic surgery, with foam sclerotherapy, thermal ablation and prostate biopsies being frequent.

Conclusions: Surgery in the elderly is frequent and diverse, with a predominance of scheduled procedures and low anesthetic risk, in accordance with the hospital's support profile. These data allow us to characterize the surgical load in this group and to plan resources adapted to their needs.

P-1044

The assessment of frailty in older people admitted under urology

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Introduction: Frailty is a valuable, independent predictor of adverse post-operative outcomes. Older patients are increasingly the core business of urological practice; frailty is our business and urologists

need to be fluent with the identification and clinical implications of frailty.

We present a prospective quality improvement project (QIP) between the Urology service and the Perioperative Care for Older People Undergoing Surgery (POPS) team, to examine current practice and inform improvement strategies.

Methods: An audit of current practice was undertaken using electronic patient records. Notes of all patients aged ≥ 65 admitted to the Urology wards were reviewed over five days. We evaluated the proportion with a Rockwood Clinical Frailty Scale (CFS) score documented and/or coded within 24 h of, or prior to admission.

An educational programme was delivered explaining the rationale for and practicalities of documenting CFS. Visual prompts on computers were implemented. We present the completed audit-cycle data following this intervention.

Results: There were 29 patients aged ≥ 65 (64% of total Urology inpatients) admitted during the study period, of which 41% were elective admissions. The mean CFS was 4, the range was (1–8).

CFS was not recorded by a urologist for any patients. However, 22/29 patients had CFS documented elsewhere by other clinical teams; of which 11 were documented pre-admission. 11 were correctly coded.

Key conclusions: Focused and “SMART” educational interventions were effective at improving awareness of CFS amongst Urology trainees. Interventions improved rates of recording CFS for Urology patients. Future work will look at surgical outcomes in relation to CFS.

P-1045

Optimised post-discharge care in older patients after surgery for colon cancer: a protocol for a randomized controlled trial

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Introduction: Older patients with localized colon cancer and frailty have a higher risk of poor recovery after surgery. While enhanced recovery after surgery (ERAS) pathways improve in-hospital recovery, structured post-discharge interventions are lacking. Home-based support may further enhance recovery in this population. This study evaluates the effect of an ERAS program incorporating home-based geriatric, nutritional, and exercise interventions immediately after discharge.

Methods: This randomized controlled trial includes older patients (> 65 years) undergoing elective colonic resection within an ERAS pathway. At discharge, frail patients (Clinical Frailty Scale score 4–7) at nutritional risk (Nutritional Risk Screening 2002 > 3) are randomized 1:1 to an intervention group ($n = 30$) or standard care ($n = 30$). The intervention consists of protein-enriched nutrition,

home-based comprehensive geriatric assessment (CGA) by a geriatric outreach team, dietary counselling, exercise instructions, and outpatient follow-up. The primary outcome is the change in the questionnaire Quality of Recovery-15 score from baseline to 12 ± 2 days postoperatively. Secondary outcomes include changes in quality of life, activities of daily living, appetite, muscle function (30-s chair-stand test), muscle mass, energy and protein intake, readmission rates, and costs.

Results: The study is ongoing (Identifier: NCT06802991).

Key conclusion: This study extends ERAS principles beyond hospitalization by addressing post-discharge needs in frail, older patients after colon cancer surgery. Home-based CGA, nutritional support, and exercise interventions may enhance recovery. A key strength is the use of patient-reported outcome measures, offering a broader assessment of recovery. If effective, this approach could optimize post-discharge care for frail surgical patients.

P-1046

Real-life implementation of geriatric co-management at the colorectal and vascular surgery ward

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Introduction: To address the challenges of an aging surgical population, a nurse-led geriatric-surgical co-management program was implemented at the colorectal and vascular surgery wards of the Leuven University Hospital. This was combined with longitudinal follow-up of routinely collected quality indicators to evaluate effectiveness.

Methods: This single-centre observational study evaluates the evolution of quality indicators following gradual integration of geriatric care into standard surgical practices for patients aged 75 and over. Implementation began in 2023 for colorectal surgery and in 2024 for vascular surgery. Eleven process and seven outcome indicators were measured annually through the electronic hospital’s data management system.

Results: At the colorectal surgery ward, screening for malnutrition, dysphagia, delirium, and urinary retention increased. Non-statistically significant improvements were observed in pre-morbid status assessment, early mobilization, and avoidance of urinary catheters. At the vascular surgery ward, screening for malnutrition, dysphagia, and urinary retention improved. More patients received early physiotherapy, and the incidence of constipation and physical restraints decreased. In addition, positive non-statistically significant trends were observed in length of stay, in-hospital mortality, and infectious complications (colorectal surgery), as well as infectious

complications, in-hospital mortality, and mortality up to 90 days post-discharge (vascular surgery).

Key conclusions: Although changing clinical routines takes time, positive trends in process and outcome indicators have been observed since implementation began. Geriatric co-management is a promising model for integrating geriatric care into routine surgical practices to improve outcomes for frail older patients.

P-1047

Comparison of hospital stay duration in elderly population with stroke, diabetes and osteoporosis admitted with a fractured neck of femur (NOF) and hypertension: a retrospective audit

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Introduction: Hospital stay duration varies significantly among patients with fractured neck of femur (NOF), especially those with comorbidities like stroke, diabetes, and osteoporosis. Stroke patients often experience prolonged stays due to mobility impairments and rehabilitation needs. Diabetes increases the risk of infections and delayed wound healing, further extending hospitalization. Osteoporosis, a key factor in fracture fragility, can impact surgical outcomes and recovery. Hypertension, common in these patients, may contribute to perioperative complications. Comparing hospital stay durations among these groups can help identify factors influencing recovery, optimize resource allocation, and improve patient outcomes through tailored management strategies.

Methods: This was a retrospective audit of 400 patients admitted to Milton Keynes University Hospital, UK, with a fractured neck of femur (NOF) between January 2021 and March 2023. The prevalence of hypertension in this cohort was 74.25% (297 patients). Among the hypertensive patients, the prevalence of stroke was 10.1%, osteoporosis 18.8%, type 2 diabetes 16.2%, and type 1 diabetes 1.34%.

Results: The average length of hospital stay was 25.7 days for stroke patients and 26 days for those with type 1 diabetes. In comparison, patients with osteoporosis had an average hospital stay of 21.2 days, while those with type 2 diabetes stayed an average of 19.7 days.

Conclusion: Among hypertensive patients with NOF, a longer hospital stay was more likely in those with type 1 diabetes and stroke.

P-1048

Prediction of 30-day infection risk in patients undergoing hip fracture surgery: a nationwide cohort study

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Background: The risk of infection within the first 30 days following hip fracture surgery is substantial. We aimed to develop prediction models for identification of patients at high risk of postoperative infections.

Methods: Using Danish national health registries, we included patients aged ≥ 65 years who underwent hip fracture surgery between 2016 and 2021.

The following predictors were considered: age, sex, pre-fracture mobility, BMI, chronic comorbidities, laboratory analyses, time to surgery, 6 months pre-fracture infection, and cohabitation place.

Outcome was any hospital-treated infection 30 days after surgery. Models were constructed using logistic regression with bootstrapping for internal validation. Model performance was assessed using area under the receiver operating characteristic curve (AUC) and calibration slope.

Results: Through complete case analysis, we included a cohort of 12,702 patients, 9.4% experienced the outcome.

The full model including all predictors had an AUC of 0.62 and calibration slope of 0.95.

The basic model including age, sex, and mobility had an AUC of 0.60 and calibration slope of 0.98.

Advanced age, severe comorbidity level, recent infection, and male sex were most strongly associated with an increased risk of infection. Further, poor mobility, abnormal BMI, low hemoglobin levels, and sodium and potassium levels outside the normal reference interval were identified as important predictors.

Conclusion: We developed models for use in the perioperative period to identify patients with hip fractures with a high risk of severe infection requiring hospital treatment. The models may potentially serve as useful screening tools, improving prevention strategies and counseling of patients and relatives.

P-1049

HIPOX, delirium and nocturnal hypoxia after hip fracture surgery in geriatric patients

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Introduction: Delirium is a common complication after hip fracture surgery, with hypoxia as a potential trigger. However, no study has yet investigated postoperative nocturnal hypoxia in elderly patients. Materials and methods. This prospective study included patients ≥ 70 years, with hip fracture surgery. Delirium was assessed using the CAM, and hypoxia via nocturnal capnography.

Results: The study included 47 patients with a mean age of 86 years. Those with delirium showed significantly higher frailty (CFS) (3.9 ± 1.5 vs. 2.8 ± 1.3 ; $P = 0.0315^*$), with approximately half diagnosed with dementia. While daytime oxygen saturation levels were similar between groups, confused patients tended to show nocturnal desaturation. Prior to the fracture, both groups exhibited equivalent levels of autonomy, however, the confused group showed

poorer functional recovery with lower SPPB scores at 7 days (0.8 ± 1.9 vs. 3.0 ± 2.8 ; $P = 0.0096^{**}$) and 1 month (2.5 ± 2.3 vs. 5.8 ± 3.8 ; $P = 0.0118^{*}$) post-surgery, and greater dependency in the ADL (3.4 ± 1.8 vs. 4.9 ± 1.3 ; $P = 0.0192^{*}$) and IADL (1.3 ± 1.1 vs. 2.5 ± 1.4 ; $P = 0.0306^{*}$) at 1 month post-surgery. Multiple regression analysis revealed that delirium was more likely in male patients, those with dementia, IADL dependence, or fecal impaction, but not linked to frailty or nocturnal desaturation.

Conclusion: In these preliminary results, nocturnal hypoxia was not significantly linked to delirium after hip fracture surgery in elderly patients, warranting further investigation with a larger cohort.

P-1050

Detection of adverse events in older adults undergoing surgery using the Global Trigger Tool in a prospective observational study

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Introduction: This study aimed to determine the frequency, types and severity of adverse events (AEs) in older surgical inpatients, along with identifying risk factors for AEs within the SURGE-Ahead project.

Methods: Using a retrospective chart review from a larger prospective observational study, we analyzed data from three surgical departments at Ulm University Medical Center. Included were patients aged ≥ 70 years undergoing inpatient surgery with an Identification Seniors at Risk (ISAR) score ≥ 2 . We employed a modified version of the Institute for Healthcare Improvement Global Trigger tool (IHI GTT) tailored to the geriatric population to detect AEs during hospitalization and up to 30 days post-discharge. Binary logistic regression helped identify factors associated with an AE-free treatment course.

Results: Among the 174 participants, 131 (75.3%) experienced at least one AE, totaling 348 AEs or 155.9 AEs per 1000 patient days/200.0 AEs per 100 admissions. Most AEs caused temporary harm necessitating intervention (58.9%), commonly involving intra-/post-operative complications (43.8%) and nosocomial infections (18.9%). Factors such as younger age, shorter operation time, and absence of frailty were significantly linked to an AE-free outcome (AUC 0.81).

Key conclusion: Our findings highlight a significant incidence of AEs among older surgical inpatients. The inclusion of additional triggers (“new impairment of cognition/vigilance, fluctuating confusion” and “electrolyte disturbances”) improved the IHI GTT’s effectiveness in the geriatric cohort. Furthermore, age, frailty status, and operation time may serve as predictors for the necessity of geriatric co-management.

Short Poster Presentation

Perioperative Care

P-1051

Standard-of-care vs. expert-recommended discharge destinations for geriatric surgical inpatients: a prospective observational cohort study

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Introduction: Discharge planning is important to ensure optimal postoperative outcomes for older surgical inpatients. As part of the Supporting SURgery with GERiatric co-management and AI (SURGE-Ahead) project, this study investigates how congruence between standard of care discharge decisions and geriatric expert recommendations affects functional outcomes in older surgical inpatients.

Methods: A prospective observational cohort study was conducted across three surgical departments at Ulm University Medical Center (Trauma, Visceral, Urology). Patients aged 70 years or older with an Identification Seniors at Risk score ≥ 2 were enrolled. The congruence between the standard of care discharge decisions (actual discharge destination) and recommendations made by expert geriatricians (unknown to clinicians) was determined across four discharge options: home, acute geriatric care unit, rehabilitation facility or nursing home. Multivariable logistic regression was employed to examine how the match (congruence) between recommended and actual discharge destinations related to functional outcomes and readmission rates post-discharge.

Results: Among the 169 enrolled participants, a discrepancy of 27% was observed between the standard of care and expert recommendations. Patients with discharge decisions incongruent to geriatric expert recommendations showed higher frailty scores, more dependence in activities of daily living, and reduced mobility pre-operatively. Mismatch between expert recommendations and standard of care was associated with decline in Barthel Index and Charité Mobility Index scores, and higher 3-month readmission rates.

Conclusion: Optimizing discharge destinations may prevent functional decline and reduce readmissions. Closing the gap in discharge decisions that are incongruent with geriatric expert recommendations could enhance functional outcomes for older surgical patients.

Poster

Perioperative Care

P-1052

Pneumocephalus. A case report

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Introduction: Pneumocephalus in geriatric patients is the abnormal accumulation of air in the cranial cavity, often secondary to neuro-surgical procedures, cranioccephalic trauma, or infections. Early identification and appropriate management are crucial due to the risk of neurological complications.

Methods: Analysis of the clinical case of a 74-year-old female patient who presented acute neurological symptoms during her hospitalization, diagnosed with pneumocephalus after completing imaging studies and evaluating her neurosurgical history.

Results: A 74-year-old female patient, independent in all basic and advanced daily living activities, with good social support and no cognitive impairment. She had a history of hypertension, urinary incontinence, and insomnia, and had recently undergone L5-S1 fusion surgery for compressive disc herniation. She presented with surgical wound dehiscence and exudate, and was admitted to Neurosurgery. She received targeted antibiotic therapy and was reintervened for wound cleaning without immediate complications. 24 h later, she developed severe headache, nausea, vomiting, and disorientation. An urgent cranial scan revealed a 19 mm pneumocephalus with mass effect on the frontal lobes. The patient was admitted for intensive management. Once stabilized, she was transferred back to the ward, where a functional rehabilitation program began. Upon discharge, she was able to ambulate with the aid of a walker.

Conclusions: Pneumocephalus is a rare but potentially severe complication in postoperative patients, even after procedures distant from the neuroaxis, like lumbar arthrodesis. In geriatric patients, early diagnosis and multidisciplinary management are essential. The favorable outcome of this case highlights the importance of timely intervention and rehabilitation to preserve functionality.

P-1053

Implementing postoperative delirium risk prediction (PIPRA-SAGE project) & multicomponent interventions (PREDELENF-ProFràgils) for frail patients hospitalised in surgical wards

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Introduction: Postoperative delirium (POD) affects up to 1/2 patients over 60 years, and it leads to complications such as functional decline, prolonged length of stay, higher readmission rates, and increased mortality. Despite scientific societies urge to identify high-risk patients to implement preventive strategies, at present, there is no a standardised solution for the system.

Methods: In the context of a frailty strategy (ProFràgils Germans Trias) for case management person-centred care and prevention of complications in older people at risk negative outcomes during

hospitalisation, several initiatives have been implemented in a tertiary hospital. The PIPRA-SAGE project assess the feasibility of implementing the PIPRA delirium management program in the Spanish healthcare sector. PIPRA is an CE-certified software that identifies older patients most at risk of POD, and it offers a holistic delirium prevention programme that combines risk prediction with targeted interventions. PREDELENF is a Geriatrics nursing-led intervention programme developed in our hospital to prevent complications in hospitalised frail populations.

Results: Through 2025, several actions have been implemented: PIPRA risk prediction algorithm has been introduced into the electronic health record. At the phase 1, both in-person and online educational modules, have been performed to clinical staff on the participating wards, to assist them with screening for and identifying delirium. At phase 2, individuals at risk have been receiving the PREDELENF multicomponent intervention to reduce the POD incidence.

Key conclusions: The integration of risk prediction, clinical staff education and ward level preventive interventions has found useful for improving frailty care in surgical wards.

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P-1054

Prognostic significance of vitamin D and C-reactive protein in older adults with hip fracture

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Introduction: Previous studies have suggested that preoperatively elevated C-reactive protein (CRP) levels and vitamin D deficiency are associated with increased one-year mortality and postoperative medical complications in older adults with hip fracture. However, the prognostic value of these biomarkers remains uncertain.

Methods: We conducted a prospective observational study including patients aged ≥ 70 years admitted for hip fracture over a six-month period. Data on sociodemographic, functional (Barthel Index), nutritional (MNA-SF), and cognitive (GDS) status were collected. Serum vitamin D and CRP levels were measured 24–48 h after admission. A multivariable logistic regression analysis, adjusted for seven poor prognosis variables (age, Barthel Index, hemoglobin at admission, number of comorbidities, glomerular filtration rate, GDS, and MNA-SF), was performed to assess whether vitamin D deficiency or increased inflammatory activity were associated with in-hospital complications and one-year mortality.

Results: A total of 199 patients were included (mean age 84 ± 8 years, 72% female, 58% with two pre-existing comorbidities, 78% with vitamin D deficiency). Logistic regression analysis showed that vitamin D deficiency at admission (OR 0.997, 95% CI 0.972–1.022; $p = 0.799$) and increased inflammatory activity (OR 0.996, 95% CI 0.991–1.001; $p = 0.09$) were not significantly associated with higher one-year mortality. Similarly, neither vitamin D deficiency (OR 1.008, 95% CI 0.986–1.03; $p = 0.487$) nor increased inflammatory activity (OR 0.995, 95% CI 0.995–1.005; $p = 0.94$) were associated with in-hospital complications.

Key conclusions: In this cohort, neither vitamin D deficiency nor increased inflammatory activity assessed by CRP levels during hospitalization were associated with increased one-year mortality or in-hospital complications.

P-1055

GENEUS project—towards integrated geriatric neurosurgery pathways in Southern Europe

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Introduction: Ageing populations across Southern Europe pose new challenges for neurosurgical care. The GENEUS (GEriatric NEUro-Surgery) project aims to ensure equitable access to neurosurgical care for older patients by developing a transnational, integrated care pathway tailored to local needs. This project is a EU-funded and supported jointly by EANS and EUGMS.

Methods: We implemented a mixed-methods approach across six institutions in France, Spain, and Portugal. Epidemiological demographic, clinical and medico-economic data on patients aged ≥ 65 years hospitalized in neurosurgery were collected. Qualitative surveys explored experiences and expectations from professionals, patients, and caregivers. Seven key domains were identified to structure a toolbox: frailty screening, comprehensive geriatric assessment, hydrocephalus identification, rehabilitation, prevention of iatrogenic dependency, perioperative optimization, and care coordination.

Results: The first phase delivered a detailed territorial analysis and revealed significant heterogeneity in practices. A consensus-based, quantifiable “toolbox” is under development to support a standardized care model. Early pilot implementations show improved multidisciplinary collaboration and alignment with patient needs.

Conclusion: GENEUS fosters a pragmatic, evidence-based geriatric neurosurgery model rooted in local healthcare realities. Scalability across Europe is supported through a structured adaptability framework, involving cross-country implementation, continuous stakeholder engagement, and harmonized data collection tools. By bridging neurosurgery and geriatrics, the project contributes to more inclusive, efficient, and age-friendly healthcare systems adaptable to diverse contexts.

P-1056

Advancing neurosurgical care for older people in Europe: the EANS action plan

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Introduction: With Europe’s population aging rapidly, older patients represent a growing proportion of neurosurgical admissions. However, traditional neurosurgical models often fail to address the complexity of older patients’ needs. In response, the European Association of Neurosurgical Societies (EANS) launched a 2024–2030 action plan to foster Geriatric Neurosurgery as a structured, patient-centered subspecialty.

Methods: The Action Plan was developed by a multidisciplinary task force of neurosurgeons, geriatricians, and healthcare experts. It defines core principles, six strategic objectives, and ten actionable steps to guide the integration of geriatric principles into neurosurgical care, education, and research across Europe.

Results: Key initiatives include implementing geriatric assessments, promoting multidisciplinary teamwork, adapting surgical decision-making to geriatric conditions, and developing integrated care pathways. Early collaborations with European societies, such as EUGMS, have begun to build momentum. Pilot programs are fostering cultural change and identifying cost-effective practices.

Conclusion: The EANS Action Plan provides a structured roadmap for transforming neurosurgical care for older adults. By embedding compassionate, coordinated, and evidence-based practices, it aims to enhance autonomy, reduce hospital-associated disability, and improve quality of life—supporting older people to live independently for as long as possible.

P-1057

Implementation of Comprehensive Geriatric Assessment based perioperative medicine services to improve clinical outcomes for older patients undergoing elective and emergency surgery with cost effectiveness; a hybrid implementation-effectiveness, interrupted

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Title: Implementation of Comprehensive Geriatric Assessment based perioperative medicine services to improve clinical outcomes for older patients undergoing elective and emergency surgery with cost effectiveness; a hybrid implementation-effectiveness, interrupted time series study.

Short title and acronym: Perioperative medicine for Older People undergoing Surgery Scale Up (POPS-SUP).

Background: Surgery provides definitive management of many age-related diseases, relieving symptoms or extending life. Age-related physiological decline, multimorbidity and frailty predispose older people to postoperative complications, incomplete functional recovery with resultant health and social-care cost. These age-related conditions can be optimised using Comprehensive Geriatric Assessment (CGA) thus mitigating perioperative risk to improve clinical outcomes with cost-effectiveness. National organisations advocate CGA-based services for older surgical patients. However, variation exists in the provision of CGA-based Perioperative medicine for Older People undergoing Surgery (POPS) services across the United Kingdom (UK) National Health Service (NHS) resulting in inequitable access for higher-risk, older surgical patients, unnecessary deaths, complications and financial cost.

Aim: To evaluate whether CGA-based POPS services can be implemented at scale, to improve clinical outcomes for older patients undergoing surgery with cost-effectiveness.

Methods: A mixed-methods hybrid implementation-effectiveness, interrupted time-series study will examine the use of a coproduced implementation strategy to embed CGA-based POPS services at scale in the UK. Co-primary implementation-effectiveness outcomes will be used; reach and length-of-hospital-stay respectively. Evaluation will include an embedded process evaluation, quantitative evaluation of clinical and cost effectiveness and qualitative appraisal of patient and staff experience.

Proposed Analysis: The embedded process evaluation will use real time framework analysis enabling iterative refinement and evaluation of the implementation strategy. Accepted interrupted time series

analysis will be used to examine and compare outcomes per participating site.

Ethics and dissemination: Appropriate approvals across the UK obtained. A predefined dissemination strategy has been co-designed with patients/carers, clinical community of practice and organisational bodies.

P-1058

Better updates, better care: improving the communication with relatives in older surgical patients

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Introduction: According to the GMC, medical professionals have a responsibility to be considerate and compassionate to those close to a patient through giving support and information. NHS digital data last year showed that 17.1% of written complaints are linked with communication. The primary aim of this project was to increase the percentage of surgical patients aged 65 or over receiving a next of kin (NOK) update. The secondary aim was to decrease the time to update to under 48 h.

Method: Using the electronic patient record surgical patients aged 65 years or over were identified. Medical records were checked for documentation of a NOK update. Where an update was documented, time to update from decision to admit was noted. In those without a documented update, time from clerking was recorded. The percentage of patients receiving an update and mean time to update was calculated. Following the implementation of posters prompting NOK updates, data was recollected. Following a teaching session a third data analysis was undertaken.

Results: Following the initial intervention the time to NOK update decreased by 78% from 232 to 50 h. The data post second intervention saw an increase in the percentage of NOK updates from 62% pre-interventions to 70% and time to update decreased by a further 5% to 40 h.

Discussion: Implementation of a poster prompt and undertaking a teaching session, highlighting the importance of communication with NOKs, demonstrated improvement in percentage and mean time to NOK updates for our patient cohort on surgical wards.

P-1059

Care pathway “dementia-friendly surgery”

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(1) AZ Alma Eeklo

Introduction: Patients with dementia who undergo surgery often experience complications such as delirium, malnutrition and falls. Specialised geriatric care must be provided throughout the whole hospitalisation. The aim is to reduce complications and risk of functional decline and improve overall outcome.

Method: Development and implementation of a care pathway “dementia-friendly surgery”.

Results: The care pathway starts on admission (emergency department or consultation of the surgeon). The geriatrician is consulted immediately to perform a comprehensive geriatric assessment. The patient is screened for malnutrition and prehabilitation takes place before surgery.

The patient is admitted to a geriatric ward. Before surgery, food intake is allowed until 6 h before surgery, and the patient may drink

clear fluids (rich in carbohydrates) up until 2 h before surgery, to maximize glycogen reserves.

The central care taker can accompany the patient with dementia in the operating room. The anaesthesiologist takes into account the physiology of the older patient, and avoids hypotension and hypothermia in these patients.

Postoperatively, the patient returns to the geriatric ward as soon as possible, where the multidisciplinary geriatric team can evaluate and start immediate rehabilitation and recovery.

Throughout the entire care pathway, there is a great focus on nutrition, proactive pain management and prevention of delirium.

Key conclusions: The care pathway “dementia-friendly surgery” is a new approach to treating patients with dementia who undergo surgery, in a tailored and holistic way. Risk of delirium is minimized and rapid and complete functional recovery is the main aim.

P-1060

Baseline characteristics and clinical outcomes of older patients attending a preoperative assessment clinic. Qatar-POPS

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Introduction: Preoperative assessment and optimization are recommended for older patients. We evaluated the baseline characteristics and short-term clinical outcomes of patients assessed in a combined Anesthesia-Geriatrics clinic, the first of its kind in Middle East.

Methods: Individuals over 60 years of age referred for preoperative assessment at an anesthetic clinic were also reviewed by the Geriatrics perioperative care of older people undergoing surgery team from 14th November 2023 to 31st December 2024.

All patients underwent comprehensive geriatric assessment, informed consent and were offered person-centered targeted interventions. Patients were then offered review on admission to hospital.

Results: 197-patients were reviewed with a mean age of 69.4 (60–87) years and female predominance (57.3%). 83.7% had ≥ 2 comorbidities, including diabetes 119 (60.4%). 77.6% took ≥ 5 medications, and 13.7% were living with frailty.

153 (77.6%) individuals underwent surgery, the most common surgical interventions: hernia MESH repair 27, breast excision 42, thyroidectomy 26 and cholecystectomy 23. The median length of stay of 2 days. No patients developed delirium, 1 returned to the theater, 3 suffered infective complications, 1 required blood transfusion and 3 suffered a fall (no significant injury). There were no deaths in hospital, at 30 or 90 days. 6 patients (3.9%) were readmitted within 30 days.

Conclusions: Our cohort of older patients included mostly independent individuals with significant multimorbidity and polypharmacy. 1 in 3 patients did not undergo surgical intervention. Of those patients who underwent surgery, none developed delirium, a small number suffered complications, and none died at 90 days.

P-1061

Differences in baseline characteristics and clinical outcomes of older persons requiring hospital admission under Acute Care Surgery before/after introducing an elderly care in reach service. Qatar Perioperative care of older people undergoing general sur

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Introduction: Preoperative assessment and optimization are recommended for older patients admitted for investigation and treatment of acute surgical conditions. We deployed a Perioperative care of Older People undergoing general Surgery (POPS) service in January 2024. We aimed to establish the benefits of our program.

Methods: Retrospective observational study of patients over 60 years of age admitted to our tertiary city hospital under Acute Care Surgery. To assess its impact, we compared patients discharged in April and May 2023 (NoPOPS) with the same population in 2024 (POPS).

Results: 2023NoPOPS cohort comprised of 72 patients, while 66 individuals were discharged in 2024POPS. POPS reviewed patients had a 100% compliance with comprehensive geriatric assessment (CGA), clinical frailty Scale scoring (CFS), medication reconciliation and problem listing. NoPOPS patients did not undergo CFS or CGA, 50% had a problem list. Average age was 67.9 (60–92) and 70 (60–109), 55% males, 58.3%NoPOPS and 63.6%POPS took ≥ 5 medications, 3.2NoPOPS and 4.7POPS had chronic illnesses, and 1.08 (0–2) and 5 (1–6) documented active diagnoses. 40NoPOPS and 46POPS patients underwent surgery, the most common surgeries: incision & drainage (15NoPOPS vs 9POPS), debridement/amputation (11NoPOPS vs 15POPS) and cholecystectomy (8NoPOPS vs 7POPS).

Median length of stay was 5 days, 3 NoPOPS vs 1 POPS patients died in hospital but none died at 30 days. 30-day readmission was 23 NoPOPS(31.9%) vs 10POPS (15.1%).

Conclusions: Our pilot study suggests that introducing a POPS service for older people may result in reduced hospital mortality and 30-day rehospitalization, despite no significant differences in baseline characteristics.

P-1062

Baseline characteristics and clinical outcomes of older persons requiring hospital admission under Acute Care Surgery after introduction of an elderly care in reach service. Qatar Perioperative care of older people undergoing general surgery (Q-POPS)

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Introduction: Older people are often admitted for investigation and treatment of acute surgical conditions. We aimed to establish the baseline characteristics and clinical outcomes of older people reviewed by a newly deployed, proactive geriatrics in-reach service, the first in The Middle East.

Methods: This was a prospective non-randomized interventional study of patients over the age of 60 years requiring emergency admission under acute care surgery between 1st January and 31st December 2024. Patients underwent comprehensive geriatric assessment, and multidisciplinary patient centered interventions.

Results: A total of 304 patients were reviewed, their mean age was 70.3 (60–109) years, 169 (55%) males, 92 (30.2%) living with frailty, 227 (74.6%) took ≥ 5 medications, 197 (64.8%) were diabetics, 275 (90.4%) were multimorbid with an average of 4.6 chronic illnesses

(0–13), and 6 (1–18) active diagnoses. The most common reasons for admission included biliary disease (107), diabetic infected foot (74), bowel obstruction (37) and abscess formation (36). 211 (69.4%) individuals underwent surgical intervention.

21 (6.9%) patients developed delirium, 25 (11.8%) returned to theater (19 of these were infected diabetic feet), 46 patients (15.1%) were readmitted within 30 days; there were 3 deaths in hospital (one underwent surgery), 1 at 30 days and 4 at 90 days.

Conclusions: Our cohort of older patients was predominantly independent individuals with significant multimorbidity and polypharmacy who presented with biliary and diabetic infected foot disease. 1 in 3 patients were living with frailty, and 2 in 3 underwent surgical intervention. Randomised controlled studies should establish the usefulness of such programs.

P-1063

Perioperative medicine for older people undergoing surgery (POPS): evaluation of clinical nurse specialist (CNS) led telephone comprehensive geriatric assessment (CGA) and optimisation

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Introduction: The surgical population is ageing, with increasing frailty and multi-morbidity [1, 2]. The POPS team provides geriatrician-led, multi-disciplinary team (MDT) CGA to enable medical optimisation and support with shared decision making. Due to workforce shortages the team have developed transdisciplinary working.

The National Health Service (NHS) is subject to long elective waiting times [3]. Pre-operative validity is 4 months.

Aim/objectives: Repeat CGA assessment through CNS-led telephone clinic to maintain capacity in consultant led clinic. Support elective recovery with least healthcare resource burden.

Methods: In 2024, patients were triaged for CNS telephone review if: 1. Initial assessment expired 2. Outstanding investigations needing review. Telephone reviews with a face-to-face if required. Retrospective data to review interventions and outcomes. Patient satisfaction assessed with 10% sample.

Results: 182 patients were reviewed, freeing up equivalent of 20.1 consultant-led clinics (equivalent to £72,618 generated in new patient tariff).

Interventions: CGA review 100%; chronic health optimisation 25%, medicines optimisation 66%, outstanding investigation review 76% and lifestyle advice 100%.

Outcomes: 133 patients optimised to proceed, 40 patients ongoing case-management, 9 patients shared decision not to proceed.

Patient satisfaction: 87% preferred telephone review, mean travel-time saving 93 min. 83% confidence and 83% satisfied with CNS led service.

CNS team reported greater sense of autonomy, highlighting ability to manage complex caseloads in addition to other activity.

Conclusion: Our pilot shows that perioperative CGA can be delivered in a novel format whilst maintaining fidelity, promoting transdisciplinary working and supporting elective recovery in a cost-effective way.

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P-1064

The feasibility and acceptability of a Music Intervention to reduce Preoperative Anxiety (fa-MIPA study) from the perspective of older surgical patients

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Introduction: Preoperative anxiety (PA) is prevalent among surgical patients. High PA levels can independently heighten the risk of mortality or major morbidity in older patients. While music intervention shows promise in reducing PA, its acceptability and feasibility from the point of view of older surgical patients remain underexplored.

Methods: A monocentric, single-arm study was conducted between December 2023 and April 2024, involving patients aged 60 years or older undergoing cardiac surgery or Transcatheter Aortic Valve Implantation (TAVI). Each participant received a 20–30-min music intervention session on the day before and the day of surgery. Music playlist was tailored to each patient's preferred genres and specific music selections. Primary outcomes were patients' acceptability and feasibility, evaluated through the consent rate, compliance rate and a short interview postoperatively.

Results: Out of 134 patients approached, 78 (58%) consented to participate. Music intervention was delivered to 71 patients, with 7 unable to participate for practical reasons. Compliance rates were 99% for the first session (n = 70) and 87% for the second session (n = 62). Interview responses from 63 patients revealed high satisfaction, with 62 (98%) expressing contentment with the intervention, 57 (90%) expressed interest in future music interventions, 58 (92%) liked the music provided, and 61 (97%) would recommend it to others. Additionally, approximately half of the participants endorsed the delivery process, supporting the overall feasibility of key components of music intervention.

Key conclusion: Music intervention is acceptable and feasible from the patient's perspective for reducing PA in older patients undergoing cardiac surgery or TAVI.

P-1065

Predictive nursing application effect based on the influencing factors of respiratory dysfunction in elderly patients with pneumothorax after closed thoracic drainage surgery

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Objective: To explore the application effect of predictive nursing based on the influencing factors of respiratory dysfunction in elderly patients with pneumothorax after closed thoracic drainage.

Methods: Eighty elderly patients with pneumothorax who underwent closed thoracic drainage surgery in our thoracic surgery department from July 2022 to July 2023 were randomly divided into a control group and an observation group, with 40 cases in each group. The control group received routine care, while the observation group received anticipatory care based on factors affecting respiratory dysfunction. Compare the incidence of respiratory dysfunction, blood gas, lung function, and quality of life between two groups of patients.

Results: The incidence of postoperative respiratory dysfunction in the observation group was significantly lower than that in the control group ($P < 0.05$); At 24 and 48 h after surgery, the levels of PaO_2 and SaO_2 in the observation group were significantly higher than those in the control group ($P < 0.05$); At 1 and 2 weeks after surgery, the levels of FEV1, FVC, FEV1/FVC, and quality of life in the observation group were significantly higher than those in the control group ($P < 0.05$).

Conclusions: Proactive nursing care for elderly patients with pneumothorax undergoing closed thoracic drainage can effectively reduce the incidence of postoperative respiratory dysfunction, improve blood gas analysis indicators, lung function, and quality of life.

Poster

Pharmacology

P-1066

Reconsidering antithrombotic therapy in patients with advanced cancer using the CoClarity shared decision support tool—the CoClarity Trial

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Introduction: The majority of patients with cancer using antithrombotic therapy (ATT) is aged ≥ 70 . Currently, ATT is usually continued until death, whilst the risk might outweigh its benefits

in patients with advanced cancer, presenting a dilemma that necessitates a personalized approach. We aim to test the impact of the CoClarity shared decision support tool (SDST) implementation in patients with advanced cancer who use ATT.

Methods: The implementation consists of the CoClarity SDST, physician education and ensuring care continuity. The CoClarity SDST is a user-friendly and web-based SDST that will facilitate personalized patient-physician conversations about ATT reconsideration in patients with advanced cancer. The trial is a multicenter 1:1 blocked cluster randomized controlled trial in hospitals/palliative care units in the Netherlands, Poland, Spain and the United Kingdom. Patients with cancer, aged ≥ 18 years, who are using ATT and meet specific palliative care episodes (e.g. active bleeding, first palliative care consultation) are eligible. The primary outcome is a composite of any bleeding and thromboembolic related symptoms. Secondary outcomes include bleeding symptoms and severity, thromboembolic symptoms and severity, fatigue, ATT use, quality of life, functioning, decisional conflict, patient involvement in shared decision making, survival, and cost-effectiveness. The intervention and trial are co-designed with patients and public involvement.

Conclusion: We aim to show the impact of the CoClarity SDST on ATT use, bleeding complications, and healthcare costs. Hopefully, usage of the tool leads to enhanced patient empowerment, improved quality of life and treatment satisfaction of patients with cancer and their caregivers.

P-1067

Falls in the hospital setting and STOPPFall criteria

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Introduction: Falls among inpatients are common and responsible for negative results in health. They result from the interaction of different risks, namely the use of fall-risk increasing drugs, whose screening should be performed using tools that help in their de-prescribing. **Aim:** To evaluate the presence and characterize the potential inappropriate medicines (PIMs) during the episodes of fall in hospital setting of older patients.

Methods: Retrospective, observational study, including the falls reported in an electronic platform during the inpatient period in an Internal Medicine ward and involving patients aged 65 years and older. Falls and patients who presented them were characterized namely regarding demographic, functional state, geriatric syndromes, and risk of fall at admission. PIMs presented in the previous 24 h of the episode of fall were screened by STOPPFall (Screening Tool of Older Persons Prescriptions in older adults with high fall risk) criteria.

Results: Seventy episodes of falls were considered, relative to 52 patients (63.5% male, mean age 80.4 ± 7.4 years). At admission 44.2% of patients were independent in basic activities of daily living and 54.5% showed high risk of fall. At the time of fall, 9 out of 10 patients were under at least one PIM, and 27.1% were medicated with four or more PIMs. Antipsychotics and antidepressants were the pharmacological classes more represented, with at least one drug identified in 61.4 and 45.7% of episodes, respectively.

Key conclusions: Management of falls requires a multidimensional intervention, including a systematic review of medication to avoid PIMs and screening of concomitant geriatric syndromes.

P-1068

Practice changing new criteria for ideal medication use in the last year-TIME for updates

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Introduction: The Turkish Inappropriate Medication use in the older adults (TIME) Criteria are updated quarterly in a year to maintain clinical relevance and keep updated. This presentation summarizes the ongoing update process initiated last year and introduces newly added and revised criteria with potential to impact clinical practice.

Methods: The TIME-National Working Group includes 45 academicians from 16 specialties, including geriatrics. Each of the 153 original TIME criteria (published in 2020), along with their references, was reassessed in light of the current literature. Criteria were revised when necessary, and new evidence-based items were created through multidisciplinary consensus. Since TIME is based on STOPP/START version 2, the latest version (v3) of STOPP/START was also thoroughly reviewed. Selected recommendations specifically aligning for the needs of clinical practice were incorporated into the updated TIME Criteria.

Results: We added 47 new criteria to the TIME, bringing the total to 200 (131 TIME-to-STOP, 69 TIME-to-START). Of these, 35 were adapted from STOPP/START v3, while the remainder were developed by the TIME Working Group (e.g., TIME-to-START, Endocrine system criterion 13: Calcium citrate over calcium carbonate in patients using PPIs who require calcium supplementation (reduced efficacy of calcium carbonate when used with PPIs)). Additionally, 18 criteria were revised based on updated evidence. Details will be shared in the presentation.

Conclusion: With its continuously updated mobile and web applications, TIME Criteria provide a dynamic, accessible resource for clinicians. Clinical validation of the current version in preventing PIM-related harm is among the group's next goals.

P-1069

Strategies to prioritise patients for medication reviews: a systematic review

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Introduction: Potentially inappropriate prescribing (PIP) is common in older adults and increases the risk of hospitalisation and death [1]. Various tools exist to detect PIP during medication review, but time

constraints limit their use [2]. Prioritisation strategies could help healthcare professionals focus on high-risk patients. However, there is a lack of established procedures. This systematic review aims to identify existing strategies for prioritising patients for medication reviews.

Methods: We conducted a systematic review according to PRISMA recommendations. The protocol was registered on Prospero (CRD42024610564). A literature search was conducted on November 9, 2024, across four databases. Articles were selected independently by two researchers following a two-step selection process. Quality was assessed using JBI tools. Data extraction was independently performed by two researchers using NVivo© with abductive coding.

Results: A total of 8025 records (including 716 duplicates) were identified, with 7209 excluded in the first selection and 74 in the second. Ultimately, 26 articles published between 1991 and 2024 were included. Two main prioritisation strategies were identified: developed and suggested. Developed strategies included automated algorithms, clinician-driven risk scores, self-assessment questionnaires, and procedures. Suggested strategies comprised 24 criteria grouped into five categories: demographic and socio-economic factors, behavioural and patient-related factors, medical and clinical factors, medication-related factors, and risk scores.

Key conclusions: This systematic review highlights the different strategies available to help healthcare professionals prioritise patients for medication review. Automated algorithms appear to be the most widely used strategy. They provide an effortless and structured approach but may require significant resources to implement.

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P-1070

Benzodiazepine exposure and 6-month mortality in older adults post-hospitalization: time to consider deprescribing?

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Introduction: Benzodiazepines (BZDs) are associated with negative outcomes in frail populations, including cognitive decline and falls. However, it remains unclear how continuing versus deprescribing BZDs during hospitalization influences 6-month outcomes after discharge. This study evaluated the association between BZD-use at hospital discharge and 6-month mortality in older adults, exploring whether in-hospital deprescribing modifies mortality risk.

Methods: This is a retrospective analysis of prospectively collected data from patients consecutively admitted to an Acute Geriatric Unit. Upon admission, all patients underwent a Comprehensive Geriatric Assessment, including evaluation of socio-demographics, functional status, comorbidities, the presence of cognitive decline or delirium, and a medications' review. A multivariable Cox-regression model was used to evaluate the relationship between mortality and BZD prescription at hospital discharge (BZD non-users, BZD at discharge, and BZD deprescribed).

Results: Overall, 1375 patients (median age: 85.5 [IQR: 48–77, 55% females]) were included in the study. The BZD at discharge group was younger ($p < 0.05$), had lower rates of frailty ($p < 0.05$) and cognitive decline ($p < 0.05$), and experienced less in-hospital delirium ($p < 0.05$) than the BZD non-users and BZD deprescribed groups. The BZD at discharge group ($n = 130$) showed a higher risk of all-cause mortality compared to BZD non-users ($p < 0.05$). Conversely, patients who were deprescribed during hospitalization ($n = 179$) exhibited a similar mortality risk as non-users ($p > 0.05$).

Conclusions: BZD use after hospital discharge was associated with increased risk of 6-month mortality, whereas deprescription mitigated this excess risk. In this context, our data suggest that hospitalization may represent a valuable opportunity to safely deprescribe BZDs in a controlled environment.

P-1071

Experimentation of a mobile unit for the optimization of psychotropic prescriptions in long-term care facilities

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Background: Psychogeriatric teams (PGT) were deployed in France for several years for residents of long-term care facilities (LTCF) in order to make an assessment and, in response, suggest existing care most suited to the needs. Their objectives are to avoid any unnecessary or inappropriate hospitalizations but these teams only intervene for punctual advices and are not intended to carry out follow-ups. However, LTCF professionals sometimes find it difficult to implement these medication recommendations or develop alternative therapies. Indeed, studies conducted in LTCF in recent years have highlighted the persistence of a high prevalence of potentially inappropriate psychotropic prescriptions for residents, always higher than that of non-institutionalized subjects.

Method: We created a Psychotropic Drug Consumption Monitoring Unit (PDC-MU) for LTCF. On an experimental basis, this unit is able to intervene in LTCFs for which a diagnosis of inappropriate consumption of psychotropic drugs has been made by the LTCF professionals or PGT. PDC-MU can, then, ensure monitoring of the proposed measures and participate, in conjunction with other implicated actors, in awareness-raising and training measures for caregivers on the risks associated with the misuse of psychotropic drugs and iatrogenic effects.

Results: Since the start of the experimentation, PDC-MU made 81 interventions for 44 residents and proposed 286 recommendations. All the results will be presented at the congress.

Conclusion: The PDC-MU aims to participate in controlling the psychotropic risks and contribute to reduce the undue exposure of

LTCF residents to these drugs, avoidable iatrogenic effects and possible hospitalizations linked to them.

P-1073

Supporting older patients' engagement in discharge medication communication: a feasibility study of a patient booklet

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Introduction: Empowering older hospitalised patients to engage in medication communication at discharge is essential to prevent adverse post-discharge outcomes. This study explored the feasibility of a patient booklet designed to support such engagement.

Methods: A prototype patient booklet, comprising discharge and medication information and question prompt lists, was developed with input from clinical pharmacists and public representatives. In this feasibility study, clinical pharmacists provided the booklet to cognitively intact, home-dwelling patients admitted to two geriatric wards at Uppsala University Hospital, Sweden. Semi-structured interviews were conducted post-discharge with patients, informal caregivers (when applicable), and healthcare professionals (HCPs). Data were analysed using thematic analysis.

Results: Sixteen patients (mean age 82 ± 8 years; 12 female) received the booklet. Nine interviews were conducted with 11 participants: five patients (mean age 78 ± 7 years; three female), two informal caregivers, two physicians, and two clinical pharmacists. Three themes emerged: (1) Feeling cared for, yet left with questions, the booklet was appreciated, but patients still had unanswered questions after discharge; (2) Unclear expectations, patients expected HCPs to engage more actively with the booklet and initiate its use; (3) Timing and involving informal caregivers, participants suggested delaying the introduction of the booklet until later during hospitalisation and providing clearer guidance on involving informal caregivers.

Key conclusions: Distributing the booklet was feasible and generally appreciated. To enhance its usefulness, it should be introduced to patients with a clearer explanation of its purpose, at an appropriate time during hospitalisation, and with guidance on how to involve informal caregivers.

P-1074

Microbiological profile of urinary tract infections in an intermediate care hospital: a two-year retrospective analysis within an antimicrobial stewardship program

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Introduction: Urinary tract infections (UTIs) are common in geriatric patients, presenting diagnostic and treatment challenges. The growing prevalence of multidrug-resistant (MDR) organisms complicates management. Understanding the local microbiological profile and ensuring high-quality microbiological sampling are crucial for guiding empirical treatment in antimicrobial stewardship programs (ASPs).

Methods: We conducted a retrospective study of urine cultures from patients at a 120-bed intermediate care hospital in Barcelona during 2023 and 2024. We analyzed microbial isolates and their antimicrobial susceptibility within the framework of a local ASP.

Results: *Escherichia coli* was the most frequent isolate in both years (67 in 2023, 56 in 2024). The proportion of *Escherichia coli* producing extended-spectrum beta-lactamases (ESBL) remained stable: 22.3% (2023) and 21.4% (2024). Fosfomycin susceptibility was $> 94\%$ in both years. No carbapenemase producers were identified. *Klebsiella pneumoniae* was the second most frequent isolated (50 in 2023 y 52 in 2024) and showed a slight decrease in ESBL production from 60% (2023) to 50% (2024). In 2024, 1 carbapenemase-producing strain (NDM) was identified, compared to 8 strains in 2023 (2 NDM and 6 OXA-48). *Pseudomonas aeruginosa* was third in frequency (17 in 2023 and 9 in 2024). With 83% susceptibility to fluoroquinolones, with only one MDR. *Enterococcus faecalis* and *Enterococcus faecium* frequencies remained stable in both years at low rates.

Conclusions: MDR isolates are frequent, particularly among Enterobacteriaceae although some of the isolates might correspond to asymptomatic bacteriuria. No increasing trend was observed. Ongoing ASPs and antimicrobial use monitoring are essential to ensure appropriate treatment and reduce resistance.

P-1075

Antimicrobial stewardship recommendations in patients with respiratory tract infections in an intermediate care hospital

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Introduction: Antimicrobial Stewardship Programs (ASPs) aim to optimize antimicrobial use and reduce unnecessary exposure. Respiratory tract infections (RTIs), are associated with high morbimortality. This study aimed to characterize patients with RTIs admitted to an Intermediate Care Hospital (ICH), identify common pathogens and treatments, and evaluate ASP recommendations and prescriber acceptance.

Methods: Retrospective study at a 116-bed ICH (September 2022 to February 2024) including patients with RTIs reviewed by the ASP team. Variables analyzed: age, gender, infection type (pneumonia (P) or lower respiratory tract infection (LRTI)), microbiological tests, prescribed antibiotics, treatment type (empirical/targeted), guideline adherence, and ASP interventions.

Results: 273 treatments were analyzed: 74% LRTIs and 26% pneumonia. The median age: 87 years [80–90], 52% female. Microbiological tests were performed in 48%: antigenuria (n = 80), sputum (n = 52), and blood cultures (n = 43). Antigenuria was positive in 11 cases (14%), all *Streptococcus pneumoniae*. Sputum

cultures were positive in 35 (67%), identifying *Pseudomonas aeruginosa* (n = 14), *Staphylococcus aureus* (n = 6, 3 Methicillin-resistant), and *Escherichia coli* (n = 4, 2 Extended spectrum beta-lactamase producer). One blood culture (2%) showed ESBL *Klebsiella pneumoniae*. Most treatments (89%) were empirical, with 81% guideline adherence. Main antibiotics prescribed: amoxicillin/clavulanate (31%), levofloxacin (27%), and piperacillin-tazobactam (18%). ASP recommendations included stopping treatment (56%), switching to oral antibiotics (21%), maintaining (18%), reducing spectrum (4%), and increasing spectrum (1%). Acceptance rate was 82%.

Conclusions: Patients with RTIs were predominantly elderly with LRTIs. Sputum cultures were the most informative, and *Pseudomonas aeruginosa* was the most common isolate. The ASP effectively optimized treatment duration, with high acceptance of its recommendations.

P-1076

Determinants of appropriate antibiotic use for urinary tract infections in nursing homes—qualitative study of health care professionals' and residents' perspectives

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Introduction: Urinary tract infections (UTIs) are the primary indication for antibiotic use in nursing homes (NHs). Residents are particularly vulnerable to inappropriate prescribing, including excessive prophylactic use, incorrect initiation, and prolonged treatment durations. This study aimed to identify key determinants of appropriate antibiotic use for UTIs in NHs by exploring the behaviours and perspectives of all relevant stakeholders.

Methods: We conducted 31 semi-structured interviews with residents/relatives (n = 9), physicians (n = 9), pharmacists (n = 10), and NH management (n = 4), and held 4 focus groups with nurses and nurse aides (n = 25). The Theoretical Domains Framework (TDF) guided the development of the interview guide. Using deductive framework analysis, data were coded to the 14 TDF domains. Inductive content analysis was then applied to identify behavioural determinants within each domain. Key domains for behaviour change were selected based on their importance, relevance, and feasibility to target in an intervention.

Results: Appropriate antibiotic use for UTIs in NHs is influenced by a complex interplay of behavioural determinants, with the nursing team playing a central role. Key determinants to address in an intervention include: limited knowledge of guidelines, insufficient self-reflection and monitoring, fear of missing complications, feelings of powerlessness, prioritisation of resident comfort, hierarchical dynamics, social pressure to prescribe, and inadequate support for interprofessional collaboration.

Conclusions: This study identified key behavioural determinants that should be targeted to optimise antibiotic prescribing for UTIs in NHs. These findings underscore the need for a theory-informed, multi-faceted intervention to support behaviour change across professional roles and improve antimicrobial stewardship in this setting.

P-1077

Development of a prescribing cascade classification framework: a modified nominal group technique study

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Introduction: Older adults are particularly at risk of experiencing a prescribing cascade, a phenomenon in which one drug (Drug A) is prescribed to manage the adverse effect of another (Drug B). Conflicting terminology has led to inconsistent descriptions of this issue, complicating its recognition and management. Given the variety of ways in which prescribing cascades can occur, this study aimed to develop a comprehensive classification framework for prescribing cascades using a modified nominal group technique.

Methods: Experts in prescribing cascades from six countries, with backgrounds in pharmacy, geriatric medicine, general practice, nursing, and public health were invited to participate. An initial draft framework based on a literature review was shared with participants via email, who independently provided feedback on term inclusion and framework refinement. A second draft was circulated before an online group meeting, where participants discussed naming terms and framework optimisation. The final framework was developed through additional written feedback and team discussion.

Results: All invited experts (n = 14) agreed to participate. The final framework consists of six categories that classify prescribing cascades based on their intentionality (intentional/unintentional), appropriateness (appropriate/inappropriate), timing of Drug B (reactive/prophylactic), likelihood of being a prescribing cascade, mechanism (e.g. dose-dependency), and number of components (e.g. more than one Drug A or Drug B).

Key conclusions: This novel framework provides a standardised approach for classifying prescribing cascades, enhancing consistency in research, education, and clinical practice. It supports the

recognition and management of different types of prescribing cascades, ultimately contributing to safer medication practices.

P-1078

Continued use of potentially inappropriate medication after hospital discharge: a retrospective cohort study

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Introduction: Many patients receive temporarily indicated medications, such as opioids, benzodiazepines, and antipsychotics, during hospitalization. Continued use of these medications at discharge can lead to potentially inappropriate medication (PIM) use post-discharge. However, data on continued PIM use in the Netherlands are lacking. This study aimed to investigate the incidence of continued use of opioids, benzodiazepines, and antipsychotics post-discharge in the Netherlands.

Methods: This retrospective cohort study included patients aged ≥ 18 years discharged between January 2019 and May 2023 from a Dutch teaching hospital with a new prescription of an opioid, benzodiazepine, or antipsychotic initiated during hospitalization and continued at discharge. Patients were followed for one year using data from the hospital's information system and community pharmacy dispensing records. The study's primary outcomes were the incidence of continued PIM prescriptions and duration of use, classified into < 30 days, 30–182 days, and > 182 days.

Results: Among 6835 patients, 82.7% were prescribed opioids (mean age 61.1 y), 14.7% benzodiazepines (mean age 60.7 y), and 2.6% antipsychotics at discharge (mean age 69.2 y). 62.5% of new benzodiazepine users, 73.4% of opioid users, and 42.1% of antipsychotic users had a duration of continued use of < 30 days post-discharge. However, a significant proportion continued PIM use for > 182 days (13.4% of opioid, 20.9% of benzodiazepine and 36.0% of antipsychotic users). PIMs were not more frequently discontinued in elderly.

Key conclusions: These results highlight the importance of recognizing PIMs and emphasize the need for careful evaluation of discontinuing these medications at hospital discharge or specifying a discontinuation date.

P-1079

Creating awareness of prescribing cascades & managing adverse drug effects (CASC-ADE) tool: appraisal by future end-users

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Introduction: Prescribing cascades appear common among older adults. To support healthcare providers (HCPs), we summarised the literature to develop knowledge documents with information for recognising and managing prescribing cascades. We assessed end-users' appraisal of this so-called "Creating Awareness of preScribing Cascades & managing Adverse Drug Effects" (CASC-ADE) tool.

Methods: An online questionnaire including 16 items, scored on 7-point Likert-scales, was developed to assess five domains: purpose, rigour, lay-out and structure, clarity and quantity, and usability of the tool. Suggestions for improving the tool could be made. Questionnaires -including at least one knowledge document—were sent to a sample of HCPs, medical and pharmacy students. Descriptive statistics are presented.

Results: Seventeen HCPs (9 pharmacists, 8 clinicians) and 11 students (5 pharmacy, 6 medical) were included. All items received positive median scores, between 5–7 for HCPs and 5–6 for students. Highest scores were seen for purpose, structure, and usability for recognising prescribing cascades (medians 6–7). Usability for managing and preventing cascades was perceived slightly lower (medians 5–6). Fifteen HCPs (88%) and 9 students (82%) stated they would use the tool in practice. Usage would depend on linkage to existing information systems. Some HCPs and students suggested to present step-by-step recommendations instead of just listing options supported by evidence on how to manage specific prescribing cascades.

Conclusion: The CASC-ADE tool was perceived as adequate across the domains studied by HCPs and students. Further research is needed to assess whether the tool will lead to increased recognition, management and prevention of prescribing cascades.

P-1080

Computerized algorithms to assess deprescribing of cardiovascular and diabetes medication among older people

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Background: Deprescribing medication is defined as the process of drug discontinuation, tapering or substitution in order to deintensify treatment. Tools are needed to assess rates of deprescribing among older adults using routinely available data. We aim to develop computerized algorithms for identifying people with deintensification of cardiovascular or diabetes medication.

Methods: Guidelines for deprescribing were used to define transition rules, i.e., medication changes within six months follow-up to be classified at patient level as: (1) deintensification, (2) no deintensification, or (3) requiring individual assessment. Transitions may include discontinuations, switches, additions, and/or dosage changes

taking combination treatments into account. The algorithms were validated using prescription data from Dutch primary care.

Results: A first algorithm was developed for lipid-lowering medication. Treatment states at baseline included statin monotherapy, other lipid-lowering monotherapy, fixed and non-fixed combinations with statins and/or other lipid-lowering medication. Fifteen possible transition rules were specified, including eight defining medication deintensification, one calculating statin equipotency to assess dose decreases, and five requiring individual assessment. Validating the algorithm on data of 97 older people (≥ 75 years) with lipid-lowering medication at baseline resulted in 15% being correctly classified as deintensification (13 discontinuations, 2 dose decreases). Seventy cases were correctly classified as no deintensification. The remaining cases (12%) required individual assessment; none being assessed as deintensification. Seven transition rules did not occur.

Conclusion: A computerized algorithm was successfully applied on routinely available prescription data to identify 15% of older adults with deintensified lipid-lowering treatment. Similar algorithms are developed for other cardiovascular and diabetes medication.

P-1082

Occurrence of potential prescribing cascades after hospital discharge: a cohort study

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Purpose: A prescribing cascade (PC) occurs when a medication (index) causes an adverse drug reaction (ADR), which is addressed by prescribing an additional medication (marker).

The study aimed to assess the cumulative incidence of 20 potential PCs post-discharge and identify the healthcare providers involved in prescribing the marker medication.

Methods: A cohort study was conducted among adult patients admitted in one hospital between 2019 and 2023, who initiated an index medication during their stay. A PC was defined as the initiation of a marker medication which may be intended to treat an ADR induced by the index medication. Data from the hospital and the Nationwide Medication Record System were used to identify potential PCs post-discharge. The primary outcome was the cumulative incidence of PCs, estimated for PCs with ≥ 10 patients initiating the index medication. The secondary outcome was the number of PCs for which $\geq 50\%$ of marker medication was prescribed by a healthcare provider outside the hospital.

Results: Of 24,282 patients initiating index medication, 502 experienced potential PCs. The cumulative incidence was estimated for 17 PCs, ranging from 0 to 12.3%. Examples of studied PCs include: ACE-inhibitors (ADR: cough) followed by antitussives (cumulative incidence: 5.4%), amiodarone (ADR: hypothyroidism) followed by thyroid hormones (4.0%) and dihydropyridines (ADR: edema) followed by high-ceiling diuretics (6.3%). For nine PCs, over 50% of

marker medications were prescribed by healthcare providers outside the hospital.

Conclusion: The cumulative incidence of potential PCs post-discharge can be substantial with marker medication often prescribed by healthcare providers outside the hospital.

P-1083

Application of the Anticholinergic Cognitive Burden Scale in patients with atrial fibrillation and anemia for the prevention of cognitive impairment

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Introduction: Atrial fibrillation (AF) is often associated with concomitant anemia, which increases bleeding risk and worsens prognosis, especially in elderly patients. AF and anemia are also associated with cognitive impairment, which may be exacerbated by inappropriate pharmacotherapy.

Objectives: to study the structure of drug prescriptions and their concordance to the Anticholinergic Cognitive Burden Scale (ACB) in elderly patients with AF and anemia.

Methods: A comparative retrospective analysis of medical records of patients ≥ 65 years old with non-valvular AF–1st group (n = 362) or with non-valvular AF and anemia–2nd group (n = 354) was performed.

Results: Age, bleeding risk according to the HAS-BLED score and failure of prescribing anticoagulants were significantly higher in the second group (median age 87 [81;92] years, 2 [2;3] points and 7.6%, respectively) compared to the first group (median age 83 [76; 89] years, 1 [1;2] points and 1.4%; respectively). Stable angina was also more common in the 2nd group compared to first one (86% and 69%; $p < 0.001$). The mean ACB score in the 1st and 2nd groups was 1 [0;1] ($p = 0.081$). In the 2nd group patients had ACB score ≥ 1 more frequently than in the 1st group (63.3% and 51.7%, respectively; $p = 0.002$). The most common anticholinergic drugs in the 1st and 2nd groups were metoprolol (26.0% and 35.9%, $p = 0.005$ respectively), furosemide (13.8% and 16.9%, $p = 0.256$ respectively) and nitrates (1.9% and 4.5%, respectively; $p < 0.001$).

Conclusions: AF with concomitant anemia is associated with higher prevalence of bleeding risk, failure of prescribing oral anticoagulants and more pronounced anticholinergic burden.

P-1085

The long-term risk of developing dementia among individuals with mild cognitive impairment and polypharmacy and hyperpolypharmacy

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Background: Polypharmacy increases the risk of developing both mild cognitive impairment (MCI) and dementia. Studies targeting a population of individuals with mild cognitive impairment addressing long-term risk associated with polypharmacy and conversion to dementia are lacking.

Method: Data were used from the Age Gene/Environment Susceptibility Reykjavik Study, including community-dwelling older adults with mild cognitive impairment (N = 550, aged 69–93 years) followed for an average of 5.2 years. Participants with MCI were divided into following three groups: four or fewer medications; non-polypharmacy; 5–9 polypharmacy; and ≥ 10 hyper-polypharmacy. Population characteristics were compared with ANOVA for continuous variables, and by χ^2 for categorical variables. Binary logistic regression analyses were applied to investigate the association between medication use and progression to dementia.

Results: At baseline, 63 (12%) of participants (mean age 79) had hyper-polypharmacy, 195 (36%) had polypharmacy and 292 (53%) non-polypharmacy. During the follow-up period 49 participants with MCI (37%) developed dementia. At baseline the groups did not differ in main characteristics and notably, neither did their cognitive status. Alcohol consumption and rate of type 2 diabetes was higher among hyper-polypharmacy. Participants with non-polypharmacy (OR:0.21, p-value: 0.04) and polypharmacy (OR:0.19, p-value:0.03) had a lower risk of developing dementia compared to hyper-polypharmacy, by 79% and 81% respectively.

Discussion: Community-dwelling older adults with MCI using nine or fewer medications (non-polypharmacy and polypharmacy) have less risk of progressing to dementia than those with ten or more medications. Hyper-polypharmacy should thus be investigated in individuals with MCI and health care providers should be mindful of deprescribing.

P-1086

Impact of pharmacological review in patients admitted to the acute geriatric unit: a multidisciplinary approach during the PIUC

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Objectives: To analyze the impact of person-centered pharmacological review and examine deprescription differences based on frailty status. The study, was conducted by Geriatrics and Pharmacy Departments, aiming to optimize chronic treatment for patients after admission to the Acute Geriatric Unit (AGU) during the Integrated Emergency Plan of Catalonia (PIUC).

Methods: This is an observational, retrospective study (January-March 2025), including all patients admitted to the AGU during the PIUC. A daily multidisciplinary meeting (Geriatrics and Pharmacy) was held to review patients using STOP-START criteria, considering baseline status and frailty degree. Patients who died during admission

were excluded. Sociodemographic variables, functional status (Barthel Index (BI)), frailty index (VIG-frail), hospitalization days, chronic medications, and anticholinergic burden (Drug Burden Index) were collected. Deprescription was analyzed by frailty groups.

Results: 78 patients were analyzed (mean age 88 [72–100], 70.5% women, 88.41% frail according to IF-VIG). The mean BI was 60/100. 28.2% had dementia, and 32% were institutionalized. The average number of medications at admission was 10.9, with 62% on extreme polypharmacy. 52.5% had a high anticholinergic burden ($\text{DBI} \geq 1$). At discharge, the average number of medications decreased to 9.2, and the percentage with high anticholinergic burden dropped to 39.7%. In frail patients, the number of medications decreased significantly: from 10.5 to 8.8 ($p < 0.001$) in initial frailty, from 10.9 to 9.7 ($p < 0.05$) in moderate frailty, and from 13 to 9 ($p < 0.03$) in advanced frailty.

Conclusions: Multidisciplinary pharmacological review improved treatment appropriateness, particularly among frail geriatric patients, reducing polypharmacy and anticholinergic burden, optimizing and simplifying patient care.

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Statin use and muscle health in older adults: findings from the scope study

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Introduction: In a large European study, we investigated whether the use of statins influences muscle strength, mass, and function in older adults.

Methods: This study was conducted within the SCOPE study, a large multicenter prospective observational study, including 2300 outpatients aged ≥ 75 years (1119 statin users; 1181 non-users). Muscle strength (handgrip, HG), muscle mass (skeletal muscle index, SMI, by bioelectrical impedance analysis), and function (Short Physical Performance Battery, SPPB) were assessed at baseline and at a two-year follow-up. ANOVA was used for continuous variables, while logistic regression assessed categorical outcomes. Analyses were stratified by sex and adjusted for age, BMI, and comorbidity score.

Results: Statin users had a higher BMI (28.3 vs. 27.4 kg/m², $p < 0.001$) and greater comorbidity (CIRS-G total: 9.3 vs. 8.0, $p < 0.001$). No significant differences were observed in HG, SMI, or SPPB between statin users and non-users at baseline. After two years, changes in HG (men: -2.8% vs. -2.4% ; women: -1.1% vs. -2.8%) and SMI (men: $+2.2\%$ vs. -0.3% ; women: $+0.6\%$ vs. $+0.2\%$) remained similar. Logistic regression showed no significant association between statin use and the risk of SPPB decline (men: OR 1.2 [0.9–1.6]; women: OR 1.0 [0.8–1.3]).

Conclusion: The use of statins does not seem to affect muscle strength, mass, and function in a large cohort of outpatients aged 75 years and older.

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Short- and long-term health outcomes following an adverse drug reaction or an adverse drug event in older populations: a systematic review

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Background: Adverse drug reactions (ADR) and adverse drug events (ADE) represent a significant burden on older adults' health but are preventable. However, an up-to-date overview of evidence reflecting short- and long-term health outcomes of after ADR/ADE is not available.

Objective: to investigate short and long-term health outcomes associated with experiencing ADRs and ADEs in older populations.

Method: A systematic search was performed in Ovid Medline, Ebsco Cinahl, and Embase restricted to publication year (2013–2024), according to predefined methods (PROSPERO: CRD42024544258). We identified studies examining ADR/ADE prevalence and associated health outcomes (hospitalisation, outpatient use, GP visits, quality of life, depression, anxiety, falls, frailty, and functional impairments) in adults aged ≥ 65 . Risk of bias was assessed using JBI critical appraisal tools.

Results: 15 studies were included measuring several outcomes, with sample sizes ranging from 112 to 34,593,000 older adults. Older patients that experienced an ADR/ADE had an increased risk of: hospitalisation (8 studies), mortality (7 studies), prolonged length of hospital stay (LOS) (4 studies), disability (2 studies) and overall survival (1 study). ADRs accounted for 3.3–16.6% of hospitalisations, and mortality rates from 4.3 to 21.6%. Hospital stays were prolonged by 17% to 2.8-fold increase for those affected. Most studies were of minimal to good quality.

Conclusion: The low number of studies identified with yet so many outcome measures and the fact that the results were varying among the studies within similar outcomes highlights the lack of consistent research in this area.

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Association between socioeconomic status and high-risk drug classes in older citizens: a nationwide a cohort study

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Background: High-risk drugs have been identified as associated with medication-related harm in older populations.

Aim: To investigate if socioeconomic status (SES) was associated with the prescribing of high-risk drug classes in older community-based populations.

Methods: Data from The Irish Longitudinal Study on Ageing (TILDA) included interviews from 2018 and medication claims for 2 years. Educational level, household income, and private health insurance were analysed in relation to antithrombotic agents, beta-blocking agents, calcium channel blockers, diuretics, renin-angiotensin-aldosterone system, psychoanaleptics, NSAIDs and polypharmacy. For drug classes, we used binary logistic regressions, and for polypharmacy ordinal logistic regressions. All analyses were made with robust standard errors and as unadjusted and adjusted. Missing data in household income was handled using multiple imputation.

Results: The study population contained 2,482 individuals (46% males and median age of 76 (IQR: 72–80)). Median number of conditions was 2 (IQR: 1–3) and 577 (23%) had ≥ 10 drug classes. Individuals with lower education levels, household income below the national median, and no health insurance were more likely to be prescribed all included high-risk drug classes and experience polypharmacy compared to those with higher education, household income above median and with private health insurance. Psychoanaleptics were the highest-risk drug class prescribed to those with lower socioeconomic status: (adj. OR 3.87 [95% CI 2.63; 5.69]) for primary education vs third/higher education, (adj. OR 2.25 [95% CI 1.74; 3.46]) for low vs. high income, and (adj. OR 3.53 [95% CI 2.67; 4.67]) for health insurance versus none.

Conclusion: A strong association was found between SES and high-risk drug classes and polypharmacy.

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Adverse drug reactions related hospital admissions and adverse drug events and their association with short and long-term health outcomes (health related quality of life (HRQOL), functional decline, and accident and emergency (A&E) visits) in older commun

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Background: Adverse drug reactions (ADRs) and events (ADEs) are harmful responses to medications, with older adults at higher risk due to polypharmacy and age-related changes.

Aim: To investigate the association between ADR-related hospital admissions and ADEs in primary care in relation to HRQOL, functional decline, and A&E visits over time.

Methods: Two cohorts were used: ADAPT (230 patients, 93 with ADR-related hospital admission) and CPRC (605 patients, 465 with ADE) both in Ireland. Patients completed a baseline health questionnaire: ADAPT in 2016–2017 and follow-up 3 months later; CPRC in 2010–2011 and follow-up 24 months later. Multivariate regressions examined the link between ADR-related admissions/ADEs and HRQOL (EQ-5D-5L/3L), functional decline, and A&E visits, adjusted for age, sex, comorbidity, and polypharmacy.

Results: ADAPT patients were older (median age 79 vs. 75), had more morbidity (Charlson score ≥ 3 : 40% vs. 7%), and more polypharmacy (≥ 10 medications: 38% vs. 31%) than CPRC patients. In ADAPT, frailty increased in both ADR (68–85%) and non-ADR (74–85%) groups ($p < 0.01$). A&E visits decreased ($p < 0.001$), and HRQOL did not change significantly. In CPRC, HRQOL decreased for both ADE ($p = 0.001$) and non-ADE ($p = 0.044$) groups. Functional decline risk rose for both (ADE: $p = 0.020$, non-ADE: $p = 0.039$). A&E visits increased ($p < 0.001$). ADE patients had lower HRQOL and more frailty ($p < 0.001$). No significant changes between ADR and non-ADR and ADE and non-ADE.

Conclusion: Understanding the impact ADRs/ADEs have on older patients' lives will inform the development of supports to manage medications and improve their well-being.

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Factors influencing the willingness of older adults and their informal caregivers to deprescribe medication in primary care: a dyadic interview study

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Introduction: Reducing inappropriate polypharmacy is a public health goal, with deprescribing medication as a potential solution. Healthcare professionals (HCPs) have cited resistance from older adults ('patients') and their informal caregivers as a barrier to deprescribing. However, recent research indicates both groups are generally open to deprescribing—although caregivers appear comparatively less willing.

Previous studies exploring reasons underpinning this willingness (or lack of) have primarily focused on patients, with little attention to caregiver perspectives.

Method: Semi-structured dyadic interviews were conducted with patients (65+ years, England, prescribed 1+ regular medication) and their informal caregivers (18+ years), recruited from a preceding study. Topics discussed included medication regimens, caregiver involvement, deprescribing experiences and views on reducing or stopping medication. Interview transcripts were analysed using Framework Analysis.

Results: Twenty-two interviews were completed with dyads (average duration: 60 min). Patients were on average 77 years (range 65–96), white (95%), female (55%) and degree-educated (50%). Informal caregivers were 68 years (range: 45–79), white (100%), female (55%) and degree-educated (68%).

Six themes were identified as barriers or enablers to willingness to deprescribe: perceived appropriateness of medications, fear of medication changes, relationship with HCPs, adverse implications on quality of life, shared decision-making and the deprescribing process.

Potential explanations for informal caregivers being less willing to deprescribe than patients included their exclusion from medication-related discussions, greater distrust of HCPs and belief that decisions lie with patients.

Conclusion: Although individual views varied, patients and informal caregivers shared broadly similar themes, suggesting that common barriers and enablers influence their willingness to deprescribe.

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Potentially inappropriate use of psychotropic drugs in older adults living in nursing homes

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Introduction: The use of psychotropic drugs in institutionalized older adults is widespread, often leading to inappropriate prescriptions. This study examines patients assessed by a Hospital-Based Liaison Geriatrics Unit (LGU) to identify potentially inappropriate psychotropic drugs (PIPD), follow its deprescription and evolution.

Methods: Retrospective observational study including patients ≥ 70 years living in nursing homes, assessed for the first time by telemedicine by a LGU in a four-month period. Chronic drug treatment was reviewed, identifying PIPDs according to STOPPPv3 criteria and evolution in the following 3 months. End-of-life patients were excluded.

Results: Of 100 included patients (mean age 88.7 years, 75 women, 94 with polypharmacy) 55 had at least one PIPD, 24 had ≥ 2 . The most prevalent STOPP criterion (67%) was the use of antipsychotics in patients with behavioural and psychological symptoms of dementia for ≥ 12 weeks (44% quetiapine, 10% risperidone) followed by use of benzodiazepines for ≥ 4 weeks by 36% (40% lorazepam, 30% bromazepam). Changes in PIPDs were recommended in 37 patients (57% quetiapine and 38% lorazepam) with withdrawal in 24 and dose reduction in 13 patients. 3 months later, 62% of the patients with indication of deprescription were reviewed: recommendations had been followed by 67%. New recommendations were made in 16 patients (withdrawal in 10, dose reduction in 6).

Conclusions: More than half of institutionalized patients receive inappropriate prescriptions of psychotropic drugs, especially antipsychotics and benzodiazepines. Deprescription suggested by liaison geriatrics is usually accepted. This model of care can help improve prescription of psychotropic drugs in nursing homes.

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Thirty-day hospital revisits in geriatric inpatients: a preliminary analysis of the ASPIRE trial

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Introduction: The ASPIRE randomized controlled trial evaluated the impact of a multifaceted pharmacist-led intervention on unplanned hospital revisits in geriatric inpatients six months post-discharge. This exploratory analysis assessed its effect on 30-day hospital revisits.

Methods: This randomized controlled trial included geriatric inpatients from an academic teaching hospital who were randomized in an intervention or control group. The pharmacist intervention comprised medication reconciliation at admission and discharge, medication review, patient/caregiver education, communication with primary care and post-discharge follow-up. A Fisher's Exact test explored the interventions' effect on 30-day unplanned same-hospital revisits which included emergency department visits or unplanned readmissions. Descriptive analyses summarized intervention duration, medication discrepancies on admission and the type of pharmacist recommendations for intervention patients.

Results: A total of 825 patients were included (mean age of 86.3 years ($\pm$ 5.87)). Intervention patients had fewer 30-day revisits ($n = 61/415$, 14.7%) than control patients ($n = 68/410$, 16.6%), yet without statistical significance ($p = 0.50$; OR: 0.87, 95% CI 0.58–1.28). The median total duration of the intervention was 77.3 [IQR 65.8–93.5] minutes and 64.5 [54.2–78.8] minutes for patients discharged home or to long-term care facilities respectively. Preadmission medication lists were incomplete in 86.6% of patients. Medication recommendations most commonly involved cardiovascular (ATC C) and hematologic (ATC B) drugs, comprising 31.7% of all recommendations.

Key conclusions: Although the ASPIRE intervention was associated with a lower 30-day revisit rate, the difference was not statistically significant. Given the persistently high revisit rate, future research should explore refinements to the intervention and identify patient subgroups most likely to benefit.

P-1094

KISS principle in gerontology

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Introduction: With the advancement of medical science and technology, gerontology as the science of studying aging is becoming more and more complex. In this complexity, one principle can guide better practices: simplicity.

Results: Polypharmacy—the phenomenon of prescribing multiple medications—can lead to significant challenges. In older adults, side effects, drug interactions, and taking medications at the same time can complicate the health status of older adults. The KISS principle suggests that we should focus on simplifying medical regimens to improve patient outcomes. A minimalist approach that uses only essential medications for the most pressing health concerns reduces the burden of managing multiple prescriptions and also improves the quality of life for older adults. Essential medications include those for hypertension, diabetes, or heart disease. Simplifying medication regimens aligns well with the concept of person-centered care. Older adults have unique and singular needs. Simplification in gerontology is not just about polypharmacy. Using clear, understandable language when talking to older patients can significantly improve understanding and decision-making. Avoiding medical jargon and focusing on

the most critical information helps patients and caregivers take informed steps toward better health.

Conclusions: Applying the KISS principle—“Keep It Simple, Stupid”—can lead to more effective management of aging populations, particularly when it comes to the medications used in gerontological care. By simplifying, older adults can take an active role in their own health and are more autonomous. What matters in gerontology must be prioritized and that is simplicity.

P-1095

GP and patient preferences in deprescribing: insights from a cross-sectional study in Swiss primary care

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Background: Deprescribing reduces potentially harmful or unnecessary medications in older adults, yet successful implementation requires understanding both patient and provider perspectives. While general practitioners (GPs) and patients influence deprescribing decisions, few studies have compared their specific medication preferences. Our objective was to examine GP and patient preferences for deprescribing and medication-related decision-making, investigating factors associated with preference concordance and the relationship with patient-provider trust.

Methods: A cross-sectional survey study was conducted from May 2022 to December 2023 in the primary care setting of the German-speaking region of Switzerland. Sixty-five patients aged ≥ 65 years taking ≥ 5 medications and their 10 GPs completed questionnaires. GPs recruited patients consecutively. Data collected included GP and patient characteristics including sociodemographic information, work practices (for GPs), attitudes toward medications, decision-making preferences, and trust measures in the GP-patient relationship. The main outcome was patient and GP preferences for deprescribing medications, assessed through two questions: for patients, “Thinking about your current medication list, are there any medications that you would like to stop taking or reduce the dose of?” and for GPs, “Would you stop or reduce the dose of any of the medications that the patient is currently taking?”. Concordance between GP-patient preferences was calculated and associations between concordance and patient/GP factors were analyzed using generalized estimating equations, accounting for clustering at the GP level.

Results: Similar proportions of patients (38%) and GPs (35%) wanted to deprescribe at least one medication, but only eight GP-patient dyads agreed on deprescribing generally, with just one agreeing on the specific medication. Most frequently identified medications were alimentary tract/metabolism (GPs: 36%; patients: 26%), cardiovascular (GPs: 21%; patients: 26%), and nervous system medications (GPs: 14%; patients: 23%). GPs' primary reason for not deprescribing was believing patients wanted to continue medications (83%), while patients continued medications believing doctors only prescribe necessary ones (38%). GPs with paternalistic decision-making approaches were more likely to want to deprescribe.

Conclusion: Despite similar overall interest in deprescribing, GPs and patients rarely agreed on specific medications to discontinue. Findings suggest that explicit discussions about medication necessity and preferences may improve alignment in deprescribing decisions, informing future interventions to optimize medication use in older adults.

P-1096**Audit on polypharmacy in longterm care facility in Qatar**

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Introduction: Polypharmacy, commonly defined as the use of five or more medications, is a significant concern in long-term care facilities due to its association with adverse drug reactions, medication errors, and increased healthcare costs. The prevalence of polypharmacy varies widely, with estimates ranging from 13 to 74% in long-term care settings. Ensuring appropriate prescribing practices is essential to minimize risks associated with polypharmacy.

Aim: This audit aimed to evaluate prescribing practices in a long-term care facility, ensuring adherence to best practices and Beers Criteria. The objectives included classifying polypharmacy severity, assessing the appropriateness of prescriptions, and identifying associated comorbidities.

Methodology: A cross-sectional audit was conducted on 93 residents from randomly selected units. Data collected included demographics, comorbidities, medication counts, and appropriateness based on Beers Criteria. Polypharmacy was categorized as major (≥ 10 medications), moderate (6–9 medications), and minor (5 medications). Compliance with audit standards was assessed, including drug-disease interactions, CNS-active polypharmacy, and renal function adjustments.

Results: Among residents, 66.67% had major polypharmacy, 29.03% had moderate, and 4.3% had minor polypharmacy. The most common comorbidities were diabetes (89%), hypertension (86%), and heart failure (94%). Beers Criteria compliance was 94.6%, with high adherence to guidelines on PIMs, drug-disease interactions, and CNS-active medications.

Discussion: The audit highlights the high prevalence of polypharmacy and its association with chronic conditions. Despite strong adherence to prescribing guidelines, ongoing medication reviews and deprescribing strategies are needed to optimize patient outcomes. Further studies should address long-term impacts and potential interventions for safer prescribing.

P-1097**Surveillance of corrected QT interval-prolonging medications upon admission throughout hospitalization in a tertiary care geriatric ward**

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Objective: Long QT syndrome (LQTS) poses a significant risk of torsade de pointes, particularly in older patients due to age related changes in cardiac repolarization and increased susceptibility to medication-induced QTc interval prolongation. Despite the increased risk, data on medication-related LQTS remain limited, leading to this study on its prevalence, characteristics, and risk factors, along with

QT-prolonging drug use in older patients. The study aimed to identify clinical and medication-related predictors of LQTS and evaluate the burden of co-prescribed QT-prolonging medications in this population.

Subjects and Methods: This prospective study at a tertiary care hospital included initial and follow-up ECGs, with medication details were collected. Statistical analyses compared variables, including QTc intervals and medication use, between patients with and without LQTS.

Results: The study included 128 adults aged 65 or older, with 27.3% presenting LQTS on admission, increasing to 42.2% after 7 days of hospitalization. Patients with LQTS had a higher prevalence of QTc interval-prolonging medications, list 1 medications, and atrial fibrillation. Laboratory changes and medication use were observed, with significant increases in QTc interval and list 1 medication administration. Male sex and amiodarone use were identified as predictors of LQTS during hospitalization.

Conclusion: The study reports a high prevalence of prolonged QTc interval and LQTS in older inpatients. Proton pump inhibitors were frequently prescribed despite their QTc-prolonging potential. This underscores the need of close monitoring and awareness of QTc prolongation risks in older patients, advocating for routine ECG assessments and vigilant management of modifiable risk factors, especially the electrolytes.

P-1098**Improving medication administration for dysphagic geriatric patients**

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Introduction: Dysphagia is a geriatric syndrome that affects up to 33% of older adults, with causes being either neurological or mechanical.

For dysphagic patients, nasogastric and gastrostomy tubes are essential for delivering enteral nutrition and medications. Administering medications through feeding tubes is challenging and requires careful consideration to maintain therapeutic efficacy, avoid toxicity and prevent complications.

Global information on the manipulation of tablets and capsules for administration via feeding tubes is limited, with even less data available on local formulations.

Methods: A dedicated guide was developed by collecting data from drug information files, personal communication with pharmaceutical companies, textbooks, drug databases, literature publications, and case reports.

Results: A user-friendly, up-to-date, local language, 200 pages pocket guide for medical personnel has been developed. It provides comprehensive information on the enteral administration of medications for dysphagic patients and those requiring tailored dosing.

The guide details delivery options, including the possibility and adequacy of crushing or dividing the medication, notes limitations regarding crushing or slicing medications, and offers alternatives. References and supplementary content on handling and administering medications via enteral feeding tubes with examples are included.

The guide has been distributed to the hospital departments, with the most extensive use is in the Geriatric Department.

Key conclusions: The developed tool offers a successful solution for safe and effective administration of local medications through feeding tubes. Its extensive use in hospital departments, particularly in geriatric department, underscores its value in clinical practice. It is advised to implement similar tools with the appropriate customization worldwide.

P-1099

Antimicrobial stewardship in geriatric care: evaluating medical students' preparedness

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Introduction: Antibiotic therapy in long-term care facilities (LTCFs) is critical for managing infections in elderly patients, but inappropriate use drives antimicrobial resistance (AMR) and adverse events [1]. This study assessed medical students' preparedness for antibiotic stewardship in LTCFs.

Methods: A 25-question survey was administered to 103 medical students in the 4th to 6th years of study at three Polish medical universities, following their completion of geriatrics training. Questions evaluated their knowledge regarding antibiotic indications, commonly used agents, patterns of AMR, and strategies for antibiotic de-escalation.

Results: While 91.3% recognized the importance of rational antibiotic use, only 48.5% demonstrated satisfactory guideline knowledge ($\geq 60\%$ correct answers). Disease-specific antibiotic selection was accurately identified by just 17.4%. Although 82.5% understood adverse effects and 77.7% correctly answered questions on AMR mechanisms, less than 64% supported additional LTCF-focused antibiotic education (goodness-of-fit $\chi^2 = 8.7$, $df = 1$, $p = 0.003$ compared to a 50% null), indicating statistically significant resistance to educational reform despite evident knowledge gaps.

Key conclusions: The findings demonstrate substantial gaps in current antibiotic stewardship training, emphasizing the need to implement comprehensive educational programs that combine detailed guideline instruction with clinical exposure to resistance cases and practical prescribing modules to effectively prepare future physicians for combating antibiotic resistance in long-term care facilities.

P-1100

How is metamizole prescribed in Belgium in hospitalized elderly patients who have undergone a geriatric assessment?

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Introduction: Metamizole, a potent analgesic and antipyretic, is widely used for acute pain management but restricted due to agranulocytosis risk. This study examines its use among elderly patients in a Belgian academic hospital.

Methods: This retrospective cross-sectional study investigated elderly patients hospitalized between June 15, 2023, and June 14,

2024, who were administered metamizole during their stay. Patients with multiple hospital admissions within this timeframe were included only once. The primary aim was to describe the population receiving metamizole. The secondary aim analyzed prescription patterns, including treatment duration, indications, and adverse events.

Results: Among 159 patients (mean age $88.4 \text{ years} \pm 6.3$), most were women (65%, $n = 104$) and admitted to acute geriatric ward (89%). Median Charlson's comorbidity score was 6 [5–8]. Most patients were frail, with a median Clinical Frailty Scale score of 6 [5–7], presented cognitive disorders (72%), malnutrition (68%), and a high risk of falls (79%). Acute pain (76%, $n = 121$) and end-of-life pain management (18%, $n = 29$) were the main indications. The mean duration of treatment was 10 days [6–15], with only 12% of patients ($n = 19$) discharged with metamizole. Although 40% of patients were on anticoagulants during their hospital stay, no serious adverse events were observed.

Conclusions: Due to safety concerns, retrospective studies are essential to assess metamizole's risk–benefit profile in elderly patients. Its in-hospital use remains a viable alternative to opioids for acute pain management.

P-1102

Factors associated with severity in very older patients diagnosed with drug eruption (toxicodermia) admitted to a tertiary hospital

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Objective: To describe the baseline characteristics, and identify factors associated with severity in older patients admitted to a tertiary hospital with drug eruption (toxicodermia).

Methods: Retrospective descriptive study of all patients 80 years or older admitted to a university hospital between 2019 and 2024 with a diagnosis of drug eruption. Data collected from electronic medical records included sociodemographic characteristics, comorbidities, treatments, triggering medications, and hospital stay. Severity was defined by the extent of skin lesions (generalized/localized), intensive care units (ICUs) admission, and mortality.

Results: We included 94 patients (67% women, mean age 87 ± 5 years). 60% were independent in basic activities of daily living, 70% had no cognitive impairment, 77% had polypharmacy and 71% had high comorbidities measured by CIRS-G. The causative drug was identified in 97% of cases: 63% antibiotics (mostly beta-lactams 43% and quinolones 13%), 20% analgesics, 6% hypouricemic agents, 5% ionic contrasts, and 6% others.

42% had generalized disease. A statistically significant association was found between the extent of the skin lesion and the use of allopurinol ($p = 0.003$), benzodiazepine ($p = 0.050$), proton pump inhibitors ($p = 0.020$), and statins ($p = 0.02$) as triggering drugs. Polypharmacy was not associated with extension ($p = 0.058$) nor the hospital stay ($p = 0.839$).

The average stay was 18 ± 30 days, ICUs were needed in 2%, and hospital mortality was 11%.

Conclusions: Older patients admitted with toxicodermia have high prevalence of polypharmacy and comorbidities despite having good functional and cognitive status. Antibiotics and analgesics are the most frequently implicated drugs. No association was found with polypharmacy and the delay in discharge.

P-1103

Identifying the impact of polypharmacy and oversedation on drug-related pressure ulcers in older adults

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Introduction: Pressure ulcers are common in older adults and bedridden patients, causing complications and increased healthcare costs. Some medications contribute to prolonged immobility and oversedation, increasing the risk of drug-related pressure ulcers. However, the specific drugs and risk factors involved remain unclear. This study aimed to identify high-risk patients and medications associated with drug-related pressure ulcers, focusing on polypharmacy and oversedation.

Methods: A multicenter retrospective observational study was conducted across 20 facilities in Japan. A total of 1113 hospitalized patients with existing skin injuries were included. Patients were classified into three groups based on predefined criteria: definite, probable, and no possibility of drug-related pressure ulcers.

Results: The definite group (11.5%, $n = 128$) showed a significantly higher prevalence of polypharmacy, defined as the use of five or more medications (83.6% vs. 71.1% in the no possibility group, $p < 0.01$), and frequent medication adjustments (76% vs. 46%, $p < 0.01$). The use of sedative agents such as antipsychotic medications (34% vs. 10%, $p < 0.01$) and missed doses of anti-Parkinson's drugs (8% vs. 3%, $p < 0.01$), which may exacerbate immobility, were strongly associated with the definite group.

Conclusions: Polypharmacy and the use of sedative agents are key risk factors for drug-related pressure ulcers in older adults. Careful medication management is essential to prevent these ulcers and improve patient outcomes.

P-1104

Potentially inappropriate medications in the oldest-old: a primary care perspective (from rural areas in Portugal's interior)

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Introduction: There is no consensus on the definition of oldest-old adults, but they are commonly considered individuals aged 85 or older. In Portugal, they represent 3.8% of the population, increasing to 12.2% in the studied patient list. Potentially Inappropriate Medications (PIMs) pose greater risks than benefits in older adults, making their identification crucial.

Methods: A descriptive cross-sectional study analyzed oldest-old adults from a primary care patient list using the MIM@UF system. A representative sample was randomized, and data were extracted from medical records, excluding institutionalized patients or those without recent contact. PIMs were identified using APIMedOlder (EU(7)-PIM list, adapted to Portugal).

Results: Of 130 patients, 76 were excluded, leaving 54 for analysis (mean age 89.6 years, 73.6% women). They used an average of 7.5

medications, with 74 PIMs identified (mean 1.4 per patient, max 5). At least one PIM was present in 81.5% of patients. The most common PIMs were proton pump inhibitors (PPIs) (52.8%) and benzodiazepines (32.1%).

Key conclusions: The high prevalence of PPIs suggests ingrained prescribing habits, while benzodiazepine deprescription remains difficult due to dependence. Family physicians play a crucial role in medication review, but barriers like time constraints and patient beliefs hinder deprescription, highlighting the need for targeted strategies.

P-1105

Hidden paradoxes of polypharmacy in the aging society: the complexity of treating older adults

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Introduction: Polypharmacy in geriatric patients is a clinical challenge, especially in those with neuropsychiatric comorbidities. Notable gender- and age-related differences in prescribing have been observed. This study aimed to assess medication use in elderly patients, focusing on contrasts between general geriatric and psychogeriatric wards.

Methods: A cross-sectional study was conducted on 77 geriatric inpatients. Complete medication data, including supplements, were collected and analyzed by ward type. Statistical analyses included Student's t-test, Pearson correlation, and linear/logistic regression to assess the impact of age, sex, and ward type on prescribing patterns.

Results: The average number of medications was 6.8 ± 2.3 . Women received more medications than men (7.2 vs 6.1; $p < 0.05$). A positive correlation was found between age and medication count ($r = 0.42$, $p = 0.0001$); each year of age increased medication use by 0.15 (95% CI 0.08–0.22). Psychogeriatric patients were prescribed 3.2 times more quetiapine ($p = 0.002$) but 2.1 times fewer opioids ($p = 0.03$) than those in general geriatric wards, who received 68% more cardiovascular drugs. Sedative polypharmacy was observed in 41% of patients. Hydroxyzine was most often used for agitation (73%), and tramadol for musculoskeletal (61%) or neuropathic pain (29%). Men were nearly twice as likely to receive opioids (OR = 1.9, $p = 0.03$) despite fewer documented pain diagnoses. Women were more frequently prescribed quetiapine (58% vs 36%, $p = 0.0497$).

Key conclusions: Age and sex significantly influenced prescribing patterns. Differences between ward types reflected varying clinical approaches. These findings support the need for individualized, evidence-based pharmacotherapy in geriatric care.

Short Poster Presentation**Pharmacology**

P-1107

OPTimization of Medication by transdisciplinary Assessment of drug Treatment in Elderly hospitalized patients (OPTIMATE): results of a multicentre randomized clinical trial (RCT)

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Background: Older patients with multimorbidity/polypharmacy experience higher risk of adverse drug reactions/events that predispose to emergency department (ED) attendance, readmission and mortality. STOPP/START criteria implementation and drug-drug interaction (DDI) avoidance could theoretically reduce these adverse outcomes.

Patients & Methods: A comprehensive medication-optimizing definitive intervention (DI) based on STOPP/STARTv3 criteria and Stockley's[®]DDI checker was evaluated by RCT. We enrolled 636 older patients (mean age = 80.3, 49.5% female) with ≥ 3 chronic conditions and polypharmacy (≥ 5 daily medications) admitted acutely across 3 large hospitals. Patients were randomized to standard pharmaceutical care (n = 217), physician-delivered-DI arm (n = 210) or pharmacist-delivered-DI arm (n = 209). For DI patients, written and verbal medication optimisation advice was delivered to senior attending physicians at admission and pre-discharge. Prioritized STOPP/STARTv3/Stockley's[®]DDI medication advice was further discussed with DI-arm patients' GPs at 10 ± 3 days post-discharge. Primary endpoints were emergency department (ED) attendance, readmission and a composite of ED attendance, readmission or all-cause mortality determined at 30 ± 7 days (T4) and 90–180 days (T5) post-discharge.

Results: Compared to control patients, the composite primary endpoint was significantly attenuated in the combined DI arm patients (adjusted OR = 0.68 [95% CI 0.46–0.99], $p < 0.05$) and in the pharmacist-delivered DI arm patients at T5 (adjusted OR = 0.59 [95% CI 0.37–0.94], $p = 0.03$). ED attendance was significantly reduced at T4 in the physician-delivered DI arm patients versus controls (adjusted OR = 0.53 [95% CI 0.28–0.98], $p < 0.05$). We found no significant endpoint differences between the two DI trial arms.

Conclusion: Detection and application of clinically relevant STOPP/STARTv3 criteria and Stockley's[®]DDI constraints reduced adverse clinical outcomes in older multimorbid patients with polypharmacy.

Poster

Pharmacology

P-1108

Optimizing geriatric care: an audit of polypharmacy and drug interactions in outpatient prescriptions

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Introduction: Polypharmacy and inappropriate prescribing are prevalent in geriatric populations, increasing the risk of adverse drug interactions. This study aimed to assess prescribing patterns and identify drug-drug interaction errors in a geriatric outpatient department (OPD).

Methods: A retrospective audit of prescriptions issued in the geriatric OPD was conducted over 1 month. Data were evaluated for compliance with National Health Mission (NHM), Government of India guideline focusing on drug appropriateness and potential adverse interactions. Lexicomp, a clinical drug database, was employed to analyze drug-drug interactions.

Results: Preliminary analysis revealed a 34.3% incidence of polypharmacy, with 47.8% prescriptions flagged for potential interactions. Severe drug-drug interactions were identified in 13.8% prescriptions. 36.5% prescriptions contained antibiotics against the hospital's antibiotic policy guideline.

Key conclusions: The study highlights significant gaps in prescribing practices for geriatric patients, underscoring the need for enhanced

clinician training and integration of decision-support tools like Lexicomp. Implementing prescription audits can reduce inappropriate prescribing and improve patient safety in geriatric care.

P-1109

FORTA (Fit FOR The Aged) list 2024: update of a validated clinical tool for improvement of drug treatment in older adults

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Introduction: Multimorbidity and polypharmacy are highly prevalent in older adults. In addition, for most of the drugs there is no evidence regarding efficacy and safety in older people. Consequently, older patients are frequently the victims of inappropriate drug treatment. Over the last three decades, various listing approaches/criteria have been developed to tackle this issue. To increase the appropriateness of pharmacotherapy in older people the FORTA List was developed. FORTA was originally created by Wehling and validated and expanded by experts in a Delphi consensus procedure. Later, we evaluated FORTA's usefulness in a pilot clinical study as well as in a controlled prospective trial. Both confirmed that FORTA significantly ameliorates the quality of pharmacotherapy and also improves relevant clinical outcomes such as adverse drug reaction or activities of daily living.

Methods: As an evidence-based tool the FORTA List needs frequent updates as the field of geriatric pharmacology advances rapidly. Therefore, we conducted a new Delphi survey to update this useful clinical tool. This Delphi consensus procedure involved 18 experts from Germany, Austria and Switzerland.

Results: Oncological diseases were removed from the general FORTA List and are going to be evaluated separately. The new FORTA List now contains 253 items consisting of the most frequently used substances/substance classes for the long-term drug therapy of older patients aligned to 27 diagnoses.

Conclusions: All in all, the updated list now contains more medications (except for oncological diseases) used to treat elderly patients.

P-1110

Development of a machine learning-derived anticholinergic burden scale: integrating enhanced drug properties and weighting

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Introduction: Anticholinergic burden (AB) scales assess the cumulative impact of medications with anticholinergic properties, particularly in older adults. Existing AB scales, such as the Anticholinergic Cognitive Burden (ACB) and Anticholinergic Toxicity Score (ATS), often fail to capture the pharmacological complexity of anticholinergic drug effects fully. This study refines a previously developed machine learning-derived anticholinergic burden (ML-AB) scale by incorporating additional drug properties and employing a semi-supervised regression-based weighting approach to enhance classification accuracy.

Methods: A regression-based weighting mechanism was incorporated within a hierarchical clustering framework to refine the ranking of anticholinergic drugs using seven drug properties, including

Lipophilicity and Molecular Weight alongside Blood–Brain Barrier (BBB) penetration, muscarinic receptor binding affinity, and P-glycoprotein (P-gp) substrate status. The refined ML-AB scale was validated using tenfold cross-validation and benchmarked against existing AB scales (ACB and ATS).

Results: The refined ML-AB scale demonstrated improved concordance with clinically validated scales, ranking 54 out of 87 drugs similarly to ACB and 16 out of 25 to ATS. Area under the curve (AUC) values were calculated to assess how well drug properties predicted the ordinal rankings assigned by the anticholinergic burden scales. The AUC for the ML-AB scale was 0.99, outperforming ACB (0.81) and ATS (0.62), confirming superior classification accuracy.

Conclusion: Incorporating additional drug properties and a regression-based weighting system enhances the ML-AB scale's accuracy, offering a more objective and data-driven alternative to traditional expert-based methods. This refined approach can potentially improve anticholinergic burden assessment in geriatric care, ultimately supporting better clinical decision-making.

P-1111

Potentially clinically relevant prescribing cascades in hospitalised older adults measured using a novel screening tool: STOPPCascade

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Introduction: Prescribing cascades have gained increasing recognition as a cause of potentially inappropriate polypharmacy. The true overall prevalence of prescribing cascades in multimorbid older people is unknown, although individual cascades, evaluated using population database information and cohort studies, suggest that cascades occur with relatively high frequency. The aim of this study was to determine the prevalence of potential prescribing cascades in hospitalised older patients using the STOPPCascade list.

Methods: The STOPPCascade list of 71 explicit potential prescribing cascades in older adults was applied to a cohort of 373 acutely hospitalised older adults. Medication lists were assessed at 3 time points: within hours of admission to hospital, during the first 5 days of admission and at discharge.

Results: 70.85% of participants (265 patients) were exposed to at least one STOPPCascade-defined potential prescribing cascade during their admission. The median number of potential prescribing cascades per patient was 1 (min 0, max 13, IQR = 3). 662 potential prescribing cascades were identified among these 373 patients. 125 new potential prescribing cascades occurred during the initial 5 days of admission and 537 new potential prescribing cascades were detected in the discharge medication lists. The 5 most prevalent prescribing cascades involved 5 index drugs: anticholinergics, glucocorticoids, beta-blockers, selective-noradrenaline reuptake inhibitors and calcium channel blockers.

Conclusions: The overall prevalence of STOPPCascade-defined potential prescribing cascades was unexpectedly high. By applying STOPPCascade criteria, 7 out of 10 older adults studied were exposed to at least one potential prescribing cascade on presentation or during their hospital admission.

P-1112

Potentially clinically relevant drug-drug interactions and frailty in acutely hospitalised older people: a prospective observational study

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Introduction: Hospitalisation represents a time of increased risk for older adults, as the prescription of new drugs to treat acute medical problems and/or to prevent readmission may increase the risk of Drug-Drug Interactions (DDIs) and adverse drug reactions (ADRs). Identification of frailty should prompt greater review of polypharmacy and trigger a search for potential DDI.

Aim: Assess the prevalence of potentially clinically relevant drug-drug interactions and frailty in older adults presenting acutely to a Level 4 university teaching hospital in Ireland.

Methodology: A prospective observational study of acutely hospitalised older adults. Inclusion criteria: age ≥ 65 years old, enrollment within 72 h, expected length of stay > 24 h. Exclusion criteria: < 65 years of age, actively dying, direct ICU admission, inability to provide informed consent/proxy consent, patients in isolation. Medical chart review was carried out, followed by an interview using a standardised data collection proforma. Frailty was measured using Clinical Frailty Scale(CFS) and DDIs using a Delphi consensus-validated list of 66 clinically relevant DDIs.

Results: 373 participants were recruited. (53.1%) were male. Mean (SD) age of participants was 78.7 (7.65) years. The mean (SD) CFS score was 4.70 (1.77). 145 patients (38.87%) were exposed to at least one potential DDI based on the validated list of DDIs in older adults. At discharge, there was a reduction in potential DDI prevalence (27.13%). There were 36 admissions due to potential harm from DDIs.

Conclusion: Many DDIs are regarded as predictable and avoidable; therefore, they may be considered as targets for education and deprescribing interventions.

P-1113

Developing the international expert panel's list of potentially inappropriate prescribing cascades (PIPC)

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Introduction: Prescribing cascades contribute to potentially inappropriate prescribing, especially among multimorbid older adults. As the prescribing cascade framework continues to evolve, it is important to distinguish between appropriate and potentially inappropriate prescribing cascades (PIPCs). The objective was to create a consensus-based list of PIPCs for clinicians and researchers.

Methods: A prescribing cascade inventory was compiled using published studies. An international panel of 12 experts in geriatric pharmacotherapy was selected. Panelists completed a Delphi consensus process, including two questionnaire rounds and a discussion round.

Results: A total of 107 prescribing cascades were identified. After Questionnaire Round 1, $\geq 75\%$ of panelists agreed or strongly agreed that 56 prescribing cascades should be included in the PIPC list. For 32 prescribing cascades, 50–74% of panelists agreed or strongly agreed, and these were included in Questionnaire Round 2. In Questionnaire Round 2, $\geq 75\%$ of panelists agreed or strongly agreed that 9 of 32 prescribing cascades should be included in the PIPC list. For 14 of 32 prescribing cascades, 50–74% of panelists agreed or strongly agreed their inclusion, and were moved to the Discussion Round. Following discussion, no additional prescribing cascades met the consensus threshold. The final list was organized by physiological system.

Key conclusion: An explicit list of 65 PIPCs was created and organized by physiological system using a rigorous Delphi consensus process. This rigorously developed consensus-based PIPC list serves as a valuable tool for clinicians, aiding in the identification of potentially inappropriate prescribing and enhancing medication safety.

P-1114

Prioritizing potentially inappropriate prescribing cascades (PIPC) list at the population level: a focus on cardiovascular system PIPCs

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Introduction: Measuring the population-level impact of potentially inappropriate prescribing cascades (PIPC) can inform targeted interventions. Prescription sequence symmetry analysis (PSSA), measuring the temporal association between medications, combined with population prevalence and sex differences, offers an opportunity to efficiently help detect signals for the occurrence of possible prescribing cascades. Our objectives were to detect the occurrence and measure the population-level burden of selected PIPCs using PSSA.

Methods: We identified 2.4 million community-dwelling adults ≥ 66 years (01-01-2022 to 31-12-2023), living in Ontario, Canada using population-level data. Selecting from a list of 65 PIPCs in seven physiological systems, we examined cardiovascular PIPCs ($n = 15$). For each prescribing cascade, we measured the prevalence and dispensing pattern of each initiating drug, by sex, and applied PSSA to determine the magnitude of each PIPC using adjusted sequence ratios (aSRs). An aSR greater than one indicated a signal of a PIPC. Prevalence and aSR results were combined to quantify overall population-level burden.

Results: Among 15 cardiovascular system PIPCs, eight had high prevalence of the initiating drug (24–66%), and strong signals of a PIPC (aSR: 1.16–1.76). These included calcium channel blocker (CCB) to diuretic, CCB to laxative, angiotensin-converting enzyme inhibitor to cough remedy, antihypertensive to antiemetic, statin to pain reliever, mineral supplement, or sleep agent, and beta blocker to antidepressant. Findings were consistent by sex.

Key conclusions: Measuring the population-level impact of prescribing cascades using prevalence data, PSSA, and sex distribution represents an important tool to efficiently identify PIPCs and reduce population level patient harm.

P-1115

Cannabis use in older adults and relationship to health system use

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Introduction: Cannabis is available in Canada for medical access as well as recreational purchases. There has been little research on older adults with rheumatologic conditions and patterns of cannabis use. The purpose of this study was to determine if older adults' cannabis use was associated with increased health system use.

Methods: Adults with rheumatologic diagnostic coding in the province of Alberta, Canada were invited to participate in a survey regarding their use of cannabis and management of arthritis and comorbidities. They were also invited to have their survey linked with their provincial health data for further analysis.

Results: A total of $n = 474$ adults (59.5% Female) age 65 and older agreed to have their health data linked with their surveys. The most common rheumatologic condition was osteoarthritis (72.4%). For cannabis 20.7% were current users and 24.2% were past users. There were no differences in dispensations of rheumatologic medications for past or current users compared to never-users. For those who had ever used cannabis vs never-users, there were no statistically significant differences for psychosis ($p = 0.07$), emergency department visits ($p = 0.07$), or inpatient admissions ($p = 0.28$). Individuals who had used cannabis (current or past) had higher hospital admissions for medications/treatment for abuse ($p = 0.004$), and combined system outcomes ($p = 0.045$). Current users had higher non-dependent drug admissions vs past users ($p = 0.009$).

Conclusions: Users of cannabis have higher use of the healthcare system compared to never-users of cannabis related to medication use.

P-1116

Factors associated with deprescription in the first geriatric consultation according to STOPP criteria

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Deprescription is a key tool in medication review for older adults, particularly in cases of polypharmacy or potentially inappropriate prescriptions (PIPs). However, its effective implementation during the first consultation still faces clinical variability and barriers.

Objective: To analyze clinical factors associated with the performance of deprescription during the first geriatric outpatient visit.

Methods: A cross-sectional study was conducted involving 176 patients aged ≥ 65 years seen in a geriatric outpatient clinic. Common chronic conditions (type 2 diabetes mellitus, COPD, cerebrovascular disease, insomnia, constipation, falls, and

presbyopia) were recorded, and STOPP v2 criteria were applied. The main outcome was the presence of at least one deprescription during the first visit. Chi-square tests and odds ratios (OR) with 95% confidence intervals (CI) were used.

Results: Deprescription was performed in 34.1% of patients ($n = 60$). The following conditions were significantly associated with a higher likelihood of deprescription:

- Insomnia ($p < 0.001$; OR: 3.92; 95% CI 2.03–7.60).
- Falls ($p < 0.001$; OR: 4.01; 95% CI 2.07–7.76).
- Presbyopia ($p = 0.004$; OR: 2.69; 95% CI 1.35–5.37).
- COPD ($p = 0.008$; OR: 2.51; 95% CI 1.26–5.02).
- Constipation ($p = 0.008$; OR: 2.47; 95% CI 1.26–4.85).
- Diabetes mellitus ($p = 0.015$; OR: 2.25; 95% CI 1.16–4.37).

These patients had a higher burden of PIPs and were more frequently targeted for deprescription interventions during the initial consultation.

Conclusions: Certain chronic conditions are significantly associated with deprescription during the first geriatric consultation. These findings support the routine use of explicit tools like the STOPP criteria to guide early clinical decision-making and improve medication safety in older adults.

P-1117

Oral cannabinoids for dementia in older adults: a pilot study

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Introduction: Dementia concerned tens of millions of people worldwide increasing with the ageing of the population. The clinical use of cannabis extracts in older patients principally with Alzheimer's disease is constantly growing. The present study assessed the use of cannabidiol (CBD) oil in older adults with neuropsychiatric symptoms of dementia.

Methods: Fourteen participants who have behavioral and neuropsychiatric symptoms of dementia (BPSD) were included in the pilot study. BPSD were measured with the Neuropsychiatric Inventory questionnaire (NPI) adapted for nursing home (NPI-NH) scale. The NPI-NH was completed before CBD or placebo initiation (day 0) and after one month of each new titration. The follow-up scores differences of the NPI-NH assessment were analyzed using the Wilcoxon Signed Rank test with the statistical significance threshold set to $p = 0.05$.

Results: Nine patients diagnosed with BPSD were finally included in this investigation. The NPI-NH score from the CBD group was higher than the placebo group (55 ± 11 vs 36 ± 7). The NPI-NH questionnaire showed a significant reduction of disillusions ($p = 0.045$), euphoria ($p = 0.014$), and irritability ($p = 0.046$). Caregivers or family reported significant improvements in daily behavior: patients appeared more serene, less excitable and irritable, and more respectful of environmental situations.

Conclusion: Alternative treatment such as CBD to reduce significantly neuropsychiatric disorders in AD or related diseases is a

fundamental necessity for an effective and safe therapy reducing polypharmacy and caregiver's stress.

P-1118

Discriminant content validity of the Patient Evaluation of the Deprescribing process Questionnaire (PED-Q)

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Introduction: The process of deprescribing medicines involves 15 patient-facing activities e.g. 'establishing the medications a patient is taking' and 'inviting the patient to decide'. Deprescribing requires prescribers to support patients to progress through each activity, however most patients decline in trials. The Patient Evaluation of the Deprescribing process Questionnaire (PED-Q) comprises 11 items which invite patients to indicate their satisfaction with the 15 deprescribing activities undertaken by prescribers. This study investigated the PED-Q's discriminant content validity (DCV).

Methods: We used DCV to evaluate the extent to which three PED-Q item versions discriminately measured a patient's evaluation of the intended deprescribing activity(s). An international panel of 30 lived experience and expert judges indicated which deprescribing activity(s) PED-Q items did/didn't measure, along with a confidence rating. We performed Wilcoxon non-parametric one sample test to identify PED-Q item versions that discriminately measure deprescribing activities. Where > 1 item discriminately measured an activity, the version with the highest confidence level was retained.

Results: Judges were based in Europe, North America and Australasia. Fourteen items discriminately measured the intended activity(s), 15 items measured the intended activity(s) plus others and four did not measure the intended activity(s). Eight items were retained in the final PED-Q with confidence ratings ranging from 7–10.

Key conclusions: The 8 PED-Q items discriminately measure patients' evaluation of 15 deprescribing activities undertaken by prescribers. The PED-Q has utility in trials of deprescribing interventions and in evaluating the quality of deprescribing in practice.

P-1119

Barriers to supporting benzodiazepine deprescribing in older adults: a survey of European non-physician healthcare professionals

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Introduction: Non-physician healthcare professionals (HCPs), such as nurses and pharmacists, can support deprescribing in older adults. While prior research has mostly focused on patients' and physicians' barriers to Benzodiazepine Receptor Agonists (BZRA) deprescribing, little is known about non-physician HCPs' perspectives.

Methods: Using a questionnaire, based on the Theoretical Domains Framework (TDF) and two self-reported behaviour questions, we surveyed non-physician HCPs working in hospitals across six European countries. Major barriers (mean < 2.99), moderate barriers (mean 3.00–3.99), and enablers (mean > 4.00) were analysed descriptively. The association between TDF domains and HCPs' intention to support BZRA deprescribing was explored using ordinal logistic regression models.

Results: We analysed data from 258 HCPs, mainly nurses (163, 63.2%). Major barriers were similar across all HCPs' categories and included lack of time and staff (Environmental context and resources), low BZRA deprescribing prioritisation (Goals), and perceived patient reluctance (Social influence). Pharmacists experienced the most enablers and physiotherapists the most barriers. Five TDF domains were associated with a stronger intention to support deprescribing: Social/Professional Role and Identity (odds ratio [OR], 3.08; 95% confidence interval [CI] 1.77–5.46); Beliefs about Consequences (OR, 1.91; 95% CI 1.07–3.34); Memory, Attention and Decision

Processing (OR, 1.80; 95% CI 1.16–2.82); Intention to promote alternatives (OR, 1.63; 95% CI 1.07–2.49) and Reinforcement (OR, 1.57; 95% CI 1.08–2.29).

Key conclusions: Different categories of non-physician HCPs face similar major barriers to supporting BZRA deprescribing, suggesting common elements that behaviour change interventions can target. Some barriers vary by professional category. Context-adapted interventions may address barriers, enhancing BZRA deprescribing.

P-1120

Older adult risk classification for anticholinergics (ORCA): a Delphi panel-validated scale

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Background: Drugs with anticholinergic (AC) properties are widely prescribed in older adults for various medical conditions. However in this population, the cumulative AC burden remains a critical factor contributing to adverse outcomes. Existing AC scales vary significantly, complicating their interpretation and application into clinical practice and research. While recent systematic reviews provide an overview of different AC scales, they often lack the clinical

perspective of healthcare professionals. To address this gap, we developed the Older adult Risk Classification for Anticholinergics (ORCA) scale, incorporating expert clinical judgment.

Methods: A Delphi panel process was conducted, using a four-point Likert scale to assess expert agreement. Results were analysed according to the Lynn method [1]. The Delphi process consisted of two iterative rounds, each divided into two phases. A preliminary drug list was compiled based on the systematic review of Al Rihani et al. [2]. Experts were encouraged to propose additional ACs and scales throughout the process.

Results: Fourteen experts from nine European countries evaluated 233 drugs, classifying 17 without AC properties, 115 as low, 31 as moderate, and 65 as high. No consensus was reached for five drugs: buprenorphine, ketorolac, levodopa, pridinol, and ropinirole.

Conclusion: Through an international Delphi process, we developed a clinically relevant list of ACs tailored for older adults. This comprehensive list provides a standardised resource to guide clinicians, pharmacists, and researchers in prescribing, evaluating, and analysing ACs in older patients. It also supports more accurate guidance on the estimation of the benefit-risk ratio of ACs in this vulnerable population.

[1] Al Rihani SB, Deodhar M, Darakjian LI, Dow P, Smith MK, Bikmetov R, Turgeon J, Michaud V. Quantifying Anticholinergic Burden and Sedative Load in Older Adults with Polypharmacy: A Systematic Review of Risk Scales and Models. *Drugs Aging*. 2021 Nov;38(11):977–994. <https://doi.org/10.1007/s40266-021-00895-x>. Epub 2021 Nov 9. PMID: 34751922; PMCID: PMC8592980.

[2] Lynn MR. Determination and quantification of content validity. *Nurs Res*. 1986 Nov-Dec;35(6):382–5. PMID: 3640358.

Short Poster Presentation

Pharmacology

P-1121

Sustained reductions in chronic PPI and sedative use in community-dwelling older adults were produced through a pharmacist-led, multidisciplinary intervention

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Introduction: To address the high prevalence of chronic proton pump inhibitor (PPI) and sedative medications among older adults, the government of Newfoundland and Labrador, Canada, supported public awareness campaigns and encouraged community pharmacists to instigate deprescribing conversations with older adults and their healthcare providers. Subsequent changes in medication use were evaluated.

Methods: Prescription claims data for adults aged ≥ 70 years from 2019 to 2021 were analysed to identify prescription and pharmacist deprescribing intervention claims. Chronic PPI or sedative users were dichotomised as receiving or not receiving the deprescribing intervention. Changes in mean daily defined doses (DDD) were evaluated using propensity score matching.

Results: DDD's were significantly reduced for both PPIs and sedatives starting the month after delivery of the intervention. For PPIs, a significant 20% reduction in dose was achieved and maintained over the 40-month follow-up period. For sedative medications, a 12% reduction in DDD was observed, which was significantly lower than the no-intervention group for 18 months follow-up.

Key conclusions: Significant reductions in chronic PPI and sedative use were observed among older adults who received the intervention. These findings highlight the role of community pharmacists in identifying potentially inappropriate medications, providing education and facilitating referrals to prescribers. Given the easy access to community pharmacists and the heightened risk of medication-related harms in older adults, this approach offers a practical and impactful strategy to enhance medication safety at a population-wide level.

P-1122

Effectiveness and safety of chronic diuretic use in older adults: an umbrella review of recently published systematic reviews and meta-analyses of randomised controlled trials

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Introduction: Healthcare providers should balance the potential risks and benefits of chronic diuretic use, particularly in older adults, as with age, diuretic benefits may decline and risks increase. A comprehensive synthesis of the available evidence on chronic diuretic treatment effects is currently lacking.

Methods: We conducted an umbrella review of systematic reviews (SRs) and meta-analyses (MAs) published since 2018 on health outcomes associated with diuretic use in randomized controlled trials (RCTs). We conducted random-effects meta-analysis for pooled effect estimates and narratively summarized data that could not be pooled.

Results: We included 741 effect estimations from 117 SRs on 1566 RCTs in individuals aged 62 ± 6 years. Of our 33 MAs, eleven provided convincing, high-quality evidence: finerenone reduced the risk of cardiovascular (CV) mortality and end-stage kidney disease in individuals with chronic kidney disease (CKD) and/or type 2 diabetes (T2D). Thiazides reduced CV events in individuals with hypertension. Mineralocorticoid receptor antagonists (MRAs) reduced heart failure related hospitalization (HFH), but also increased hyperkalemia risk in individuals with HF. MRAs also reduced the risk of atrial fibrillation in those with HF or CVD, and reduced HFH, major adverse cardiovascular events (MACEs), $> 40\%$ eGFR decrease, and composite kidney outcomes in individuals with CKD and/or T2D. Lower quality evidence suggests that in older (≥ 65 years), but not in younger adults, diuretics may reduce CV mortality, but also increase adverse event risk.

Key conclusions: Our umbrella review offers a comprehensive and up-to-date evaluation of the benefits and harms of diuretics. However, further research is needed to establish their efficacy and safety in populations commonly seen in clinical practice, especially older adults living with multimorbidity and frailty.

Poster

Pharmacology

P-1123

Prevalence of preventable medication-related harm in low- and middle-income countries: an updated and extended systematic review and meta-analysis

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Introduction: Medication-related harm (MRH) has been a significant public health concern. A systematic review of the global prevalence of preventable MRH has been previously conducted by WHO. However, the prior review excluded non-English articles and no study from mainland China was included. The aim of the current review was to estimate the prevalence of preventable MRH in low- and middle-income countries (LMICs) through an updated and extended systematic review and meta-analysis.

Methods: We searched five Chinese databases (January 2000–August 2024) and five English databases (April 2022–August 2024). We included quantitative observational and cross-sectional study design. Estimated pooled prevalence was calculated using a random-effects meta-analysis, followed by subgroup analysis. Publication bias and small-study effects were assessed using Egger's test.

Results: Forty-one studies (3,081,404 subjects) from 13 LMICs were included. The pooled preventable MRH prevalence was 4.64% (95% CI 3.11–6.45%). The prevalence varied greatly according to countries (from 1.70% in Morocco to 24.67% in Uganda) and WHO regions (from 1.92% in the Eastern Mediterranean Region to 12.50% in the Region of the Americas). The highest estimated prevalence of preventable MRH was observed in geriatric wards (8.70%) and highly specialized care or surgical wards (6.63%). Egger's test revealed a significant publication bias.

Key conclusions: The prevalence of preventable MRH was 464 per 10,000 population in LMICs. Patients in geriatric wards and highly specialized care or surgical wards were at a higher risk of preventable MRH than in other medical care settings.

P-1124

Urinary tract infections in elderly patients associated with SGLT-2 treatment

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Introduction: Sodium-glucose cotransporter 2 inhibitors (SGLT-2i) have taken a frontline position in heart failure and chronic kidney disease treatment, which has led to an increase in their consumption. However, there are safety issues that may be particularly relevant in elderly patients, and therefore a long-term analysis with real-life data is desirable.

Methods: The present study included elderly patients with a first prescription of a SGLT-2i during 2022. The objective was to analyze the relationship between the use of SGLT-2i and the risk of urinary tract infections (UTI) in elderly patients, estimating the frequency of occurrence before and after the prescription.

Results: A total of 1950 patients were included, 61.1% men. The most frequently prescribed drug was empagliflozin (60.3%). 11.6% of patients had an episode of UTI prior to the prescription of SGLT-2i and 12.8% had it during the following year, this increase was not statistically significant. A statistically significant increased risk of recurrent UTI was observed in patients with a history of previous UTI compared to those without it (17.6% vs 2.9%).

Conclusions: The results of this study indicate that initiation of SGLT-2i in elderly patients was safe considering that it did not result in a significant global increase in the risk of UTIs. A considerable increase in the frequency of occurrence of recurrent UTIs was observed in patients with a history of previous UTIs, which highlights the need for a targeted evaluation of the use of SGLT-2i in these patients. This finding should be further analyzed in future studies.

Sarcopenia

P-1125

Dietitian-led interventions for sarcopenia management in cancer patients: a quality improvement initiative

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Introduction: Sarcopenia, the progressive loss of muscle mass and function, is a common complication in cancer patients that can negatively impact treatment outcomes and quality of life.

Aim: This quality improvement project aimed to assess the effectiveness of dietitian-led interventions in managing sarcopenia among cancer patients and to establish best practices for nutritional care.

Methodology: A six-month prospective study was conducted on 100 cancer patients at various stages of treatment. Patients underwent initial screening for sarcopenia using the SARC-F questionnaire and bioelectrical impedance analysis. Dietitians implemented tailored nutritional interventions, including high-protein diets (1.2–1.5 g/kg/day), oral nutritional supplements, and counseling on physical activity. Muscle mass, strength, and physical performance were assessed at baseline and after three and six months. Patient-reported outcomes were collected using the EORTC QLQ-C30 questionnaire.

Results: After six months, 72% of patients showed improvements in muscle mass and strength. Adherence to dietitian-prescribed nutritional plans was associated with a 40% reduction in sarcopenia progression compared to standard care. Patients receiving dietitian-led interventions reported significant improvements in fatigue levels and overall quality of life. The integration of nutritional care with exercise recommendations led to synergistic benefits, with a 25% increase in physical performance scores.

Conclusion: This quality improvement project demonstrates the significant impact of dietitian-led interventions in managing sarcopenia among cancer patients. The implementation of targeted nutritional strategies, combined with physical activity guidance, resulted in improved muscle health and quality of life. These findings support the integration of specialized dietetic services as a standard of care in oncology settings to effectively address sarcopenia and enhance overall patient outcomes.

P-1126

The role of GNRI in predicting probable sarcopenia in older adults

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Introduction: Geriatric Nutritional Risk Index (GNRI) is an objective and practical screening tool for evaluating the nutritional status of older adults, relying on height, weight, and serum albumin levels. We aimed to explore the relationship between GNRI and probable sarcopenia in outpatient individuals, and determine its efficacy in predicting probable sarcopenia.

Methods: We retrospectively analyzed 380 patients who applied to the geriatrics outpatient clinic of our university hospital between March 2018 and October 2023 and underwent comprehensive geriatric assessments. Their GNRI scores were calculated. The cut-off value predicting probable sarcopenia was determined, and patients were divided into two groups as low GNRI and high GNRI. Multivariate logistic regression analysis was performed to assess the relationship between probable sarcopenia and GNRI.

Results: 67.9% of participant were women, mean age was 74 (60–96; SD6.8), and 17.9% had probable sarcopenia. The optimal GNRI cut-off value was 102.45 (AUC 0.653). Based on this threshold, 14.7% of participants had low GNRI score; this subgroup was significantly older, exhibited a higher prevalence of sarcopenia and frailty, and had increased rates of malnutrition. Additionally, they demonstrated significantly greater dependency in instrumental activities of daily living, reduced physical performance, and a higher need for support. After adjusting for age, gender, BMI, frailty, malnutrition, diminished physical performance, dependency, polypharmacy, and cognitive impairment, a low GNRI score was independently associated with probable sarcopenia (OR: 2.634; 95% CI 1.241–5.290; $p = 0.0012$).

Conclusions: This study demonstrates a significant relationship between GNRI and probable sarcopenia, suggesting that GNRI may serve as a potential tool for predicting sarcopenia in outpatient older adults.

P-1127

Osteosarcopenia as a risk factor for fractures and mortality—19-year follow-up of a population-based sample

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Purpose: This study assessed osteoporosis, sarcopenia and osteosarcopenia as risk factors for fractures and mortality during 19-year follow-up.

Methods: The study population consisted of 2142 individuals aged 55 and older participating in the Finnish population-based Health 2000 Survey. Probable sarcopenia was defined as grip strength below 27 kg for men and below 16 kg for women. Osteoporosis was identified by a bone density T-score below -2.5 via ultrasound or a self-reported diagnosis. Participants were divided into four categories: neither condition, probable sarcopenia only, osteoporosis only, and osteosarcopenia. Fractures and deaths were identified from the national registers until 2019.

Results: Over a mean follow-up of 19.1 years, 482 (23%) participants sustained a fracture of any type and 1252 (59%) died. Osteosarcopenia, probable sarcopenia and osteoporosis were all associated with increased risk of any fracture and mortality compared to no sarcopenia no osteoporosis group. Osteoporosis alone was associated with lower mortality than osteosarcopenia (HR 0.69, 95% CI 0.51–0.95), but mortality did not differ between probable sarcopenia and osteosarcopenia (HR 0.80, 95% CI 0.59–1.07). No differences in the fracture risk between osteosarcopenia, sarcopenia and osteoporosis were observed.

Conclusion: While both sarcopenia and osteoporosis significantly increase fracture and mortality risks, their combination does not seem to elevate fracture risks. Osteoporosis is a stronger predictor for future fractures, whereas probable sarcopenia is more closely linked to

mortality. Further research is warranted to determine the best ways to incorporate sarcopenia assessment into comprehensive fracture risk evaluation.

P-1128

Comparison of acute significant weight loss according to different confirmed sarcopenia definitions

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Aim: This study aimed to investigate the relationship between three different definitions of confirmed sarcopenia and weight loss exceeding %10 the past three months.

Methods: The study retrospectively included patients aged 65 and older participants who visited a geriatric outpatient from December 2023 to April 2024. Confirmed sarcopenia is defined as the presence of low muscle strength and low muscle mass. Significant weight loss was defined as more than 10% weight loss in the last three months.

Results: The study population included 75 participants, with a median age of 79 years (65–91). The number of participants who lost more than 10% of their weight in the last 3 months was 11% (14.7). The prevalence of confirmed sarcopenia was found to be 8% (6) when adjusted for weight, 18.7% (14) when adjusted for body mass index, and 4% (3) when adjusted for height. In univariate analyses, significant weight loss in the last three months showed a statistically significant relationship with confirmed sarcopenia adjusted for body mass index ($p = 0.014$) and confirmed sarcopenia adjusted for height ($p = 0.009$). When adjusted for age and gender in multivariate analyses, confirmed sarcopenia adjusted for body mass index ($p = 0.030$, OR: 4.682, CI 1.163–18.844) and confirmed sarcopenia adjusted for height ($p = 0.026$, OR: 35.664, CI 1.542–824.785) continued to demonstrate a statistically significant relationship.

Conclusion: In older patients experiencing acute significant weight loss, adjustments for body mass index and height are key factors in predicting confirmed sarcopenia.

Keywords: confirm sarcopenia, different adjustment, weight loss, older adults.

P-1129

Frequently reported blood biomarkers in sarcopenia clinical trials: a systematic review and meta-analysis

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Introduction: This systematic review and meta-analysis aims to identify the most frequently reported blood-based biomarkers (BB) in randomised clinical trials (RCTs) addressing sarcopenia management, and to perform a preliminary evaluation of the effects of sarcopenia-specific interventions on BB concentrations.

Methods: Medline, Scopus and CENTRAL databases were searched to retrieve RCTs published until March 2024 with any type of interventions on sarcopenic participants aged from 60 years. Studies using a consensus definition of sarcopenia and reporting BB values pre- and post-intervention were included. Meta-analyses were performed for BB reported in minimum 2 RCTs using a random effect model with a standardised mean difference (SMD) and a 95% confidence interval as effect size.

Results: Twenty-one RCTs measuring BB in individuals with sarcopenia matched our inclusion criteria. Altogether, 47 BB were identified whereas 23 BB were reported in minimum 2 RCTs. The most frequently reported BB were c-reactive protein (8 RCTs), interleukin 6 (7 RCTs), tumour necrosis factor α (6 RCTs), 25-OH-vitamin D (6 RCTs), Insulin-like Growth Factor 1 and Albumin (5 RCTs). Alanine aminotransferase, Cholesterol, Creatinine, interleukin 10 and glucose were reported in 3 to 4 RCTs. Among the most frequently reported BB, IGF-1 (SMD = 0.45, CI = [0.17; 0.73]) and 25-OH-Vitamin D (SMD = 0.92, CI = [0.27; 1.57]) were significantly impacted by the studied interventions.

Key conclusions: Despite the heterogeneity of BB measured in sarcopenia RCTs, a limited number were muscle-specific. Additionally, few BB seemed impacted by the proposed interventions. Better standardisation of sarcopenia management is needed, particularly by developing a core outcome set.

P-1130

Lipid-muscle interactions in aging: the relationship between total cholesterol and probable sarcopenia

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Introduction: Sarcopenia is a significant health issue that occurs as a result of the decrease in skeletal muscle mass and function with aging and increases the risk of frailty, falls and mortality in elderly individuals [1]. The effects of lipid metabolism on muscle health are increasingly being investigated [2]. It has been suggested that low cholesterol levels may be associated with the development of sarcopenia [3].

Objectives: This study aimed to investigate the relationship between total cholesterol levels and probable sarcopenia, as well as the effects of lipid metabolism on muscle health.

Methods: Data from 328 patients aged ≥ 60 years who applied to a university geriatrics outpatient clinic between March 2018 and October 2023 were retrospectively analyzed. Demographic characteristics, history of chronic diseases, frailty status, probable sarcopenia assessment, and total cholesterol levels were obtained from patient records. Basic activities of daily living (ADL) were assessed using the KATZ Index, and instrumental ADL were evaluated using the LAWTON-BRODY scale. Frailty was assessed with the FRAIL scale, and nutritional status was evaluated with the Mini Nutritional Assessment–Short Form (MNA-SF). Body mass index (BMI) was calculated by dividing body weight (kg) by the square of height (m^2). Handgrip strength was measured using a hand dynamometer, and low values were defined as probable sarcopenia. Low handgrip strength was determined according to cut-off values specific to the Turkish population (35 kg for men/20 kg for women) [1,4]. The association was evaluated using multivariable logistic regression analysis. The cholesterol level predicting probable sarcopenia was calculated via ROC analysis, and patients were divided into two groups based on the determined threshold value.

Results: The mean age of the participants was 74.5 ± 6.8 years, and among the 147 patients (44.8%) identified with probable sarcopenia, 55.8% were women. In univariate analyses, male sex, frailty, malnutrition, dependence in instrumental activities of daily living (IADL), low BMI, and low cholesterol levels were significantly associated with probable sarcopenia ($p < 0.001$). In ROC analysis, the area under the curve (AUC) was 0.617 (95% CI 0.562–0.670, $p = 0.0002$), with a sensitivity of 70.5% and specificity of 49.7%. The optimal cut-off value was determined as 216 mg/dL. In multivariable analyses including age, sex, BMI, and frailty, low cholesterol levels (≤ 216 mg/dL) remained an independent risk factor for probable sarcopenia [OR: 1.729, 95% CI (1.017–2.939), $p = 0.043$].

Conclusion: Low total cholesterol levels were independently associated with probable sarcopenia. The findings support the role of lipid metabolism in muscle health and suggest that low cholesterol levels may be an important risk factor for probable sarcopenia.

Keywords: Sarcopenia, cholesterol, older adults.

P-1131

Relationship between muscle specific strength and functionality in older adults with osteosarcopenia

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Introduction: Osteosarcopenia is an important geriatric syndromes associated with increased risk of falls, disability and death in older adults. The aim of the study is to compare the muscle specific strength

and to find out the association between functionality in patients with osteoporosis, sarcopenia and osteosarcopenia.

Methods: One hundred seventy patients were enrolled in this study and 141 patients were analyzed. Hand grip strength (HGS) was measured with Jamar dynamometer, muscle mass was measured with ultrasound, and sarcopenia diagnosis based on low muscle strength and low muscle mass. Osteoporosis is diagnosed if the T score was below -2.5 or fragility fracture is present. The patients with osteoporosis and sarcopenia were accepted as osteosarcopenia.

Results: Mean age of the patients was 76.86 ± 6.74 and 121 (71.2%) were female. Ten percent of the patients was osteoporotic, 25.9% was sarcopenic and 27.1% was osteosarcopenic. In patients with osteosarcopenia; HGS/rectus femoris thickness (kg/cm) was 11.35 (2.47–37.5); HGS/rectus femoris cross sectional area (kg/cm^2) was 5.16 (0.82–27.3) ($p = 0.009$), and HGS/quadriceps femoris thickness (kg/cm) was 5.4 (1.43–13.04). When compared to control, osteoporosis and sarcopenia groups, muscle specific strength was lower in the osteosarcopenia group ($p < 0.001$, $p = 0.009$, $p < 0.001$, respectively). Linear regression analyses.

revealed that muscle specific strength was significantly associated with timed up and go ($\beta = -0.236$, $p = 0.030$) and L1–L4 T score ($\beta = -0.233$, $p = 0.032$).

Conclusion: Muscle specific strength—especially rectus femoris and Quadriceps femoris thickness—is associated with TUG and L1–L4 scores.

P-1132

A body shape index (ABSI) as a predictor of probable osteosarcopenia in postmenopausal women

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Introduction: Osteosarcopenia, the coexistence of osteoporosis and sarcopenia, is a growing concern in postmenopausal women. A Body Shape Index (ABSI), a novel measure of abdominal adiposity, has been linked to metabolic and musculoskeletal disorders. Given the potential role of central adiposity in muscle and bone deterioration, this study aimed to evaluate ABSI as a predictor of probable osteosarcopenia.

Methods: This retrospective study included 605 postmenopausal older women. Probable osteosarcopenia was defined as the coexistence of osteoporosis (T-score ≤ -2.5 at the lumbar spine or femoral neck) and low handgrip strength (< 16 kg). ABSI was calculated as $WC/(BMI^{2/3} \times height^{1/2})$. Multivariate logistic regression and ROC curve analysis assessed its predictive value.

Results: The mean age of participants was 74.9 ± 6.4 years. ABSI was higher in those with osteosarcopenia ($p < 0.001$) and was identified as an independent predictor (OR = 1.55, 95% CI 1.19–2.01, $p = 0.001$). ABSI demonstrated moderate diagnostic accuracy (AUC = 0.676, 95% CI 0.636–0.714, $p < 0.001$) with a negative predictive value of 94.2%, outperforming WC (AUC = 0.583, $p = 0.002$) and BMI (AUC = 0.622, $p < 0.001$). DeLong's test confirmed that ABSI performed significantly better than WC ($p = 0.0158$) and BMI ($p = 0.0214$), while no significant difference was found between BMI and WC ($p = 0.0742$).

Conclusion: ABSI is an independent predictor of probable osteosarcopenia, outperforming BMI and WC. These findings suggest

its potential as a screening tool, though further research is needed to confirm clinical applicability.

P-1133

Can ultrasound-based forearm muscle thickness serve as a reliable predictor of body muscle mass, sarcopenia and frailty?

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Aim: Since sarcopenia and frailty are associated with adverse health outcomes in older adults and are closely related to each other, early detection is crucial. This study aims to evaluate whether forearm muscle thickness can serve as a predictive parameter for muscle mass indices and an early detection tool for sarcopenia and frailty.

Methods: Patients underwent a comprehensive geriatric assessment, muscle mass measurement via bioelectrical impedance analysis, and forearm muscle thickness (muscle thickness of the forearm-ulna (MTU), muscle thickness of the forearm-radius (MTR)) evaluation using ultrasound. Frailty status was determined using the Fried Frailty Phenotype (FFP).

Results: 104 patients aged 60 and older were included, of whom 60 (57.7%) were female. Sarcopenia was identified in 13 patients, while 12 were classified as frail. MTU correlated positively with appendicular skeletal muscle mass (ASM) ($r = 0.622$), fat-free mass (FFM) ($r = 0.575$), and handgrip strength (HGS) and negatively with FFP score ($r = -0.394$). MTR showed positive correlations with ASM ($r = 0.571$), FFM ($r = 0.544$), and HGS ($r = 0.464$). MTU and MTR differed significantly between sarcopenic and frail groups. In the univariate regression analysis, both MTU and MTR were significant predictors of sarcopenia (MTR: $\beta = -1.7$, $p = 0.032$; MTU: $\beta = -1.5$, $p = 0.006$) and frailty (MTU: $\beta = -1.82$, $p = 0.002$; MTR: $\beta = -1.6$, $p = 0.05$). However, after adjusting for confounders in the multivariate regression model, only MTU remained significant for frailty ($\beta = -2.65$, $p = 0.02$, 95% CI 0.01–0.66) and sarcopenia ($\beta = -1.4$, $p = 0.028$, 95% CI 0.07–0.85).

Conclusion: MTU may serve as a valuable marker for predicting whole body muscle mass indices, sarcopenia, and frailty in older adults.

P-1134

Changes in geriatric depression scale scores in relation to physical performance, inflammatory status, and hippocampal atrophy over a 7-year follow-up: data from the Pro.V.A. study

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Introduction: Depression in older adults is often undiagnosed due to subtle symptoms. Physical performance tests may help explore mental-physical health links. This study examined changes in

Geriatric Depression Scale (GDS) scores over 7-years in relation to physical performance, considering sex differences.

Methods: Data from the Progetto Veneto Anziani-Pro.V.A. cohort of Italians aged 65+ were analyzed. Baseline assessments included multimorbidity, frailty, physical performance (handgrip strength-HGS, gait speed, chair stand test), GDS scores, and inflammatory markers. Hippocampal atrophy was assessed in 759 participants. Physical performance and GDS were reassessed at follow-up. Changes in GDS were analyzed using linear mixed models. This study was conducted within the Next Generation EU-“Age-It” project, National Recovery and Resilience Plan (PNRR).

Results: Among 1429 participants (mean age: 73 ± 6 years; 794 women), physical performance correlated with GDS at baseline, independent of inflammation. In men with low inflammation, all tests correlated with GDS, whereas in women, only HGS and the chair test showed associations. With high inflammation, men’s GDS linked to HGS and the chair test, while in women, only the chair test remained significant. Longitudinally, gait speed and chair test changes correlated with GDS, but only the chair test remained significant across sexes. In those with low hippocampal atrophy, HGS and the chair test correlated with GDS, but no associations emerged in those with high atrophy. The chair test remained significant for women, regardless of atrophy.

Key conclusion: Physical performance relates to GDS scores, suggesting that monitoring physical function may support mental health in older adults.

P-1135

Muscle strength and tissue asymmetry changes over 5 years among older adults

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Background: The declines in muscle strength during aging process is linked to reductions in tissue integrity and underlying cellular processes. It suggests potential gender differences in these fundamental mechanisms. The current study investigates whether the decline in muscle strength over a 5-year period correlates with changes in tissue asymmetry and explores potential gender differences between men and women.

Methods: The longitudinal study comprised 3156 participants residing in Reykjavik, Iceland, with a baseline mean age of 74.9. The analysis included 1150 men and 1587 women ($n = 2737$). Tissue asymmetry, assessed through CT scans, was defined by differences between the right and left sides across 11 soft tissue composition parameters for fat, muscle, and connective tissue. Changes in leg strength and asymmetry parameters over 5 years were calculated by subtracting follow-up values from baseline. Linear regression analysis was performed to assess the association between changes of maximum knee extension strengths and changes in soft-tissue asymmetry over 5 years, adjusting for confounders by gender.

Results: In men, a decline in leg strength over 5 years was significantly associated with an increased asymmetry across five parameters (2 related to fat and 3 related to muscle ($p < 0.05$)). In women, associations were observed with an increased asymmetry parameters involving fat, muscle, and connective tissue ($p < 0.03$).

Conclusion: Gender-specific variations in asymmetry parameters highlight how fat and muscle composition in men uniquely contribute to leg strength changes over time. This emphasizes the need to consider gender-specific factors in understanding age-related muscle strength changes, informing targeted interventions for older adults.

P-1136

Predictive value of gait speed thresholds for mortality risk in older adults: insights from a prospective cohort study

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Introduction: Gait speed (GS) is crucial for assessing health and function in older adults, predicting frailty, disability, and mortality. Despite established associations between slower GS and increased mortality risk, optimal cut-off points remain debated across populations.

Methods: We studied 365 adults aged over 65 (mean age 72.5 ± 5.8 years) from two veterans' homes and a hospital outpatient department. GS was measured using a 6-m walk test, with mortality data collected until December 2024. Receiver operating characteristic (ROC) analysis identified 0.6 m/s as the optimal GS threshold for mortality prediction. Participants were classified into normal (≥ 0.6 m/s) and low (< 0.6 m/s) GS groups. Survival analysis and Cox regression models adjusted for covariates examined mortality risk.

Results: Twenty percent ($n = 76$) had low GS (< 0.6 m/s). They were older and more functionally dependent ($p < 0.001$). A 0.1 m/s decrease in GS correlated with higher mortality risk (HR: 1.17, $p = 0.04$). Kaplan–Meier curves showed significantly lower survival in the low GS group ($p = 0.02$), with an adjusted HR of 2.12 ($p = 0.05$) for mortality compared to the normal GS group.

Conclusion: Slower GS (< 0.6 m/s) robustly predicts mortality in older adults, independent of age and functional status. This underscores GS as a valuable prognostic tool for routine clinical use in identifying high-risk individuals. Future research should focus on interventions to improve GS and its impact on longevity.

P-1137

Comparing the predictive value of the SARC-F questionnaire and four-meter gait speed test with dynamometry for sarcopenia diagnosis

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Introduction: Sarcopenia is a geriatric syndrome that increases the risk of falls, immobility, and mortality. According to the European

Working Group on Sarcopenia in Older People, “probable sarcopenia” is defined by low muscle strength, measured by dynamometry. The SARC-F is a screening tool, while the four-meter gait speed (4mGS) is a test to assess physical performance. This study compared the predictive value of SARC-F and 4mGS with dynamometry, “the gold standard” for diagnosing probable sarcopenia, in a Geriatric Day Hospital.

Methods: A cross-sectional observational study was conducted, collecting demographic variables (age, sex) and results from dynamometry, SARC-F, and 4mGS. The following values were deemed pathological:

- Muscle strength: ≤ 27 kg for men and ≤ 16 kg for women.
- SARC-F ≥ 4 .
- 4mGS ≤ 0.8 m/s.

Results: Were included 206 patients (71.36% women, 28.64% men), with a mean age of 82 years (SD = 9.84). Sarcopenia was detected as follows:

- 31% by dynamometry, with an average of 26.26 for men (SD = 8.94) and 16.43 for women (SD = 7.18).
- 48.78% by SARC-F, with an average score of 3.40 (SD = 1.48).
- 90.73% by 4mGS, with an average speed of 0.53 m/s (SD = 0.12).

The positive predictive value (PPV) and negative predictive value (NPV) in relation to dynamometry were:

- SARC-F: PPV = 0.34, NPV = 0.72 (Kappa = 0.065).
- 4mGS: PPV = 0.32, NPV = 0.74 (Kappa = 0.158).

Conclusion: The utility of SARC-F and 4mGS in confirming sarcopenia is limited, but they can be useful for ruling it out during screening. These tools should be complemented with objective methods, including imaging studies or bioimpedance when possible, for an accurate diagnosis.

P-1138

Assessing the sensitivity and specificity of combining SARC-F and 4-m gait speed test for sarcopenia screening

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Introduction: Sarcopenia is a condition linked to increased morbidity and mortality, making early diagnosis essential. The European Working Group on Sarcopenia in Older People recommends assessing muscle mass, strength, and functionality, classifying sarcopenia as probable, established, or severe. The SARC-F questionnaire is commonly used for screening, it has limited sensitivity, and the 4-m gait speed test (4mGS) assesses functionality. This study aimed to evaluate the combination of these two methods to improve sensitivity in detecting sarcopenia.

Methods: A cross-sectional observational study was conducted with patients attending a geriatric day hospital, collecting: age, sex and results from SARC-F and 4mGS, with dynamometry used as the “gold standard” for probable sarcopenia.

The following values were considered pathological: muscle strength: ≤ 27 kg for men and ≤ 16 kg for women, SARC-F ≥ 4 , 4mGS ≤ 0.8 m/s.

Results: A total of 206 patients (71.36% women, 28.64% men) with a mean age of 82 years (SD = 9.84). Sarcopenia was detected as follows:

- 31% by dynamometry (mean: 26.26 for men [SD = 8.94] and 16.43 for women [SD = 7.18]).
- 48.78% by SARC-F (mean: 3.40 [SD = 1.48]).
- 90.73% by 4mGS (mean: 0.53 m/s [SD = 0.12]).

The sensitivity and specificity were:

- SARC-F: 52.54% and 54.96%;
- 4mGS: 91.53% and 10.69%;
- Combination of both tools: 91.53% and 58.02%, respectively.

Conclusions: The combination of SARC-F and 4mGS improves both sensitivity and specificity for sarcopenia screening. Due to their low cost and ease of implementation, these tools could be useful for the initial diagnosis of sarcopenia in clinical practice, especially when dynamometry is not available.

P-1139

Role of growth hormone resistance in IGF-I deficient sarcopenic patients

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Introduction: Insulin like growth factor I (IGF-I) plays a key role in the onset of sarcopenia. It is unclear whether the pituitary gland, the liver as the main source of IGF-I production, or a dysregulation of the hypothalamic-pituitary axis is responsible for low IGF-I serum levels in these sarcopenic patients.

Methods: Eighty patients with IGF-I deficient sarcopenia/probable sarcopenia were recruited for an IGF-I generation test. Sarcopenia was diagnosed according to the European Consensus definition (EWGSOP2). On four consecutive days patients received 0.4 mg growth hormone subcutaneously. Difference of IGF-I before and after the test was calculated. Patients with changes in IGF-I below 44.2% were regarded as growth hormone resistant. Further, in a subgroup of 17 patients the pituitary gland was stimulated with growth hormone releasing hormone (GHRH).

Results: Recruited patients had a mean age of 84 years. Forty-three of the patients were female. Regarding the change of IGF-I concentration, 48% of the patients were below an increase of 44.2%. In the GHRH-testing only one patient did not show an adequate stimulation of the pituitary gland.

Key conclusions: The pituitary gland seems to work adequately into old age. About one half of the patients have shown growth hormone resistance. All the other patients seem to suffer from a dysregulation of the hypothalamic-pituitary axis. These patients, who react adequately to growth hormone application could profit from a therapeutic treatment with growth hormone.

P-1140

Sex-specific predictive ability of SARC-F and SARC-CalF for ultrasound-based sarcopenia in older adults

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Introduction: The anterior thigh muscles are among the earliest affected in sarcopenia. This study evaluated the sex-specific predictive value of SARC-F and SARC-CalF in detecting sarcopenia, using ultrasound-derived anterior thigh muscle thickness (ATMT) as the reference.

Methods: This cross-sectional study included 347 older adults (227 women, 120 men) from a geriatrics outpatient clinic. Sarcopenia was defined as low handgrip strength plus a low anterior thigh muscle thickness index (ATMT/BMI). Participants completed SARC-F and SARC-CalF questionnaires using both standard (< 31 cm) and population-specific (< 33 cm) calf circumference cut-offs. Trained geriatricians performed anthropometric and ultrasound measurements. Screening performance was assessed via ROC curve analysis, and multivariate logistic regression was used to explore associations with sarcopenia.

Results: Sarcopenia prevalence was 21.3%. Affected individuals had smaller arm circumferences, slower gait speeds, and more frailty. SARC-F positivity was 21.9%, while SARC-CalF positivity was 11.8% (< 33 cm cut-off) and 35.4% (< 31 cm cut-off). SARC-F showed the highest diagnostic accuracy overall (AUC = 0.693) and in women (AUC = 0.708). Using the < 33 cm cut-off improved SARC-CalF sensitivity in women (72.09% vs. 58.11%) and the overall group (62.16% vs. 58.11%). In men, SARC-CalF < 33 had the highest specificity (73.03%), while SARC-F had the highest sensitivity (83.87%). Regression analysis identified older age, male sex, and frailty as independent predictors of sarcopenia, with SARC-F remaining the strongest screening tool.

Key conclusions: SARC-F demonstrated the highest overall diagnostic performance. Population-specific calf circumference thresholds improved SARC-CalF sensitivity, especially in women, supporting its use as a complementary tool.

P-1141

Sarcopenia in older CKD patients

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Introduction: Sarcopenia is a geriatric syndrome that is very common among chronic kidney disease (CKD) patients. 2024 KDIGO guidelines recommend sarcopenia identification as a modifier of CKD management. The aim of this study was to assess the prevalence of sarcopenia in CKD patients and correlates it with comorbidity index and other geriatric syndromes.

Methods: We conduct a multicenter cross-sectional study in 5 nephrology outpatient departments during 2024. All patients above 65 years old underwent a comprehensive nutritional and functional assessment. Sarcopenia was defined as SARC-F > 4. Tools used were Mini-nutritional assessment (MNA), Test up and go (TUG), Short Performance physical Battery (SPPB), Fried index (FI), Edmonton Frailty Scale and Clinical Frailty Scale. Charlson Comorbidity Index (CCI) was calculated.

Table 1:

Variable	Non-sarcopenic Mean (SD)	Sarcopenic Mean (SD)	t-value	df	p-value

Table abcdef continued

Variable	Non-sarcopenic Mean (SD)	Sarcopenic Mean (SD)	t-value	df	p-value
SARC-F (total)	0.76 (1.04)	6.57 (1.97)	− 32.47	282	< 0.001
SPPB (total)	8.93 (2.77)	2.70 (2.95)	17.85	281	< 0.001
Fried Phenotype	0.48 (0.86)	3.03 (1.28)	− 19.95	280	< 0.001
Clinical Frailty Scale	3.17 (1.07)	5.46 (1.21)	− 16.55	280	< 0.001
Edmonton	2.92 (2.07)	8.06 (2.96)	− 17.13	280	< 0.001
MMSE	26.80 (3.90)	17.95 (9.26)	11.17	281	< 0.001
MoCA	23.05 (5.68)	11.88 (8.53)	13.21	281	< 0.001
QoL	66.44 (18.49)	55.03 (23.30)	3.84	223	< 0.001
POS-R	2.25 (2.10)	4.38 (3.07)	− 6.91	281	< 0.001
MNA (total)	13.30 (1.38)	10.28 (3.35)	10.64	282	< 0.001
Albumin	3.86 (0.42)	3.54 (0.49)	5.35	239	< 0.001
eGFR	30.05 (12.06)	24.05 (8.34)	2.1	76	0.039
Hemoglobin	11.78 (1.71)	11.06 (1.57)	3.48	275	0.001
Charlson Index	8.19 (2.51)	10.10 (2.60)	− 6.05	278	< 0.001
Age	77.42 (7.29)	82.94 (6.68)	− 6.38	282	< 0.001

Results: 284 patients (pts) were evaluated: 158 (54.1%) pre-dialysis, 96 (29.4%) on dialysis and 47 (15.1%) on palliative care (PC). Mean age was 79.48 ± 7.55 years-old and 161 (55.1%) were man. 106 pts (36.3%) were sarcopenic, from whom the majority were CKD patients without renal replacement therapy (RRT) ($n = 45$, 42.5%), mainly those on stage G4 CKD ($n = 41$, 50%). From patients on stage G5, those under PC were the ones where sarcopenia was more prevalent ($n = 36$, 34%). An independent samples t-test was conducted to compare various clinical, functional, cognitive, nutritional, and laboratory variables between individuals with and without sarcopenia. The relationship between sarcopenia and several categorical variables was also explored using chi-square tests (Table 2). The results indicate that sarcopenia is significantly associated with gender, caregiver status, physical activity, and BMI classification.

Table 2:

Variable	Chi-square (χ^2)	p-value	Cramér's V
Sex	27.83	< 0.001	0.313
Caregiver status	57.472	< 0.001	0.45
Physical activity	29.298	< 0.001	0.321
BMI category	17.736	< 0.001	0.25

Discussion: This study identified significant differences between individuals with and without sarcopenia across multiple clinical, cognitive, functional, and sociodemographic variables.

Independent samples t-tests revealed that participants with sarcopenia had significantly worse scores in key domains. Specifically, they showed higher levels of frailty (SPPB, Fried Phenotype, Clinical Frailty Scale, Edmonton), reduced cognitive performance (MMSE, MoCA), poorer nutritional status (MNA), lower quality of life (QoL), and higher comorbidity burden (Charlson Index). Statistically significant differences ($p < 0.001$) were observed in most of these variables, with large effect sizes (e.g., SPPB: Cohen's $d = 2.10$; MoCA: $d = 1.45$).

Chi-square tests further identified significant associations between sarcopenia and several categorical variables. Sarcopenia was significantly more prevalent among women ($\chi^2 = 27.83$, $p < 0.001$), patients with caregivers ($\chi^2 = 57.47$, $p < 0.001$), physically inactive individuals ($\chi^2 = 29.30$, $p < 0.001$), and those with lower BMI ($\chi^2 = 17.74$, $p < 0.001$). These associations were of moderate strength (Cramér's V ranging from 0.25 to 0.45).

Conclusion: Sarcopenia is strongly associated with increased frailty, cognitive decline, malnutrition, reduced quality of life, and greater clinical vulnerability. It is also more common among women, patients with caregivers, and physically inactive individuals, and is linked to lower BMI. These findings highlight the importance of early detection and multidimensional interventions in populations at risk. Sarc-F is an easy tool to use regularly in nephrology consultations, since it takes less than 1 min. Diagnosis of sarcopenia may impact outcomes if an early intervention is guaranteed.

P-1142

Sarcopenia and sarcopenic obesity in older women with knee osteoarthritis

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The study aimed to assess the frequency of sarcopenia and sarcopenic obesity (SO) in postmenopausal women with symptomatic knee osteoarthritis (KOA).

Methods: We examined 155 women aged 50–89 years, divided into two groups: (1) healthy females (control group) and (2) patients with symptomatic KOA. The diagnosis of sarcopenia was confirmed using the EWGSOP2 criteria, sarcopenic obesity—ESPEN/EASO criteria. The results demonstrated that the subjects did not differ in age and body mass, but women with KOA had significantly higher BMI ($p = 0.01$). Obesity was present in 50% of patients with KOA and 27.3% of controls. Muscle strength and mass were significantly worse in women with KOA. 44.3% of KOA patients had decreased muscle strength according to hand dynamometry (31.8% in the control group) and 45.9% (31.8% in the control group, respectively) by the “sit-to-stand” test. The sarcopenia frequency did not differ between groups.

However, the SO frequency was significantly higher in women with KOA (21.3 and 11.4%). The frequency of sarcopenia increased with age (in patients with KOA, 5.4 and 20.8% for women aged 50–69 and 70–89 years old, respectively; in controls, 8.0 and 15.8%), while the incidence of SO significantly increased with age only in subjects with KOA (16.2 and 29.2%, respectively).

In conclusion, the frequency of sarcopenia does not differ in post-menopausal women, depending on the presence of KOA. However, the frequency of SO was significantly higher than in the control group, which may negatively impact the course of the disease and the quality of life of patients.

P-1143

Which adiposity indicator is independently associated with muscle strength in obese older adults?

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Introduction: Obesity negatively affects muscle health through various mechanisms. While several adiposity markers are used to assess obesity, data on which markers are independently related to muscle strength in obese elderly individuals is limited. Our study aimed to identify which adiposity markers are significantly and independently associated with muscle strength in this group.

Methods: This retrospective cross-sectional study included elderly patients who presented to an outpatient clinic at a university hospital and accepted comprehensive geriatric assessment. Obesity was defined by an increased body fat percentage according to bioelectrical impedance analysis. Adiposity markers used were body mass index (BMI), waist circumference (WC), waist circumference adjusted for weight (WCW), and body fat percentage. Muscle strength was measured using handgrip strength (HGS) with a dynamometer. Linear regression analysis was conducted to examine which adiposity markers were independently associated with muscle strength.

Results: A total of 277 obese elderly individuals (65% women, mean age 73.2) were included. After adjusting for confounders such as age, gender, smoking, dependency in activities of daily living, frailty, diabetes, and hypertension, only WCW and body fat percentage were independently associated with muscle strength (for WCW and body fat percentage, β and p values were -1.15 ; 0.02 and -0.71 ; <0.001 , respectively).

Key conclusions: Our findings suggest that among adiposity markers, only body fat percentage and WCW are significantly and inversely associated with muscle strength in obese individuals. These results support the use of WCW and body fat percentage instead of traditional BMI and WC in evaluating sarcopenic obesity. Further studies are needed to confirm this.

P-1144

SESAM: sonoelastography sarcopenia-associated muscle change

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Background: Sarcopenia, the loss of muscle mass and strength, is a growing health concern. Shear wave elastography (SWE) and B-mode ultrasound are potential diagnostic tools.

Methods: This cross-sectional study included 66 participants in three groups: older adults with and without sarcopenia and younger adults. Sarcopenia was diagnosed using EWGSOP2 criteria. The primary outcome was rectus femoris (RF) muscle stiffness in resting position measured by SWE. Additional B-mode measurements included muscle thickness, cross-sectional area, and pennation angle.

Results: Older adults with sarcopenia tended to have higher RF stiffness compared to non-sarcopenic older adults and younger adults with a mean (SD) 29 kPa (12), 23 (13), and 22 (5) respectively (Kruskal–Wallis $P = 0.06$, $n = 65$). In older adults, RF stiffness distinguished poorly between those with and without sarcopenia (AUC 0.67, 95% CI [0.50–0.84], $n = 43$).

All three B-mode ultrasound measurements were significantly higher in younger adults and non-sarcopenic older adults compared to those with sarcopenia (ANOVA $P < 0.001$, $n = 66$). Among older women, the cross-sectional area was an excellent distinguisher of sarcopenia (AUC 0.97, 95% CI [0.91–1.00], $n = 22$), but performed poorly for men. Conversely, in older men, the pennation angle was good at detecting sarcopenia (AUC 0.81, 95% CI [0.61–1.00], $n = 22$), but it showed poor discrimination in females.

Conclusion: SESAM results highlight the need for sex-specific sarcopenia assessment, as men and women may experience different declines in muscle quantity and quality. Larger studies are needed to confirm this and establish diagnostic thresholds.

P-1145

Shear wave elastography muscle mapping: assessing rectus femoris stiffness and sarcopenia components

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Background: Sarcopenia diagnosis relies on assessing muscle mass or quality. Ultrasound is a minimally invasive and accessible tool for muscle evaluation, but standardized protocols are needed for accurate assessments.

Methods: We assessed the rectus femoris (RF) in the dominant limb using ultrasound. Shear wave elastography (SWE) measured muscle stiffness, while B-mode ultrasound evaluated muscle thickness, pennation angle, and cross-sectional area at 25%, 50%, and 75% of the thigh length (from the greater trochanter to the proximal edge of the patella). Correlations between these parameters, muscle mass of the examined limb, and grip strength of the dominant hand were analyzed using Spearman's rank correlation.

Results: The study includes 16 participants (ongoing recruitment), 50% female, with an average age of 83 years (SD ± 6). RF stiffness averaged 16.4 kPa (± 9), 18.4 kPa (± 9), and 20.4 kPa (± 8) at 25%, 50%, and 75% of thigh length, respectively. In contrast, B-mode

ultrasound showed a pronounced decline in muscle parameters as measurements progressed distally.

At the 50% measurement point: RF stiffness had a weak negative correlation with grip strength ($r = -0.34$) and a moderate negative correlation with muscle mass ($r = -0.64$). The pennation angle had a strong correlation with grip strength ($r = 0.72$) but a low correlation with muscle mass ($r = 0.29$). Muscle thickness and cross-sectional area showed moderate to strong correlations with grip strength and muscle mass.

Conclusion: Ultrasound parameters are linked to muscle mass and quality. Further research is needed to refine examination protocols and establish clinically relevant thresholds.

P-1146

Lower and higher quintiles of BMI and waist are not associated with physical function in older Icelandic adults

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Background and aim: Body Mass Index (BMI) and waist circumference are indicators of body composition and have been linked to physical function in adults. High BMI, especially with excess fat, can reduce mobility, while central obesity is associated with poorer performance, including slower gait and reduced balance. Conversely, low BMI may signal sarcopenia. This study aimed to examine associations between indicators of body fatness and physical function in older adults (mean age 82 ± 6 years) using day-care services at nursing homes in Reykjavik, Iceland.

Methods: A cross-sectional study was conducted in 73 community-dwelling older adults (65.8% women; BMI = 28.2 ± 5.7 ; body fat% = 42.8 ± 9.0). Anthropometric measurements were taken, and physical function was assessed using the Short Physical Performance Battery (SPPB). Questionnaires were used to gather general background information.

Results: Women and men had similar BMI (28.7 ± 6.5 vs. 27.2 ± 3.8 kg/m²) and waist circumference (99 ± 15 vs. 101 ± 9 cm). However, women were more frequently represented in both the highest and lowest BMI and waist quintiles ($P = 0.006$). Mean unadjusted SPPB scores across BMI (7.9 ± 3.5 to 8.9 ± 2.7) and waist (6.9 ± 3.4 to 9.1 ± 1.7) quintiles showed no statistically significant differences or consistent patterns. Adjustments for age, gender, and medications did not change the results. Further analysis of individual SPPB components (balance, gait speed, chair stand) showed no associations with body fatness.

Conclusion: Poor physical function was common among older adults attending day-care services. However, at this advanced age, physical function no longer appears associated with body fatness, suggesting other factors such as disease, medications, or muscle quality may play a larger role.

P-1147

Muscle shape with 3D ultrasound and AI based segmentation: a novel marker for sarcopenia ?

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Sarcopenia has a major impact on the daily lives and independence of our patients. Clinical studies characterizing muscle impairment

related to sarcopenia have primarily focused on muscle mass. Fat infiltration of the muscle is becoming increasingly important. However, muscle shape, which appears to be an obvious parameter, has been left aside.

3D ultrasound allows for the measurement of muscle volume using manual segmentations but also enables visualization of the three-dimensional shape of the muscle. In this study, we aimed to classify hospitalized geriatric patients based on the shape of their rectus femoris muscle.

To do this, we relied on artificial intelligence to model normal muscle shapes, trained on a subgroup of young subjects and non-sarcopenic older adults according to the European definition. We then introduced an unsupervised anomaly detection method. Using a self-decoding strategy, we taught it a latent representation of muscles that allowed the shape of each muscle to be represented in a two-dimensional space. The results on a dataset of 103 segmented volumes indicate that our anomaly detection strategy perfectly discriminates between the muscles of young subjects, the muscles of non-sarcopenic older adults, and the muscles of sarcopenic older adults in this space, across multiple training/test pairs.

This method thus highlights, using a two-dimensional linear scale, the impact of sarcopenia on muscle shape.

P-1148

The association between non-high-density lipoprotein cholesterol to high-density lipoprotein cholesterol ratio (NHHR) and sarcopenia: a 4-year prospective cohort study

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Background: The ratio between non-high-density lipoprotein cholesterol and high-density lipoprotein cholesterol (NHHR) is a reliable marker for assessing the risk linked to lipid metabolism disorders. This study aims to assess the association between the NHHR and sarcopenia risk among middle-aged and older adults participating in the China Health and Retirement Longitudinal Study (CHARLS).

Methods: A multivariate logistic regression and a restricted cubic spline (RCS) model adjusted for associated factors were utilized to evaluate the correlation between baseline NHHR and the 4-year follow-up sarcopenia. Subgroup and sensitivity analyses were conducted to verify the robustness of the findings.

Results: The average age of the participants included in this study was 65.3 ± 5.1 years, and 890 individuals (52.41%) were male. Over a median follow-up period of 4.0 years, a total of 142 people (8.36%) were diagnosed sarcopenia. In adjusted Model 3, a higher NHHR was found to be significantly associated with the lower occurrence of sarcopenia (OR = 0.79, 95% CI 0.65–0.96). RCS analysis further identified a non-linear relationship between NHHR and sarcopenia. We determined an inflection point of 4.509 for the NHHR. Subgroup analysis indicated that sex and the numbers of comorbidities were the significant stratifying factors. The consistency of these findings across multiple sensitivity analyses suggest their robustness.

Conclusion: Higher NHHR was associated with a lower sarcopenia risk. NHHR may be a simple marker for predicting sarcopenia in Chinese middle-aged and older adults.

P-1149

Anti-sarcopenic effects of active vitamin D through modulation

of anabolic and catabolic signaling pathways in human skeletal muscle

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Introduction: The muscle-building and strengthening effects of the active form of vitamin D in humans remain unclear.

Methods: In this ancillary study of the Diabetes Prevention with active Vitamin D trial, we examined clinical and experimental aspects to investigate the effects and mechanisms of eldecalsitol, an active form of vitamin D, in preventing sarcopenia. We examined changes in molecules involved in muscle synthesis and degradation pathways in muscle samples from 32 participants before and after 1 year of eldecalsitol or placebo treatment. The protein levels of molecules involved in muscle synthesis and degradation pathways were examined using western blotting. Additionally, the skeletal muscle and body fat volumes were measured using bioelectrical impedance analysis with a body composition analyzer.

Results: We found that eldecalsitol treatment for 1 year resulted in higher phosphorylation levels of mammalian Target of Rapamycin (mTOR) and Forkhead Box Protein O1 (FOXO1) signaling pathways, which are associated with increased muscle mass and strength than those with placebo treatment. Body composition measurements at 1 year showed that the eldecalsitol group had significantly higher skeletal muscle mass (1.9% vs. − 3.4%, $p < 0.001$) and muscle strength (4.1% vs. − 0.7%, $p < 0.001$), and lower fat mass (− 3.2% vs. 1.8%, $p < 0.001$) than those in the placebo group.

Key conclusion: This study suggested that the active form of vitamin D regulates the protein synthesis and degradation pathways in human skeletal muscle and may help prevent sarcopenia. This study was registered at UMIN clinical trials registry, UMIN 000005394.

P-1150

Sarcopenia is not predictive of mortality, but impaired physical function is: an analysis of the KoGES ansung cohort

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Background: While numerous studies have identified sarcopenia as a predictor of mortality, community-based cohort studies in Korea in this area are scarce.

Aim: This study aimed to investigate the relationship among sarcopenia, its components, and mortality using data from a representative cohort in Korea.

Method: The study included 3235 participants (1361 men and 1874 women) from the 8th wave of the cohort. The participants were followed up to the 10th wave. Based on the definition suggested by the Asian Working Group for Sarcopenia, sarcopenia was defined when participants had low muscle mass and at least one of the following: weak grip strength or impaired physical function.

Results: The mean age at baseline was 68.4 years. A total of 179 participants died during follow-up. In a model adjusted for age and sex, sarcopenia was not found to be a predictor of mortality (HR,

1.325, 95% CI 0.846–2.077). When analyzing individual components of sarcopenia, low muscle mass was not identified as a risk factor, whereas weak grip strength and impaired physical function were significant predictors of mortality. Further analysis stratified by sex revealed that, in women, impaired physical function was the only significant predictor of mortality (HR, 2.429, 95% CI 1.354–4.355).

Conclusion: Muscle mass alone does not predict mortality; rather, a decline in muscle function plays a crucial role in predicting mortality. This study highlights the importance of focusing on muscle function rather than muscle mass when assessing mortality risk in older adults.

Short Poster Presentation

Sarcopenia

P-1151

Probable sarcopenia identified from handgrip strength in 2855 adult patients: disagreement between EWGSOP2 and Danish normative population cut-offs for low muscle strength

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Introduction: The EWGSOP2 algorithm recommends specific cut-offs for low handgrip strength (HGS) to identify people with “probable sarcopenia” while also recommends the use of local normative data [1]. Here, we compared the agreement between EWGSOP2-HGS cut-offs and Danish normative data to identify low muscle strength, i.e., probable sarcopenia, in hospitalized adult patients.

Methods: Low HGS according to EWGSOP2 (< 16 kg for women and < 27 kg for men) was compared with Danish age-decade and sex-specific normative data for reduced muscle strength (< -1 SD of average) (60–69 yrs: women < 21.8 kg, men < 37.1 kg; 70–79 yrs: women < 19.2 kg, men < 31.2 kg; 80–89 yrs: women < 16.2 kg, men < 25.5 kg; 90+ yrs: women < 12.4 kg, men < 14.7) [2].

Results: A total of 2855 patients (mean $\pm$ SD age of 78.6 ± 8.8 years, 1590 women, 1265 men) admitted to medical and surgical wards at a major university hospital over one year were included. HGS below EWGSOP cut-offs was present in 42% women and 46% men, respectively, while 47% and 51% had reduced muscle strength according to normative data. In patients aged 60–79y, probable sarcopenia was identified in 33% women and 25% men, whereas

55% and 44% had reduced muscle strength, respectively. Contrary, among those 80 years or older, 58% women and 65% men had probably sarcopenia, while 50% women and 46% men had reduced muscle strength.

Key conclusions: EWGSOP2-HGS cut-offs potentially underestimate probable sarcopenia in patients aged 60–79 years compared to normative data, while the opposite trend appears for patients 80 years and older, especially so in men. Findings suggest that the disagreement between the two cut-off methods needs further validation to establish more precise cut-offs.

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Poster

Sarcopenia

P-1152

Biological age-acceleration in relation to muscle mass, strength and function: findings from the Hertfordshire Cohort Study

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Introduction: Sarcopenia, the accelerated loss of muscle mass, strength and function with age, is associated with adverse health outcomes. DNA methylation accumulates across life and age-acceleration (extent to which an individual is biologically older than their chronological age) could potentially predict individuals at high sarcopenia risk. We examined biological age-acceleration measures in relation to sarcopenia components in a community-dwelling cohort.

Methods: Overall, 331 participants from the Hertfordshire Cohort Study were analysed. At baseline (1998–2004), participants underwent health assessments and provided blood samples. At follow-up (2011–12), appendicular lean mass (ALM) index was ascertained using DXA; muscle strength by grip dynamometry; and gait speed over 2.4 m. DNA was extracted from peripheral blood leukocytes and DNA methylation at CpG sites was measured using the Infinium Human Methylation Beadchip arrays. Age-acceleration measures (PCPhenoAge and bAge) were ascertained, and examined in relation to grip strength, gait speed and ALM index using sex-stratified linear regression. Baseline age, follow-up time, height and BMI were included as adjustments.

Results: At baseline, mean (SD) age was 65.1 (2.8) years. Among men, greater age-acceleration was related to lower grip strength; for both age-acceleration measures, the standard deviation (SD) difference in grip strength per SD increase in age-acceleration was -0.16 (-0.31, -0.01), $p = 0.04$. Associations for gait speed and ALM index were weak among men and women ($p > 0.25$ for both age-acceleration measures).

Conclusions: Greater age-acceleration was related to lower grip strength among men, whereas associations regarding gait speed and ALM index were weak among both sexes. These findings require further investigation in larger cohorts.

P-1153

Cardio-sarcopenia as a geriatric syndrome

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Sarcopenia is characterized by the progressive loss of muscle mass, strength, and function in older adults, significantly impacting their health and quality of life. In the context of heart failure (HF), this degeneration is accelerated, leading to the development of “cardiosarcopenia”. The prevalence of HF increases with age, from 1% in individuals under 55 to over 10% in those over 70.

This review synthesizes current literature on sarcopenia and HF in individuals over 65, with a search of major databases from inception to March 2025. The aim is to highlight diagnostic challenges and therapeutic approaches.

Sarcopenia exacerbates HF symptoms and is associated with poor outcomes. Inactivity, oxidative stress, and malnutrition in HF can accelerate sarcopenia. Hand grip strength (HGS) is an effective and accessible screening tool to screen for cardiac sarcopenia. Resistance training (RT) and adequate protein intake remain the primary strategies for managing sarcopenia. Aerobic exercise, in conjunction with RT, enhances cardiovascular capacity. First-line HF medications may indirectly benefit muscle health by improving circulation and managing symptoms. Personalized interventions based on multiomic data, alongside these approaches, could slow sarcopenia progression and reduce inflammation in muscles.

Cardio-sarcopenia poses a clinical challenge requiring a multidisciplinary approach to address both muscle loss and HF. Personalized interventions can improve health outcomes and quality of life in the aging population, but further research is warranted to optimize these strategies.

P-1154

An interim analysis of the impacts of 4-months Rapamune therapy (a mechanistic target of rapamycin complex 1 (mTORC1) inhibitor) upon muscle physiology in older humans

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Introduction: Sarcopenia, characterized by age-related declines in muscle mass and function, poses significant health risks in older adults, leading to reduced mobility, frailty, and diminished quality-of-life (1). The mechanistic target of rapamycin complex 1 (mTORC1), is a master regulator of muscle mass that becomes hyperactivated in ageing muscles (2), leading to impaired proteostasis (3). Indeed, animal studies show that suppression of the mTORC1 pathways can mitigate aspects of sarcopenia (4). We investigated the impacts of Rapamune therapy on skeletal muscle physiology under both rested and exercised conditions in humans.

Methodology: Thirteen male participants (64 ± 6 y, BMI: 26 ± 2 kg/m²) were included in this analysis following ethical approval (FMHS 90-0820) and clinical trials registration (NCT05414292). Exclusion criteria were cardiovascular,

cerebrovascular, respiratory, metabolic, neurological, and musculoskeletal conditions, in addition to clinical contraindications to Rapamune (e.g., immunosuppression). Participants were randomly assigned to either: 'Rapamune' (rapamycin) ($n = 7$) receiving 1 mg (pill form) daily, or placebo ($n = 6$) (a lactose pill). The intervention lasted 4-months, with participants undergoing unilateral resistance exercise training (3x/week, knee-extension with the dominant leg, 75% 1-repetition maximum). Muscle architecture [non and exercised-legs] of the vastus lateralis (VL) was assessed by ultrasonography (cross-sectional area (CSA) and muscle thickness (MT)) before and after the intervention. Strength was evaluated by maximum voluntary contraction (MVC) of the knee extensors. Data were analysed by ANOVA; $p < 0.05$ was considered significant.

Results: In the untrained legs, no significant changes in MT were found in either the Rapamune (2.44 vs 2.40 cm, $p = 0.86$) or placebo groups (2.18 vs. 2.09 cm, $p = 0.624$) over the 4-month intervention period. However, when examining CSA, the Rapamune group exhibited a significant increase over the 4-month period (26.64 vs. 29.19 cm², $p = 0.01$), while no significant changes were observed in the placebo group (22.49 vs. 23.80 cm², $p = 0.29$). In-keeping with this, MVC increased in the Rapamune untrained legs (374 vs. 464 N, $p = 0.007$), while no significant changes were observed in the placebo untrained legs (392 vs. 400 N, $p = 0.75$). In the trained legs, there were no changes in MT in either the Rapamune (2.59 vs 2.67 cm, $p = 0.53$) or placebo (2.21 vs. 2.30 cm, $p = 0.43$) groups over the 4-month intervention. Similarly, no significant differences were found in CSA in either the Rapamune (27.9 vs. 29.4 cm², $p = 0.09$) or placebo group (23.2 vs. 24.2 cm², $p = 0.34$), albeit with a tendency for Rapamune to increase muscle CSA ($p < 0.1$). MVC increased in the Rapamune group only (349 vs. 489 N $p = 0.003$), (placebo: 393 vs. 426 N, $p = 0.63$).

Conclusion: Rapamune may improve both muscle dimensions and function in trained and untrained states. This work appears to substantiate the potential benefits of dampening mTORC1 signalling to mitigate age-related neuro/muscular declines under rested and exercised conditions. Ongoing research will explore larger sample sizes, mechanisms, and clinically important outcomes, such as mobility and balance. Diversifying ethnicity and sex of participants in order to validate Rapamune's therapeutic potential for sarcopenia treatment are also key next steps.

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P-1155

Handgrip strength and sarcopenia assessment using two methods: associations with in-hospital mortality in older adults

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Background: Handgrip strength (HGS) is a key diagnostic tool for sarcopenia, yet the comparative prognostic value of the Jamar[®] dynamometer and Martin[®] vigorimeter in hospitalized older adults remains unclear.

Methods: This prospective cohort study included 376 hospitalized older adults (mean age: 82.7 years) across acute, rehabilitation, and long-term care wards. HGS was assessed using both the dynamometer and vigorimeter, applying two sets of cut-offs per instrument. Sarcopenia was confirmed using bioelectrical impedance analysis to calculate the fat-free mass index (FFMI), with four diagnostic criteria combining HGS and FFMI thresholds. Associations between HGS, sarcopenia, and mortality were evaluated using logistic regression and Cox proportional hazards models, with Kaplan–Meier curves illustrating survival differences.

Results: Higher HGS measured by the vigorimeter was independently associated with reduced in-hospital mortality (OR 0.96, 95% CI 0.93–0.98, $p = 0.001$), whereas no significant association was found for dynamometer-measured HGS. Confirmed sarcopenia was significantly associated with mortality for two diagnostic criteria (criterion 2: OR 1.77, 95% CI 1.01–3.10, $p = 0.047$; criterion 4: OR 1.76, 95% CI 1.01–3.07, $p = 0.048$), although no significant association was observed with time-to-mortality. Kaplan–Meier curves demonstrated significant survival differences only for vigorimeter-based HGS cut-offs ($p = 0.04$). Male sex and falls during hospitalization were associated with increased mortality, while admission to rehabilitation or long-term care wards was associated with reduced mortality.

Conclusion: HGS measured by the Martin[®] vigorimeter demonstrated superior prognostic value compared to the Jamar[®] dynamometer in predicting in-hospital mortality among hospitalized older adults. These findings underscore the clinical relevance of optimizing sarcopenia assessment methods to improve risk stratification in geriatric care settings.

P-1156

Validation of the in-grip dynamometer as a reliable alternative to the jamar model for measuring grip strength

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Introduction: Handgrip strength is crucial for diagnosing sarcopenia and assessing muscle function in older adults. The Jamar dynamometer is widely used, supported by robust epidemiological and clinical data. However, alternatives such as the In-Grip, a digital dynamometer with stable calibration and an ergonomic grip, have emerged. This study aimed to validate the accuracy, reliability, and diagnostic capacity of the In-Grip dynamometer in comparison to the Jamar model.

Methods: A cross-sectional, randomised, single-centre study was conducted in 415 community-dwelling older adults (mean age: 75.3 ± 6.5 years). Hand grip strength was assessed using both devices according to the Southampton protocol. Correlation and agreement (Bland–Altman and ICC) with the reference dynamometer (Jamar) were analysed, as well as diagnostic capacity using ROC

curves to determine sensitivity, specificity and predictive values for low handgrip strength based on EWGSOP2 criteria.

Results: The In-Grip dynamometer showed strong correlation with the Jamar dynamometer ($r = 0.95$) and excellent agreement (ICC = 0.94), intraobserver (ICC = 0.96), and interobserver (ICC = 0.96), with a mean bias of -0.37 kg. Its diagnostic power was high (AUC women = 0.968; AUC men = 0.982). Optimal cut-offs values were ≤ 18 kg for women (sensitivity = 92.6%, specificity = 90.5%, PPV = 78.5%, NPV = 97%) and ≤ 27.5 kg for men (sensitivity = 96%, specificity = 93%, PPV = 88.9%, NPV = 97.6%).

Conclusion: The In-Grip dynamometer demonstrated excellent performance in measuring grip strength in older adults, showing a high correlation, strong agreement, and high diagnostic accuracy according to EWGSOP2 criteria. Consequently, the In-Grip dynamometer can be used as a direct alternative to the Jamar model.

P-1157

Comparison between Eforto® and Jamar dynamometers: accuracy and validity of grip force measurement

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Introduction: Grip strength is key to diagnosing sarcopenia and assessing muscle function in older adults. While the Jamar dynamometer provides the most robust epidemiological and clinical data, digital devices such as Eforto® also assess endurance. However, its accuracy, reliability and diagnostic performance requires validation before clinical use.

Methodology: A cross-sectional, randomised trial involving 415 community-dwelling older adults (mean age: 75.3 ± 6.5 years) was conducted according to the Southampton protocol. Lower limb strength and physical performance tests were assessed. Correlation and agreement between Eforto® and the Jamar dynamometer were analysed using Bland–Altman plots and ICC, while diagnostic accuracy was assessed using ROC curves.

Results: Eforto® dynamometer correlated strongly with Jamar ($r = 0.82$, $p < 0.001$; ICC = 0.80). Bland–Altman showed a magnitude-dependent bias, with overestimation at low values and underestimation at high values. Eforto® showed high diagnostic accuracy for low grip strength (AUC: 0.92 women, 0.91 men). Optimal cut-offs values: ≤ 16.2 kg in women (sensitivity = 86.8%, specificity = 82.2%) and ≤ 23.2 kg in men (sensitivity = 89.3%, specificity = 85%). The predictive values were high (PPV = 68.1%, NPV = 93.4% women; PPV = 80.6%, NPV = 91.9% men). Endurance correlated moderately with the Chair-Stand Test ($r = 0.64$, $p < 0.001$), showing a stronger association with this test than with other functional tests.

Conclusions: Eforto® dynamometer is valid and reliable for grip strength assessment in older adults, with high diagnostic accuracy but a magnitude-dependent bias. A correction equation is required. Its relationship with the Chair-Stand Test suggests value in the assessment of muscle fatigue.

P-1158

Muscle volume as a key predictor of COVID-19 mortality: a CT-based body composition analysis

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Introduction: COVID-19 is an acute lung disease caused by SARS-CoV-2 that quickly developed into a global pandemic with significant socioeconomic impact. This study investigated whether obesity or sarcopenia has a stronger influence on COVID-19 mortality. To avoid the burden of Dual-Energy X-ray Absorptiometry (DXA) on patients and healthcare systems, a pretrained deep learning model was used to assess body composition from routine thoracic CT scans.

Methods: The cohort included 165 patients (mean age 69 ± 8 years, 37.0% mortality) from the National Pandemic Cohort Network (NAPKON). Body composition was analyzed using CT imaging to measure muscle, bone, total fat, and intramuscular fat volumes. Binary logistic regression was performed to examine the association between obesity, sarcopenia, and mortality.

Results: Significant differences were found between survivors and non-survivors in muscle volume ($p = 0.015$) and intramuscular fat volume ($p = 0.027$). Among the body composition parameters, muscle volume had the strongest predictive value for mortality in the logistic regression model, even after adjusting for sex, age, diabetes, chronic lung disease, chronic kidney disease, and arm position in CT imaging (odds ratio = 0.540).

Conclusion: This study is the first to identify muscle volume, derived from routine CT imaging, as a key predictor of survival in COVID-19 patients, particularly when normalized to body weight. These findings highlight the potential of CT-based body composition analysis in risk stratification and clinical decision-making for COVID-19 patients.

P-1159

Denosumab induced hypocalcaemia

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Introduction: Denosumab is commonly given to patients for treatment of osteoporosis, and is regarded as a safe drug in the outpatient setting. There have been reports of refractory hypocalcaemia associated with its use. Unlike bisphosphonates, it is not renally excreted, however patients with CKD and other conditions that predispose to hypocalcaemia are at higher risk for hypocalcaemia following denosumab administration. The prevalence of hypocalcaemia is thought to be 6%, however just 1% experience severe hypocalcaemia[1].

Methods: A retrospective chart review was undertaken in a model three hospital for the year 2024, of inpatient prescribed denosumab.

Results: 29 patients were prescribed denosumab as inpatients. Average age was 81.1 All patients had an initial calcium level recorded. 13.7% were hypocalcaemic ($n = 4$) prior to administration. 75% of those hypocalcaemic prior to administration had hypocalcaemia at the 2 week review. 27.6% ($n = 8$) had creatinine clearance < 30 mmol/l. 50% of these were hypocalcaemic post administration, in comparison to 23.8% of those with creatinine clearance > 30 mmol/l. 34.48% ($n = 10$) had no repeat biochemistry undertaken. 68.96% had no Vitamin D checked prior to administration. 10.34% ($n = 3$) were Vitamin D deficient.

Conclusion: This study shows an increase in prevalence of hypocalcaemia post administration of denosumab, in comparison to prior studies. Managing osteoporosis in patients with CKD is challenging. Patients should be optimized with calcium and vitamin D supplements before starting pharmacologic treatment. Calcium levels should be routinely checked post administration, along with ongoing monitoring of renal function. Additionally, patients should be educated on recognising the symptoms of hypocalcaemia, emphasising its potential severity.

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P-1160

Association between quadriceps muscle volume and physical performance in sarcopenic and non-sarcopenic geriatric outpatients: study protocol for a cross-sectional study

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Introduction: Sarcopenia, a progressive skeletal muscle disorder, is a major contributor to fall risk in older adults. The European Working Group on Sarcopenia in Older People 2 (EWGSOP2) defines muscle quantity using appendicular lean mass (ALM). When muscles deteriorate, the quadriceps femoris (QF) is often one of the first muscle groups to weaken; therefore, ALM may not adequately capture this site-specific sarcopenia. As QF is critical for mobility, its muscle volume (QFMV) may serve as a more sensitive marker for early sarcopenia.

This study investigates the association between QFMV and physical performance in sarcopenic and non-sarcopenic geriatric outpatients using ultrasound-based methods.

Methods: This cross-sectional study recruited participants from the Falls Outpatient Clinic Funen, at Svendborg Hospital, Denmark, between 01.10.2024 and 31.12.2024.

Inclusion criteria were age > 65 years and risk of falls. Exclusion criteria were moderate to severe dementia and acute illness.

QFMV and ALM were assessed using validated ultrasound prediction models. Sarcopenia was diagnosed according to EWGSOP2 criteria. Muscle strength was measured via hand-grip strength and the 5-times sit-to-stand test while physical performance was evaluated using the Short Physical Performance Battery.

Results: A total of 114 participants (67% female, median age 80, IQR 75–85) were included (participation rate 97%). Data analysis is ongoing.

Key conclusions: By investigating QFMV using ultrasound-based methods and its association with physical performance in older adults, this study aims to provide insights into a more sensitive, patient-near point-of-care approach for earlier diagnosis and monitoring of sarcopenia.

P-1161

Expanding the scope of the functional reach test index: could it detect sarcopenia in older adults?

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Objective: The primary aim of the study is to evaluate whether the functional reach test index (FRTI) used to assess balance and risk of falls is an independent parameter associated with sarcopenia in older adults and to determine the threshold value that predicts different sarcopenia definitions.

Materials and methods: In this cross-sectional study, patients aged 60 years and older who visited a university hospital on an outpatient basis were included. FRT was performed by measuring the maximum distance the participants can reach forward while standing in a fixed position without losing balance. Since FRT results are influenced by height, the FRT measurement was adjusted for height to obtain an FRTI. The definitions of probable and confirmed sarcopenia were used: a Jamar hydraulic hand dynamometer was utilized to assess handgrip strength, and bioelectrical impedance analysis was employed for muscle mass evaluation. Baseline demographic and clinical data were recorded, and comprehensive geriatric assessment was conducted for all participants. The relationship between low FRTI and sarcopenia definitions was evaluated using uni- and multivariate analyses. ROC analysis was performed to determine the optimal FRTI values that predict sarcopenia.

Results: Out of 411 participants, 70.3% (n = 289) were female (mean age of 74.1 ± 6.7 years). Mean FRTI was 0.182 ± 0.03 cm/cm, with no significant difference between sexes. FRTI < 20th percentile (< 0.152 cm/cm) was considered low FRTI. After adjustment for age, sex, BMI, number of comorbidities, and a list of geriatric syndromes, low FRTI was independently associated with both probable and confirmed sarcopenia (OR = 2.32 (95% CI 1.05–5.12) and OR = 3.11 (1.35–7.15), respectively). The optimal FRTI threshold for predicting probable sarcopenia was determined as ≤ 0.180 cm/cm (AUC = 0.789; sensitivity = 87%, specificity = 56.7%), while the threshold for predicting confirmed sarcopenia was ≤ 0.173 cm/cm (AUC = 0.795; sensitivity = 78.9%, specificity = 66.5%).

Conclusion: FRTI, used for balance and fall risk assessment, can simultaneously evaluate sarcopenia risk in older adults. Thus, in settings with time or equipment constraints for sarcopenia assessment, individuals at risk of falls can be identified more effectively.

P-1162

Serum testosterone is positively associated with muscle strength and mass in middle-aged men from the United States

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Introduction: Maintaining skeletal muscle health is crucial for preserving autonomy in older adults, as sarcopenia, the progressive decline in muscle mass and strength, begins to manifest around the 5th decade of life. Testosterone, a vital hormone, decreases by 0.4% to 2% each year after the age of 30, possibly linked to sarcopenia's onset. This study investigates the association between testosterone levels with handgrip strength (HGS) and skeletal muscle index (SMI) in men aged 40–49 and 50–59 years.

Methods: Data were drawn from multiple cycles of the National Health and Nutrition Examination Survey (NHANES): 2011–2016 and 2021–2023 for testosterone, 2001–2018 for SMI, and 2011–2014 for HGS. Relationships were evaluated using linear and logistic regression models, adjusted for factors such as age, body mass index, ethnicity, education, and comorbidities. The analysis compared two age groups, 40–49 and 50–59, with a total sample of 2139 men.

Results: In adjusted models, testosterone showed a positive association with SMI in men aged 40–49 ($b = 0.001$, $p < 0.01$), while in those aged 50–59, it was linked to both HGS ($b = 0.005$, $p < 0.01$) and SMI ($b = 0.001$, $p < 0.01$). Elevated testosterone increased the likelihood of higher HGS in the older group (odds ratio (OR): 1.93, 95% CI 1.30–2.84, $p < 0.01$), whereas lower levels decreased HGS odds (OR: 0.52, 95% CI 0.35–0.77, $p < 0.01$).

Key conclusions: The association between testosterone and muscle health may be intensified with age in American men aged 50–59 years.

P-1163

Link of muscle strengthening activities with muscle mass, strength and performance in adults over 50 years of age

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Introduction: Muscle-strengthening activities (MSAs) may offset age-related declines in muscle mass, strength, and function, though their effects could vary by age. This study investigated the connection between MSAs and knee extension strength (KES), gait speed (GS), and skeletal muscle index (SMI) in adults aged 50 and older.

Methods: Data were collected from the 1999–2018 National Health and Nutrition Examination Survey. KES and GS were tested in 2169 participants, and SMI was measured in 765 using dual-energy X-ray absorptiometry. MSE frequency was self-reported and split into ≥ 8 or < 8 sessions/month. Linear and logistic regressions, adjusted for demographic and health factors, assessed links, with analyses split by age: 50–64 ($n = 1126$) and ≥ 65 ($n = 1043$).

Results: In the 50–64 age group, MSAs were tied to faster GS ($\beta = 0.24$ m/s, 95% CI -0.42 to -0.07 , $p < 0.01$) and greater KES ($\beta = 31.7$ Nm, 95% CI 18.9–44.5, $p < 0.01$). Logistic regression showed MSAs lowered odds of slow GS (OR 0.61, 95% CI 0.43–0.87, $p < 0.01$) and raised odds of high KES (OR 1.92, 95% CI 1.27–2.89, $p < 0.01$). In those ≥ 65 , these associations diminished after adjustments. SMI showed no consistent link with MSAs in either group. Higher MSA frequency (≥ 8 sessions/month) primarily benefited the younger group.

Key conclusions: MSAs enhance lower body strength and function in middle-aged adults but not older ones. Early, tailored resistance training may support healthy ageing to mitigate sarcopenia-related decline.

P-1164

Psoriatic arthritis and sarcopenia in elderly patients

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Introduction: Psoriatic arthritis (PsA) is a chronic inflammatory disease affecting joints and entheses, frequently leading to sarcopenia. Sarcopenia, characterized by progressive muscle loss and functional decline, impacts mobility and quality of life, particularly in elderly PsA patients. The relationship between inflammation, disease activity, and sarcopenia remains insufficiently studied.

Objective: This study evaluates sarcopenia prevalence in elderly PsA patients and its association with inflammation, disease activity, and functional impairment.

Materials and Methods: A cross-sectional study included 174 elderly PsA patients (≥ 65 years; 67.8 ± 2.5 years) diagnosed using CASPAR criteria. Sarcopenia was assessed per EWGSOP2 guidelines, including:

- Muscle strength: Handgrip dynamometry.
- Muscle mass: Bioelectrical impedance analysis (BIA).
- Physical performance: 4-m gait speed test.

PsA activity was evaluated using DAS28-CRP and ASDAS-CRP. Inflammatory markers CRP, IL-6, and TNF- α were measured. Functional impairment was assessed with HAQ-DI.

Results:

- Sarcopenia prevalence: 35.6% ($n = 62$), higher in patients with moderate-to-severe PsA ($p < 0.01$).
- Sarcopenic patients had higher IL-6 and CRP levels ($p < 0.05$).
- Handgrip strength and gait speed negatively correlated with DAS28-CRP ($r = -0.41$, $p = 0.002$).
- Multivariate regression analysis identified ASDAS-CRP and IL-6 as independent predictors of sarcopenia ($R^2 = 0.48$, $p < 0.001$).
- Sarcopenia was linked to higher disability (HAQ-DI, $p < 0.01$) and increased fall risk (OR = 2.3, $p = 0.005$).

Conclusions: Sarcopenia is common in elderly PsA patients, associated with inflammation, disease activity, and disability. Early screening, rehabilitation, and anti-inflammatory therapy are crucial to improving outcomes.

P-1165

Threshold values for L3 vertebra skeletal muscle and psoas muscle index measurements adjusted for body mass index

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Introduction: Sarcopenia is a progressive and generalized skeletal muscle disorder that leads to falls, fractures, and disability, reducing quality of life. Computed tomography (CT) is the gold standard for

muscle mass assessment. L3-level measurements strongly correlates with total body muscle. Reliable CT-based cutoff values for low muscle mass vary across populations. This study aims to determine BMI-adjusted cutoff values for skeletal muscle index (SMI) and psoas muscle index (PMI) at the L3 level in the Turkish population.

Methods: The study included healthy liver donors aged 18–40 years from Istanbul University Transplantation Center (June 2010–April 2018). Preoperative CT images were analyzed to measure L3-level skeletal muscle area (SMA) and psoas muscle area (PMA), adjusted for BMI to calculate SMI and PMI. Cutoff values were determined using the 5th percentile and mean minus two standard deviations (Mean -2SD) methods.

Results: The study population consisted of 482 individuals with a mean age of 28.8 ± 5.9 years, of whom 55.6% were male. In sex-specific analyses, the 5th percentile cutoff values for SMI and PMI were calculated as 4.87 and 0.65 for females and 3.24 and 0.36 for males, respectively. Using the mean -2SD method, the SMI and PMI cutoff values were 2.69 and 0.25 for males and 4.67 and 0.55 for females, respectively.

Conclusions: This study established cutoff values for BMI-adjusted SMI and PMI based on CT images. Prospective studies are needed to validate the effectiveness of these cutoff values in predicting mortality and other complications associated with low muscle mass.

P-1166

Geriatrics experts approach muscle ultrasound: reliability and feasibility feedbacks from the european academy for medicine of ageing (EAMA)

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Introduction: Although muscle ultrasound (MU) for sarcopenia evaluation in older patients has proven to be promising, lack of its methodological standardization, need for ultrasound expertise, and availability of ultrasound equipment make its use unusual for this purpose. Numerous experts in geriatric medicine are collaborating in the EAMA, with varying levels of expertise in ultrasound practice and broad knowledge of sarcopenia's diagnostic implications. The aim of our work is to evaluate reliability and feasibility of MU as performed by experts in geriatric medicine, with low or no expertise with this technique, contextually assessing both their preliminary level of knowledge and the impressions derived from practice.

Methods: During the last session of the current EAMA course, participants will undergo a preliminary survey on their MU knowledge. Following this, they will receive a brief training on this technique and, subsequently, will practice it on volunteers. Muscle thickness and cross-sectional area of the rectus femoris muscle will be measured three times each. Finally, participants will be asked to answer a second questionnaire concerning their impressions of the practice.

Results: Obtained repeated measurements from a fair number of raters, will allow us to calculate intrarater and interrater reliability; the time taken for the two measurements will be registered as well.

Key conclusions: Reliability on obtained measurements, time taken to carry them out, and participants' opinions, also in relation to their level of knowledge, will allow to gain understanding of this technique's feasibility in geriatric clinical practice.

P-1167

Muscle ultrasound in sarcopenia evaluation (MUSE): a collaborative project born within the European Academy for Medicine of Ageing

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Introduction: Muscle ultrasound (MU) has emerged as a valuable tool in the evaluation of sarcopenia in older people. Despite the lack of standardising methodological criteria, a moderate to high diagnostic accuracy and an excellent intra- and inter-rater reliability have already been proved, making it a promising method for the integration in clinical practice. The aim of our work is to structure a scientific pathway that can lead to a standardised methodological approach to MU in sarcopenia evaluation.

Methods: For the first project's phase, we constructed a questionnaire devoted to collect the current methodological status of MU in sarcopenia evaluation in older people; after the approval of the scientific committee, this survey will be internationally conducted through the EuGMS network. Based on the survey results, the second phase will aim to identify potentially standardisable MU procedures, as well as, in an expert meeting which will be held in Parma, to test their feasibility/reliability and to discuss/select items for the third phase: a Delphi process, aiming to reach consensus on the operative standard procedure for MU in sarcopenia evaluation.

Results: Awaiting approval by the EuGMS Scientific Committee and the survey distribution, we are preparing the expert meeting that will be held in Parma.

Key conclusions: We aim to reach the consensus on theoretical and methodological aspects of MU in sarcopenia evaluation. This step is essential to bridge the gap in study homogeneity and allow the production of high-level evidence in order to make this promising technique pivotal for the sarcopenia diagnostic pathway.

P-1168

Muscular ultrasonography in morphofunctional geriatric assessment in Lanzarote, Canary Islands

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Introduction: Muscular ultrasonography is a technique that allows for the assessment of both the amount and quality of muscle in specific body regions. Malnutrition in the elderly population has become an endemic condition; early diagnosis and treatment can positively influence the progression of the disease. Identifying patients at risk and initiating nutritional support and exercise early have been associated with improved outcomes, including a reduction in complications and an enhancement in quality of life.

Methods: An observational study was conducted from January to March 2025 at the morphofunctional geriatric outpatient clinic. The inclusion criteria for patients were the presence of malnutrition, as detected by a nutritional screening test, and mild or no cognitive impairment. Anthropometric measurements, bioelectrical impedance analysis (BIA), hand-grip strength, and muscle ultrasound evaluations were performed.

Muscular ultrasonography of the quadriceps rectus femoris (QRF) in the right lower extremity was conducted using a 5–12 MHz multi-frequency linear matrix probe while the patient was in a supine position.

Results: A total of twenty patients were assessed over the course of three months. Three of them had presarcopenia, eleven sarcopenia, and six severe sarcopenia. Nutritional supplements and exercise were prescribed based on their functional capabilities.

Conclusions: Nutritional assessment cannot be based solely on anthropometric measurements; it should be supplemented with evaluations of body composition and functionality to provide a more accurate diagnosis and monitoring.

P-1169

11-Beta-hydroxysteroid dehydrogenase type 1 (HSD11B1) gene expression in muscle is linked to reduced skeletal muscle index in sarcopenic patients

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Introduction: Glucocorticoids play a significant role in metabolic processes and pathways that impact muscle size, mass, and function. The expression of 11-beta-hydroxysteroid dehydrogenase type 1 (HSD11B1) has been previously described as a major regulator of skeletal muscle function in glucocorticoid-induced muscle atrophy and aging humans. Our study aimed to investigate glucocorticoid metabolism, including the expression of HSD11B1 in skeletal muscle, in patients with sarcopenia.

Methods: Muscle biopsies were taken from the vastus lateralis muscle of thirty-three patients over 60 years of age with hip fractures. Sarcopenia status was assessed according to the criteria of the European Working Group on Sarcopenia in Older People 2. Skeletal muscle mass was measured by bioelectrical impedance analysis. Cortisol and cortisone concentrations were measured in serum. Gene expression analysis of HSD11B1, NR3C1, FBXO32, and TRIM63 in muscle biopsies was performed.

Results: The study included 33 patients (21 women) with a mean age of 82.5 ± 6.3 years, 17 patients revealed sarcopenic ($n = 16$ non-sarcopenic). Serum cortisone concentrations were negatively correlated with muscle mass ($\beta = -0.425$; $p = 0.034$) and type-2 fiber diameter ($\beta = -0.591$; $p = 0.003$). Gene expression of HSD11B1 ($\beta = -0.673$; $p = 0.008$) showed a negative correlation with muscle mass in the sarcopenic group. A significant correlation was found for the non-sarcopenic group for NR3C1 ($\beta = 0.548$; $p = 0.028$) and muscle mass.

Conclusion: These findings suggest a pathogenetic role of HSD11B1 in sarcopenic muscle.

Keywords: FBXO32; Glucocorticoids; HSD11B1; NR3C1; Sarcopenia; TRIM63.

P-1171

Weight-adjusted waist index: a prominent emerging obesity marker in sarcopenic obesity screening

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Introduction: Sarcopenic obesity (SO) screening typically uses body mass index (BMI) or waist circumference (WC) to assess obesity. However, the weight-adjusted waist index (WWI) has been proposed as a more valid indicator of obesity-related adverse outcomes. This study aimed to identify which of these markers BMI, WC, or WWI is most strongly associated with SO.

Methods: This retrospective cross-sectional study included patients aged 65 and older who visited a tertiary geriatric outpatient clinic between November 2012 and December 2024 and underwent comprehensive geriatric assessment. Handgrip strength and body composition were measured using a dynamometer and bioelectrical impedance analysis, respectively. WWI was calculated as $WC/\sqrt{\text{weight}}$. SO was defined as low muscle strength and mass along with increased fat percentage. Each obesity marker was evaluated in separate regression models, and the optimal WWI cutoff was determined using ROC analysis.

Results: A total of 1,735 patients (68.4% female, mean age 73.4 years) were included. SO prevalence was 15.4%. In models adjusted for age, frailty, and functional dependency, WWI showed the strongest association with SO in both sexes. Odds ratios for WWI were 1.8 (95% CI 1.489–2.199) in females and 2.8 (95% CI 1.779–4.598) in males. The optimal WWI cutoff was 11.5 $\text{cm}/\sqrt{\text{kg}}$, yielding AUC values of 0.612 (females) and 0.724 (males).

Conclusion: WWI demonstrated the strongest association with SO among the obesity markers evaluated. Replacing BMI or WC with WWI during the case-finding phase of SO screening may improve identification of at-risk individuals.

P-1172

Defining normative values for the five times sit-to-stand test, and the relations with hand grip strength: a pilot study

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Background: The Five Times Sit-to-Stand Test (5xSTS) is a widely utilized tool for assessing lower limb strength and functional mobility in older adults. While some normative data are available, the results are with limited sample sizes or non-standard protocols. This pilot study presents preliminary findings from an ongoing study aimed at establishing normative reference values, and cut-off thresholds for the

5xSTS for Turkish people, and to assess its relationship with handgrip strength (HGS).

Methods: Adults aged 18–40 years, moderately physically active were recruited. Assessments included 5xSTS, HGS, gait speed, International Physical Activity Questionnaire–Short Form (IPAQ-SF), and body composition. Normative data were reported using mean $\pm$ standard deviations and percentiles. Cut-off values were determined using both 75th percentile and + 2SD method. Comparisons were made using local HGS thresholds. Further analyses will be discussed.

Results: A total of 207 participants (78 females, 129 males) were included. Mean 5xSTS time was 8.16 ± 1.78 s; 75th percentile was 9.30 s, and “+ 2SD” cut-off was 11.73 s. There was a weak negative correlation between 5xSTS and gait speed ($r = -0.145$, $p = 0.038$). No significant correlations were found between 5xSTS and HGS, muscle mass, or phase angle (all, $p > 0.05$).

Conclusion: By our preliminary findings, we report the normative data for 5xSTS in healthy, moderately active Turkish young adults, and we show that there were no significant correlations between local 5xSTS and HGS values in this group.

Keywords: 5xSTS, young adults, reference values, handgrip strength, sit-to-stand test, functional assessment.

P-1173

Inverse association between muscle mass and oxidative stress in younger male seniors: implications for healthy aging

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Introduction: Oxidative stress, resulting from the excessive and uncontrolled production of reactive oxygen species (ROS), plays a fundamental role in the pathogenesis of numerous chronic conditions, including atherosclerosis, coronary artery disease, and neurodegenerative disorders such as dementia. Identifying physiological factors that influence oxidative balance is essential for understanding the mechanisms underlying healthy aging and for developing effective preventive strategies against age-related diseases.

Methods: A cross-sectional analysis was conducted in a cohort of 272 individuals (134 women and 138 men) aged 60–65 years. Total oxidative status (TOS) was measured to assess systemic oxidative burden. Body composition, including the percentage of muscle mass, was evaluated using bioelectrical impedance analysis.

Results: Women in the study were significantly younger (mean age 62.4 vs. 62.9 years), had a lower percentage of muscle mass (26.51% vs. 36.11%) and higher TOS levels (0.45 mM vs. 0.40 mM) compared to men. Higher muscle mass percentage was independently associated with lower TOS values but only in the group of men ($\rho = -0.25$; $p = 0.003$). In female group the correlation was insignificant ($\rho = -0.14$; $p = 0.01$).

Conclusions: There is an inverse relationship between total oxidative status and muscle mass percentage in younger senior men, with no parallel association for women. These findings may suggest that preserving skeletal muscle mass may play a protective role against oxidative damage among men, supporting strategies for healthy aging. In women, this relationship remains unclear and requires further investigation.

P-1174

Ultrasound assessment of muscle quantity and quality to improve

detection of sarcopenia, low physical and social activity levels in community-dwelling older adults

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Background: Current sarcopenia diagnosis focuses on decreased muscle quantity. Ultrasound (US), incorporating muscle quantity and quality assessment, may provide additional insights, but its use remains to be validated. We aim to investigate the optimal combination and diagnostic performance of US quantity and quality measures for sarcopenia, and to determine if using US improves the detection of cases with low physical and social activity levels compared to current criteria.

Methods: We studied 122 community-dwelling older adults (mean age 67.2 ± 5.8 years). US quadriceps measures included quantity (muscle thickness (MT), cross-sectional area (CSA), pennation angle, fascicle length); and quality (echo-intensity, elasticity, shear-wave velocity (SWV)). We selected US parameters based on associations with physical performance (Short Physical Performance Battery, SPPB) using linear regression. We compared area under receiver operating characteristic curves (AUC) for combinations of US quantity and quality measures, against Asian Working Group for Sarcopenia (AWGS) 2019 criteria. We compared the proportion of cases identified with low physical activity (International Physical Activity Questionnaire (IPAQ)) and social activity (Frenchay Activities Index (FAI)) using three methods: US measures, self-report (SARC-F2), and AWGS 2019 criteria (possible sarcopenia).

Results: Elasticity ($\beta = 0.030$, $p = 0.031$) and SWV ($\beta = 0.523$, $p = 0.024$) were significantly associated with SPPB. MT ($\beta = 0.597$, $p = 0.055$) and CSA ($\beta = 0.123$, $p = 0.055$) showed moderate associations. The model with all selected muscle US indicators (Elasticity, SMV, MT, CSA) yielded the highest AUC of 0.839. Muscle US parameters detected more individuals with low FAI (61.54%) and low IPAQ (55.38%), compared to SARC-F (10.26% and 7.69%) and possible sarcopenia (48.72% and 35.38%), respectively.

Discussion and conclusions: Our results provide preliminary evidence for integrated US-measured muscle quantity and quality for sarcopenia diagnosis. Further studies are required to validate its use in clinical settings.

P-1175

Interventional research in sarcopenia: how pragmatic are we in current practice?

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Introduction: This study reviews published randomized controlled trials (RCTs) on sarcopenia to assess their level of pragmatism and identify areas for improvement in clinical relevance and feasibility.

Material and Methods: A systematic review was conducted in March 2024 using MEDLINE (via Ovid), Embase, and the Cochrane Central Register of Controlled Trials to identify all RCTs performed using a consensus definition for the diagnosis of sarcopenia. Pragmatism was assessed using the PRECIS-2 tool across 10 domains: eligibility, recruitment, setting, organization, flexibility (delivery/adherence), follow-up, primary outcome, analysis, and control. Subgroup analyses were conducted based on intervention type, geography, sample size, study duration, and sarcopenia definition.

Results: Among 3985 references, 58 RCTs met the inclusion criteria. The mean PRECIS-2 score across its 10 domains was 2.92 (SD 1.30), reflecting a balance of explanatory and pragmatic characteristics. Organization, recruitment, and primary outcome were identified as the most pragmatic domains, whereas eligibility, adherence, and follow-up were the most explanatory. Subgroup analyses revealed that geographical location and sarcopenia definitions significantly impacted the overall PRECIS-2 score. Specifically, studies conducted in Asia achieved higher pragmatism scores, with significant differences in setting ($p = 0.016$), follow-up ($p = 0.009$), and control ($p = 0.011$). Studies using Asian sarcopenia criteria (e.g., AWGS) were also more pragmatic, particularly in the setting ($p = 0.036$) and control ($p = 0.010$) domains.

Conclusion: This systematic review revealed that improvements in exclusion criteria, follow-up, and adherence could enhance the level of pragmatism in sarcopenia RCTs, making them better reflect real-world interventions.

P-1176

Integrative analysis identifies LCORL, ETNK1, and MAP7D2 as novel candidate regulators in sarcopenic obesity and potential mediators of muscle-adipose crosstalk

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Introduction: Sarcopenic obesity (SO), characterized by low muscle mass/strength combined with excess adiposity, represents a significant health burden with poorly understood pathophysiology. Identifying key regulators of the muscle-fat interplay is crucial for developing diagnostics and therapies. This study aimed to identify novel SO candidate genes using integrative bioinformatic analysis and explore their potential roles, particularly in muscle-adipose tissue crosstalk.

Methods: We integrated differential gene expression (DEG) analysis and weighted gene co-expression network analysis (WGCNA) on public sarcopenia and obesity transcriptomic datasets. Key genes identified from intersecting DEGs and phenotype-associated modules underwent functional enrichment, protein–protein interaction (PPI) network analysis, and preliminary regulatory network exploration. Future directions outlined include tissue-specific expression analysis (muscle vs. adipose), validation using in vitro models, in vivo SO animal models, and clinical sample verification.

Results: LCORL, ETNK1, and MAP7D2 were robustly identified as dysregulated genes strongly associated with the SO phenotype across datasets. Functional annotation suggested their involvement in pathways crucial for muscle structure/function, lipid metabolism, and potentially cellular signaling or transport relevant to tissue crosstalk. Preliminary network analysis suggested connections to known muscle atrophy and adipose dysfunction pathways, guiding exploration of their roles in pathological muscle-fat interactions.

Conclusion: LCORL, ETNK1, and MAP7D2 emerge as novel, promising candidate genes in SO pathogenesis. Their consistent identification and association with relevant biological pathways

highlight their potential as future diagnostic biomarkers or therapeutic targets. Further investigation focusing on their specific molecular mechanisms and roles in muscle-adipose crosstalk is warranted to fully elucidate their significance in SO.

Short Poster Presentation

Sarcopenia

P-1177

Does high-frequency resistance exercise offer additional benefits to older adults? learnings from a randomized controlled trial

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Resistance exercise is an effective strategy to improve muscle strength in older adults. A limited-load resistance would be flexible and suitable for community-based training. It was unclear whether high-frequency resistance exercise offer additional benefits to older adults. Here, we aimed to examine the effect of limited-load resistance exercise among different frequency on muscle parameters in older adults.

Methods: The current study was a single-blind, randomized controlled trial comparing the effectiveness of different-frequency resistance exercise in older adults. Change in skeletal muscle was estimated with a multi-frequency bioelectrical impedance analyzer. Demographics, physical examination, nutritional assessment, prealbumin and lymphocytes were also measured. Fisher's precision probability test and baseline-adjusted generalized linear models were applied accordingly to analyze the influence of dose-different exercise on prevalence of sarcopenia, muscle parameters and body composition. A two-sided p value of < 0.05 was defined statistical significance.

Results: The participants had a mean age of 71.96 years and close gender ratio. One hundred and twenty-seven participants (control 40; low-dose 46; high-dose 41) completed the 6-month exercise intervention. In contrast to control group, only high-dose exercise groups experienced improvements in muscle mass (0.66 kg, $p < 0.001$) and max grip strength (+ 2.17 kg, $p < 0.001$). There were significant dose–response effects of muscle mass (index), fat mass (index), max grip strength, 5-times sit to stand test, 6-min walking test and visceral fat area (all $p(\text{trend}) < 0.01$).

Conclusions: As the proved dose-dependent effect, current findings supported high-frequency limited-load resistance exercise applied and extended among older adults in community.

Trial Registration: This study was registered at Chinese Clinical Trial Registry Network (ChiCTR2200062007, Registered on 19 July 2022).

Poster

Sarcopenia

P-1178

Gap analysis of muscle ultrasound in sarcopenia evaluation: a collaborative project born within the European Academy for Medicine of Ageing

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Introduction: Evidence supports the use of muscle ultrasound (MU) as a reliable tool for assessment of sarcopenia in older people, with accuracy depending on the muscle and ultrasound parameters measured [1]. However, literature regarding this topic highlights the need for further validation and standardisation of this technique [2].

Methods: We are conducting a comprehensive review of existing literature on this topic, in order to both map out the current knowledge and identify areas of limited or conflicting evidence. The methodological quality assessment of relevant literature sources will be carried out using Critical Appraisal Skills Programme tools [3]. Collaterally, a survey devoted to collect the current methodological status of MU in sarcopenia evaluation in older people will be internationally conducted through the EuGMS network, after the approval of the scientific committee.

Results: Combined and gathered information will be used to identify, categorize, prioritize and, finally, display gaps in MU for sarcopenia evaluation.

Key conclusions: Based on this gap analysis, it could be possible to develop a research agenda that outlines specific research questions and guides future well-targeted and impactful research efforts on this topic. In particular, we hypothesized a Delphi process, aimed to reach a consensus on a standard operative procedure for MU in sarcopenia evaluation, which could help its theoretical and methodological harmonisation and validation.

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P-1179

A comparative study of characteristics associated with sarcopenia in hospitalised older adults

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Introduction: Sarcopenia, a progressive loss of skeletal muscle mass and function, is linked to adverse health outcomes in older adults. Identifying distinguishing characteristics between patients with and without sarcopenia is crucial for early detection and intervention.

Methods: A cross-sectional study compared older adults with and without sarcopenia admitted to an Acute Care of Elderly Unit or Orthogeriatric Unit. Sarcopenia was assessed using bioimpedance analysis (BIA) according to EWGSOP2 criteria. Comprehensive geriatric assessment (CGA) and demographic data were recorded.

Results: Eighty-eight patients underwent BIA; 24 (27.3%) had sarcopenia (23.1% in the acute geriatric unit and 30.6% in the orthogeriatric unit). Patients with sarcopenia were older (87.88 ± 5.75 years vs. 83.78 ± 4.68 years, $p = 0.001$) and had a lower proportion of females (33.3% vs. 64.1%, $p = 0.010$). Malnutrition prevalence, according to GLIM criteria, was higher in the

sarcopenia group (78.3% vs. 11.1%, $p < 0.001$), as well as Body Mass Index (BMI) (22.87 ± 3.21 vs 27.78 ± 4.20 , $p < 0.001$). Sarcopenic patients exhibited lower Barthel Index scores at discharge (62.75 ± 17.43 vs. 74.11 ± 17.28 , $p = 0.014$). No significant differences were observed in FRAIL scores, comorbidity, medication count, or geriatric syndromes. Differences remained when comparing the acute geriatric and orthogeriatric units.

Conclusions: Sarcopenia prevalence was 27.3%. Older age, higher malnutrition rates, and male sex characterized patients with sarcopenia. These patients also had lower Barthel Index scores at discharge. These findings highlight the importance of comprehensive assessment for timely identification and management of sarcopenia in hospitalized older adults.

P-1180

Despite the relevance of Primary Care (PC) in the care of the elderly and its healthcare research, there is a growing deficit in this area. An Integrated Care Organization approach is presented to bring it to the fore

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Oral/poster.

Objective: To achieve the emergence

Urinary Incontinence

P-1181

Incidence of acute urinary retention in elderly patients during hospitalisation in an orthogeriatrics unit

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Acute urinary retention (AUR) is a common complication among hospitalized geriatric patients, particularly those undergoing surgical procedures such as hip fracture. This study aimed to analyze the incidence of AUR, associated factors, and the functional progress of patients during their stay in an orthogeriatric unit.

A retrospective observational study was carried out, including all patients admitted to the orthogeriatric unit throughout 2024. Exclusion criteria included patients in end-of-life care, those with permanent urinary catheters, or with urostomies. Sociodemographic, clinical, and functional variables were analyzed, including the Barthel Index and FAC scale at admission and discharge, the length of time urinary catheterisation was maintained, use of absorbents, type of hip fracture and pharmacological treatment.

The incidence of AUR was 17.8%, with a predominance in women (89%) and a mean age of 88.4 years. Most patients (81.3%) lived at home prior to admission. Among those who developed AUR, only 42 had been continent before the hip fracture. The average duration of urinary catheterization was 5.9 days. No statistically significant correlation was found between the duration of catheterization and functional variation. Patients with AUR had a longer hospital stay (average 10.2 days), especially those previously consumed opioids. The mean anticholinergic burden was 2.1, with antidepressants, second-generation antipsychotics, benzodiazepines, and opioids being the most commonly associated drugs.

These findings highlight the importance of identifying risk factors and optimizing pharmacological management to prevent AUR and improve postoperative recovery in elderly patients.

P-1182

Indicators of frailty mediate the difference in survival rates among continent, urinary and double incontinent men with hip fracture

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Introduction: Incontinence and hip fractures (HF) are associated with increased mortality, with men having higher mortality rates than women. This study examined 1-year mortality among older male HF patients based on continence status (continent, urinary incontinent (UI), or double incontinent (DI)), and assessed prognostic factors.

Methods: A prospective cohort study included all men aged ≥ 65 treated for their first HF at Seinäjoki Central Hospital, Finland (2007–2019). Kaplan–Meier and Cox proportional hazards models were applied.

Results: Among 542 patients (mean age 81.4 ± 7.8), mean survival was 307 days (95% CI 293–320) for continent patients, 258 days (95% CI 237–278) for UI, and 221 days (95% CI 182–261) for DI. Factors independently associated with 1-year mortality included age 80–89 (HR 1.49; 95% CI 1.012–2.18) or ≥ 90 (HR 2.26; 95% CI 1.45–3.54), impaired mobility (HR 1.89; 95% CI 1.28–2.77), poor nutrition (HR 1.46; 95% CI 1.02–2.09), and delayed urinary catheter (UC) removal (HR 1.49; 95% CI 1.08–2.05). Continence status did not independently predict mortality.

Conclusions: Men with UI and DI had higher mortality rates, but incontinence alone was not an independent predictor. The difference in survival rates was mediated by underlying disability and frailty, including poor mobility, nutrition, and advanced age. As a care-related factor, the widespread use of UCs in acute surgical care should be minimized.

P-1183

Correlates of urinary incontinence among older adults with HIV: a Mexican cross sectional and multi-center study

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Introduction: As people with HIV (PWH) age, there is growing concern about the emergence of geriatric syndromes, including urinary incontinence (UI). While UI in general population is a well-documented condition, data on its prevalence and correlates among older PWH remains limited. Thus, this study aims to explore the prevalence and factors associated with UI in older PWH.

Methods: Cross-sectional study including 402 community-dwelling PWH aged ≥ 50 , receiving therapy in five specialized clinics, and achieving optimal viral suppression. UI was assessed using the Barthel Index, and potential correlates included physical function, diverse geriatric syndromes, multimorbidity (≥ 2 conditions), mental-health

related conditions, and HIV-related variables. Logistic regression models were used to identify factors associated with UI.

Results: Participants' median age was 56 years (IQR: 52–64), and 330 (82%) were men. UI was reported in 64 (16%) participants. Compared to those without UI, participants with UI were older, had more prevalent comorbidities, falls, physical disability, depressive symptoms, and frailty. In the multivariate analysis, self-reported falls (OR 1.96, 95% CI 1.10–3.47), depressive symptoms (OR 1.12, 95% CI 1.02–1.23), and multimorbidity (OR 1.75, 95% CI 1.0–3.07) were independently associated with UI. Conversely, higher CD4+ cells were associated with lower odds of UI (OR 0.998, 95% CI 0.997–0.999).

Conclusions: UI is a prevalent, yet under-addressed condition among relatively younger older PWH. Multimorbidity, depressive symptoms, falls, and CD4+ cells were the strongest correlates of UI, suggesting a complex interplay between physical, mental, and immunologic factors, and highlighting the relevance of comprehensive geriatric assessments in people aging with HIV.

P-1184

Investigation of the relationship between sarcopenic obesity and urinary incontinence

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Introduction: Sarcopenic obesity is a condition characterized by decreased muscle mass and strength along with an increased body fat percentage. While previous studies have separately examined the relationship between sarcopenia and obesity with urinary incontinence (UI). This study aimed to evaluate the relationship between sarcopenic obesity and UI.

Methods: This study included 1197 female patients aged 60 and older in a geriatric's outpatient clinic between November 2012 and June 2024. Body composition was measured using bioelectrical impedance analysis (BIA), and muscle strength was assessed using handgrip strength. The skeletal muscle mass index was adjusted for body weight. Sarcopenic obesity was defined using threshold values specific to the Turkish population. Patients were classified into four different phenotypic groups based on body composition: non-sarcopenic non-obese, sarcopenic non-obese, sarcopenic obese, and non-sarcopenic obese. The prevalence of UI and its relationship with phenotypic groups were analyzed using multivariable logistic regression analysis.

Results: The mean age of the included patients was 74 years (60–99). UI was observed in 24.8% of the 251 (21%) patients with sarcopenic obesity. A significant difference in UI prevalence was found among the phenotypic groups classified by body composition ($p < 0.001$). In multivariable regression analysis, sarcopenic obesity was independently associated with UI ($p = 0.008$).

Conclusion: This study demonstrates that sarcopenic obesity is more strongly associated with UI than sarcopenia or obesity alone. Early recognition of sarcopenic obesity and targeted interventions may play a crucial role in mitigating the effects of UI or reducing its incidence.

P-1185

Urinary incontinence as a risk factor for hip fracture

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(1) Geriatria

Urinary incontinence is very common in the older population, as are fall syndrome and hip fractures after falling. The bathroom is one of the places where most accidents occur, and getting up to urinate is a very common cause of falls.

Objective: To determine the prevalence and severity of urinary incontinence in a sample of patients hospitalized with hip fractures. To determine the relations hip between urinary incontinence and hip fractures.

Material and Methods: Observational, descriptive study in a sample of patients of both sexes, aged 75 years or older, hospitalized for hip fracture. Use of the Barthel Index to detect the presence/absence of urinary incontinence; to determine its severity, the Sandvik severity test. Variables: age, sex, Barthel Index, presence/absence of urinary incontinence, cause of fracture.

Statistical analysis:SPSS v.15.

Results: Sample:136 patients, 80.9%women, 19.1%men. Mean age:89 years. 70% of patients presented with incontinence. Incontinence was more frequent among women. Applying the Sandvik test, very severe incontinence was the most common in the sample and among men. Moderate incontinence was the most common in women. The most common cause of fracture was after a fall(77.9%) (tripping or slipping(74.5%); after dizziness(25.5%), unknown fracture mechanism(14%), no previous fall(8.1%). The most common areas where patients fell were the bathroom and kitchen; of those who fell in the bedroom, 39.9%fell out of bed, 60.1%fell while getting up to urinate.

Conclusions:

1. High prevalence of incontinence in the sample.
2. Incontinence was more common in women, but less severe.
3. Urinary incontinence is a risk factor for hip fracture in women.

P-1186

Prevalence of urinary incontinence among geriatric patients in a tertiary care hospital in Chengalpet, Chennai (India)

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Background: Urinary incontinence (UI) is a significant health issue affecting the geriatric population, leading to a decline in quality of life and increased dependency. Despite its prevalence, there is limited research on UI in India, particularly among older adults.

Objective: This study aims to estimate the prevalence of urinary incontinence among geriatric patients attending a tertiary care teaching hospital in Chengalpet, Chennai (India) and to evaluate its impact on their quality of life.

Methods: A cross-sectional study will be conducted over three years, involving 193 geriatric patients aged 60 years and above. Data will be collected through face-to-face interviews using validated questionnaires, including the International Consultation Incontinence Questionnaire (ICIQ-SF) and ICIQ-LUTSqol. Statistical analysis will be performed using SPSS 17, with a focus on descriptive statistics and significance testing.

Results: The study anticipates identifying the proportion of geriatric patients suffering from UI, along with its frequency, severity, and overall impact on their daily lives. The findings will contribute to a

better understanding of UI in the geriatric population and highlight the need for targeted interventions.

Conclusion: This research underscores the importance of recognizing urinary incontinence as a critical geriatric syndrome. By identifying its prevalence and associated factors, the study aims to inform healthcare practices and improve the management of UI, ultimately enhancing the quality of life for older adults. The results will also advocate for increased awareness and destigmatization of urinary incontinence in the community.

Keywords: Urinary incontinence, geriatric patients, prevalence, quality of life, India, healthcare interventions.

P-1187

The effect of electrical parameters on transcutaneous tibial nerve stimulation for overactive bladder syndrome: a systematic review and meta-analysis

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Introduction: Overactive Bladder Syndrome (OAB) is common and distressing for older people. Transcutaneous Tibial Nerve Stimulation (TTNS) is an alternative approach for OAB management. Three electrical parameters are mainly used: frequency, intensity and pulse width. We investigated their effect on incontinence, urgency, frequency and nocturia.

Methods: We searched MEDLINE, EMBASE and AMED to January 2023 for studies comparing TTNS to control/sham in adults with OAB in clinical or home settings. Two reviewers independently screened papers, extracted data and assessed Risk-of-Bias (ROB2). We summarised studies narratively, and using GRADE framework. We meta-analysed RCTs (random-effects), grouping studies by electrical parameters. PROSPERO registration number CRD42024490465.

Results: We included 35 papers (9 RCTs), involving 2171 participants (636 in RCTs). Most studies (57%) included people aged ≥ 60 . TTNS protocols varied: electrical frequency 10 or 20 Hz; intensity reported as sensory or motor threshold; pulse width mostly 200 microseconds. No serious adverse effects were reported, only mild and short-term discomfort. TTNS at 10 Hz improved incontinence episodes (MD = -1.25, 95% CI -2.09 to -0.41, n = 255, N = 3). TTNS with motor threshold improved urgency (MD = -1.95, 95% CI -2.96 to -0.98, n = 112, N = 3) and nocturia (MD = -1.56, 95% CI -2.12 to -1.00, n = 72, N = 2). Risk of bias was low.

Conclusions: Results suggest electrical parameters may mediate improvement (in favour of 10 Hz, motor threshold). Certainty of evidence is reduced due to small numbers of studies and participants. Future studies should vary electrical parameters to clarify their impact particularly with older people living in different settings. Findings from this review will be used to pre-set a new wearable TTNS device.

Short Poster Presentation

Urinary Incontinence

P-1188

A bladder sensor for adults with urinary incontinence

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Introduction: The TENA SmartCare Bladder Sensor, a wearable device, supports children (≥ 6 years) and adults ($\text{BMI} \leq 25 \text{ kg/m}^2$) by tracking bladder filling and notifying users when to go to the bathroom via vibration or in-app notification. The primary objective of this study was to demonstrate the sensor's ability to detect the bladder before urination among adults. Secondary objectives included evaluating performance, safety, usability, user satisfaction, and impact on quality of life (QoL). The hypothesis was that the median bladder detection rate would exceed 85% ($H_0: \leq 0.85$, $H_1: > 0.85$, $p\text{-value} < 0.05$).

Patients & Methods: Adults (≥ 18 years) with urinary incontinence tested the sensor at home for one week. Performance, safety, usability, satisfaction, and QoL were assessed. Subjects documented urination and urine loss in a diary. Raw data was analysed to evaluate bladder detection and notification rates.

Results: 30 adults (67% female, 33% male; median age 53 years; median BMI 22.6 kg/m^2) completed the study. The median bladder detection rate was 89.8% (IQR 82.6–95.3%), and the null hypothesis was rejected ($z = 69$, $p < 0.05$). The median actual full bladder notification rate was 63.1% (IQR 50.0–71.4%), and the median perceived rate was 94.4% (IQR 87.0–105.6%). The device reduced unwanted leakages by 67% and improved QoL.

Conclusion: The Bladder Sensor effectively detects the bladder in real-life conditions and supports urinary incontinence prevention. Its effectiveness seemed to depend on anatomical factors, bladder volume, and/or proper fixation. The device had a positive effect on the subject's urinary incontinence, their QoL and overall well-being while testing it for one week. Long-term benefits of the Bladder Sensor as an adjunct tool in continence care management needs to be investigated.

Poster

Urinary Incontinence

P-1189

The relationship between functional assessment tests results, BMI, and WHR and urinary incontinence in women and men hospitalized in a geriatric ward

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Introduction: Urinary incontinence (UI) is a common condition that significantly affects the quality of life in older adults. Identifying the risk factors for UI, such as sarcopenia, obesity, and functional impairment, is essential for early intervention. However, few studies

assess the determinants of UI using objective tests and anthropometric indicators in the elderly.

This study aimed to evaluate the relationship between selected anthropometric parameters and functional assessment results with the occurrence of UI in hospitalized older adults in a geriatric ward.

Methods: The study included 250 patients (73.2% women, 80.8% aged 75+ years) consecutively admitted to the Geriatrics Ward at the Medical University of Białystok. Functional assessments included gait speed, Short Physical Performance Battery (SPPB), Clinical Frailty Scale (CFS), Functional Reach Test (FRT), Timed Up and Go Test (TUG), and handgrip strength (HGS). Anthropometric measurements included body weight, height, waist, and hip circumference, with BMI and WHR calculated.

Results: UI was reported by 58.8% of participants, more commonly in women (65% vs. 41.8% in men, $p < 0.001$). UI correlated with reduced handgrip strength in men but not in women. In women, UI was linked to poorer functional test results and a higher WHR, but not BMI. No significant relationship was found between UI and anthropometric parameters in men.

Key conclusions: The study highlights the high prevalence of UI, especially in women and those with sarcopenia. These findings underscore the need for integrated therapeutic strategies combining physiotherapy and targeted nutritional interventions to address UI in older adults.

Vaccines

P-1190

Enhancing vaccination coverage in elderly patients: an interprofessional approach in the Geneva Rehabilitation and Geriatrics Department

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Introduction: Elderly individuals (≥ 65 years) are particularly vulnerable to infections due to immunosenescence and co-morbidities. Despite the proven efficacy of vaccines, vaccination coverage remains suboptimal in this population. This programme aims to improve vaccination uptake among elderly patients in the Rehabilitation and Geriatrics Department of the Geneva University Hospitals through an interprofessional approach (nurses, doctors, secretaries, pharmacists and pharmacologists), thereby reducing complications from vaccine-preventable diseases.

Methods: The programme employs three key strategies: (1) training medical and nursing teams using information sessions, microlearning, and TeamSTEPPS tools to enhance communication, advocacy, and confidence in vaccination management; (2) developing decision-support and documentation tools, including algorithms, pocket cards, digital monitoring forms, and embedded recommendations in the patient informatics system; and (3) establishing a specialised vaccinology team for elderly patients.

Results: Programme objectives include increasing vaccination coverage by at least 20%, optimising vaccination opportunities, identifying barriers to vaccination, reducing preventable hospitalisations and complications, and strengthening coordination between hospital and community care through discharge recommendations. Ongoing evaluation is conducted using clinical indicators such as the number of vaccines prescribed and administered, documentation rates, and satisfaction levels among healthcare teams, patients, and families.

Conclusion: This interprofessional approach integrates training, decision-support tools, and a specialised team to improve vaccination coverage and patient outcomes. The use of quality indicators ensures continuous assessment of programme impact, sustainability, and barriers to vaccination.

P-1192

Impact of influenza and COVID-19 vaccination in older adults hospitalized for respiratory viral infections: comparison between the 2023 and 2024 campaigns

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Introduction: Respiratory infections (RVI) caused by viruses (influenza, COVID-19...) are the more important cause of morbidity and mortality in the elderly population. Seasonal vaccination strategies are essential to reduce complications, mortality and hospital stay.

Methods: Retrospective observational study of patients > 84 years with RVI at Geriatric Acute Care Unit of Hospital Monte Naranco (Spain) between October-December of 2023 and 2024. Variable: Sociodemographic, functional, cognitive, vaccination and clinical outcomes.

Results: Patients: 99 in 2023 and 101 in 2024.

2023: Mean age: 90.3 ± 4.1 years; Barthel Index: 44.3 ± 34.1; cognitive impairment: 47.5%; institutionalized: 52.5%; hospital stay: 10.2 ± 4.9 days; in-hospital mortality: 15.2%; 30-day mortality: 8.1%. Vaccination coverage: influenza 64.6%, COVID-19 92.9%, both 43.4%.

Double vaccinated, 60.3% were institutionalized; 39.7% at home.

Mortality and hospital stay:

- Unvaccinated (n = 7): 14.7% in-hospital mortality, 0% at 30 days; mean stay: 11.1 days.
- Vaccinated with both (n = 63): 19.1% in-hospital mortality, 3.2% at 30 days; mean stay: 10.1 days.

They weren't statistically significant.

2024: Mean age: 91.2 ± 3.9 years; Barthel Index: 52.6 ± 34.3; cognitive impairment: 64.4%; institutionalized: 48.5%; hospital stay: 9.0 ± 4.7 days; in-hospital mortality: 14.9%; 30-day mortality: 13.9%. Vaccination coverage: influenza 62.3%, COVID-19 94.1%, both 52.5%.

Double vaccinated, 50.9% were institutionalized; 49.1% at home.

Mortality and length of stay:

- Unvaccinated (n = 37): 21.6% in-hospital mortality, 27% at 30 days; mean stay: 10.6 days.
- Vaccinated with both (n = 53): 11.3% in-hospital mortality, 7.6% at 30 days; mean stay: 8.2 days.

Double vaccination was a statistically significant reduction in 30-day mortality (p = 0.0060) and in hospital stay (p = 0.0232) compared to unvaccinated patients. In-hospital mortality wasn't significant (p = 0.1589).

Conclusions: Data show higher vaccine coverage among institutionalized patients. In 2024, a decrease in influenza vaccination coverage was observed, while COVID-19 and dual increased. In our cohort, dual vaccination was associated with significantly lower 30-day mortality and hospital stay during 2024.

P-1193

Invasive pneumococcal disease causes significant burden especially in older adults: a Finnish registry study 2016–2022

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Introduction: This study evaluates the clinical and economic burden of laboratory-confirmed invasive pneumococcal disease (IPD) in the Finnish adult population. It also assesses the IPD coverage of current and new pneumococcal conjugate vaccines (PCVs).

Methods: IPD episodes were identified from the National Infectious Disease Register. Healthcare resource use (HCRU) was obtained from the Finnish care registers and linked to each episode. Case-fatality was determined within 30 days after positive *Streptococcus pneumoniae* culture. HCRU was valued according to national healthcare unit costs. The direct costs associated with HCRU were calculated per episode and per year and stratified by patient's age.

Results: Overall, 4018 IPD episodes were identified of which 54% were in adults aged 65 and older. Case-fatality was 9.7% in all adults and increased steeply with age, from 3.16% in 18–49-year-olds to 26.7% in ≥ 85-year-olds. The average costs per episode were €9,118 (95% confidence interval [CI] €8802–€9419), with the highest costs (€9953; 95% CI €9242–€10,562) observed in the 65–74-year-olds. The main costs driver was inpatient care, comprising 94% of the total costs. In adults aged 65 and older, IPD coverage for PCV13, PCV20 and PCV21 was 47.5%, 66.5%, 75.3%, respectively.

Key conclusions: This study demonstrates a significant clinical and economic burden of IPD especially in the older adults. The disease coverage of the new PCV21 vaccine was higher compared to other PCVs. Broader pneumococcal immunization using new vaccines with extended disease coverage has the potential to reduce the clinical and economic burden of pneumococcal diseases in the elderly population.

P-1194

Factors associated with improved vaccination coverage in hospitalized older adults: analysis of a targeted clinical intervention

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Introduction: Completing the vaccination schedule in older adults is crucial for preventing infectious diseases and reducing complications. To protect their health and enhance quality of life, a project was implemented to optimize vaccine adherence strategies in elderly patients.

Method: Prospective study with purposive sampling of patients over 70 years old admitted to the Geriatrics Unit between April 2024 and February 2025 (n = 296). Intervention: referral to the Preventive Medicine Department to complete vaccination schedules in patients with incomplete immunization.

Results: n = 296. The mean age was 81.6 years; 66% were women. Average scores: CIRS-G 5.3, Barthel Index 71.4 (SD 34.2), Lawton Index 3.3 (SD 2.5), SARC-F 3.9 (SD 2.5), with 44.6% screening positive for sarcopenia, and CFS 4.2 (SD 1.6), with 19.6% scoring ≥ 6 . Severe polypharmacy was observed in 10.1%, and 41.1% had dementia. Vaccination coverage increased during admission: influenza from 76.6 to 79%, COVID-19 from 80.3 to 81.7%, herpes zoster from 5.4 to 7.9%, tetanus from 14.6 to 32.2%, and pneumococcus from 14.2 to 32.2% (p < 0.001 for all). In multivariate logistic regression, higher Barthel Index (OR 1.03; 95% CI [0.016, 0.061]; p = 0.03) increased the likelihood of improved vaccination, while dementia (OR 0.45; 95% CI [0.009, 0.178]; p = 0.01) decreased it.

Conclusions: Referral to Preventive Medicine significantly improved vaccination coverage in hospitalized elderly patients. Greater functional status, as measured by the Barthel Index, was linked to better vaccine adherence, while dementia was associated with lower adherence. These results highlight the value of individualized proactive interventions.

P-1195

Comparison of herpes zoster related healthcare consumption in older adults and immunocompromised populations in Sweden: a retrospective regional database analysis

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Introduction: Increased age and impaired immunity are recognised risk factors for herpes zoster (HZ) and the postherpetic neuralgia complication (PHN). However, it is unclear if HZ burden is as severe in older adults as it is in people with immunocompromising conditions. Here we assessed the clinical burden of HZ among immunocompetent people ≥ 80 years of age (YOA) and immunocompromised populations ≥ 18 YOA by describing their healthcare resource use (HCRU) during HZ and PHN episodes.

Methods: We conducted a retrospective study of HZ patients ≥ 18 YOA in Region Västra Götaland, Sweden with healthcare records in the Vega registry from 2014–2019. HCRU related to HZ and PHN was estimated and stratified by age group and immunocompromising status.

Results: The mean number of primary care visits was similar in immunocompetent people ≥ 80 YOA and in immunocompromised patients ≥ 18 YOA at 2.43 vs. 1.95 per HZ episode, and 6.17 vs. 5.65 per PHN episode. The mean number of hospitalisations was also similar in these two groups at 0.03 vs. 0.03 per HZ episode, and 0.081

vs. 0.085 per PHN episode. Furthermore, mean inpatient stays for immunocompetent people ≥ 80 YOA were longer than for immunocompromised patients ≥ 18 YOA for both HZ (7.75 vs. 6.67 days) and PHN (7.73 vs. 5.39 days).

Key conclusions: Immunocompetent people ≥ 80 YOA have a high disease burden and HCRU during HZ and PHN episodes similar to those for immunocompromised patients ≥ 18 YOA, suggesting that they are immunocompromised due to increased age.

Funding: GSK (GSK study identifier: VEO-000210).

P-1196

Prevention of respiratory infections in nursing homes: current status and perspectives

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Introduction: Respiratory infectious (RI) diseases are a major concern for nursing home (NH) residents. Despite this, vaccination coverage (VC) remains insufficient. This study aims to examine measures for RI in NHs, evaluate VC and identify barriers and facilitators.

Materials and Methods: A questionnaire was deployed to 302 respondents working in NH (doctors, nurses, directors). Conducted between June and July 2024, this online survey targeted professionals supportive of vaccination.

Results:

- In NHs with more than 100 residents, an average of 12 residents were hospitalized due to influenza or COVID in the last 12 months.
- 70% (212/302) tested each symptomatic resident and 25% (77/302) tested the first symptomatic residents.
- Only 47% (59/125) of doctors prescribed antivirals in NHs. Among non-prescribers, 38% (21/55) deemed them unnecessary, 18% (10/55) cited a lack of training and information.
- 86% (260/302) reported that their NH had a vaccination protocol following health recommendations.
- For the 2023 winter campaign, 86% were vaccinated against influenza, 81% against COVID, but only 54% during spring campaign. Pneumococcal vaccination coverage remained low at 35%. Main barriers to vaccination were residents beliefs (77%; 232/302), lack of family support (73%; 221/302), risk of side effects (69%; 208/302).
- Most relevant elements to encourage prevention were information on hospitalizations, number of deaths and vaccination rates.

Conclusion: Despite preventive efforts in NH, RI remain a major concern, with insufficient VC and limited use of antivirals. Strengthening vaccination monitoring and improving access to targeted information could enhance residents protection.

Diabetes

P-1197

Efficiency of basal insulin in elderly population in France: a post-hoc analysis of an observational longitudinal study

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Introduction: The EF-BI study, a nationwide observational and retrospective study in France, compared the total costs of care for T2DM patients initiating Gla-300 versus Gla-100. The study found a significant reduction in total expenditures with Gla-300 over a three-year follow-up. However, benefits may vary based on patients' characteristics. This post-hoc analysis evaluated outcomes in elderly population.

Methods: Using the national French healthcare claims database (SNDS), adults with T2DM who started basal insulin with Gla-300 or Gla-100 between January 1, 2016, and December 31, 2020, without prior insulin therapy in the last 6 months, were included. A propensity score on initial patient/treatment characteristics was used for an adjusted comparison of total costs over one to three years. Two age groups were considered with a cut-off at 80 years. Costs included all-cause health expenditures (in-patient and out-patient care).

Results: A total of 175,556 patients were included, 47,228 on Gla-100 and 13,021 on Gla-300. After adjustment, cost comparisons per patient over three years showed significant results favoring Gla-300: – €2759 (– 6.6%, $p < 0.0001$) in patients ≥ 80 years, and – €2544 (– 7.4%, $p < 0.0001$) in patients < 80 years. Treatment persistence was better and hospitalized acute events related to insulin therapy were less frequent with Gla-300 in both subgroups. Similar results were found using other age cut-offs at 65 and 75 years.

Conclusions: This EF-BI post-hoc analysis suggests that Gla-300 is associated with lower overall costs and fewer hospitalized acute events related to insulin therapy compared to Gla-100 in the T2DM population in France, regardless of age.

Falls and Fractures

P-1198

Layers of protection: a multidimensional strategy to reduce inpatient falls

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Introduction: Patient falls are the most common adverse events reported in hospitals and a large proportion of these occur in the geriatric population who are inherently at risk of falls in the community as well as during hospitalisation. Inpatient falls result in significant physical and economic burdens to patients as well as to medical organizations [1].

Methods: A multi component fall prevention intervention package was implemented over a period of one year (January to December 2024) in an integrated hospital in Singapore catering to a majority of geriatric patients. The interventions were targeted at staff level, organizational level and system levels and included measures aimed at improving awareness, harnessing technology and policy changes to highlight and focus on high-risk aspects. Inpatient preventable falls data was collected and analyzed on a monthly basis by the Falls Prevention Workgroup consisting of a multidisciplinary team.

Results: Inpatient preventable fall rates (per 1000 patient days) dropped from a median 0.73 in 2024 to 0.54 in 2024 representing a

26% decrease. The total number of inpatient falls in 2023 was 66 which dropped to 46 following implementation of the multicomponent intervention package.

Conclusion: Falls prevention in hospitals remains a constant challenge and a multicomponent intervention targeted at different levels is recommended to achieve better outcomes.

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Gerotechnology

P-1199

Gait biomarkers collected with wrist-worn sensor as a chronic obstructive pulmonary disease screening tool

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Introduction: Chronic obstructive pulmonary disease (COPD) is a major cause of mortality and disability worldwide. Identification of at-risk individuals at an early stage is crucial for effective prevention. Our aim was to determine if COPD can be predicted by gait biomarkers.

Methods: We collected gait data from a wrist motion sensor worn for at least five consecutive days by UK Biobank participants aged 60–78 years. COPD was tracked using NHS databases. Established risk factors were gathered via health assessments and questionnaires. Univariable and multivariable Cox proportional-hazard models assessed the relationship between digital gait biomarkers and incident COPD. Model performance was evaluated using the Harrell's concordance statistic.

Results: 639 (2.26%) participants were diagnosed with COPD during a mean follow-up of 8.5 years. Four complementary digital gait biomarkers (little running duration, slow maximal walking speed, duration of longest walk, and a small proportion of walks longer than 8-s) and four easily collectable self-report measures (age, sex, smoking pack-years and asthma history) were predictive of incident COPD. This eight-variable model had a Harrell's Concordance Statistic of 0.79 (SD = 0.01); comparable to previous models that require clinic-based tests and numerous self-report items.

Key conclusions: Gait digital biomarkers collected from a wrist-worn device were shown to predict COPD. These easy-to-collect measurements give a new opportunity to identify older individuals at risk and to apply early interventions with the intention to reverse, halt, or delay COPD progression and preserve quality of life.

Acute Hospital Care

P-1200

Predicting 90-day mortality for targeting proactive palliative care in older hospital patients: validation of the CRiSTAL score and a streamlined e-CRiSTAL score

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Introduction: The CRiSTAL score was developed to identify older hospital patients with expected survival of < 3 months for proactive palliative care but external validation is scarce. We therefore validated the CRiSTAL score, and a more parsimonious e-CRiSTAL score, in consecutive samples of older patients with unplanned hospital admission.

Methods: Trained research nurses in the SUPPORT study determined the CRiSTAL score (including demographics, residence, illness acuity, comorbidities, frailty, cognitive status, maximum score = 22) on consecutive medical patients aged > 75 years on arrival. Separately, an e-CRiSTAL score using proxy items routinely available in electronic patient records (EPRs) was created in ORCHARD-EPR (2017–2019). The accuracy of CRiSTAL/e-CRiSTAL for 3-month mortality were evaluated using the AUC.

Results: Among 1982 SUPPORT participants (mean age/sd = 85.8/6.0 years, 1037 (52.3%) women) median (IQR) CRiSTAL was 6 (5,7) and 585 (29.52%) had died by 3 months. OR for death was 1.22/unit increase in CRiSTAL (95% CI 1.15–1.29) and 1.13 (1.06–1.2, adjusted age, sex, comorbidity) with AUC of 0.65 (0.62–0.67), indicating moderate predictive ability. Among 50,360 ORCHARD EPR patients (mean/sd = 84.5/6.0 years, 26,698 (53.5%) women) median (IQR) e-CRiSTAL score was 6 (IQR 4–8) and 10,527 (20.9%) died by 3 months. OR for mortality per unit increase in e-CRiSTAL was 1.36 (95% CI 1.34–1.37) with AUC of 0.70 (0.69–0.71).

Key conclusions: The CRiSTAL score reliably identified those at high short-term risk of death but required manual collection by trained researchers. In contrast, the e-CRiSTAL score performed similarly using only routinely collected EPR data and could help target proactive palliative care in hospital.

Best Poster

AI and Big Data

P-1201

Is artificial intelligence smart enough to be a geriatric specialist?—Artificial intelligence vs. Polish State Geriatrics Exam

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Introduction: Artificial intelligence (AI) surpasses humans in data analysis, but its clinical judgment capabilities, especially in geriatrics where multimorbidity demands personalized care, remain unproven. This study assessed whether three state-of-the-art AI models (Gemini 2.0 Flash-Lite, DeepSeek-V3, and GPT-4o) could pass the Polish State Geriatrics Exam (PES), offering an objective benchmark of their readiness for clinical decision-making.

Methods: We evaluated the models on 120 questions from the most recent Geriatrics PES exam, comparing their performance to physician averages. The analysis focused on accuracy, clinical reasoning, and case interpretation using standard psychometric measures.

Results: Physicians achieved an average score of 89.2 (SD = 11.40), ranging from 64 to 109. DeepSeek-V3 outperformed all human participants with a score of 107 (89%), followed by Gemini (102, 85%) and GPT-4o (87, 73%). All AI models failed the same four questions, indicating systemic limitations in addressing complex or ambiguous geriatric scenarios—likely due to difficulties integrating

multifactorial clinical data. The AI models had a higher mean difficulty index (0.822) compared to humans (0.738), reflecting superior accuracy on standardized questions. Their mean discrimination index (0.1667) was lower than that of physicians (0.229), suggesting a reduced ability to distinguish between clinically nuanced cases.

Key conclusions: These findings demonstrate that AI, particularly DeepSeek-V3, shows strong factual knowledge in geriatrics and can match or exceed average physician performance on standardized assessments. Nonetheless, AI's limited contextual reasoning emphasizes the need for human expertise in individualized geriatric care. AI may function effectively as a decision-support tool but cannot yet replicate holistic clinical judgment.

Poster

Gerotechnology

P-1202

Usefulness of a new digital version of the MPI-SVaMA (MPI-SVaMA Digit) in predicting short- and long-term mortality in community-dwelling older people

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Introduction: The Multidimensional Evaluation of Elderly Person Form (SVaMA) is the official Comprehensive Geriatric Assessment (CGA) tool in most Italian regions for assessing medical, social, and functional needs of community-dwelling older people and developing an integrated care plan to meet them. The Multidimensional Prognostic Index (MPI) is a validated CGA-based tool for predicting mortality, other negative health outcomes and assessing multidimensional frailty. SVaMA's wide diffusion in clinical practice prompted the development of an MPI version based on its data (MPI-SVaMA).

The aim is assessing the usefulness in predicting mortality of a new digital version of the MPI-SVaMA (MPI-SVaMA Digit) through a simpler model.

Methods: In this retrospective cohort study, 12,020 community-dwelling older people (≥ 65) who underwent the SVaMA in Veneto, Italy were included. One-month and one-year mortality rates were retrieved from Registry Offices. The MPI-SVaMA Digit was obtained by assigning a risk category to each domain assessed in the SVaMA. Accuracy and precision were assessed using Area Under the Curve (AUC) and concordance index (C-index). The association between MPI-SVaMA Digit and mortality was evaluated through Cox regression analysis.

Results: The MPI-SVaMA Digit showed good accuracy and precision in predicting 1-month (AUC = 0.78; 95% CI 0.75–0.81, C-index = 0.78 95% CI 0.75–0.81) and 1-year mortality (AUC = 0.77; 95% CI 0.76–0.78, C-index = 0.72 95% CI 0.71–0.74). People at moderate and severe risk of multidimensional frailty showed, respectively a fourfold and 12-fold increased mortality risk than the group at mild risk.

Key conclusions: The MPI-SVaMA Digit is an accurate prognostic tool for short- and long-term mortality useful to address clinical and organizational demands in community-dwelling older people.

Poster

Late-Breaking Abstracts

LB-01

Sarcopenic obesity and mortality: a silent and underrecognized epidemic in the older adults?

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Background & Aims: Sarcopenic obesity (SO) is an emerging geriatric condition with important clinical implications. In 2022, ESPEN and EASO proposed standardized diagnostic criteria for SO, yet their clinical validity remains to be established. This study aimed to evaluate whether the ESPEN/EASO diagnostic algorithm predicts all-cause mortality in older adults.

Methods: This retrospective cohort study included outpatients aged ≥60 years admitted between November 2012 and June 2024. Muscle function was assessed using handgrip strength, and body composition (muscle mass, fat percentage) was measured by bioelectrical impedance analysis. Skeletal muscle mass was adjusted for body weight and body mass index (BMI). Participants were categorized into four phenotypes: non-sarcopenic non-obese (reference), sarcopenic non-obese, sarcopenic obese, and non-sarcopenic obese. Associations between body composition phenotypes and mortality were examined using Kaplan–Meier survival analysis and Cox proportional hazards models.

Results: A total of 1,687 participants (mean age 75 ± 6.8 years; 69.1% female) were included. The prevalence of SO was 2.9% (weight-adjusted) and 3.3% (BMI-adjusted). During 87 months of follow-up, all-cause mortality was 35%. Survival differed significantly across phenotypes ($p < 0.001$). In multivariable Cox models, only SO was independently associated with increased mortality risk [HR = 1.612 (95% CI 1.048–2.480; $p = 0.03$) for weight adjustment; HR = 1.784 (95% CI 1.178–2.701; $p = 0.006$) for BMI adjustment].

Conclusions: The ESPEN/EASO diagnostic algorithm effectively predicts mortality risk in Turkish older adults. BMI-adjusted skeletal muscle mass appears more predictive than weight-adjusted values. Further longitudinal studies are warranted to confirm these findings.

LB-02

Impact of socio-economic and patient-centered characteristics on access to Alzheimer's disease medication in primary care: a population-based study in the Stockholm County, Sweden

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Introduction: Although treatment recommendations exist for Alzheimer's disease (AD), access to AD medications is not evenly distributed, even within the same healthcare system [1, 2, 3]. This study explored predictors influencing access to AD-specific drugs in a retrospective cohort including nearly all individuals diagnosed with AD in Stockholm between 2013 and 2021.

Methods: The cohort comprised 14,884 individuals with an incident AD diagnosis during 2013–2021. The primary outcome was dispensation of AD drugs (cholinesterase inhibitors or memantine) within

90 days before to 180 days after diagnosis. A generalized linear mixed-effects model (GLMM) was used, including patient characteristics (age, comorbidities) and features of the primary care centres (PCCs) where patients were listed, such as the Care Need Index (CNI) [4].

Results: Overall, 77% received AD medication. Patients at PCCs with high CNI scores—indicating lower socioeconomic status—had reduced likelihood of drug dispensation compared with those at low CNI centres (76.2% vs. 84.8%; OR 0.65, 95% CI 0.50–0.86). This association weakened among nursing home residents. Additional factors associated with lower odds of treatment were age ≥85 years (OR 0.25, 95% CI 0.21–0.28), nursing home residency (OR 0.37, 95% CI 0.34–0.41), and higher comorbidity (OR 0.63, 95% CI 0.57–0.70).

Key conclusions: Socioeconomic circumstances substantially affected the probability of receiving AD-specific medication, in addition to known determinants such as age and comorbidity. Targeted efforts are needed to reduce inequities in pharmacological treatment of AD, particularly those linked to socioeconomic disadvantage.

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LB-03

Guidelines and tools to assess diuretic prescribing appropriateness and aid deprescribing: a systematic review

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Background: Diuretics are widely prescribed for heart failure and hypertension, particularly among older adults. While effective, prolonged use increases the risk of adverse drug events (ADEs), including electrolyte imbalances, falls, and drug-drug interactions. Emerging evidence suggests high-dose loop diuretics may be linked to increased mortality in heart failure, and strict blood pressure control in older adults may present more risks than benefits. Objectives This study reviews contemporary international recommendations on inappropriate diuretic prescribing and deprescribing from clinical practice guidelines (CPGs). Additionally, expert tools on polypharmacy and deprescribing were analyzed to develop practical recommendations for optimizing diuretic use.

Methods: A systematic review following PRISMA 2020 guidelines was conducted using Ovid Medline, Embase, and grey literature databases. Inclusion criteria encompassed guidelines and tools addressing inappropriate diuretic use and deprescribing in adults (≥18 years). Two independent reviewers performed data extraction and quality appraisal.

Results: Of 3059 records screened, 40 resources met inclusion criteria (17 CPGs and 23 deprescribing tools). A total of 158 recommendations on diuretics were extracted, of which the majority covered general warnings or contra-indications, highlighting cautious use and monitoring ($n = 112$). Thirty-five recommendations covered

appropriate and inappropriate prescribing. A minority of recommendations focused specifically on deprescribing ($N = 11$), of which two contained structured deprescribing guidance and one involved shared decision making.

Key conclusions: Recommendations on diuretic use mainly consist of general warnings/contraindications and lack structured deprescribing guidance in terms of prioritization, communication, alternatives and specific groups or circumstances. Addressing these topics in future guidelines and tools could improve clinical practice.

LB-04

Therapeutic impact of sodium-glucose cotransporter 2 inhibitors on blood pressure and safety outcomes in adults aged 65 and older: a systematic review and meta-analysis

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Introduction: Sodium-glucose cotransporter 2 (SGLT2)-inhibitors have demonstrated cardioprotective effects in individuals with type 2 diabetes and/or heart failure. However, evidence in older adults remains limited.

Aim: To investigate the effects of SGLT2-inhibitors on blood pressure (BP) in adults aged ≥ 65 , with secondary endpoints including glycated hemoglobin (HbA1c), body weight (BW), and adverse events.

Methods: A systematic search was conducted in PubMed and Web of Science, complemented by backward citation checking. Randomized controlled trials (RCTs) including > 450 participants aged ≥ 65 years were eligible. Risk of bias (RoB) was assessed. Meta-analyses were performed using RStudio.

Results: Five RCTs met the inclusion criteria, comprising 15,377 patients with mean ages between 66.2 ± 11.0 and 71.8 ± 9.3 years. The RoB was low in three studies and moderate in two. SGLT2-inhibitors significantly reduced systolic BP (mean difference [MD] = -1.27 mmHg, [95% confidence interval: -1.79 ; -0.75], $p < 0.00001$) as well as HbA1c (MD = -0.20% , [-0.29 ; -0.11], $p < 0.0001$), and BW (MD = -1.14 kg, [-1.57 ; -0.70], $p < 0.0001$). One study assessed diastolic BP and found no significant effect. Treatment lowered the risk of hospitalization for heart failure (risk ratio [RR] = 0.73 , [0.67 – 0.79], $p < 0.00001$) and cardiovascular mortality (RR = 0.88 , [0.79 – 0.97], $p = 0.013$). No significant effects were observed for urinary tract infection, falls, or fractures. Risk of hypotension was significantly increased (RR = 1.16 , [1.03 – 1.32], $p = 0.0175$).

Conclusion: SGLT2-inhibitors reduced systolic BP, HbA1c, and BW in adults aged ≥ 65 . They also provided benefits for heart failure hospitalization and cardiovascular mortality. However, the 16% increased risk of hypotension raises concerns, particularly in frail individuals. Further studies in geriatric persons are needed to investigate their real-world potential.

LB-05

Multidomain intervention for dementia risk reduction in primary care: results from the HAPPI MIND cluster randomised controlled trial

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Kevin Mc Namara (7), Sharleen L O'Reilly (8), Dennis Thomas (9), Elizabeth Manias (10), Kaarin J Anstey (11), Marlien Varnfield (12), Rajiv Jayasena (13), Rohan A Elliott (14), Cik Y Lee (15), Andrea Hernan (7), Denise van den Bosch (1), Catherine Ferreira (16), Nina Nguyen (1), Johnson George (17)

Introduction: Modifiable midlife risk factors are major contributors to development of dementia, yet scalable interventions in primary care are lacking. Multidomain approaches integrating behavioural support and mobile health (mHealth) interventions may be effective. This study evaluated the effectiveness of the HAPPI MIND intervention, a multi-domain, nurse-led, mHealth-supported program, in reducing dementia risk among middle-aged adults.

Methods: Adults aged 45 to 65 years with ≥ 2 modifiable dementia risk factors were recruited from 31 Australian general practices (intervention = 13, control = 18). Intervention participants received the Australian National University–Alzheimer's Disease Risk Index (ANU-ADRI) dementia risk assessment, six nurse-led motivational interviewing sessions, an individualised action plan, and access to the mHealth application. Control participants received an ANU-ADRI dementia risk assessment and a brief intervention. Data collection was undertaken by nurses at baseline and 12 months. The primary outcome was 12-month change in ANU-ADRI dementia risk score. Intention-to-treat analyses using linear mixed-effects models were performed adjusting for clustering and key covariates.

Results: 403 participants (intervention = 201, control = 202) were enrolled; mean ($\pm$ standard deviation) age was 56.4 ± 5.7 years, and 62.5% were female. The intervention group demonstrated statistically significant improvement in ANU-ADRI scores compared with controls (adjusted mean difference = 1.51 , 95% CI 0.01 – 3.01 ; unadjusted mean difference = 1.44 , 95% CI 0.11 – 2.77). Findings were consistent in per-protocol and complete-case analyses, all favouring the intervention.

Key conclusions: The HAPPI MIND intervention was associated with reduced dementia risk, supporting the use of nurse-led, multidomain, and mHealth-supported approaches as scalable strategies for dementia prevention in primary care.

LB-06

Using a frailty trigger at triage to predict mortality and higher acuity among older emergency department attenders

ECGI submission

Elizabeth Moloney (1), Rónán O'Caoimh (1), Anne O'Keefe (2), Mark R. O'Donovan (3), Anne Healy (2)

Background: Frailty is common in older adults presenting to Emergency Departments (EDs) but is often under-recognised early in the admission pathway. We evaluated the Frailty Trigger (FT), a brief nurse-administered screening tool used at ED triage, for its association with clinical urgency and mortality.

Methods: A prospective observational study was conducted on consecutive ED attendances aged ≥ 65 years at a university hospital in Cork, Ireland, from October 1, 2024 to January 31, 2025. The FT was applied at triage. Outcomes included Manchester Triage System (MTS) score, ED process times, admission length of stay (LOS), and mortality. Ordinal logistic regression assessed the association between FT result and MTS score. Cox proportional hazards models estimated mortality risk, adjusting for age, sex, and MTS score.

Results: Of 3,335 patients screened, 50.8% ($n = 1696$) were FT-positive. They were significantly older (median age 79 vs. 73, $p < 0.001$), with no gender difference ($p = 0.935$). FT-positive

patients had more urgent triage scores (OR 0.510, 95% CI 0.447–0.582, $p < 0.001$). Survival analysis showed reduced survival for FT-positive patients (log-rank $\chi^2 = 116$, $p < 0.001$). The unadjusted hazard ratio (HR) for mortality was 4.3 (95% CI 3.21–5.73), and remained significant after adjustment (adjusted HR 2.99, 95% CI 2.21–4.05, $p < 0.001$). FT positivity was associated with 3.16 times greater odds of death (95% CI 2.31–4.32, $p < 0.001$) after full adjustment.

Conclusions: The Frailty Trigger identifies older ED patients at increased risk of mortality and higher clinical urgency. As a rapid triage tool, it may aid early recognition of frailty and guide timely geriatric care.

LB-07

Digital mobility outcomes can help distinguishing between frailty status in the InCHIANTI cohort

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Introduction: Frailty is a clinical syndrome affecting a growing portion of the global older adult population. It increases the risk of falls, hospitalization, and mortality [1]. Yet, frailty remains under-assessed in large-scale community settings due to a lack of scalable, objective tools. We hypothesized that Digital Mobility Outcomes (DMOs) from wearable sensors in daily life could support geriatricians in assessing and monitoring frailty. **Methods:** This study uses the 4th ($n = 164$, age 79.57 ± 6.44 yrs) follow-up of the InCHIANTI study (clinical trial: NCT01331512). Participants wore a Samsung Galaxy S2 smartphone on the lower back for one week during daily activities. DMOs were computed using the Mobilise-D pipeline [2]. Frailty status was classified using Fried's criteria [3]. DMO–frailty associations were tested using ANOVA or Kruskal–Wallis (based on Shapiro–Wilk), with pairwise t-tests or Mann–Whitney U tests. **Results:** DMOs across all five gait domains (amount, pattern, pace, rhythm, and bout-to-bout variability) differed significantly between frailty groups (robust = 74, Pre-frail: 58, Frail: 17), although within rhythm and variability some measures were not significant. Robust participants showed greater walking activity (duration, step count), higher speed, and cadence than pre-frail individuals ($p < ?10^{??}$). Pre-frail participants, in turn, outperformed frail individuals in walking duration, speed, cadence, stride length, and exhibited lower gait variability ($p < 0.05$). **Conclusions:** DMOs derived from the Mobilise-D pipeline can discriminate frailty status in community-dwelling older adults, supporting their use for scalable, real-world frailty monitoring. This preliminary study could help the geriatrics community adopt a more ecological approach to distinguish frailty levels.

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LB-08

The omission of nursing care and elderly outcomes: a systematic review

Christian Rochefort (1), Josiane Provost (1), Émilie Gosselin (1)

Introduction: Research has established associations between nurse staffing levels in hospitals and adverse elderly outcomes. However, the mechanism for these associations is uncertain, and scholars have proposed nursing care omissions has a potential explanation. Over the past two decades, international studies have provided evidence of an association between higher rates of care omissions and adverse elderly outcomes. However, existing evidence remains scattered.

Objectives: To systematically summarize existing evidence on the associations between care omissions and elderly outcomes.

Methods: A systematic search of the literature was undertaken. Studies were included if they: (a) were published between 2000 and 2025; (b) used a quantitative design; (c) examined the association between care omissions and elderly outcomes. Data were independently extracted, analysed, and synthesized by two authors and discrepancies were resolved by consensus. Methodological heterogeneity precluded formal meta-analysis. The methodological quality of each study was assessed using the STROBE criteria.

Results: Among 3,437 retrieved articles, 49 studies were included. Results revealed that the most omitted nursing care elements included: (1) symptom monitoring and management (e.g., pain control, comfort care); (2) communication with patients and families (e.g., teaching and discharge planning); (3) patient ambulation, and; (4) mouth care. In addition, higher rates of nursing care omissions were associated with higher incidence of falls, medication errors, pressure ulcers, infections, and readmissions.

Conclusion: Care omissions have a negative impact on elderly outcomes. It is essential for healthcare organizations to implement evidence-based strategies to prevent care omissions, such as improving staffing levels, workloads, and communication among healthcare providers.

LB-09

The association between frailty and hospital-related adverse events on older acutely admitted patients

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Introduction: Frailty is an age-related syndrome that increases vulnerability to adverse outcomes. Hospital-related adverse events (AEs) are complications not primarily caused by the patient's pre-existing conditions. While age has been widely studied, less is known about how frailty affects in-hospital AEs in older adults.

Methods: We conducted a single-centre observational study using routinely collected data from University Hospitals of Leicester between October 2017 and October 2023. The cohort included patients aged ≥ 65 admitted via the emergency department (ED). Frailty was assessed at ED presentation using the Clinical Frailty Scale (CFS). AE categories included: falls, pressure ulcers, moisture damage, adverse drug reactions, medication errors, infections, abuse, self-harm, discharge and transfer incidents, and hospital injuries. Poisson regression was used to estimate the association between frailty and AEs.

Results: Among 158,455 admissions, frailty was associated with a significantly increased risk of adverse events. Compared to CFS 1–3, adjusted relative risks (RRs) for CFS 7–9: falls (RR = 1.46), pressure ulcers (RR = 2.75), moisture damage (RR = 3.56), adverse drug reaction (RR = 2.89), medication errors (RR = 1.53), infections (2.03), discharge/transfer issues (RR = 2.42), and hospital injuries (RR = 1.66). Risks generally increased with frailty level and

remained significant after adjusting for age, sex, ethnicity, ED wait time, and inpatient length of stay.

Conclusion: Frailty is a strong and consistent predictor of adverse events during hospital admission. Increasing frailty levels were associated with higher risks across multiple event types, highlighting the need for targeted prevention strategies in frail populations.

LB-10

Evaluation of a caregiver educational program on nutritional rehabilitation of malnourished older adults

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Introduction: Malnutrition is a prevalent and serious concern in older adults, associated with adverse health outcomes and increased caregiver burden. This study aimed to assess the effectiveness of a structured educational program for caregivers of malnourished older adults, focusing on improvements in patients' nutritional and biochemical status as well as their quality of life, and on potential effects on caregivers' quality of life.

Methods: A prospective, randomized, controlled, non-blinded trial was conducted with 240 dyads of patients (+ 65 years, moderate/severe malnutrition) and their caregivers. Participants were randomized into intervention (n = 120) and control (n = 120) groups. Caregivers in the intervention group received structured training sessions on nutritional care, delivered in-person, online, or via telephone, while controls received no training. Outcomes included nutritional status (Mini Nutritional Assessment, MNA), plasma albumin, hemoglobin, and quality of life (WHOQOL-BREF) of both patients and caregivers, assessed at baseline and six months. Statistical analyses used repeated measures ANOVA. After intervention (AI).

Results: At baseline, groups were comparable. At six months, significant improvements were observed in the intervention group compared with controls: MNA score (Before intervention (BI) 15.29—After intervention (AI) 24.07, $p < 0.001$), plasma albumin (2.87 (BI)—3.79 (AI) g/dl, $p < 0.001$), hemoglobin (11.39 (BI)—13.06 (AI) g/dl, $p < 0.001$), and patients' WHOQOL-BREF score (81.39 (BI)—90.29 (AI), $p < 0.001$). No significant change was observed in caregivers' quality of life ($p = 0.299$).

Conclusion: The caregiver educational program was effective in enhancing patients' nutritional status, biochemical markers, and quality of life, underlining the importance of caregiver training in geriatric nutritional rehabilitation. However, caregivers' own quality of life remained unaffected, suggesting the need for complementary interventions to support their well-being.

LB-11

Muscle ultrasonographic parameters predict prolonged hospital stay in older adults: a multicenter study

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Introduction: Sarcopenia contributes to prolonged hospital stays in older adults. Muscle ultrasonography (USG) is a bedside tool to assess muscle quantity and quality. This study aimed to identify USG parameters that predict prolonged stay in hospitalized older adults.

Methods: This prospective multicenter study was conducted in three European university hospitals. Patients >65 years admitted to geriatrics clinics were included. Frailty, undernutrition, and sarcopenia were evaluated using validated tools. USG of rectus femoris and vastus lateralis was performed within 48 h of admission and repeated on days 8, 15, and 22. Muscle thickness, cross-sectional area, pennation angle (PA), and stiffness were measured. Prolonged stay was defined as the top third of hospital length. Analysis of variance (ANOVA) and logistic regression analyses were used.

Results: A total of 114 patients (59.6% female, median age 82) were included. Median hospital stay was 11 days (IQR:9–17). Infections, especially respiratory, were the main admission cause (68.3%). High rates of frailty and undernutrition were observed. No significant changes were seen in USG measures over time. At admission, vastus lateralis PA and thickness predicted prolonged stay (> 15 days) [OR = 1.37 (1.06–1.79), $p = 0.023$; OR = 0.79 (0.63–0.99), $p = 0.037$].

Key conclusions: Vastus lateralis pennation angle and muscle thickness at admission are useful ultrasonographic markers to predict prolonged hospital stay in older adults. These findings highlight the clinical potential of muscle ultrasound as a non-invasive, bedside tool to aid early risk stratification. Integrating such measurements into routine geriatric assessment may help optimize personalized care, and reduce complications associated with prolonged hospitalization. Future large-scale longitudinal studies are warranted to establish standardized protocols.

LB-12

Fall risk assessment using the FRAT-up score and comparison with the risk categories of the World Falls Guidelines taskforce: a preliminary analysis from the DARE FALLSPREDICT studies

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Introduction: Falls are a major health concern in older adults. The FRAT-up score is a validated tool for estimating fall risk, with strong discriminative ability demonstrated across four European cohorts. The World Falls Guidelines (WFG) taskforce has recently proposed a new fall-risk stratification algorithm. This preliminary analysis from the DARE FALLSPREDICT studies compared one-year fall risk estimated by FRAT-up with the categories defined by the WFG algorithm.

Methods: We analysed data from the DARE FALLSPREDICT studies, ongoing protocols aimed to develop a multivariable model for predicting incident falls in community-dwelling older adults. For this analysis, participants were stratified into WFG risk categories. Wilcoxon rank-sum tests, ANCOVA, and partial correlations were used.

Results: A total of 192 participants were included (mean age: 76.4 ± 9.0 years; 67% women). The mean FRAT-up score was 0.33 ± 0.18 . According to WFG, 53.4% were low risk, 43.5% high risk, and 3.1% intermediate risk. FRAT-up scores were significantly higher in the WFG high-risk group than in the low-risk group ($p < 2.2 \times 10^{-16}$). Associations remained significant after adjustment for potential confounders (sex, age, and frailty).

Conclusion: These preliminary findings suggest that the one-year fall risk estimated by the FRAT-up score is consistent with the fall-risk categories defined by the WFG, as proposed by the recent World Falls Guidelines. This research was co-funded by the Italian Complementary National Plan PNC-1.1 "Research initiatives for innovative technologies and pathways in the health and welfare sector" D.D. 931

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LB-13

Identifying biomarkers of accelerated ageing in older people with cancer from routine clinical data

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Introduction: Cancer and ageing have a bidirectional relationship: age is the strongest risk factor for cancer, and cancer and treatments can accelerate ageing. Consequently, biological age of cancer patients often deviates from chronological age. Biomarkers of biological age are needed to stratify interventions to minimise accelerated ageing.

Methods: PhenoAge was calculated from routine blood test results of patients attending Guy’s Hospital Geriatric Oncology Liaison Development clinic. PhenoAgeAccel was the residual from a regression of PhenoAge against age.

Results: Data were available for 173 patients (62% male). Mean PhenoAge was higher than age (84.3 (12.6) vs 76.2 (7.24), $p < 0.001$), though the two were correlated ($r = 0.579$, $p < 0.001$). Unlike age, PhenoAge and PhenoAgeAccel were associated with one-year mortality (PhenoAge OR = 1.083, 95% CI 1.038–1.136; PhenoAgeAccel OR = 1.096, 95% CI 1.047–1.155). PhenoAge correlated with Clinical Frailty Score and Timed Up and Go (CFS: $R_s = 0.31$, $p < 0.001$; TUG: $R_s = 0.25$, $p < 0.005$); there were no correlations with age. PhenoAgeAccel correlated with the number of CGA interventions made ($R_s = 0.17$, $p < 0.05$), unlike age and PhenoAge. Diabetics had a higher PhenoAgeAccel (3.40 (9.78) vs -1.71 (10.53), $p = 0.002$). In patients receiving systemic anti-cancer treatment, patients with PhenoAgeAccel calculated pre-treatment had less age acceleration than those with PhenoAgeAccel calculated post-treatment, both overall (2.18 (10.64) vs -2.87 (7.98); $p = 0.048$) and in matched samples ($n = 21$, 7.76 ± 11.98 vs -2.87 ± 7.98 , $p < 0.001$).

Conclusions: PhenoAgeAccel is a greater predictor of risk than chronological age in older people with cancer. Integration of PhenoAgeAccel within electronic healthcare records could identify patients suited to geroprotective interventions.

LB-14

Age-associated patterns in direct oral anticoagulant dosing in atrial fibrillation: are older patients at risk?

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Introduction: Direct oral anticoagulants (DOACs) are the first-line treatment in atrial fibrillation (AF), requiring dose adjustments based on age, creatinine clearance, weight, and drug interactions. Inappropriate dosing, especially underdosing, is common in older adults due to frailty and polypharmacy, increasing morbimortality risk. This

study aimed to evaluate whether DOAC dosing appropriateness differs across age groups and investigate trends with increasing age.

Methods: A retrospective single-center study included 141 AF patients admitted between March 24 and 30, 2024. Exclusion criteria were warfarin use, death during hospitalization, major bleeding, incomplete data, clearance < 15 mL/min, or total dependency. Patients were divided into four groups according to age. Dosing appropriateness was assessed according to European Society of Cardiology guidelines.

Results: The cohort comprised 109 patients (mean age 80.8 ± 11.8 years, 64% female) receiving DOACs: apixaban (41%), edoxaban (32%), rivaroxaban (17%), and dabigatran (9%). Inappropriate dosing occurred in 28% of patients (63% underdosed, 37% overdosed). Appropriateness declined progressively with age: 86% in patients under 65, 78% in those aged 65–74, 74% in the 75–84 age range, and 67% in patients aged 85 or older. Chi-square showed no significant association ($p = 0.637$); however logistic regression revealed a 3.7% decrease in adequacy per additional year ($\text{Exp}(B) = 0.963$; $p = 0.080$), suggesting a clinically relevant trend.

Key conclusions: Although not statistically significant, the progressive reduction in DOAC dosing adequacy with age highlights very elderly patients as a vulnerable subgroup. Targeted interventions, careful dosing and monitoring of DOAC dosing are warranted to enhance safety in this high-risk population.

LB-15

Developing a Chinese Version of “Lifestyle Integrated Functional Exercise” (CLiFE) as a falls prevention intervention programme: a qualitative component of a mixed-methods study

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Introduction: This qualitative study aimed to identify perceptions and acceptability among older Chinese adults in the UK of an adapted lifestyle-integrated exercise (aLiFE) programme, which seamlessly integrates balance and strength exercises into daily routines (e.g. doing one-leg stands while brushing teeth). This is part of a complex intervention, developing and evaluating a Chinese version of this falls prevention intervention (CLiFE).

Method: Three sets of individual semi-structured interviews (partners: researcher, community leader, Taichi expert) and three focus groups (18 older Chinese adults (64–84) who live in the UK) were conducted to explore perceptions and acceptability of the adapted lifestyle-integrated exercise programme (aLiFE). Results of thematic analysis led to development of a draft adapted CLiFE programme. The draft is being co-designed further in workshops with older Chinese people and other partners.

Results: Preliminary analysis identifies three key themes: current activity level and status, perception of cultural adaptation of movements, and perceptions of data collection methods. These findings provide evidence and valuable insights for the development of the CLiFE programme. Cultural modifications of aLiFE to develop CLiFE using co-design methods will be based on these findings.

Key conclusions: Findings indicated a high level of acceptance of aLiFE programme among older Chinese people in the UK, but the intervention needs cultural modification. Based on qualitative results and co-design workshops, a culturally adapted version, CLiFE, will be developed and tested within a future pre-post feasibility study with follow-up interviews.

Support/Funding Source: This study is self-funded by the main researcher.

LB-16

Factors shared by monozygotic twins explain unexpected associations between frailty and the use of menopausal hormone replacement therapy

ECGI Submission

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Introduction: Menopausal hormone replacement therapy (HRT) is first-line treatment for distressing vasomotor symptoms, increasingly popular, and may help prevent specific conditions like osteoporosis. However, data on the association of HRT with ageing overall, including frailty, is lacking.

Method: We analysed women in the Danish population registry ($n = 471,206$), Danish Twin Registry and TwinsUK cohort ($n = 1547$). In Denmark, we assessed frailty age 65, 70 and 75, using a modified Hospital Frailty Risk Score. This linked to national prescribing data, to ascertain HRT use by age 55, adjusting for birth year, education and income. In TwinsUK, we assessed frailty after age 65 using a frailty index (TwinFI) by HRT use, adjusting for covariates (BMI, smoking, alcohol use, education and deprivation). Analysis used conditional/fixed-effects generalised estimating equations, examining within twin-pair frailty associations.

Results: HRT associated with higher frailty scores amongst both Danish women ($\beta = 0.21$, $P < 0.001$) and TwinsUK ($\beta = 0.035$, $p = 0.01$) equivalent to ageing 5 years. However, in TwinsUK, HRT only associated with higher frailty for the within-pair analyses in dizygotic twins (Dizygotic: $\beta = 0.061$, $p = 0.01$, Monozygotic: $\beta = 0.013$, $p = 0.36$). This was robust to multiple sensitivity analyses, including HRT subtypes, duration and imputation.

Conclusions: We found an unexpected relationship between HRT use and higher frailty across both Denmark and the UK. However, twin analysis suggests this relationship is not causal, but confounded by factors shared within monozygotic twins, including genetics. Further investigation is needed to determine whether individuals prescribed HRT are already on the path to frailty, and whether this would be an apt opportunity to intervene.

LB-17

Validation of an assessment instrument for assistive technologies in older adults (BEAT): a pilot study

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Introduction: Assistive technologies (AT) can support autonomy in older adults, yet selection is complex. We developed the “Bewertungsinstrument für Assistive Technologien” (BEAT—in English: assessment instrument for AT), a professional, multidimensional tool

to appraise personal, technological, and economic aspects of AT. We examined its reliability and validity.

Methods: Prospective pilot study including community-dwelling older adults ($n = 9$; single session) and healthcare students/professionals ($n = 29$; two sessions two weeks apart). After standardized instruction and hands-on testing of three AT (automatic pill dispenser, emergency smartwatch, tablet accessibility aid), participants completed BEAT; professionals repeated BEAT at T2. Outcomes were test–retest reliability (intraclass correlation coefficient, ICC; Spearman rho), face validity (average rating across all items on a 4-point Likert scale; Wilcoxon signed-rank test), and construct validity (correlations with QUEST 2.0 and PIADS at T1).

Results: Test–retest reliability among professionals was moderate-to-excellent: single-measure ICC 0.55 to 0.81, average-measure ICC 0.71 to 0.90; Spearman rho 0.50 to 0.69 (all $p < 0.006$). Face validity was high (overall mean 3.62/4; all items above neutral, $p < 0.001$). Construct validity was supported by positive correlations with QUEST 2.0 and PIADS for the emergency smartwatch and pill dispenser (rho 0.39 to 0.63; all $p < 0.026$), whereas associations for the tablet aid were smaller and not statistically significant.

Key conclusions: BEAT showed robust reliability and supportive face and construct validity after brief exposure to diverse AT, indicating suitability for structured, comparative evaluation of AT for older adults. Longer real-world testing and refinement are warranted to optimize standardization and interpretability.

LB-18

Closing the communication gap: redesigning ward round conversations to improve care for older inpatients

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Introduction: In busy acute medical wards, communication with patients is often rushed, inconsistent, or incomplete. For older adults—many of whom face sensory, cognitive, or health-literacy barriers—this leads to poor understanding of diagnosis, treatment, and discharge planning. Such gaps undermine patient confidence, create avoidable anxiety for families, and generate unnecessary out-of-hours enquiries. This project set out to redesign ward round communication, ensuring that older patients receive clear, structured, and patient-centred updates every day.

Methods: At MFT, 54 acute medical inpatients (mean age 71 years) were surveyed across five domains: diagnosis clarity, treatment plan, next steps, discharge planning, and opportunity to ask questions. Interventions included: (1) a structured ward round checklist for clinicians, (2) patient-facing bedside posters outlining expected information, and (3) targeted educational sessions for the acute medical team on communication with older adults.

Results: Baseline data revealed striking gaps: while 91% of patients recalled introductions and being offered time for questions, only 43% understood the next steps, and just 22% were clear about discharge plans. Following implementation of the checklist, posters, and educational programme, the second cycle of data collection has shown substantial improvement across all domains, with patients reporting clearer understanding, reduced anxiety, and greater confidence in their care.

Conclusion: Communication failures during ward rounds are common, avoidable, and disproportionately harmful for older adults. This structured, educationally reinforced model closes the loop, delivering measurable improvements in patient understanding, satisfaction, and discharge preparedness. Simple, scalable, and sustainable, it has the potential to transform ward culture across geriatric and acute medical services internationally.

LB-19

New landscapes in geriatric medicine:co-creating care through interdisciplinary collaboration-recognizing patients as team partners

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Introduction: Geriatric care requires the integration of multiple perspectives to address the complex needs of frail older adults. The EU-funded RAISE (Robotics and Artificial Intelligence for Socio-Economic Empowerment) project demonstrates how clinicians, engineers, physiotherapists, psychologists, and patients can jointly drive innovation, bridging clinical needs with technological solutions. The project combines geriatric expertise with robotics, Artificial Intelligence, and human–computer interaction.

Methods: RAISE adopted a co-creation approach, engaging patients and caregivers as active stakeholders in workshops, brainstorming sessions, and focus groups. Their input guided design choices and adaptations, ensuring usability, acceptability, and ethical compliance. Interdisciplinary communication was structured using the SBAR (Situation, Background, Assessment, Recommendation) framework. Patient experience was assessed using a 5-point Likert scale on ease of use, usefulness, comfort, involvement in decisions, and overall satisfaction, complemented by an open-ended question for qualitative feedback.

Results: Preliminary findings, with half of the planned cohort already enrolled, indicate that including patients as equal contributors enriched the design process, revealing barriers often overlooked by professionals. Prototypes were refined using both clinical and patient feedback. Early evaluations showed improved adherence, engagement, and satisfaction, with Likert scores consistently above 4/5 across domains.

Key conclusions: Acknowledging patients as equal contributors supports the development of personalized, human-centred technologies that are perceived as part of daily living, thus reinforcing confidence in their integration into geriatric care pathways.

LB-20

Standing up to deconditioning: a multidisciplinary approach to enhancing patient mobilization

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Background: Deconditioning, the progressive loss of physical and functional capacity during hospital admission, is a significant but often overlooked contributor to poor patient outcomes. It increases dependency, prolongs recovery, and raises the risk of hospital-associated complications. Despite these consequences, patient mobilization is frequently limited by invasive lines, staff workload, and entrenched ward routines.

Objective: This quality improvement project evaluated whether small, low-cost, multidisciplinary interventions could increase patient mobilization and reduce deconditioning in a hospital inpatient ward.

Methods: A multidisciplinary team of doctors, nurses, therapists, and healthcare assistants introduced four ward-based strategies: (1) emphasizing early mobilization during morning handovers to set expectations; (2) minimizing barriers by reducing unnecessary intravenous fluids, antibiotics, and urinary catheters; (3) implementing sit-out charts with simplified instructions to track mobilization and encourage early intervention; and (4) displaying posters to raise awareness of deconditioning among staff and patients.

Results: At baseline, the mean number of patients mobilizing out of bed was 7.73 (median 7). After the first interventions, this increased to a mean of 14.71 (median 14). Sustained improvement was observed with continued reinforcement through sit-out charts and visual prompts (mean 13.14, median 14). These results demonstrate that awareness-raising combined with simple practical measures can produce measurable increases in patient activity.

Conclusion: Embedding mobility-focused practices into daily ward routines is feasible, sustainable, and effective. Small, low-cost interventions improve independence, accelerate recovery, enhance quality of care, and reduce hospital length of stay.

LB-21

Integrating geriatric syndromes into a respiratory severity index to predict in-hospital mortality among older adults

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Introduction: Hospitalized older adults with respiratory diseases often present with geriatric syndromes that complicate prognosis and management. Existing risk scores inadequately capture the physiological vulnerability associated with aging. We aimed to develop and validate a novel Respiratory-Geriatric Severity Index (RGSI) incorporating geriatric syndromes to predict in-hospital mortality among older adults.

Methods: We conducted a retrospective cohort study of patients aged ≥75 years hospitalized for acute or chronic respiratory diseases at a tertiary respiratory center. Comprehensive geriatric assessments were performed within 24 h of admission. Geriatric syndromes included frailty, sarcopenia, cognitive impairment, delirium, functional disability, pressure ulcers, incontinence, dysphagia, and nutritional and strength deficits. A multivariable logistic regression identified independent mortality predictors, which were weighted to create the RGSI. Predictive accuracy was evaluated using the area under the receiver operating characteristic curve (AUC). Subgroup analyses were performed for major respiratory diagnoses.

Results: Among 728 patients, in-hospital mortality was 18.3%. Thirteen variables were independently associated with mortality and integrated into the RGSI. Patients were stratified into low (0–5), intermediate (6–11), and high risk (≥12) categories, with respective mortality rates of 3.7%, 17.4%, and 33.6% ($p < 0.001$). The RGSI showed strong discrimination (AUC 0.83), outperforming traditional indices. Functional disability, pressure ulcers, delirium, frailty, and sarcopenia were the strongest predictors. Performance remained robust across subgroups.

Conclusions: The RGSI is a practical, accurate tool for predicting in-hospital mortality in older adults with respiratory disease. Its use may enhance early identification of high-risk patients and guide palliative care referrals and goal-concordant interventions.

LB-23

Development of a peer support-based intervention to address loneliness in French-speaking seniors living in Toronto (Canada) in a context of linguistic minority

Mia Hubert (1), Sabrina Kolker (2), Mireille Norris (3), Jacques Lee (4)

Introduction: Social isolation and loneliness (SIL) affect nearly 30% of Canadians aged 70 and older [1,2]. Linguistic and racialized

minorities face additional barriers to social participation, increasing their vulnerability to SIL and its associated consequences, including poorer health outcomes, reduced quality of life and higher mortality risk [3–6]. The HOW-R-U? peer-support intervention—weekly phone call between seniors and trained volunteers—has demonstrated effectiveness in reducing loneliness and depression [7,8]. To date, however, the program has only been implemented in English.

Methods: Recognizing the need for a linguistically and culturally adapted approach, we are piloting this intervention with French-speaking seniors. This feasibility study will determine baseline rates of loneliness and assess the acceptability of a tailored peer-support program. Francophone seniors aged 65+ with baseline score of ≥2 on the De Jong Gierveld Loneliness Scale will participate in a 12-week program involving weekly phone calls with trained French-speaking volunteers.

Results: Outcomes will include changes in loneliness, social connectedness (Lubben's Social Network Scale), depression (Geriatric Depression Scale), and quality of life (EQ-5D-5L) measured at baseline and post-intervention.

Key conclusions: Findings will inform the design of a larger trial and provide insights into how to implement sustainable, accessible peer-support programs for seniors facing linguistic barriers and loneliness. Beyond the Canadian Francophone context, results may offer strategies relevant to other linguistic minority communities globally, including in Europe.

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LB-24

Transforming perioperative geriatric care in Sweden: the role of comprehensive geriatric assessment in surgical decision-making for frail older adults

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Introduction: With an aging population, the number of older adults undergoing elective cancer surgery is increasing. Many of these

patients present with frailty and multiple comorbidities, making perioperative management challenging. Comprehensive Geriatric Assessment (CGA) is a multidimensional tool that may guide perioperative decision-making and support improved outcomes, although its use in surgical pathways remains limited.

Methods: In March 2024, Karolinska University hospital established a high-risk preoperative clinic through collaboration between surgery, anesthesiology, and geriatrics. Patients referred to the clinic underwent CGA if they met at least one of the following criteria: age ≥80 years, Clinical Frailty Scale (CFS) ≥4, cognitive impairment, ≥3 comorbidities, or polypharmacy (≥5 medications). The CGA included standardized assessments of medical, nutritional, psychological, and functional domains, with multidisciplinary input shaping individualized care plans. Postoperative follow-up was conducted both in-hospital and at six months.

Results: To date, over 200 patients—including those with colorectal, bladder, uterine, and ovarian cancers—have been assessed. Preliminary findings suggest CGA enables early identification of risk factors such as sarcopenia, cognitive decline, and delirium, and facilitates targeted interventions including medication review and optimization of comorbid conditions.

Key conclusions: CGA appears to be a valuable tool for optimizing perioperative care in frail older adults undergoing elective cancer surgery. Its structured, multidisciplinary approach supports risk stratification and personalized planning. Further research is needed to determine its impact on clinical and functional outcomes.

LB-25

Hard collars or not for odontoid process fractures in older/frail people? The Duration of External Neck Stabilisation (DENS) trial

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Introduction: Cervical spine odontoid process (C2) fractures are often due to falls in older/frail adults, and are usually managed in hard collars. This trial aimed to examine whether management without hard collar immobilisation is associated with improved Quality of life in older/frail patients.

Methods: Non-blinded randomised controlled trial with nested qualitative study. Early hard collar removal (ERC) (intervention) v standard management (SM) in hard collar for 12 weeks. Aimed to recruit 887 participants from 25 UK hospitals over 2 years. Eligible patients aged ≥65 years, or with Rockwood Clinical Frailty Scale of ≥5. Study registration: NCT04895644.

Results: The study was terminated prematurely because of slow recruitment. 138 patients randomised. 83.3% aged > 75 years. Mean days in collar 0.2 (SD 1.4) ERC; 55.5 days (SD 38.0) SM; Cross-over: 3.0% ERC; 15.6% SM. At 28 days, 80 patients (61.5%) were not wearing a collar. Primary endpoint assessment (Quality of life: EQ5D5L at 12 weeks), intention to treat analysis, mean 0.675 (SD 0.250, 0.490–0.86) (ERC); 0.673 (SD 0.262, 0.51–0.89) (SM). Pre-specified subgroup analysis by fracture type ($p = 0.3645$), Rockwood score ($p = 0.6593$) and age ($p = 0.4088$) non-significant. Fifteen patients died; ten (17.2%) ERC, 5 (9.8%) SM (OR = 1.92 (0.61–6.04), $p = 0.266$). No deaths directly related to fracture or trial allocation. Qualitative study participants reported decreased autonomy

following the fracture. SM patients reported additional negative impacts. There was need for better information.

Conclusion: Clinicians can consider prioritising independence and comfort of older/frail patients with odontoid fracture by early collar removal.

LB-26

Comparing the diagnostic accuracy of word recall tests for cognitive impairment: findings from the Mexican Cognitive Aging Ancillary Study (Mex-Cog)

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Background: Episodic memory is a key component of cognitive screening, typically assessed using delayed verbal recall tasks. However, the number of words and trials used in these tests varies, and their diagnostic performance is not well-established across formats. This study examines the diagnostic properties of several recall tasks using data from the Mexican Cognitive Aging Ancillary Study (Mex-Cog).

Methods: We analyzed data from 3208 community-dwelling adults aged 58 years and older (mean age 72; 58% female) who participated in the 2021 wave of Mex-Cog, a sub-study of the Mexican Health and Aging Study. Episodic memory was measured using four tasks: 3-word recall (scored 0–3), 10-word recall (0–10), short story recall (0–12), and long story recall (0–50). Diagnostic accuracy for cognitive impairment was assessed using Area Under the Curve (AUC) from Receiver Operating Characteristic (ROC) analyses.

Results: Participants recalled an average of 2 words (± 1 SD) in the 3-word task and 3 words (± 2 SD) in the 10-word task. Two-thirds of participants scored ≥ 2 in the 3-word test. Agreement between 3-word and 10-word recall was poor (Cohen's Kappa < 0.2). The 10-word recall demonstrated significantly better diagnostic accuracy for cognitive impairment compared to the 3-word recall when using long story recall as the reference (AUC 0.75 vs. 0.61; $p < 0.001$).

Conclusion: The 10-word recall test offers greater diagnostic utility than the 3-word version. These findings suggest that longer word lists provide more reliable screening for cognitive impairment in older adults.

LB-27

Implementation of SGLT2i in old and very old patients: is their renal safety a problem?

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Introduction: Renal safety of sodium–glucose cotransporter-2 inhibitors (SGLT2i) in very old patients with heart failure with preserved or mildly reduced ejection fraction (HFp/mrEF) remains uncertain, and acute kidney injury (AKI) and glomerular filtration rate (GFR) remain as major limitations for their use.

Methods: We included 259 outpatients with ≥ 65 years with chronic HFp/mrEF recently started on a SGLT2i. Patients aged 65–79 years

($n = 108$) were compared with those ≥ 80 years ($n = 151$). Follow-up varied to a maximum of 24 months. Baseline characteristics were compared. Outcomes evaluated included AKI and longitudinal GFR. **Results:** Compared with the 65–79 group (mean age 73.5 ± 4.8), the ≥ 80 group (85.3 ± 3.8) showed a statistically significant lower GFR at baseline (56.45 ± 19.89 vs 68.17 ± 23.64 mL/min/1.73 m²; $p < 0.001$) and a higher prevalence of chronic kidney disease (58.94% vs 34.26%; $p < 0.001$). AKI occurred more often in those ≥ 80 years (16.56% vs 7.41%; $p = 0.03$). Discontinuation due to adverse events including AKI did not differ significantly and was uncommon (5.3% vs 4.6%; $p = 0.808$). Despite their baseline differences, the evolution of GFR was parallel between the groups ($p = 0.313$), with adjusted differences of approximately 9–14 mL/min/1.73 m² (all $p > 0.011$) at 3, 6, 12 and 24 months.

Key conclusions: Among older adults initiated on SGLT2i, very old patients had greater renal vulnerability (lower baseline eGFR and higher incidence of AKI), yet discontinuation due to adverse events was not significantly higher. These data support SGLT2i use in the very old with careful renal monitoring.

LB-28

ICare.IT–AvereCura—a longitudinal study on care burden of informal caregivers of people with dementia: preliminary analysis of objective and subjective variables

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Background: Caregivers of people with dementia present a significant risk of social isolation, stress, and increased risk of developing diseases. The ICare.IT–AvereCura study aimed to monitor caregivers' well-being across multiple domains.

Methods: Informal caregivers completed questionnaires and wore wearable sensors to monitor physical activity, sleep and heart rate for one week. Assessments were planned at baseline (T0), six months (T1), and twelve months (T2).

Results: Baseline data from 61 participants (46 women, median age 59 years, IQR 14) indicate that most caregivers were adult children (60%) or partners (35%) with a median caregiving time of 43 h per week (IQR 49). Median Zarit Burden Interview (ZBI) score was 38.5, reflecting moderate burden, and most caregivers reported low perceived social support (83%). ZBI correlated positively with age and mood symptoms, and negatively with relationship quality, perceived quality of life, and life satisfaction. Poor perceived sleep quality was associated with higher ZBI, higher anxiety, and reduced physical activity. Objective sleep and heart rate measures did not correlate with ZBI.

Conclusions: Baseline data from the ICare.IT–AvereCura study suggest that caregivers' burden is linked to worse perceived mood symptoms, increased social isolation and worse perceived sleep quality, which is also associated with higher anxiety and lower physical activity. Follow-up data will help confirm and refine these findings. This work was co-funded by Next Generation EU—“Age-It—Ageing well in an ageing society” project (PE0000015), National Recovery and Resilience Plan (NRRP)—PE8—Mission 4, C2, Intervention 1.3. CUP J33C22002900006.

LB-29

Public perceptions of ageing and anti-ageing interventions in a UK based population sample

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Introduction: This ongoing study employs a mixed-methods approach to evaluate public acceptability of geroprotective interventions across sociocultural variables including age, religion and ethnicity.

Methods: Cross-sectional online survey data were collected primarily from the UK population, with a pilot survey launched in October 2024. Questions focus on (1) likelihood of taking anti-ageing drugs in varying circumstances, (2) ethical perspectives on gerotechnology, and (3) concerns about ageing. Quantitative data were analysed using SPSS with descriptive statistics, correlations and non-parametric tests, while qualitative responses were examined thematically using NVivo.

Results: As of August 2025, 1004 individuals (mean age 48.0 years, 64% female) completed the survey. Among the 497 individuals (49.9%) indicating willingness to take geroprotective drugs, 78% prioritised healthspan improvements. Friedman's test revealed significant variations in intervention acceptability across scenarios ($\chi^2(7) = 1608.483$, $p < 0.001$), with greatest support for taking drug to reverse cognitive ageing and lowest for healthfood supplements. Kruskal–Wallis tests revealed significant age group differences in most intervention acceptability statements, except for reversing cognitive ageing ($p = 0.288$). Spearman's correlations ($N = 903/928$) revealed older age was weakly but significantly correlated with more optimistic ageing outlooks ($r = 0.097$, $p = 0.003$). Qualitative analysis contextualised quantitative trends through three overarching themes (1) dichotomy of healthspan and lifespan, (2) geroscience skepticism, and (3) ethical ambivalence.

Conclusion: Consistent acceptability of cognitive-specific interventions across age groups suggests that healthspan improvement attitudes may be primarily driven by cognitive decline concerns, followed by physical health deterioration, with longevity extension being of lower priority.

LB-30

Influence of diabetes on risks of COVID-19 infection and outcomes among older people in Sweden

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Introduction: This study aims to examine risks of COVID-19 infection, hospitalization, and mortality between older people with and without diabetes in Sweden.

Methods: This observational study employed real-world data based on the linkage of several Swedish national registries. People aged 65 years old or above were followed between 01 March 2020 (index date) and 31 December 2020 (before the implementation of COVID-19 vaccination in Sweden). Fine-Gray hazard models were performed to estimate the subdistribution hazard ratios (HR) and 95% confidence intervals (CI) of COVID-19 infection, hospitalization, and mortality between people with and without diabetes.

Results: This study included people with and without diabetes, who were living in community dwellings (329,356 versus 1,650,949 people) or nursing homes (18,738 versus 69,216 people). In community dwellings, people with diabetes were at higher risks of COVID-19 infection (HR 1.29, 95% CI 1.25–1.32), hospitalization (HR 1.53, 95% CI 1.48–1.58) and mortality (HR 1.66, 95% CI 1.56–1.77), compared to people without diabetes. In nursing homes,

people with diabetes had significantly higher risks of COVID-19 infection (HR 1.05, 95% CI 1.01–1.10), hospitalization (HR 1.25, 95% CI 1.13–1.38) and mortality (HR 1.24, 95% CI 1.15–1.33), compared to people without diabetes.

Key conclusions: Before the implementation of COVID-19 vaccination in Sweden, higher risks of COVID-19 infection, hospitalization and mortality were seen in older people with diabetes, compared to individuals without diabetes. Differences in risks were higher among older people in community dwellings, compared to those in nursing homes.

LB-31

Influenza and pneumococcal vaccination status in individuals aged 65 and above: Manisa, Türkiye

Berna Bilgin Sahin (1), Kubra Cicek (2)

Introduction: All adults aged 65 years and older are recommended to receive annual seasonal influenza vaccination, at least one dose of pneumococcal vaccine, and a two-dose series of recombinant zoster vaccine. The aim of the study was to determine the immunization status of elderly people followed up in family health centers.

Methods: This comparative-descriptive study was conducted with 5,171 elderly individuals registered in 18 family health centers located in Manisa, Türkiye. Data were analyzed using frequencies, percentages, variance, and chi-square tests.

Results: The mean age of participants was 72.4 ± 5.5 years; 55.7% were women, and 19.7% had not completed primary school. It was determined that 22.8% of the elderly had received the seasonal influenza vaccine and 21.2% had received the pneumococcal vaccine. No significant difference was found between influenza vaccination rates of elderly individuals living in semi-urban and urban areas (urban: 22.3%, semi-urban: 24.6%, $p > 0.05$). However, pneumococcal vaccination rates were significantly higher among those living in urban areas (urban: 22.8%, semi-urban: 15.0%, $p < 0.001$). No significant correlation was found between the number of visits to the family health center and receiving either the influenza vaccine ($r = 0.711$, $p = 0.732$) or the pneumococcal vaccine ($r = 0.518$, $p = 0.300$).

Key conclusions: This study revealed that vaccination coverage among the elderly has not reached the desired prevalence. Healthcare professionals, particularly family physicians, play an important role in raising awareness of the importance of immunization. Planned and continuous adult vaccination training provided by primary healthcare personnel will help increase immunization rates among the elderly and improve their quality of life.

LB-32

Lived stakeholder experiences of facility-based transitional care for older adults transitioning from acute hospital to home: a qualitative evidence synthesis

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Introduction: Older adults transitioning from acute hospital settings to home often face fragmented care, poor communication, and unmet needs, increasing risks of functional decline and hospital readmission [1,2]. Facility-based transitional care programs, including slow-stream rehabilitation, re-enablement, convalescence, and intermediate care, aim to optimize recovery and independence [3]. However, there is limited understanding of the lived experiences of patients, caregivers, and healthcare professionals within these models [4].

Methods: A qualitative evidence synthesis was conducted following PRISMA guidelines. Databases including MEDLINE, CINAHL, Embase, and PsycINFO were searched from inception to March 2024. Eight studies met the inclusion criteria. Data were managed and coded using NVivo 14 and analysed using thematic synthesis. Methodological quality was appraised using the Joanna Briggs Institute (JBI) Checklist for Qualitative Research.

Results: Four overarching themes emerged: (1) Person-centred care and individual experience—stakeholders described tensions between autonomy and being positioned as passive recipients shaped by system-driven processes; (2) Communication, information, and empowerment—the quality of communication determined levels of preparedness, agency, and confidence during transitions [1,5]; (3) System and service challenges—transitional care often acted as a compensatory response to wider structural gaps, addressing immediate needs without resolving systemic weaknesses [3,4]; and (4) Family, social networks, and support systems—relatives and peers played a crucial role in providing emotional and practical support, though this often placed significant burdens on families [2].

Key conclusions: Facility-based transitional care supports recovery and may reduce hospital readmissions [3], but variability in delivery, communication gaps, and systemic limitations undermine effectiveness. Understanding lived experiences highlights the need for integrated, person-centred models aligned with initiatives such as Ireland's Sláintecare reforms [4].

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LB-33

Vitamin D testing deviations in general internal medicine inpatients: undertesting, overtesting, and guideline adherence

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Introduction: Vitamin D testing in patients is common but inconsistently guided by evidence. This study evaluated adherence to the Health Service Executive (HSE) Lab criteria guidelines for vitamin D testing [1], assessed therapeutic responses to results, and identified predictors of vitamin D levels in general internal medicine (GIM) inpatients.

Methods: A retrospective review of 408 GIM inpatients categorised into four groups based on HSE-defined testing appropriateness: (1) testing indicated and ordered, (2) indicated but not ordered, (3) not indicated but ordered, and (4) not indicated and not ordered. Testing appropriateness was assessed against HSE Lab criteria [1], and predictors of testing practices and vitamin D levels were analysed using

logistic regression models in R statistical software (v4.1.2) [2], adjusted for age, gender, ethnicity, and hospital length of stay.

Results: Of 408 patients, 35% (n = 143) deviated from guidelines: 22.3% (n = 91) lacked indicated testing, while 12.3% (n = 50) underwent unindicated tests. Older age (OR 1.08 per year, 95% CI 1.04–1.13; p < 0.001) and prolonged hospitalisation (OR 1.01 per day, 95% CI 1.00–1.01; p = 0.03) predicted testing regardless of indication. Of 77 tested patients, 62.3% (n = 48) had sufficient levels (≥50 nmol/L), 16.9% (n = 13) insufficient (30–49 nmol/L), and 20.8% (n = 16) deficient (< 30 nmol/L). Supplementation was omitted in 32/48 (66.7%) patients with adequate levels who required maintenance therapy.

Key conclusions: Deviations from HSE Lab criteria were frequently observed, with older patients overtested and high-risk populations undertested. Interventions integrating electronic decision-support tools into electronic patient records, education, and standardised protocols are essential to aligning practices with HSE guidelines and improving patient outcomes. 1. Cormican, M. Indications for Measurement of Vitamin D Levels. Health Service Executive. [May 8th 2024]. Accessed [October 10th 2024]. <https://www.hse.ie/eng/about/who/cspd/lsr/resources/indications-for-measurement-of-vitamin-d-levels.pdf>. 2. R Core Team. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing. 2021. <https://www.R-project.org/>.

LB-34

Understanding longitudinal trends in cardiovascular risk factors for people with and without dementia using routine healthcare data

Yiqing Wang (1), Atul Anand (1), Nicholas Mills (1), Dimitrios Doudehis (1), Konstantin Georgiev (1)

Introduction: Patterns of cardiovascular risk assessment within the routine care of people at risk of dementia is uncertain.

Methods: We conducted a retrospective observational cohort study including the population of Edinburgh and the Lothians (Scotland) who were free of a dementia diagnosis and aged ≥50 years in April 2009. Follow-up used both GP and hospital data sources. Recordings of blood pressure, alcohol consumption, smoking, body mass index (BMI) and lipids were studied in relation to dementia risk using a competing risk analysis. Risk factor measurement patterns before and after dementia diagnosis were also studied.

Results: In 149,577 people (65 ± 11 years, 52% women), 14,039 (9%) developed dementia over a median follow-up of 14 [12,14] years. The number of recorded codes for risk factors varied from 0 [0,2] for alcohol intake to 8 [2,18] blood pressure measures, and these were more frequent in those who subsequently developed dementia. Only high-risk blood pressure status (uncontrolled hypertension or BP ≥140/90 mmHg without diagnosis) was associated with future dementia risk (subdistribution hazard ratio [HR] 1.08, 95% CI 1.04–1.12). Active measurement of blood pressure, BMI and lipids reduced early after dementia such that only 1 in 7 people with dementia had all five risk factors assessed in the third year after diagnosis. Following dementia diagnosis, blood pressure modification (to < 140/90 mmHg) was only demonstrated in 43% of patients within 2 years.

Key conclusions: Cardiovascular risk factors are frequently measured before dementia diagnosis, but opportunities remain to improve risk assessment and treatment modification after diagnosis.

LB-35

Resistance exercise snacking improves strength and is perceived as feasible among sedentary university staff: a mixed-methods pilot study

James Timmons (1)

Introduction: Sedentary behaviour is a modifiable risk factor for musculoskeletal decline and cardiometabolic disease. Resistance Exercise Snacking (RES), involving brief resistance band bouts, offers a workplace-friendly approach to increase activity. This study evaluated the feasibility, effectiveness, and participant experiences of an 8-week RES programme among sedentary university staff.

Methods: Twenty-one staff were randomised to intervention ($n = 11$) or control ($n = 10$). The intervention involved two daily 5-min sessions (5 exercises, 45 s each) during workdays. Outcomes included adherence, retention, strength, fitness, and body composition (analysed with ANCOVA, adjusted for baseline). Additionally, qualitative semi-structured interviews were conducted with nine intervention participants, analysed thematically using the Theoretical Domains Framework.

Results: Seventeen participants completed the trial (81% retention). Adherence averaged $74.9\% \pm 21.1\%$. Compared with controls, the intervention group significantly improved upper limb ($+13.9$ kg, $p = 0.023$, $d = 1.27$) and lower limb strength ($+18.7$ kg, $p = 0.030$, $d = 1.23$), with no significant changes in other outcomes. Qualitative themes highlighted the feasibility and acceptability of RES, with perceived gains in strength, energy, and mood. Barriers included workplace privacy, routine disruption, and initial confusion with the term “snacking.” Facilitators included time efficiency, portability, and accountability. Participants recommended clearer communication, greater exercise variety, and integration into workplace culture.

Conclusions: This mixed-methods study demonstrates that RES is both effective in improving strength and acceptable to sedentary working adults, despite modest adherence. The findings support RES as a feasible, scalable intervention to reduce sedentary behaviour and promote healthy ageing across adulthood.

LB-36

The effect of environmental enrichment on cognitive health in ageing: A scoping review with a translational perspective

Bourdon Etienne (1), Oquendo Bruno (1), Belmin Joel (1)

The enriched environment (EE) concept has been utilized as an experimental device to evaluate the potential effects of environment on health. In this context we conducted a scoping review according to PRISMA-ScR guidelines to identify and describe the effects of EE on cognitive health in aging, in both animal and human studies. We searched the PubMed and COCHRANE electronic databases for articles published between 1985 and 2025 that addressed dimension of interest with a combination of EE and older humans or animals. Of 304 yielded articles 37 met the inclusion criteria of which 4 on humans and 33 on animal model. 35 studies presented a significant effect of EE on age related cognition. We examined neurobiological and EE features outcomes in relation with cognitive health. The review is interesting as it provides an overview of EE benefits on cognition skills. Animal studies provide very positive, significant and consistent benefits of EE on the cognition of aged mice and

rats. The complexity of EE design for humans is highlighted in our results as it needs specific adaptation in relation with the different situations where it is evaluated. Making the most of this translational work between EE in the mouse model and in humans will accelerate its development and help clinicians to develop appropriate protocols applied to the elderly.

LB-37

Physical, psychological and musculoskeletal outcomes in elderly vs. young caregivers of neurological patients: a pilot study

Evrin GÖZ (1), Abdulkadir GÖZ (2)

Introduction: This study aims to compare the physical workload, musculoskeletal pain, psychological status, and care burden of caregivers of elderly and young chronic neurological patients.

Methods: The Physical Workload Questionnaire was used to assess the physical workload of caregivers, the Visual Analogue Scale was used to assess musculoskeletal pain, the Depression-Anxiety Stress Scale 21 (DASS 21) was used to assess psychological status, and the ‘Caregiving Burden Scale’ was used to assess the caregiving burden of caregivers. 12 caregivers participated in the study. Group comparisons between young and elderly participants were performed using the Mann–Whitney U test.

Results: Four elderly (age = 66.75 ± 4.99), 8 young (age = 51.88 ± 4.94) caregivers participated in the study. The elderly and young groups were similar in terms of physical workload, psychological status and caregiving burden ($p > 0.05$). In addition, there was no statistically significant difference between the groups in terms of pain intensity in the neck, shoulder, elbow, hand, back, waist, hip, and foot regions ($p > 0.05$). However, knee pain was significantly higher in elderly caregivers ($p = 0.049$).

Key conclusions: The study revealed that the elderly group generally had higher physical workload, musculoskeletal pain and caregiver burden, and worse psychological status. However, the differences between the groups were not found to be statistically significant, apart from knee pain. As these are preliminary findings from an ongoing study, we believe that the results will be more conclusive once the study has been completed with a larger number of participants.

LB-38

Strengthening Moroccan healthcare students’ competencies in healthy ageing: a scoping review and intervention framework

Sarah Michaud (1), Liliane Liliame Bokaa W’Engesu (2), Adil Mansouri (3)

Introduction: Ageing is a growing challenge in Morocco, with older adults projected at 24% by 2050. Geriatrics is not a recognized specialty, and health promotion is weakly integrated into curricula. Strengthening healthcare students’ competencies on healthy ageing is essential. This study aimed to synthesize international evidence on effective educational interventions for health students, assess contextual facilitators and barriers in Morocco, and design a tailored educational workshop.

Methods: A scoping review of meta-analyses (PubMed, Scopus, Web of Science, 2010–2024) was conducted following PRISMA-ScR guidelines to identify effective, evidence-based educational interventions that improved health students’ knowledge, attitudes, or competencies related to healthy ageing. A SWOT analysis was done to evaluate facilitators and barriers for implementing healthy ageing educational initiatives in Morocco.

Results: Three meta-analyses were retained, showing that educational interventions (including problem-based learning, simulation, inter-professional workshops, and empathy-focused strategies) positively impacted students' knowledge, attitudes, and competencies, with experiential and communication-focused approaches particularly effective. The SWOT analysis highlighted political commitment, international partnerships, and existing training frameworks as opportunities, and limited geriatric training, curriculum constraints, and resource shortages as barriers. Six thematic areas identified from the review and SWOT informed an evidence-based workshop: health promotion, healthy ageing, age-related pathologies, the World Health Organization Integrated Care for Older People (WHO ICOPE) tool, communication, and end-of-life care.

Key conclusions: Integrating international evidence with a contextual SWOT provides a tailored framework to strengthen students' competencies. Pilot testing is needed to assess impact in Morocco.

LB-39

How to reach and motivate frail community-dwelling older adults towards Physical Activity Programms: the role of governmental organizations

Patricia De Vriendt (1), Hanna Steenwegen (1), Jade Tambreur (1), Emma De Keyzer (1)

Background: ACTIVE@home is a proven physical activity program for frail older adults living at home. Despite its effectiveness, implementation remains challenging, particularly in reaching and motivating this vulnerable population. This issue is widely recognized in both scientific literature and practice, as engaging frail older adults often requires substantial effort.

Objectives: This study explores how governmental organizations in Flanders experience the challenge of engaging frail older adults. It aims to answer two key questions: (1) How can we effectively reach this target group? (2) How can we sustain their motivation to participate?

Methods: In-depth interviews (n = 13) were conducted with representatives of local authorities in Flanders. The interviews focused on barriers, strategies, and contextual factors. Data were analyzed thematically.

Results: Local governments see themselves playing a crucial role in reaching and motivating frail older adults, ranging from providing information to identifying individual needs. Key findings include the importance of tailored communication, trusted channels, and social motivation. Effective policy requires collaboration across services, early detection, and a clear understanding of the target group's vulnerabilities. Sustained motivation is best supported through participatory strategies and strong local networks. Organizational barriers occurred and choices in strategic approaches emerged.

Conclusion: Effective engagement of frail older adults requires coordinated efforts, emphasizing social connection and inter-organizational collaboration. Local governments play a crucial role in early detection and outreach. Future policy and research should focus on structural support for partnerships and tailored motivational strategies to enhance participation in health-promoting programs.

LB-40

Nasogastric tube: nutritional support or iatrogenesis?—analysis of an acute geriatric unit

António Barbosa de Abreu (1), Cláudia Camila Dias (2), Ana Raquel Freitas (3), Heloísa Ribeiro (3), Yolanda Martins (3), Gonçalo Sarmento (3)

Introduction: The use of Nasogastric Tubes (NGT) in the geriatric population is a controversial topic. Balancing potential nutritional benefits against iatrogenic risks, and respecting patient autonomy, is challenging.

Objectives: To study the prevalence of NGT at admission and discharge, characterize the functional profile of patients, analyze survival, and evaluate the impact and relationship of NGT presence on functional profile and mortality.

Methods: This was a retrospective, single-center study, analyzing demographic, clinical, functional, and survival outcome data from 205 patients hospitalized between June 4 and August 31, 2024, in an Acute Geriatric Unit (UGA).

Results: NGT prevalence was 8.3% (n = 17) at admission and 10.7% (n = 22) at discharge. Patients with NGT showed a significantly more compromised functional profile. Patients with NGT at discharge demonstrated longer hospitalization stays (p = 0.017). No patient with NGT at admission died during hospitalization. Shorter hospitalization stays were associated with in-hospital mortality (p < 0.001).

Conclusions: Despite the more compromised functional profile of NGT patients, NGT presence was associated with the non-occurrence of death. A frailty profile at admission was not related to increased mortality. NGT placement in this acute context is expected to be transient, potentially contributing to greater survival rather than being a negative prognostic marker. Patients with NGT at discharge were associated with longer hospitalization. In-hospital mortality likely occurred within the first days of hospitalization. Conclusions are based on the specific data of the studied sample.

LB-41

Development and evaluation of ACTIVE-AGE@home based on the guidelines of the Medical Research Council: a home-based physical activity program for frail older adults

De Vriendt Patricia (1), Emma De Keyzer (1), Jade Tambreur (1), Wim Peersman (2), David Beckwee (1), Kathleen Willems (3), Marianne Belpaire (3), Sarah de Cauwer (3), Dimitri Vrancken (3), Dominique Van de Velde (4)

Objectives: To identify barriers and motivators for physical activity among frail older adults and to develop, pilot, and evaluate a tailored home-based intervention—ACTIVE-AGE@home—aimed at improving physical fitness, daily functioning, and quality of life.

Methods: Following the British Medical Research Council framework, we conducted in-depth interviews with 25 frail older adults (GFI > 4/15) to explore factors influencing physical activity. Insights informed the development of ACTIVE-AGE@home, which was pilot-tested in an assisted living facility. Case studies and feasibility assessments led to two program variants: ACTIVE-AGE@home1 (daily functioning focus) and ACTIVE-AGE@home2 (higher physical intensity). A randomized controlled pilot study (n = 71) evaluated outcomes including physical fitness, ADL, participation, and HRQoL. A qualitative follow-up study (n = 50) assessed long-term experiences.

Results: Barriers were mainly intrapersonal (e.g., fear, low self-esteem), while motivators included social support and personalized coaching. Pilot testing showed high acceptability and no adverse effects. The randomized trial revealed significant improvements in physical fitness and quality of life, especially in ACTIVE-AGE@home2. Participants reported increased strength, confidence, and mental resilience. Post-intervention, privacy and frequency

concerns decreased, while motivation through coaching and perceived physical gains increased. Follow-up showed lasting behavioral changes, though few continued formal exercises.

Conclusion: ACTIVE-AGE@home is a feasible and effective intervention for frail older adults. Tailoring to individual needs, integrating social support, and home-based delivery are key to enhancing participation and outcomes.

LB-42

Nurse-led pilot project for resident deprescribing

Tom Vermeulen (1), Tine Hacour (2), Steven Dirickx (3), Annelies Pieters (4)

Introduction: PRECEDE (Protocol for Resident Centered Deprescribing) focusses on systematic medication reviews in Long term Care Facilities within a medical-ethical framework.

Methods: We used the newly developed BASELO (Belgian Anti-cholinergic and Sedative Load) to assess risk for adverse events and cognitive decline and the third version of the STOPP-criteria to screen for PIM's in 95 residents in Belgium. Also, we monitored for prescribing cascades. The project includes the preferences and needs of residents and empowers teams and residents to use non-pharmacological approaches for (chronic) disease burden.

Results: An reduction of the risk score with 12% is seen in participating GP's. When compared to comparable institutions we see a reduction of 0.5–1.65 on the BASELO-risk score. Comparing the use of psychotropic drugs with last year, we see a very strong reduction in benzodiazepines (BZ), 19%, and opioids (OP), 12% and to a lesser extent in antidepressants (AD), 10% and antipsychotics (AP), 8%, albeit in the latter a significant dose reduction was noticed. Essential elements include the involvement of general practitioners and pharmacists, trained core staff, a clear vision and broader framework for working with mental health vulnerabilities, and coordination by a nurse specialist. Effective points include further increasing the involvement of general practitioners, building the necessary time into the phase-out process and the expected effects, and reducing the use of antipsychotics in residents with cognitive vulnerabilities.

Conclusion: Deprescribing in long term care facilities is feasible in a nurse-led project within a medical-ethical interdisciplinary framework.

LB-43

Older patient's experience at a community diagnostic centre

Elizabeth Aitken (1), Lisa Tilley (1), Jason Cross (1)

Clinic at Eltham Community Diagnostic Centre: Activity and Patient Experience March 2024–March 2025. The POPS (Perioperative Older Persons Services) clinic at Eltham Community Diagnostic Centre (CDC) was established in March 2024 as a nurse-led initiative with consultant oversight. The clinic accommodates four patients per session to optimise their health for surgery. Each patient undergoes a Comprehensive Geriatric Assessment (CGA), including ECG, blood tests, gait speed analysis, and the Timed Up and Go test, alongside functional and mental health evaluations. A shared decision-making approach ensures patients actively participate in their care planning. Following the assessment, a structured follow-up call is conducted to discuss results and next steps. Patient feedback was gathered via telephone, with 25 completed responses. Referral sources included the Health Inequalities Clinic Panel (50%) and direct surgical team referrals. Travel ease averaged 4.4/5, and overall clinic experience was rated 4.6/5. During their appointment, nearly all patients reported that clinicians introduced themselves, explained the purpose of

assessments, and ensured clarity in the procedures undertaken. Most patients felt well-informed about their care, though some noted gaps in communication regarding clinical summaries and follow-up processes. Reception staff received an average rating of 4.1/5, with minor concerns regarding accessibility and responsiveness. Overall, the clinic has provided valuable, patient-centered care with enhanced accessibility. Future improvements may focus on refining communication, ensuring patient-friendly clinical summaries, and optimizing follow-up procedures to improve continuity of care.

LB-44

“Plus Ultra”, overcoming adversity and striving for excellence in the care of the older adult

ECGI Submission.

Kate McCarthy (1), Neasa Fitzpatrick (1), Aisling Doran (1), Sinead Barnett (1), Emer Ahern (1)

Introduction: “Plus Ultra” is a historical Spanish motto that signifies pushing boundaries and striving for excellence. This report demonstrates the impact of the 5Ms[1] in an Age Friendly Health Service (AFHS), in the care of complex orthogeriatric patients.

Methods: “What matters most?” was asked to all inpatients under the care of the orthogeriatric service. Goals of care were identified and discussed. A plan to facilitate patient's wishes evolved with the support of the MDT and community teams. Three cases illustrate the importance of implementation of WMM.

Results: Case 1, 90 year old widower with a MOCA of 13. WMM was an upcoming “final” holiday to Torremolinos. Case 2, 92 year old retired builder. His past medical history included multiple prolonged hospital admissions with recurrent bacteraemia complicated by delirium. WMM was getting home to his wife. Case 3, 93 year old retired priest. Developed acute dysphagia during hospital admission with post operative challenges leading to further deconditioning. WMM was seeing his fellow clergymen with whom he had worked in Africa. Each of the three case overcame adversity and survived surgical intervention. They were discharged home with a bespoke care plan of MDT input and community support.

Key conclusions: The unifying feature in this case series is that despite their individual complexity, these patients were all successfully discharged home through exemplary care. By utilising an age friendly health system and WMM each discharge home was achieved with support from multiple community teams. 1. Tinetti, M., A. Huang, and F. Molnar, The Geriatrics 5M's: A New Way of Communicating What We Do. J Am Geriatr Soc, 2017. 65(9): p. 2115.

LB-45

In search of an explanation: a case study of 69-year-old patient with overlap vasculitis featuring symptoms of microscopic polyangiitis (MPA) and giant cell arteritis (GCA) coexistence

Julia Skowera (1), Aleksandra Adamska (2), Marek Brzosko (2), Piotr Seiffert (2)

Introduction: Overlap vasculitis is a rare clinical condition that encompasses features of more than one systemic vasculitis. Such cases often present significant diagnostic challenges, particularly in older patients with multimorbidity, leading to delays in diagnosis and treatment. This report underscores the importance of a broad

diagnostic approach in patients with complex or atypical clinical presentations.

Methods: We present a case study of a 69-year-old man with overlap vasculitis, integrating clinical, serological, radiological, and histopathological assessments.

Results: The patient was referred to the Rheumatology Department with acute kidney injury, proteinuria, and persistent fever during corticosteroid therapy. His initial symptoms, which began several months earlier, included low-grade fever, muscle pain in the extremities, and jaw claudication. He had previously been hospitalized and diagnosed with extrinsic allergic alveolitis (EAA) due to interstitial lung disease (ILD) findings on imaging. Laboratory investigations revealed elevated inflammatory markers and anti-myeloperoxidase (MPO) antibodies. Computed tomography (CT) scans of the chest and cranium, temporal artery ultrasound, and kidney biopsy were performed. These findings confirmed overlap of microscopic polyangiitis (MPO antibodies, ILD, crescentic glomerulonephritis) and giant cell arteritis (jaw claudication, halo sign on temporal artery ultrasound). Intensive treatment with cyclophosphamide and high-dose corticosteroids led to significant clinical improvement and stabilization of renal function.

Key conclusions: This case highlights the importance of considering overlap vasculitis in older patients with atypical or evolving presentations. A comprehensive diagnostic approach is essential to guide timely, targeted therapy and improve clinical outcomes.

LB-46

Improving post-emergency department outcomes in frail older adults through rapid home-based rehabilitation

Edel McDaid (1), Ciara Ryan (1)

Background: The Active Recovery Team (ART) provides timely, home-based therapy support to older adults following an emergency department (ED) visit. The multidisciplinary team includes a physiotherapist, occupational therapist, and therapy assistant. Patients are referred by the ED's frailty intervention team. As this is a newly implemented care pathway, a service evaluation was undertaken.

Methods: A retrospective analysis was conducted on patients discharged from the ED to the ART service between January 2024 and March 2025. Data collected included demographics (age, sex), frailty level (via Clinical Frailty Scale), length of service involvement, and reason for ED presentation. Functional outcomes were assessed using the Functional Independence Measure (FIM), comparing scores from the initial and final home assessments using a paired T-test. Rates of ED re-presentation and hospital readmission were recorded at 72 h, 7 days, and 30 days.

Results: During the evaluation period, 118 patients were discharged from the ED to ART. All were contacted the next working day, with urgent cases receiving a home visit within one clinical day. The cohort was predominantly female (72%) with a mean age of 81 years. The average duration of service involvement was 17 days (range: 3–70). Most patients (90%) had mild to moderate frailty (CFS 4–6), with 5% classified as pre-frail (CFS 1–3) and 5% as severely frail. Falls accounted for 72% of ED presentations, with 30% resulting in fractures. FIM scores showed a statistically significant improvement ($p > 0.001$), with an average increase of 3 points. ED re-presentation rates were 1.7% at 72 h, 2.5% at 7 days, and 9.3% at 30 days.

Readmission rates were 1.7% at both 72 h and 7 days, and 6.8% at 30 days.

Conclusion: The ART service effectively supported older adults with frailty to recover at home following an ED visit. Prompt, therapy-led interventions delivered in the home environment resulted in meaningful functional gains for this population.

LB-47

Factors influencing anticoagulant dosing in elderly patients: the role of sex, age and direct oral anticoagulant type

ECGI Submission.

Daniela Maurício (1), Inês Brito e Cruz (2), Ana Margarida Coutinho (1), Nuno Campos Santos (1), João Costelha (1), Teresa Alfaiate (1), Luís Leite (3), Arsénio Santos (1)

Introduction: Anticoagulant therapy is central to preventing and managing thromboembolic events, particularly in patients with atrial fibrillation (AF). Optimal dosing requires adherence to guidelines that consider age, renal function, body weight, and potential drug interactions. However, real-world evidence shows a substantial rate of inappropriate dosing.

Methods: This retrospective single-center study included patients over 65 years who underwent electrocardiogram in the emergency department between March 24–30, 2024. Of 411 screened patients, 133 had AF. Exclusions were warfarin therapy, in-hospital death, incomplete data, estimated renal clearance < 15 mL/min. DOAC dosing appropriateness was assessed according to 2024 ESC guidelines.

Results: The cohort consisted of 102 patients (mean age 82.8 ± 8.8 years; 66% female) receiving apixaban (41%), edoxaban (30%), rivaroxaban (19%), and dabigatran (10%). Multivariate logistic regression showed that women were significantly associated with lower odds of appropriate DOAC dosing ($B = -1.220$; $p = 0.027$; OR = 0.295; 95% CI 0.100–0.872), indicating that women were approximately 70% less likely to be correctly dosed compared to men. Age demonstrated a non-significant negative trend with dosing appropriateness ($B = -0.038$; $p = 0.165$; OR = 0.962; 95% CI 0.912–1.016), suggesting a slight decrease in the likelihood of appropriate dosing as age increases. The choice of anticoagulant wasn't significantly associated with dosing accuracy ($p = 0.934$).

Key conclusions: In this cohort, female sex—but not age and DOAC type—was independently associated with inappropriate DOAC dosing. These findings highlight the need for individualized anticoagulant management in older patients with AF.

LB-48

Adoption of SGLT2i in old and very old patients: differences between all cause/CV death and HF hospitalisation

David Matos Monteiro (1), Ana Rita Ventura (1), Ana Margarida Coutinho (2), Gabrielle Christina (2), Nuno Santos (2), Ana Rita Ramalho (2), Patrícia Dias (2), Arsénio Santos (2)

Introduction: Heart failure (HF) prognosis in older patients remains poor with a high mortality rate, more frequently attributed to non-cardiovascular causes. We aimed to evaluate the evolution of old and very old patients with HF with moderately reduced and preserved ejection fraction (HFmr/pEF) who started sodium-glucose cotransporter-2 inhibitors (SGLT2i).

Methods: We included a real-world cohort of outpatients with ≥65 years with chronic HFmr/pEF newly started on an SGLT2i (N = 259), followed for up to 50 months. We divided patients into those aged 65–79 (n = 108) and ≥80 years (n = 151). Baseline characteristics, HF hospitalisation, all-cause and cardiovascular (CV) mortality were compared. Time-to-event results are reported as hazard ratios (HR).

Results: Compared with the 65–79 group (mean age 73.5 ± 4.8), the ≥80 years group (85.3 ± 3.8) showed lower functional independence (Katz 4.88 ± 1.69 vs 5.73 ± 0.97 ; $p < 0.001$) and higher comorbidity burden (Charlson 6.26 ± 1.72 vs 5.27 ± 1.59 ; $p < 0.001$). Baseline characteristics were similar except for the presence of atrial fibrillation/flutter (70.2% vs 56.5%; $p = 0.023$) and chronic kidney disease (58.9% vs 34.3%; $p < 0.001$). ≥80 group showed worse outcomes, with statistically significant increased CV mortality (21.9% vs 9.3%; HR 3.03, $p = 0.002$), HF hospitalisation (37.1% vs 22.2%; HR 2.32, $p = 0.001$) and all-cause mortality (26.5% vs 10.2%; HR 3.60, $p < 0.001$).

Key conclusions: As expected, the rate of events was higher in the very old group. Nonetheless, overall mortality was lower than that reported in international studies and was mainly due to CV events. Treatment goals and decisions should aim to reduce symptoms, hospitalisations, readmissions and mortality, and to improve quality of life.

LB-49

A disease never comes alone

Marina Faria (1), Ana Teresa Melo (1), Margarida Ribeiro (1), Renata Barbosa Soares (1), Joana Pimentel Cavaco (1)

The increasing prevalence of chronic diseases and multiple comorbidities contributes to the rising complexity of healthcare, even in younger persons in working age. 67-year-old woman, still working, with active problems of: hypertension, dyslipidemia, type 2 diabetes mellitus, calcified atheromatous disease of the aorta, ischaemic heart disease, smoking and chronic obstructive pulmonary disease Gold E, anxiety, breast carcinoma, ovarian tumour, left shoulder calcified tendinopathy, polyarticular spondylarthritis, low ferritin levels without anemia, irritable bowel syndrome, chronic gastritis with hiatal hernia and vocal cord leukoplakia. Previous history of peptic ulcer disease with *Helicobacter pylori* and tubular adenoma of the transverse colon (2020); oropharyngeal candidiasis and sudden deafness of right ear (2025). Followed in twelve medical specialties: Immunohemotherapy, Pneumology, Cardiology, Diabetes, Rheumatology, Otorhinolaryngology, Senology, Oncology, Gynaecology, General surgery, Psychiatry and Psychology. Chronic medication: esomeprazole 40 mg, perindopril 4 mg, bisoprolol 2.5 mg, clopidogrel 75 mg, metformin 1000 mg, empagliflozin 10 mg, insulin glargine 300 U/mL 34 U, rosuvastatin-ezetimibe 20–10 mg, budesonide-formoterol-glycopyrrolate 160–5–7.2 µg/dose and montelukast 10 mg. Currently, there are limited clinical tools available for the approach of complex

and challenging cases like this, one of which is the problem map—a graphic and dynamic representation of the problems. The family physician plays a vital role in the articulation between primary and secondary healthcare, preventing exam duplication, checking medical interactions, reducing polypharmacy associated risks, prioritizing problems and defining goals, ensuring a patient centred approach. The longitudinal following by the family physician is also essential in the management of multimorbidity associated anxiety and expectations and the distinguish between new symptoms and those related to preexisting pathologies.

LB-50

Exploring the experience of patients, carers, and healthcare professionals of the CGA-Q, a tool to facilitate person-centred Comprehensive Geriatric Assessment

ECGI Submission.

Katherine Chin (1), Rebekah Schiff (1)

Introduction: Comprehensive Geriatric Assessment (CGA) is a multi-disciplinary, multi-domain assessment and intervention of an older person's physical, psychological, social, functional and environmental health. Person-centred care focuses on an individual's priorities. CGA-Q is a patient/carer completed questionnaire consisting of 20 tick-box questions and eight free-text boxes covering the CGA domains. CGA-Q prompts patients to identify their concerns prior to seeing the clinician and therefore has the potential to facilitate person-centred care. This study explores the experience of using CGA-Q from the perspective of stakeholders—patients, informal carers (ICs) and healthcare professionals (HCPs).

Method: Focus groups with each stakeholder group were conducted. Discussions were audio recorded, transcribed and analysed using reflexive thematic analysis.

Results: Three patients, three ICs, and four HCPs were recruited. Patients and ICs found CGA-Q facilitated discussion of issues that may not otherwise have arisen. “I can tick things off that I wouldn't tell the doctor [...], because you can't say all of that” (P002). The perception of their health and interpersonal relationships between stakeholders influenced what issues were shared in the CGA-Q. “My problem is I think I am a very healthy person” (P003). CGA-Q's list format helped patients feel less of a burden and helped ICs to discuss difficult topics with the person they cared for. The Advanced Care Planning question was difficult for patients and ICs, but valuable for HCPs. HCPs felt CGA-Q was less valuable for geriatricians who frequently conduct CGA but may be a useful screening tool to identify who requires CGA or to facilitate non-geriatricians to deliver CGA. Overall, it was felt that CGA-Q can facilitate person-centred care.

Conclusion: CGA-Q allows patients and ICs to identify and discuss new issues. When interpreting the CGA-Q, HCPs should be mindful that patient's and ICs' perceptions of their health, and interpersonal relationships, may influence their answers.

LB-51

Lost in transition: a review of current facility-based short-stay care models for older adults in Ireland

Kate McCarthy (1), Neasa Fitzpatrick (1), Alison Holmes (2), Prof Rose Galvin (2), Dr. Emer Ahern (3), Patrice Reilly (4), Sharon Walsh (5), Brendan Walsh (6)

Introduction: Facility-based short-stay care (SSC) supports older adults transitioning from acute hospitals. However, international variation in terminology, service design, and outcome evaluation creates challenges for developing policy and practice frameworks. In Ireland, SSC provision is fragmented, predominantly delivered through private nursing homes funded via Transitional Care Funding (TCF), with limited regulation, inconsistent governance, and no standardised outcome tracking.

Methods: A scoping review of international literature and a system-level analysis of Irish SSC models were conducted. International studies were reviewed to identify core service components, clinical and economic outcomes, and user perspectives. Irish SSC provision across public and private sectors was assessed for governance structures, capacity, funding mechanisms, care interventions, and performance monitoring.

Results: International SSC models integrate multidisciplinary care, comprehensive geriatric assessment (CGA), and coordinated discharge planning but lack standardised outcome metrics. In Ireland, SSC models demonstrate high variability in structure and delivery, with frequent gaps in access to allied health services, high readmission rates, prolonged lengths of stay, and substantial public expenditure exceeding €120 million annually.

Key conclusions: SSC represents a pivotal transitional care pathway for older adults but requires urgent reform in Ireland. Priorities include integrated governance, standardised care frameworks, consistent outcome measurement, and robust economic evaluation to improve equity, efficiency, and patient outcomes.

LB-52

The impact of diabetes on polypharmacy in older adults

ECGI Submission

Kubra Cingar Alpay (1), Duygu Ozata (1), Suna Avci (1), Alper Doventas (1), Ulev Deniz Erdinler (1)

Introduction: Polypharmacy—typically defined as the use of five or more medications—is common in older adults and associated with adverse outcomes such as frailty, falls, and mortality [1]. Diabetes mellitus (DM), a prevalent chronic condition in this population, may further increase medication burden [2]. This study aimed to assess the independent impact of diabetes on polypharmacy in older adults.

Methods: A cross-sectional study was conducted with 201 patients aged ≥65 years who presented to a geriatric outpatient clinic within the past three months. Polypharmacy was defined as the use of ≥5 medications. Data on diabetes status, total number of medications, hemoglobin A1c levels, and comorbidities were collected. Multivariate logistic regression was used to determine the association between diabetes and polypharmacy, adjusting for confounders.

Results: A total of 201 patients were included (mean age: 76.1 ± 6.6 years; 68.7% female), with 50.7% diagnosed with DM. Among diabetic patients, the most commonly used antidiabetic agents were metformin (54.9%), DPP-4 inhibitors (48.0%), SGLT2 inhibitors (45.1%), long-acting insulin (34.3%), short-acting insulin (19.6%), sulfonylureas (6.9%), and pioglitazone (2.9%). The mean

number of medications was significantly higher in patients with diabetes compared to those without (8.4 ± 2.8 vs. 5.1 ± 3.1 ; $p < 0.001$). Polypharmacy prevalence was also higher in the diabetic group (91.2% vs. 54.1%; $p < 0.001$). Multivariate logistic regression analysis revealed that diabetes was independently associated with polypharmacy, even after adjusting for age, sex, HbA1c, and number of comorbidities. The presence of diabetes increased the risk of polypharmacy by nearly sixfold (odds ratio [OR]: 5.81; $p = 0.015$). Comorbidity count was also an independent predictor (OR: 4.14; $p < 0.001$), while age, sex, and HbA1c were not significantly associated ($p > 0.05$).

Conclusion: Diabetes significantly increases the risk of polypharmacy in older adults. Care strategies should aim to minimize medication burden while ensuring effective glycemic control. 1- Gnjjdic, D., Hilmer, S. N., Blyth, F. M., Naganathan, V., Waite, L., Seibel, M. J., McLachlan, A. J., Cumming, R. G., Handelsman, D. J., & Le Couteur, D. G. (2012). Polypharmacy cutoff and outcomes: five or more medicines were used to identify community-dwelling older men at risk of different adverse outcomes. *Journal of clinical epidemiology*, 65(9), 989–995. <https://doi.org/10.1016/j.jclinepi.2012.02.018>. 2- Fried, T. R., O'Leary, J., Towle, V., Goldstein, M. K., Trentalange, M., & Martin, D. K. (2014). Health outcomes associated with polypharmacy in community-dwelling older adults: a systematic review. *Journal of the American Geriatrics Society*, 62(12), 2261–2272. <https://doi.org/10.1111/jgs.13153>.

LB-53

Patient education on SGLT-2 inhibitors amongst geriatric medicine trainees

Peter Cassar (1), Gianluca Gatt (2), David Cuschieri (2), Jean Claude Grech (2)

Introduction: Sodium glucose cotransporter-2 (SGLT-2) inhibitors are increasingly prescribed in older adults with diabetes, chronic kidney disease, and heart failure due to their proven cardiorenal benefits [1]. However, they carry risks including genital and urinary infections, dehydration, and rare ketoacidosis. Effective patient counselling is therefore essential to ensure safe prescribing, and is recommended in national and international guidelines [2]. This quality improvement project assessed how well geriatric medicine trainees communicated key safety messages when initiating SGLT-2 inhibitors.

Methods: Trainees were asked to explain SGLT-2 initiation to a hypothetical older patient with no prior knowledge of the drug. Their responses were assessed against a checklist of essential counselling points, including infection risk, hygiene, dehydration, sick day rules, perioperative management, and when to seek medical advice.

Results: Twenty four geriatric medicine trainees participated. Almost all mentioned the risk of urinary tract infections (95.8%), but fewer highlighted genital infections (26.1%) or the importance of genital hygiene (12.5%). Half discussed the risk of dehydration (50.0%), and most covered sick day rules (70.8%). Fewer trainees advised withholding therapy before certain surgeries (41.7%) or addressed ketoacidosis risk (66.7%). Only 8.3% mentioned stopping the drug if not eating or drinking, and 29.2% advised when to seek urgent medical attention.

Key conclusions: While awareness of urinary tract infection risk was high, other critical safety messages were frequently omitted. Patient education by trainees is inconsistent, with important safety gaps identified. Targeted teaching interventions and the use of a patient information leaflet may help standardise counselling and promote safer prescribing in older adults.

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LB-54

Lower detection rate of microbial etiology in older adults with community-acquired pneumonia—results from a prospective case–control study

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Introduction: The incidence and mortality from pneumonia is highest among older adults. Symptoms are often less specific in this group and chest infiltrates may take longer to appear. Most pneumonia studies exclude patients without infiltrates on chest imaging; studies including patients with symptoms of pneumonia without infiltrates (SPWI) are lacking.

Methods: Suspected pneumonia patients requiring admission were prospectively recruited 1st of May 2018 to 30th of April 2019 at Landspítali, Reykjavik which serves 2/3 of the country's population. Age and sex-matched patients without respiratory tract infections were included in a control group. Oropharyngeal swabs were gathered for PCR analysis targeting pneumococci, *Haemophilus influenzae* and respiratory viruses.

Results: Clinician-ordered testing yielded no microbial etiology in 82.9% of older adults (> 80 years) with pneumonia compared to 72.5% for younger adults ($p = 0.009$), and 59.9% vs. 51.6% for the study PCR ($p = 0.05$), respectively. Among the CAP and SPWI patients pneumococci were found by PCR in 12.9% of older adults vs. 21.1% for younger adults ($p = 0.013$), and 10.3% vs. 14.6% ($p = 0.139$) for *H. influenzae*, respectively. Respiratory virus PCR were positive in 25.0% of older adults and 24.5% of those younger ($p = 0.92$).

Key conclusions: PCR testing from oropharyngeal swabs shows different microbial yield by age among pneumonia patients. A higher proportion of older adults has no respiratory pathogen identified by both clinician-ordered testing and study PCR. The share of pneumococci and *H. influenzae* decreases with age. It is possible that some of that difference may be explained by aspiration-related pathogens, not tested for in this study.

LB-55

Proprioception in older and young ALS patients: preliminary results

Evrin GÖZ (1), Filiz KOÇ (2)

Introduction: Amyotrophic lateral sclerosis (ALS) is a progressive neurodegenerative disorder characterized not only by motor neuron involvement but also by multisystem degeneration. The aim of this study was to investigate the involvement of proprioceptive system in ALS. To the best of our knowledge, this is the first study to assess the proprioceptive system in ALS patients.

Methods: Twelve patients with a definitive diagnosis of ALS at Neuromuscular Diseases Outpatient Clinic of Çukurova University

Faculty of Medicine, were enrolled. Functional status was assessed using the ALSFRS-R. Proprioceptive function (joint position sense) of the upper and lower extremities was measured with the J-TECH DUALER inclinometer at standardized angles (shoulder abduction/flexion at 60°, elbow flexion at 65°, knee flexion at 60°). Participants initially performed the tasks with eyes open, while the actual assessments were conducted with eyes closed. Each task was repeated three times, and mean absolute error scores were calculated. Group comparisons (younger < 65, older > 65 years) were performed using the Mann–Whitney U test.

Results: Data from 8 younger patients (age: 50.0 ± 5.21 years) and 4 older patients (age: 69.0 ± 2.83 years) were analyzed. No significant differences were observed between the two groups in terms of functional status, lower extremity and shoulder joint position sense ($p > 0.05$). However, older patients demonstrated significantly impaired right elbow joint position sense compared to younger patients ($p = 0.027$).

Conclusion: Preliminary findings from this ongoing study suggest that older ALS patients exhibit a marked decline in right elbow proprioception compared to younger patients, whereas shoulder and lower extremity proprioception, as well as overall functional status, appear to be preserved.

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LB-56

Re-audit of 4AT and delirium documentation 1 year post Establishment of SGW

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Introduction: National guidelines recommend that all hospitalised adults over 65 should be screened for delirium. This is of particular relevance on a Specialist Geriatric Ward, where there is a particularly high prevalence of delirium amongst inpatients. Intensive quality improvement initiatives, as well as the establishment of a dedicated Specialist Geriatric Ward (SGW) within our service in 2023 saw a significant rise in screening and documentation of delirium from 2023 to 2024. We aimed to repeat the audit cycle to assess for sustained and ongoing improvements within our SGW.

Methods: All patients over 65 years of age admitted to the Specialist Geriatric Medicine Ward in a hospital in the West of Ireland from January to March 2025 inclusive were included. Information was gathered via a retrospective chart review to establish if delirium and delirium assessment was documented during their stay. Information collected included a 4AT score.

Results: A 4AT score was documented in 27.3% (50/183) of the medical notes and 75% (137/182) of the nursing notes, compared to 89% in 2024. This represents a significant fall in the rate of 4AT documentation from 2024. Delirium was documented in 26.9% (46/171) of medical notes at some point in the admission, compared with 23% in 2024 representing a year on year small improvement.

Conclusion: A fall in the completion rate of the 4AT specifically highlights the need for continued education and quality improvement initiatives within the Specialist Geriatric Ward to avoid complacency and ensure standards of care are being retained. This creates the need for further quality improvement interventions longitudinally and repeat audit cycles.

LB-57

A multi-stakeholder qualitative evaluation of ED PLUS: a physiotherapy-led transition to home intervention for older adults following emergency department discharge

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Introduction: Older adults frequently attend Emergency Departments (EDs) and experience high rates of adverse outcomes, including functional decline, re-presentation, and unplanned hospital admissions. Developing effective interventions to prevent these outcomes is a priority. Healthcare providers (HCPs) are well positioned to establish integrated care pathways. ED PLUS is a physiotherapy-led, multidisciplinary model that bridges the transition between the ED and the community by initiating a Comprehensive Geriatric Assessment (CGA) in the ED and providing six weeks of multidisciplinary follow-up post-discharge.

Methods: A descriptive qualitative study was conducted. Older adults ($n = 9$) and HCPs ($n = 10$) from the ED PLUS trial intervention arm were invited to participate in semi-structured interviews exploring their experiences of the intervention. Interviews were audio-recorded, transcribed verbatim, and analysed using reflexive thematic analysis.

Results: Nine older adults and six HCPs participated. Four themes were identified: (1) Bridging care transitions—ED PLUS supported continuity of care between hospital and community; (2) Stakeholder collaboration—interdisciplinary teamwork and shared commitment enabled implementation; (3) Organisational and logistical barriers—resource limitations and workflow challenges impeded delivery; and (4) Service optimisation and expansion—participants highlighted opportunities to enhance and scale the model.

Key conclusions: ED PLUS demonstrates the potential of physiotherapy-led, multidisciplinary transitional care to improve outcomes for older adults discharged from the ED. Stakeholder insights provide valuable recommendations for refining the model and inform the design of a future definitive trial.

LB-59

Closing gaps in prevention of cognitive disorders: “healthy aging clinic”, a novel brain health service in Sweden

Alexandre Bonnard (1)

Introduction: Preventive services are accessible in the Swedish healthcare system. Primary care provides prevention of cardiovascular diseases, chronic obstructive pulmonary diseases and diabetes. The healthcare policies emphasize prevention through a healthier lifestyle. Nevertheless, the prevention of cognitive disorders is still lacking throughout the country. FINGER study showed that structured lifestyle and health interventions can lead to cognitive improvements. US Pointer study had similar results. Karolinska University hospital has implemented a brain health service to close the gap in prevention of cognitive disorders.

Methods: The brain health service is accessible to patients with subjective cognitive decline (SCD) and mild cognitive impairment (MCI). The main intervention is a one year-long coaching to get and retain a healthier lifestyle. The secondary intervention is a patient-

educational program about the importance of diet, physical activity, cognitive training and good cardiovascular health.

Results: 252 patients (women 53.2%) accessed the brain health service. The mean age is 72 years (range 52–89 years). The diagnosis are as follow SCD 24.7%, MCI 58.7%, Dementia 7.3% and Others 9.3%. Other variables such as body mass index (BMI), body fat-free mass and blood pressure will be analyzed. Patients reported experience measures (PREM) show 98% of ratings as good or very good.

Conclusions: It has been possible to implement a new brain health service. The service is being reviewed to ascertain the outcome of the intervention and to prepare a wider implementation.

LB-60

Vaccination patterns in geriatric outpatients and their association with COVID-19 doses

ECGI Submission

DUYGU OZATA (1), KUBRA CINGAR ALPAY (1), SUNA AVCI (1), ALPER DOVENTAS (1), ULEV DENIZ ERDINCILER (1)

Introduction: Immunosenescence and multimorbidity increase infection risk in older adults, while vaccine uptake often remains suboptimal [1,2]. We aimed to describe vaccination status and diversity, and to examine associations with COVID-19 dose count and selected biomarkers in geriatric outpatients.

Methods: In this cross-sectional study at Istanbul University-Cerrahpaşa, Geriatrics Department, records of 237 patients aged ≥65 years were reviewed. Vaccination status was captured for influenza (last season and regular annual), pneumococcal, tetanus, zoster, meningococcal, hepatitis B, and COVID-19. A Vaccine Diversity Score (number of different vaccine types received, including COVID-19) was calculated. COVID-19 dose number and vaccine type (CoronaVac/Sinovac, BNT162b2/BioNTech, or both) were recorded. χ^2 , Mann-Whitney U, and Spearman correlation tests were applied ($p = 0.05$).

Results: Uptake was highest for COVID-19 (94.9%) and pneumococcal (54.9%), and low for tetanus (18.6%), influenza last year (11.4%; regular annual 5.5%), hepatitis B (6.3%), meningococcal (5.9%), and zoster (0.8%). Mean COVID-19 doses were 3.7; 11 had 0, 82 had 1–3, and 144 had ≥4 doses. Vaccine Diversity Score averaged 2.0. Participants with ≥4 COVID-19 doses had higher diversity scores ($p = 0.011$). COVID-19 dose count correlated with influenza vaccination years ($r = 0.21$) and diversity score ($r = 0.29$). Diversity score correlated positively with albumin ($r = 0.203$; $p = 0.004$) and negatively with C-reactive protein ($r = -0.219$; $p = 0.002$); correlations with vitamin D, hemoglobin, HDL, HbA1c, and total medication count were non-significant.

Conclusions: In this cohort, COVID-19 and pneumococcal vaccinations were relatively common, whereas other adult vaccines were rarely received. Higher COVID-19 dose counts aligned with broader vaccination behavior, and better nutritional/low-inflammatory profiles may be linked to greater vaccine diversity. Findings support strategies to improve awareness and reduce access barriers in geriatric vaccination programs. [1,2]

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LB-61

Use of SGLT2i in old and very old people: differences between patient characteristics and tolerability

David Matos Monteiro (1), Ana Rita Ventura (1), Ana Margarida Coutinho (2), Gabrielle Christina (2), Nuno Santos (2), Ana Rita Ramalho (2), Patrícia Dias (2), Arsénio Santos (2)

Introduction: Prognosis-modifying drugs (PMD), particularly sodium-glucose cotransporter-2 inhibitors (SGLT2i), are approved for heart failure with mildly reduced or preserved ejection fraction (HFmr/pEF). However, they are often underprescribed in very old people, often justified by the lack of directed clinical trials and concerns regarding side effects, which are potentiated by comorbidities, polypharmacy and drug interactions.

Methods: Our study included 259 outpatients aged ≥65 years with chronic HFmr/p newly initiated on SGLT2i. Patients were grouped into 65–79 years (n = 108) and ≥80 years (n = 151). Baseline characteristics, background HF therapies and adverse events (AE) were compared.

Results: Thirteen percent of patients were excluded as they did not initiate SGLT2i therapy. Compared with 65–79 group (mean age 73.5 ± 4.8), the ≥80 group (85.3 ± 3.8) showed lower functional independence (Katz 4.88 ± 1.69 vs 5.73 ± 0.97 ; $p < 0.001$) and higher comorbidity burden (Charlson 6.26 ± 1.72 vs 5.27 ± 1.59 ; $p < 0.001$). They had higher NT-proBNP (3846 ± 6119 vs 1849 ± 2497 pg/mL; $p = 0.002$), higher prevalence of atrial fibrillation/flutter (70.2% vs 56.5% ; $p = 0.023$) and chronic kidney disease (58.9% vs 34.3% ; $p < 0.001$). Use of ACEI/ARB/ARNI, β-blockers, MRAs and overall polypharmacy were similar (all $p > 0.05$). AE occurrence was generally low and comparable between groups (hypotension, diabetic ketoacidosis, hypoglycemia, urinary tract infection, candidiasis, amputation and bone fracture), except for acute kidney injury (16.6% vs 7.4% ; $p = 0.03$). Discontinuation due to AE was infrequent and nonsignificant (5.3% vs 4.6% ; $p = 0.808$).

Key conclusions: SGLT2i remain underprescribed in old and very old patients with HFmr/p. Despite our cohort being older than in previous studies, we found no differences in major adverse events, supporting their safe use.

LB-62

Acute psychiatric conditions—a reason for prolonged hospital treatment after cardiac surgery

ECGI Submission

Marija Kostadinovska (1), Milka Klineva (2)

Introduction: Acute psychiatric conditions are frequent postoperative complications after cardiac surgery, associated with increased morbidity, mortality, and prolonged hospitalization. Their occurrence requires timely recognition and a multidisciplinary approach.

Aim: To assess the influence of postoperative acute psychiatric conditions on hospital stay in cardiac surgery patients.

Methods and Material: A retrospective study was conducted at the Clinical Hospital “Zan Mitrev” Skopje between 2023 and 2025. A total of 2054 patients underwent cardiac surgery during this period. Among them, 173 patients (8.4%) developed acute psychiatric

complications and were evaluated by a psychiatrist. Demographic and clinical characteristics, psychiatric history, surgical type, and postoperative psychiatric complications were analyzed. Prolonged hospital stay was defined as $> 7 \pm 2$ days.

Results: The mean age was 68 ± 12 years, with hypertension (84%), hyperlipidemia (73%), and diabetes (51%) as the most common comorbidities. A psychiatric history was documented in 128 patients (75%). Within the analyzed cohort (n = 173), postoperative delirium occurred in 72 patients (42.1%), depression in 54 (31.6%), anxiety in 28 (16.4%), and agitation in 12 (7.0%). Most patients underwent CABG (43%), valve surgery (5%), or combined procedures (8%). Prolonged hospitalization was observed in 83 patients (49%), with a mean length of stay of 16 ± 8 days. Rehospitalization occurred in 13 patients (8%).

Conclusion: Acute psychiatric conditions, including delirium, depression, and anxiety, significantly prolong hospital stay after cardiac surgery. Early psychiatric consultation, preventive measures, and individualized treatment are essential to optimize outcomes and reduce healthcare burden.

LB-63

Predifall: a study protocol for polymodal fall prediction with clinical, laboratory, and blood-based biomarkers

Evrin Gökçe (1), Antoine Langeard (1)

Introduction: Falls are a leading cause of injury, disability, and mortality among older adults, with substantial public health and economic consequences. Current detection methods relying on questionnaires or simple functional tests lack sensitivity, particularly for healthy fallers. Due to the multifactorial nature of falls, there is a need for integrated approaches that combine clinical, functional, and biological markers to better explain and predict fall events.

Methods: The PrediFall project will recruit 100 healthy adults aged ≥65 years (50 fallers, 50 non-fallers). Participants will undergo multimodal assessments, including validated questionnaires, cognitive testing, mobility and balance evaluations, muscle strength and proprioception measures, vestibular and postural control tests, and neuroimaging of the brain and muscles using magnetic resonance imaging, proton magnetic resonance spectroscopy, functional near-infrared spectroscopy, and ultrasound. Blood samples will be collected for proteomic and genome-wide single-nucleotide polymorphism analyses. Physical activity will be monitored by actimetry, and fall events will be tracked for 12 months using a dedicated smartphone application. Data will be integrated into statistical models and artificial intelligence algorithms to identify distinguishing characteristics between fallers and non-fallers. The “PrediFall” project is co-funded by the Normandy Region and the European Union under the FEDER/FSE 2021–2027 program (#00159760).

Results: This study will evaluate the discriminative power of combined multimodal data to differentiate fallers from non-fallers and identify predictive biomarkers within each domain. Integration of clinical, laboratory, and genomic markers will enable the development of validated algorithms designed both to explain past fall incidents and to predict future fall risks.

Conclusions: We hypothesize that a specific multimodal biomarker signature can differentiate older adults at risk of falling and anticipate future fall events. PrediFall will advance the understanding of fall mechanisms and contribute to innovative prevention strategies in aging populations.

LB-64

Food supplements in geriatric population: between nutritional support and interaction risk—the role of pharmacists

Nevena Ivanovi? (1), Ivana Djuricic (1)

Introduction: Food supplements (FS) are concentrated sources of nutrients or other substances with nutritional or physiological effects intended to supplement the normal diet. They are often used by older adults to maintain vitality and prevent malnutrition. However, the simultaneous intake of different drugs (polypharmacy) increases the risk of undesirable interactions.

Methods: This work discusses the current evidence on the dual role of FS in elderly care, focusing on benefits and risks. Particular attention is paid to the potential for interactions between dietary supplements and pharmaceuticals and the key role of pharmacists in clinical practice.

Results: Whey protein supplements have been shown to support muscle protein synthesis and prevent sarcopenia. Vitamin D and omega-3 fatty acids can promote bone and cardiovascular health. However, FS such as omega-3, garlic and ginkgo biloba can enhance the effect of anticoagulants (e.g., warfarin) and thus increase the risk

of bleeding. These interactions often go unrecognised because patients do not report them appropriately and medical staff are not sufficiently informed.

Conclusions: Although FS can improve the nutritional status of older people, their use must be individualised and assessed in the context of all medications. Pharmacists are in a unique position to recognise potential interactions, educate patients and support the safe use of FS in the context of multidisciplinary geriatric care. Key word: food supplements, interactions, elderly.

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