

RISK STRATIFICATION AND SECONDARY PREVENTION OF CVD

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DO WE KEEP CARDIAC PATIENTS OUT OF HOSPITAL BY ADDING TELEREHABILITATION TO STANDARD REHABILITATION?

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Background: Standard in-hospital cardiac rehabilitation (CR) has been proven to be effective. Cardiac patients however often do not attend these rehabilitation sessions leading to non-compliance with lifestyle and risk factor recommendations, which is associated with increased adverse outcomes.

Objectives: We investigated whether the addition of an internet-based rehabilitation program to standard CR can reduce the number of cardiovascular rehospitalisations.

Methods: The Telerehab III study is a multi-centric randomized controlled trial, that runs from February 2013-2015. Coronary artery disease or heart failure patients were eligible. Intervention patients (n=70) were, at study start, stratified in different subgroups based on their cardiovascular risk factor profile and cardiopulmonary exercise testing. This stratification enabled the caregiver to provide each patient with a personalised diet and exercise protocol. The intervention patients were asked to wear a motion sensor continuously for a total study period of 6 months. Each week, they received feedback messages (via e-mail and/or SMS) to gradually increase their activity level and to inform them about healthy diets. Control patients (n=70) wore taped motion sensor three times for 9 days (week 1, 6 and 24) for measurement purposes only. They did not receive feedback regarding their physical activities via SMS or e-mail, nor did they receive dietary advice.

Results: The Kaplan-Meier curve showed a significant lower rehospitalisation rate in the intervention group (P=0.01055) (13 rehospitalisations), when compared to the control group (29 rehospitalisations).

Conclusions: The addition of an internet-based telerehabilitation program to standard CR can impact favorably on cardiovascular rehospitalisation rate.