

Luciana De Michelis Mendonça, PhD¹ ■ Emilie Dick, MSc² ■ Bruno Tassignon, PhD^{2,3} ■ Eleni Kapreli, PhD⁴
 Sanna Paasu-Hynynen, MSc⁵ ■ Sanna Sihvonen, PhD⁵ ■ Teemu Elomaa, MSc⁵ ■ Carlo Ramponi, BSc⁶
 Aristi Tsokani, MSc⁷ ■ Mati Arend, PhD⁸ ■ Nikolaos Strimpakos, PhD⁷ ■ Maria Constantinou, PhD⁹ ■ Jo Verschueren, PhD²

Sports Physical Therapy Competencies Update: Study Protocol for an International Consensus Statement

■ **OBJECTIVE:** The purpose of this protocol is to outline the process of updating the international sports physical therapy (SPT) competencies globally, utilizing a 3-stage process of incorporating expert sports physical therapists and stakeholders.

■ **DESIGN:** Protocol for a 3-round Delphi study, qualitative study, and consensus meeting.

■ **METHODS:** A 3-stage process will be conducted: first, a Delphi study composed of at least 2 rounds to reach a consensus on the current SPT competencies; second, 3 international focus groups for stakeholders and a series of 8 one-on-one online interviews with stakeholders who are sports medicine leaders from large international sporting organizations. The third stage will be a consensus meeting to define the final version of the competencies.

■ **RESULTS:** The results of this study will be disseminated through peer-reviewed publications, clinical meetings, and conference presentations. These updated competencies will guide the content of postgraduate and specialization courses, shaping the skills of future professionals. Moreover, the competencies will set expectations for other health professionals working with sports physical therapists and will influence job descriptions and opportunities in the field.

■ **CONCLUSION:** A global dissemination of the outcomes of the study is expected through International Federation of Sports Physical Therapy member organizations, which would impact sports physical therapists' practice, education, and training. *JOSPT Methods* 2025;1(3):1-6. Epub 16 July 2025. doi:10.2519/josptmethods.2025.0008

■ **KEY WORDS:** athlete, profession, rehabilitation, standards

Sports physical therapy (SPT) is a recognized profession worldwide, possessing a broad scope of knowledge and skills.^{4,10} In 2000, the International Federation of Sports Physical Therapy (IFSPT) was founded, and since 2003, it has been recognized as a specialty group of World Physiotherapy.¹³ Following a process of development and standardization, the Sports Physiotherapy for All project led by the IFSPT published the 11 SPT competencies in 2005 (**SUPPLEMENTAL FILE 1**), providing a framework for professional behaviors and skills worldwide.^{3,13} SPT competencies have been used by the IFSPT

to guide the pathways for training and recognition of sports physical therapists globally.³

Since the SPT competencies were developed, the SPT profession has evolved, with new contexts and research being implemented.¹⁵ As such, the need to review and update these competencies by the IFSPT became clear.¹⁵ It is important not only to ensure that competencies are up-to-date based on the perspectives of sports physical therapists but also to consider the viewpoints of stakeholders, including those who receive SPT services and those who collaborate with them to ensure the well-being of athletes. An initiative to update the SPT competencies was put forward and accepted at the IFSPT General Meeting in 2022 in Nyborg, Denmark.¹⁵

In 2023, the IFSPT formed a consortium with 4 European universities (Vrije Universiteit Brussel [VUB], Jamk University of Applied Sciences, University of Thessaly, and University of Tartu). SportsComp ("Higher Education to Improve Competency in Sports Physiotherapy") is a Cooperation Partnership project that was successful in receiving Erasmus+ funding from the European Union in 2023. The general objective of the project is to increase the quality of SPT education and profession through SPT competence development. The aim of this paper is to outline the protocol designed to update the SPT competencies globally, utilizing the 3-stage process by incorporating expert

¹Department of Physical Therapy, School of Physical Education, Physical Therapy and Occupational Therapy, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil. ²Human Physiology and Sports Physiotherapy Research Group, Faculty of Physical Education and Physiotherapy, Vrije Universiteit Brussel, Brussels, Belgium. ³Rehabilitation Research Center (REVAL), Faculty of Rehabilitation Sciences, Hasselt University, Diepenbeek, Belgium. ⁴Clinical Exercise Physiology and Rehabilitation Laboratory, Department of Physiotherapy, University of Thessaly, Lamia, Greece. ⁵Institute of Rehabilitation, School of Health and Social Studies, Jamk University of Applied Sciences, Jyväskylä, Finland. ⁶Kinè Rehabilitation and Orthopaedic Center, Treviso, Italy. ⁷Health Assessment and Quality of Life Laboratory, Department of Physiotherapy, University of Thessaly, Lamia, Greece. ⁸Institute of Sport Sciences and Physiotherapy, Faculty of Medicine, University of Tartu, Tartu, Estonia. ⁹Physical Activity, Sports and Exercise Research Theme, Faculty of Health, Southern Cross University, Lismore, Australia. ORCID: Mendonça, 0000-0002-4495-1807; Tassignon, 0000-0003-3216-4045. The SportsComp project ("Higher Education to Improve Competency in Sports Physiotherapy"; project reference 2023-1-FIO1-KA220-HED-000155843) was supported by the European Commission through the Erasmus+ Cooperation Partnership project. The authors do not indicate any conflict of interest. The European Commission granted this project. The views and opinions expressed are, however, those of the authors and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor the EACEA can be held responsible for them. Address correspondence to Luciana De Michelis Mendonça, Department of Physical Therapy, School of Physical Education, Physical Therapy and Occupational Therapy, Universidade Federal de Minas Gerais, Avenida Presidente Antônio Carlos, 6627 Pampulha, Belo Horizonte, MG 31270-901, Brazil. E-mail: lucianademichelis@yahoo.com.br ■ Copyright ©2025 The Authors. Published by JOSPT Inc. d/b/a Movement Science Media. Original content from this work may be used under the terms of the Creative Commons Attribution 4.0 License. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

sports physical therapists and stakeholders internationally.

METHODS

This study was conducted within the context of the SportsComp project (“Higher Education to Improve Competency in Sports Physiotherapy”), implemented from September 1, 2023, to August 31, 2026, and it is divided into 5 work packages. This protocol paper describes the following: a Delphi study of sports physical therapists internationally, a stakeholder consultation consisting of focus groups and one-on-one interviews of international sports medicine leaders, and a final panel meeting (following the consensus procedures) to define the updated version of the competencies.

Design

This study is carried out in collaboration with the SportsComp project partners. The study will follow a 3-stage process: (1) a Delphi study to evaluate the support of current SPT competencies in a global context; (2) 3 international focus groups for stakeholders—1 with athletes, 1 with athlete support personnel, and 1 with managers of sporting organizations and clubs—plus a series of 8 one-on-one online interviews with stakeholders who are sports medicine leaders from large sports organizations; and (3) a consensus meeting to define the final version of the competencies.

A Delphi study approach is designed with a panel of experienced sports physical therapists based on the existing international SPT competencies.³ The Delphi study aims to achieve agreement on the current competencies utilized by the IFSPT. The Delphi study will involve a minimum of 2 rounds, with a third round possible if needed to achieve consensus.

Three focus groups and in-depth interviews will be conducted to gather the opinions of experts regarding the

role of sports physical therapists in sports and health systems. The in-depth interviews involve one-on-one conversations between a researcher and a participant, whereas the focus groups will involve group discussions, where participants provide feedback and opinions guided by a moderator.

The final panel (consensus meeting) will be held in Brussels, according to the SportsComp project schedule, to merge the results of stage 2 (focus groups and interviews) with the competencies agreed on the Delphi approach (stage 1).

The study design will follow the CREDES (Conducting and REporting Delphi Studies) guidelines.⁶ This study has been approved by the Medical Ethics Committee of Universitair Ziekenhuis Brussel of VUB under registration EC-2023-254 (BUN: 1432023000209).

Participants

Sex equality will be incorporated within all stages of this project. The Delphi study will utilize the IFSPT member organizations’ database for the recruitment of participants who are expert international sports physical therapists. The IFSPT database is composed of 40 current member organizations, with 6 additional countries that either were members in the past 5 years or applied to become a member. Each IFSPT member organization will be asked to nominate at least 2 qualified physical therapists who work in sports to participate in the study. Inclusion criteria for physical therapists are (1) licensed to practice in their country; (2) with over 5 years’ experience working with athletes (recreational to elite) in any setting for treatment, prevention, or research; and/or (3) with over 5 years’ experience teaching in a postgraduate specialized SPT program. Participants will be excluded from the study if they do not meet the inclusion criteria and/or do not fill in the round 1 of the Delphi survey reaching at

least competence 9 (ie, at least 80% of the survey).

The selection of participants for the focus groups and interviews will be conducted through purposive sampling, utilizing the network of each project partner. Three focus groups will be organized with the following participant categories: (1) athletes representing diverse sex and abilities, encompassing both team and individual sports; (2) support personnel, including coaches, strength and conditioning coaches, physicians, sports psychologists, and nutritionists; and (3) representatives from national sporting health care organizations, including team management, sports-related hospitals, sports clinics, and representatives of different sports responsible for the recruitment of physical therapists. Additional optional criteria for participants include professionals from different continents to ensure a greater level of representation.¹¹ Furthermore, interviews will be conducted with representatives from international sporting organizations. To ensure a representative sample, we will include participants from the following types of organizations: International Olympic Committee, International Sports Federations, International Paralympic Committee and National Olympic Committees. Individuals lacking proficiency in the English language or unable to utilize the Microsoft Teams platform will be excluded from both the focus groups and interviews.

Stage 1: The Delphi Survey Process

A Delphi study consisting of a minimum of 2 rounds will be undertaken. Each round will involve (1) data collection via an online anonymous survey; (2) analysis of responses and survey modification; and (3) providing feedback to the participating sports physical therapists through open questions in round 1, before the next round is conducted. All Delphi rounds will be conducted via a survey link

using the REDCap survey tool.⁸ Following the creation of the survey link, participants will receive e-mail invitations that include essential information to successfully complete the survey. Participants will receive information about the study on the initial page of the survey. By proceeding with the survey, participants provide their informed consent. Participants have the option to exit the survey at any time if they choose not to continue or wish to withdraw from the study. The IFSPT will send reminders and work intensively to enhance the adhesion of their members on every round of the Delphi process.

Each Delphi round will ask participants to indicate whether they “agree,” “disagree,” or are “unsure” about each competency. The first round will be built based on the existing SPT competencies,⁴ alongside open-ended questions. Further to the closed-ended questions, round 1 will include open-ended questions for every subitem and at the end of each competency. The open-ended questions will give an opportunity for participants to comment on why they are unsure about the statement and/or to suggest changes or additions to a competency (**SUPPLEMENTAL FILE 2**).

The goal of the Delphi process is to achieve a predefined high level of agreement (>80%) between the respondents.⁷ In this Delphi study, *consensus* is defined as agreement equal to or higher than 80% on the “agree” or “disagree” response options, with less than 10% of participants indicating the “unsure” response option. If an item reaches 80% or more agreement but has over 10% of “unsure” responses in rounds 1 and 2, it will be reworded based on the thematic analysis of the participants’ suggestions and presented in the next round. Items with less than 80% agreement will be revised and reevaluated in subsequent rounds. After 3 rounds, any item that does not achieve 80% agreement will be marked

as “no consensus found.” However, if an item meets the 80% agreement threshold with 10% or more of participants marked as “unsure” in the third round, it is still recorded as reaching consensus.

Stage 2a: Focus Groups

Based on an interpretivist paradigm, the current focus group study aims to comprehend and delineate human nature and the perspectives of individuals intimately involved with the subject under study.^{1,5} A 32-item COREQ (Consolidated criteria for REporting Qualitative research) checklist will be used to conduct this study, which is a valuable tool for researchers who wish to produce qualitative studies efficiently.¹⁴ A reflexive thematic analysis has been chosen to be used to facilitate a comprehensive analysis that integrates the author’s cognitive and experiential insights with the gathered data, thereby demonstrating the inherent reflexivity within the methodology.² Data collection will involve semistructured interviews, allowing participants to express themselves freely on topics selected by the researcher while providing a structured framework for the researcher to follow. Experienced academics in qualitative studies will design a semistructured interview guide based on literature reviews and their extensive clinical and educational experience, and a pilot test will be conducted prior to the study. The guide will include open-ended questions to encourage participants to engage and speak freely about the information they will receive without becoming influenced by preexisting knowledge of the researchers.¹¹

Eligible participants will receive an official e-mail invitation outlining the study’s purpose, focus group procedures, moderator and facilitator roles, date, platform (Microsoft Teams), and meeting duration (60–90 minutes).⁶ Participation is voluntary and requires informed

consent. Sessions will be audio- and video-recorded.

One researcher, as the moderator, will be primarily responsible for guiding the flow of the conversation, introducing topics, asking questions, and keeping the discussion on track. Another researcher, as the facilitator, will manage the discussion process and will keep digital notes using the OneNote app, to be presented at the end of each question’s discussion. A third person will provide technical assistance with the Microsoft Teams platform during the focus groups. The moderator of each focus group will first share a short PowerPoint presentation explaining the purpose of the study and the rules of the discussion and then use the interview guide to start the meeting. During the focus group, all participants need to have the same opportunity to express their opinions freely. An automated speech-to-text transcription tool will be utilized. A researcher will subsequently verify the final transcription of the interview to ensure its accuracy.¹⁶

The guide for the focus groups will incorporate 3 engagement questions designed to foster a comfortable and inviting atmosphere for participants. These questions will facilitate early participation and establish a positive environment that encourages contributions from all attendees. By establishing rapport between the facilitator and participants, engagement questions create a trusting environment where people feel safe sharing their opinions. Furthermore, they enable the facilitator to observe group dynamics, facilitating effective management of the discussion. In addition, 7 exploration questions will be utilized to assess the competencies of sports physical therapists (**SUPPLEMENTAL FILE 3**). These questions will focus on the role of sports physical therapists and the essential skills required for effective practice. Participants will be specifically asked to

discuss how these competencies benefit athletes, contribute to injury prevention, and promote healthy lifestyles. The questions will also highlight the significance of cultural competencies and the importance of both theoretical knowledge and practical application in the field.¹¹

Stage 2b: Interviews

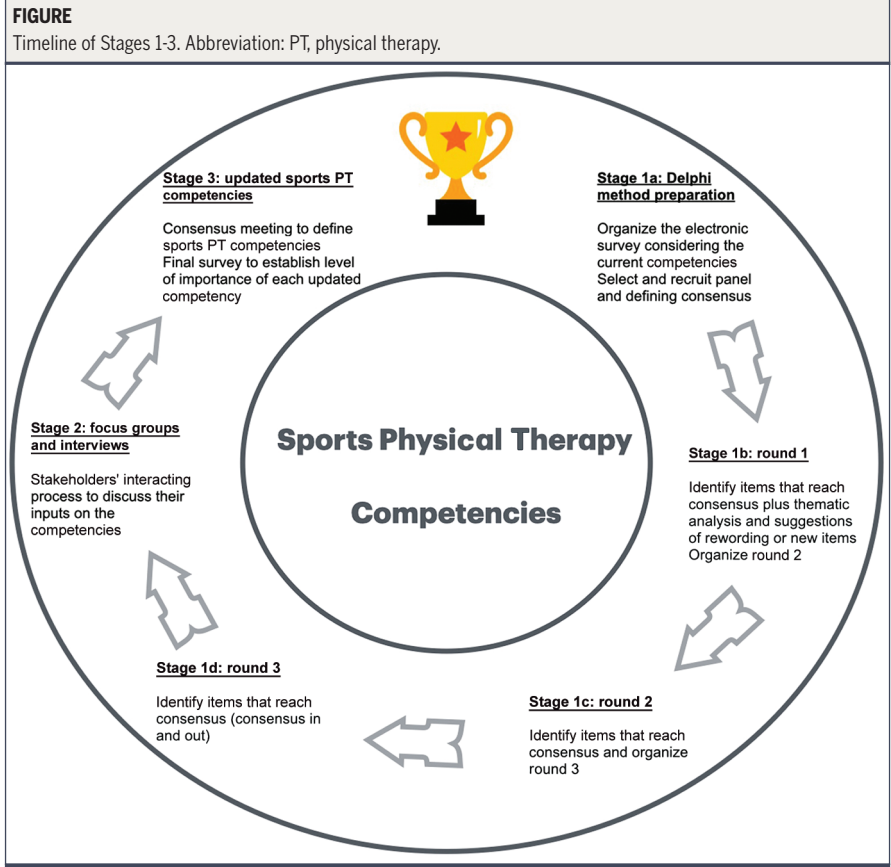
The same initial procedures regarding invitation and consent for the focus groups will be undertaken for the interviews. The discussion will be audio- and video-recorded through the Microsoft Teams platform and will last around 45 minutes. The researchers will follow the same procedure, explaining the purpose of the study and managing the process of the discussion. Three engagement questions will be used to encourage participation, followed by 7 exploration questions to examine the competencies of sports physical therapists.¹²

Stage 3: Final Updated SPT Competencies

A consensus meeting will be held to merge the results of stage 2 (focus groups and interviews) with the competencies agreed upon in the Delphi process (stage 1). All items identified in stage 2 will be added on the agreed competencies defined on the Delphi after revision and the voting process, separately. An agreement of at least 80% of these items will be necessary to be included in the final updated competencies. **FIGURE** outlines the 3-stage process of this study.

Data Analysis

The data from the first round of the Delphi study will be analyzed using both qualitative and quantitative methodologies. Qualitative data obtained from the open-ended questions will undergo thematic analysis to identify suggestions for rewording, missing competencies, and themes. This analysis will guide



modification and potential additions to the competencies. Quantitative analysis will be conducted using R software to determine the level of agreement on each competency. Competencies that reach 80% agreement will be included in the updated version of the competencies. Those that do not reach 80% agreement or have more than 10% “unsure” responses will be rewritten based on the thematic analysis and reevaluated in the second round. This same process will apply to the third round. The sentences that reach the best performance among rounds will be maintained. Items will be included in the final competencies only if they achieve 80% agreement regardless of the percentage of “unsure” responses. In the optional fourth round, a Likert scale from 1 to 10 will be used on all updated competencies to assess

the level of importance allocated to each competency by the participants.⁹

Thematic analysis will be employed to analyze the results of the focus groups and interviews, allowing the systematic identification, organization, and interpretation of patterns and themes within the data. The process will begin with familiarization, where 2 researchers will thoroughly review the transcripts to immerse themselves in the content. Next, initial codes will be generated by identifying significant phrases or concepts related to the research questions. These codes will be organized into broader themes that capture the essence of the data.¹¹

After themes are identified, they will be reviewed and refined by a third researcher to ensure they accurately represent the data and are distinct from one another. This involves verifying if the themes are

coherent in relation to the coded data and the entire data set. Finally, the themes will be clearly defined and named, followed by the final analysis, where the themes will be interpreted in the context of the research objectives.²

DISCUSSION

This paper outlines a 3-stage protocol for updating the international SPT competencies. The IFSPT will lead the process by incorporating input from expert sports physical therapists and stakeholders globally.^{3,13} The first stage will involve a Delphi study seeking agreement on maintaining the current competencies in a global context. The second stage will incorporate the Delphi results with the insights from focus groups and interviews involving international stakeholders, such as athletes, coaches, health care institutions, and federations. The third and final stage will combine results of the previous stages through a consensus meeting to develop the final updated international SPT competencies. We expect that this process will produce more contemporary competencies that will be distributed worldwide to help enhance the quality of SPT education and profession.

The IFSPT will rely on its affiliated member countries, inviting participants globally to define the updated SPT competencies through the Delphi approach.^{3,4} In comparison to the previous process, which established the current competencies, broader international involvement is expected, with greater participation from middle- and low-income countries. The fact that IFSPT dissemination and membership has increased from 11 to 40 member organizations since its foundation in 2000 provides a bigger global platform for participation of countries.^{3,13} Considering this broader participation of countries worldwide, it is anticipated that a more inclusive and diverse scope of SPT practice and responsibilities will

be defined. We recognize the language restriction (only English proficiency) as a limitation, which might affect the number of participants from some countries.

The current SPT competencies include a broader scope of behaviors, actions, responsibilities, and skills.³ This content will form the basis of the Delphi process.³ While it may still be considered contemporary in some aspects, clinical practice, the role of sports health care professional teams, and research have significantly evolved worldwide since then.¹⁰ The responsibilities and knowledge of sports physical therapists have grown, and the world has evolved in terms of attitudes and behaviors.^{4,10,13} Therefore, all health care professions need to adjust and update their frameworks. Additionally, the attitudes and beliefs of health care professionals who work closely with sports physical therapists, stakeholders, and athletes will be included in this updating process through focus groups and interviews. In this way, their perspectives will be added to the updated competencies.

DISSEMINATION PLAN

The results of the study described in this protocol will be published in high-impact, peer-reviewed journals and disseminated in scientific congresses and clinical meetings. The results are also outputs of the SportsComp project. A global dissemination of the outcomes of the study is expected through IFSPT member organizations, which would impact sports physical therapists' practice, education, and training.

CONCLUSION

The international SPT competencies define their current capabilities, abilities, actions, and responsibilities.³ Once updated, these competencies will guide the content of postgraduate and specialization courses, shaping the skills of future professionals. Moreover, they

will set expectations for other health professionals working with sports physical therapists and will influence job descriptions and opportunities in the field.^{4,10} Future developments in clinical practice and research in SPT will depend on this process. ■

KEY POINTS

FINDINGS: The sports physical therapy (SPT) competencies already have 20 years of existence and require an update to be aligned with the current practices and demands of the profession. The International Federation of Sports Physical Therapy (IFSPT) formed a consortium with 4 European universities to develop the process of updating the competencies.

IMPLICATIONS: The online dissemination of the Delphi study, involving the IFSPT membership, provides global participation in the effort to update the SPT competencies. The inclusion of stakeholders from different profiles and areas adds value to the updating process by including their perspectives and perceptions on the role and competencies of the sports physical therapist. After the establishment of the updated SPT competencies, the consortium will build online courses to disseminate information and increase opportunities for education.

CAUTION: English proficiency could be a limitation of this study, affecting the number of participants from some countries.

STUDY DETAILS

AUTHOR CONTRIBUTIONS: L.D.M., B.T., E.K., M.C., N.S., and J.V. were responsible for the conception and design of the study and data collection; L.D.M., E.D., B.T., E.K., A.T., and M.C. were involved in the drafting of the article; and all authors contributed to the interpretation of the data for the work and revising it critically for important intellectual content. All

the authors finally approved the article. L.D.M., B.T., E.K., S.P.-H., S.S., C.R., M.A., N.S., M.C., and J.V. were responsible for obtaining project funding and take responsibility for the integrity of the work as a whole. All authors have read and agreed to the published version of the article.

DATA SHARING: There are no data in this article.

PATIENT AND PUBLIC INVOLVEMENT: Not applicable.

ACKNOWLEDGMENTS: *The authors would like to thank the European Commission (Erasmus+) for the financial support.*

REFERENCES

1. Blaikie N, Priest J. In: Hoboken NJ, ed. in *Designing Social Research: The Logic of Anticipation*. John Wiley & Sons, 2019.
2. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health*. 2019;11:589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
3. Bulley C, Donaghy M. Processes in the development of international specialist competencies and standards: the Sports Physiotherapy for All project. *J Allied Health*. 2008;37:221E–243E.
4. Carrard J, Morais Azevedo A, Gojanovic B, et al. Sport and exercise medicine around the world: global challenges for a unique health-care discipline. *BMJ Open Sport Exerc Med*. 2023;9:e001603. <https://doi.org/10.1136/bmjsem-2023-001603>
5. Cavaye ALM. Case study research: a multi-faceted research approach for IS. *Inf Syst J*. 1996;6:227–242. <https://doi.org/10.1111/j.1365-2575.1996.tb00015.x>
6. Daniels N, Gillen P, Casson K, Wilson I. STEER: factors to consider when designing online focus groups using audiovisual technology in health research. *Int J Qual Methods*. 2019;18:1609406919885786. <https://doi.org/10.1177/1609406919885786>
7. Diamond IR, Grant RC, Feldman BM, et al. Defining consensus: a systematic review recommends methodologic criteria for reporting of Delphi studies. *J Clin Epidemiol*. 2014;67:401–409. <https://doi.org/10.1016/j.jclinepi.2013.12.002>
8. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009;42:377–381. <https://doi.org/10.1016/j.jbi.2008.08.010>
9. Jünger S, Payne SA, Brine J, Radbruch L, Brearley SG. Guidance on Conducting and REporting DElphi Studies (CREDES) in palliative care: recommendations based on a methodological systematic review. *Palliat Med*. 2017;31:684–706. <https://doi.org/10.1177/0269216317690685>
10. Kemp J, Mendonça LDM, Mosler AB, et al. Sports physiotherapists' contribution to the sports and exercise medicine team: moving forward, together. *Br J Sports Med*. 2023;57:74–75. <https://doi.org/10.1136/bjsports-2022-106404>
11. Moser A, Korstjens I. Series: practical guidance to qualitative research. Part 3: sampling, data collection and analysis. *Eur J Gen Pract*. 2017;24:9–18. <https://doi.org/10.1080/13814788.2017.1375091>
12. Saarijärvi M, Bratt E-L. When face-to-face interviews are not possible: tips and tricks for video, telephone, online chat, and email interviews in qualitative research. *Eur J Cardiovasc Nurs*. 2021;20:392–396. <https://doi.org/10.1093/eurjcn/zvab038>
13. Thorborg K, Mendonça L. Sports Physiotherapy for All. *Int J Sports Phys Ther*. 2021;16:1178–1180. <https://doi.org/10.26603/001c.28268>
14. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19:349–357. <https://doi.org/10.1093/intqhc/mzm042>
15. Verschuere J, Constantinou M. Do the international competencies of the sports physical therapist need updating? *Int J Sports Phys Ther*. 2023;18:1257–1260. <https://doi.org/10.26603/001c.89666>
16. Willemsen RF, Aardoom JJ, Chavannes NH, Versluis A. Online synchronous focus group interviews: practical considerations. *Qual Res*. 2022;23:1810–1820. <https://doi.org/10.1177/14687941221110161>



MORE INFORMATION
WWW.JOSPT.ORG