

Research

An international core capability framework for physiotherapists to deliver quality care via videoconferencing: a Delphi study

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KEY WORDS

Telehealth
Physical therapy
Videoconferencing
Telemedicine
Rehabilitation



ABSTRACT

Question: What are the core capabilities that physiotherapists need in order to deliver quality care via videoconferencing? **Design:** A three-round modified e-Delphi survey. **Participants:** An international Delphi panel comprising a Steering Group and experts in the field, including physiotherapy researchers, physiotherapy clinicians, representatives of physiotherapy organisations, and consumers. **Methods:** The draft framework was developed by the research team and Steering Group, based on relevant documents identified within the literature. The panel considered a draft framework of 73 specific capabilities mapped across eight domains. Over three rounds, panellists rated their agreement (Likert or numerical rating scales) on whether each capability was essential (core) for physiotherapists to deliver quality care via videoconferencing. Those capabilities achieving consensus, defined as 75% of the panel ratings being ≥ 7 out of 10 in Round 3, were retained. **Results:** A total of 130 panellists from 32 countries participated in Round 1, with retention rates of 65% and 60% in Rounds 2 and 3, respectively. The final framework comprised 60 capabilities across seven domains: compliance (n = 7 capabilities); patient privacy and confidentiality (n = 4); patient safety (n = 7); technology skills (n = 7); telehealth delivery (n = 16); assessment and diagnosis (n = 7); and care planning and management (n = 12). **Conclusion:** This framework outlines the specific core capabilities required of physiotherapists to provide quality care via videoconferencing. The core capability framework provides guidance for physiotherapists to deliver care via videoconferencing and will help inform future development of physiotherapy curricula and professional development initiatives in the delivery of telehealth. [Davies L, Hinman RS, Russell T, Lawford B, Bennell K, International Videoconferencing Steering Group (2021) An international core capability framework for physiotherapists to deliver quality care via videoconferencing: a Delphi study. *Journal of Physiotherapy* 67:291–297]

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Introduction

Provision of physiotherapy care via telehealth is becoming increasingly common and, in some circumstances, a necessity as observed during the COVID-19 pandemic.^{1,2} Telehealth enables physiotherapists to provide care remotely to patients within their own home/environment or in other facilities and clinics through the use of information and communication technologies.³ Videoconferencing technology is often used for telehealth because of its accessibility, versatility and convenience, as well as the fact that it allows for visual contact in real time.⁴ Previous research has demonstrated that telehealth is associated with high rates of patient satisfaction and, compared with traditional in-person care, reduced re-hospitalisations in people with coronary artery disease, greater

adherence in congestive heart failure outpatient programs, equivalent clinical outcomes in surgical populations and better outcomes in some musculoskeletal populations such as total hip arthroplasty.^{5–9} As such, telehealth is emerging as an effective and acceptable mode of healthcare delivery.¹⁰

Despite evidence supporting the effectiveness and acceptability of telehealth,¹¹ uptake of telehealth in physiotherapy has been slow for a variety of reasons, including lack of telehealth funding, resistance to changing practice, and lack of physiotherapist confidence, knowledge or skills in telehealth.¹² The introduction of social distancing measures during the COVID-19 pandemic led to a dramatic uptake in telehealth services such as videoconferencing across Australia and worldwide.^{2,13} For many physiotherapists, this came with limited preparation or training in implementation of videoconferencing services. In order to effectively and safely deliver care via telehealth, physiotherapists require different skills to those used for in-person consultations and must be able to adapt their usual practice to the

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digital environment.^{12,14} As such, there is a need to provide physiotherapists with the knowledge, confidence and skills in the delivery of telehealth. World Physiotherapy has highlighted this as a primary regulatory issue that needs to be addressed and they have called for the upskilling of physiotherapists in the digital environment.¹⁴

In order to facilitate the training and development of a physiotherapy workforce that is skilled in the delivery of care via videoconferencing, it is important to first identify what individual capabilities physiotherapists need to possess. A capability can be defined as an 'integration of knowledge, skills, personal qualities and understanding used appropriately and effectively'.¹⁵ Development of a framework of the core capabilities required by physiotherapists to deliver care via videoconferencing will provide physiotherapists and service providers with the knowledge of what is required to deliver quality care using this mode, whilst lending itself to be used as a blueprint to inform curriculum and professional development initiatives, including learning outcomes, assessment strategies and graduate attributes.

Competency frameworks for telehealth delivery have been developed for nursing and medical professions.^{16,17} However, it is suggested that frameworks based on capability need to be discipline-specific in order to capture the nuances of the specialty area.¹⁸ It is believed that there are currently no frameworks describing the core capabilities for physiotherapists specifically. Thus, this study aimed to develop a core capability framework for physiotherapists to deliver quality care via videoconferencing, using an international consensus process involving consumers, physiotherapy clinicians and researchers, and representatives of private health insurers and physiotherapy professional organisations.

Therefore, the research question for this Delphi survey was:

What are the core capabilities that physiotherapists need in order to deliver quality care via videoconferencing?

Methods

Overview

This framework was developed through the lens of individual physiotherapists working potentially without the support of administrative staff in their clinical practice setting. A Delphi panel was established and a three-round modified e-Delphi survey was conducted between August and November 2020 to achieve expert consensus on the core capability framework.

Previously established methodological criteria for reporting Delphi studies were used to ensure quality.^{19,20} The study was overseen by an international Steering Group assembled by the research team. The group comprised 10 members with an interest in telehealth from Australia (n = 4), Canada (n = 4), United States of America (n = 1) and Scotland (n = 1), and involved physiotherapy clinicians (n = 5) and academics (n = 3), a policy representative from the Australian Physiotherapy Association and a representative from an Australian private health insurer. Ethics approval was obtained from the University of Melbourne. Figure 1 outlines the study phases.

Survey development

An initial list of 55 potential core capabilities was generated by the research team, using a number of relevant documents identified from a search of the literature and telehealth guidelines. These documents included telehealth frameworks from the Academy of Medical Royal Colleges²¹ and National Initiative for Telehealth Framework of Guidelines,²² a Position Statement on tele-practice in speech from Speech Pathology Australia²³ and five research articles about competencies required for delivering digital healthcare.^{16,24–27} These capabilities were then organised into eight domains: compliance; patient privacy and confidentiality; patient safety; technology skills; telehealth delivery; assessment and diagnosis; care planning and management; and quality assurance.

This draft framework was sent to the Steering Group for review. For each capability, Steering Group members were asked to answer 'yes' or 'no' as to whether they believed it was relevant to include in the draft framework. Similarly, for each domain name, members were asked to answer 'yes' or 'no' as to whether it was suitable and relevant to include in the framework. Members were provided with the opportunity to suggest edits to capabilities and domains and to also suggest additional capabilities they felt had not been captured. Feedback received from the Steering Group was discussed by the research team and resulted in the addition of 20 new capabilities, five amalgamated capabilities, one capability separated into two and 28 other capabilities undergoing edits to wording. Thus, the final draft framework for the Delphi panel comprised 73 capabilities across eight domains.

Delphi panel

An international Delphi panel of experts in the physiotherapy field was established to reach consensus on the core capability framework and comprised Steering Group members, physiotherapy researchers involved in telehealth research, physiotherapy clinicians with experience providing care for patients via videoconference, representatives of a physiotherapy professional organisation, and consumers with experience of receiving care from physiotherapists via videoconferencing.

All panellists were required to understand English. Further eligibility criteria for researchers were being a qualified and registered physiotherapist who had at least one of the following achievements: first or last author on at least three papers relating to telehealth and physiotherapy care; or invited to give a presentation on telehealth at a national or international conference within the last 5 years. Inclusion criteria for clinicians were: being registered to practise as a physiotherapist in their country, and having provided care to more than 50 patients via videoconferencing in the last 3 years. Inclusion criteria for representatives of a physiotherapy professional organisation were: currently working in a national or international physiotherapy association/body, and knowledge of physiotherapy professional practice and governance issues. The inclusion criterion for consumers was that they have had at least four consultations with a physiotherapist via videoconferencing in the past 12 months.

A list of potential panel participants was compiled by the research team and Steering Group, drawing on their academic, research and clinical networks, as well as an internet search of physiotherapy clinicians delivering telehealth, physiotherapy organisations internationally and physiotherapy researchers in the telehealth field. Invitations were sent to 2,315 potential panel participants via email. A snowball method was used by inviting potential panellists to forward the invitation on to their colleagues or anyone else in their network whom they believed could be eligible. We also advertised for additional panellists on social media (Facebook, Instagram and Twitter). Potential panellists completed a series of screening questions at the beginning of the Round 1 e-Delphi survey to ensure eligibility criteria were met. Ineligible people were excluded from participating. For subsequent Delphi rounds, only those participants who had completed the previous Delphi round were emailed the survey.

e-Delphi survey

The Delphi panel was asked to rate each of the 73 capabilities across the eight domains. An electronic survey was developed using an online software tool^a and administered iteratively over three rounds. Round 1 was open for 4 weeks and subsequent rounds were open for 2 weeks. Three reminder emails were sent over that time to non-responders, to encourage completion. Participants took approximately 20 to 30 minutes to complete each round of the survey.

Round 1

In Round 1, panellists were asked to rate each of the specific capabilities as 'unimportant', 'important' or 'essential' for

physiotherapists in the delivery of quality care via videoconferencing. The panel was invited to suggest additional capabilities that were not already included in the draft framework via a free-text box option of the survey. Individual capabilities that reached panel consensus were retained for further consideration in Round 2. Consensus was defined as 75% (median threshold for consensus¹⁹) of the panel agreeing that the capability was either 'important' or 'essential'.

Round 2

In Round 2, panellists were asked to reconsider and re-rate the capabilities from Round 1, as well as rate any new capabilities suggested by the panel in Round 1. To assist in this process, summary panel data from Round 1 were displayed alongside each capability (presented as n (%) across the three response categories) showing the proportion of agreement across panellists. For this round, the panellists were asked to rate how strongly they agreed or disagreed that each capability should be included as a core capability for physiotherapists to deliver quality care via videoconferencing. Panellists rated their level of agreement on an 11-point numerical scale (with terminal anchors of 0 = strongly disagree and 10 = strongly agree). Individual capabilities that achieved consensus (at least 75% of the panel rating ≥ 6) were retained for Round 3.²⁸

Round 3

In Round 3, panellists were asked to reconsider and re-rate the capabilities from Round 2 using the same rating scale as Round 2. Summary panel data from Round 2 were presented for consideration alongside each capability in the format: number (%) of participants rating in each of the ranges 0 to 4, 5 to 6, 7 to 8, or 9 to 10. Only those capabilities that achieved consensus (at least 75% of the panel rating ≥ 7) were retained for inclusion in the final core capability framework.²⁸

Final phase

In the final phase, the research team (LD, RH, BL, TR, KB) reviewed the final framework for redundancies and refined wording across the domains. Capabilities that were similar in nature were merged together. Amalgamated capabilities were sent to the Steering Group for review and agreement. The final framework was reviewed by the Steering Group to approve the edits and merged capabilities.

Results

Characteristics of the panellists

Table 1 describes the characteristics of the Delphi panel. In Round 1, 130 participants from 32 countries participated, with more than half of the panel (n = 79, 61%) being physiotherapy clinicians and seven (5%) being consumers. We retained 85 panellists for Round 2 and 78 panellists for Round 3, representing 64% and 60% retention of Round 1 panellists, respectively.

Delphi Rounds 1 to 3

Figure 1 provides a summary of each Delphi Round. In Round 1, only one (1%) capability did not reach consensus as being 'essential' or 'important' for inclusion in the core capability framework for physiotherapists to deliver quality care via videoconferencing and was excluded from Round 2 (Appendix 1). Additionally, 42 individual panellists provided 86 separate items of feedback/additional capabilities for consideration. Of these, seven items were regarding generic physiotherapy capabilities not specific to telehealth, 20 were alternative suggestions for wording of capabilities already included in the framework and 43 were general comments/observations about telehealth and the survey rather than capabilities per se. From the remainder, an additional 11 unique capabilities were generated for inclusion in Round 2 and wording amendments were made to five capabilities in the framework (Appendix 2). In Round 2, 11 (13%) capabilities (Appendix 3) did not reach consensus and were removed from the final round. In Round 3, four (5%) capabilities (Appendix 4)

did not reach consensus for retention in the final core capability framework and were removed.

Final phase

When the research team reviewed the final framework after Round 3, 13 capabilities were identified across the domains as having similar meanings and as a result were amalgamated into five capabilities (Appendix 5). When the amalgamated capabilities were sent to the Steering Group, the 'quality assurance' domain was made redundant, with the final capability being merged into the 'telehealth delivery' domain, and minor word edits were made to five capabilities (Appendix 6). The final core capability framework comprised 60 specific capabilities across seven domains (Table 2).

Discussion

This study aimed to develop an internationally-relevant, discipline-specific core capability framework for physiotherapists to deliver quality care via videoconferencing. The final framework comprised 60 specific capabilities mapped across the seven domains shown in Table 2. This framework provides a model that communicates the key capabilities required of physiotherapists to ensure quality care via videoconferencing. The intention of this framework is not to dictate how or when these capabilities should be implemented in clinical practice. Instead, this framework provides physiotherapists with best practice recommendations about the skills and knowledge required for delivery of care via videoconferencing.

It is believed that no previous studies have examined the capabilities required by physiotherapists to deliver quality care via videoconferencing. However, our findings can be compared to other previously developed telehealth capability frameworks for other healthcare professions. A recent study of expert consensus from a panel of 11 leaders in telehealth investigated the skills required by medical healthcare professionals to deliver care via telehealth.¹⁷ The skills and domains identified within this study share similarities with ours, including considerations around patient safety and privacy, performing remote clinical assessments and the use of information technology in the delivery of care.¹⁷ Similar findings have been reported in other studies on the development of core competency frameworks for physicians in the delivery of virtual health,²⁵ nurses delivering telehealth¹⁶ and generic guidelines around tele-rehabilitation delivery,²⁶ which all identified domains relating to the implementation and delivery of telehealth, technology skills for both the patient and clinician and patient privacy.

Points of difference between our framework and those discussed above^{16,17,25} are the additional domains with specific capabilities for assessment, diagnosis, delivery, care planning and management included in our framework. One explanation for this may be because of the subtle differences that exist across healthcare professionals' scope of practice and the type of care they deliver to patients. Traditionally, to perform an assessment of a patient, physiotherapists will often use a 'hands-on' approach.²⁹ Physiotherapists may also instinctively communicate through therapeutic touch in order to convey empathy and understanding to patients who are showing signs of pain.³⁰ This physical aspect is removed when consulting via videoconferencing and requires physiotherapists to alter the way in which they would normally work, which may explain why additional domains are found in our framework relative to some other frameworks.

Our framework highlights the most important factors that need to be considered by physiotherapists and service providers when offering a telehealth service. The domain of 'telehealth delivery' spans 16 capabilities, the largest of the seven domains, followed by 12 capabilities for 'care planning and management' and seven capabilities for 'assessment and diagnosis'. This suggests that the delivery of telehealth (such as instructing patients to set up their camera angle placement to optimise assessment and treatment) needs to be taken into consideration when implementing physiotherapy services via videoconferencing. For example, in-person care potentially allows for

Table 1
Characteristics of the participants in the Delphi panel.

Participants	Round 1 (n = 130)	Round 2 (n = 85)	Round 3 (n = 78)
Panellist classification, n (%)			
researcher	22 (17)	18 (21)	17 (22)
clinical physiotherapist	79 (61)	48 (56)	43 (55)
physiotherapy association representative	21 (17)	12 (15)	11 (15)
Australian private health insurer	1 (1)	1 (1)	1 (1)
consumer	7 (5)	6 (7)	6 (7)
Sex, n (%)			
male	50 (38)	31 (36)	28 (36)
female	80 (62)	54 (64)	50 (64)
Country of residence, n (%)			
Australia	43 (33)	35 (41)	34 (44)
Belgium	1 (1)	1 (1)	1 (1)
Bhutan	1 (1)	1 (1)	1 (1)
Brazil	1 (1)	0 (0)	0 (0)
Canada	11 (8)	11 (13)	10 (13)
Chile	1 (1)	1 (1)	1 (1)
China	1 (1)	1 (1)	1 (1)
Denmark	1 (1)	1 (1)	0 (0)
Egypt	1 (1)	0 (0)	0 (0)
Finland	1 (1)	0 (0)	0 (0)
Greece	2 (2)	1 (1)	1 (1)
India	7 (5)	0 (0)	0 (0)
Italy	2 (2)	1 (1)	1 (1)
Kenya	2 (2)	0 (0)	0 (0)
Malta	2 (2)	1 (1)	1 (1)
Montenegro	1 (1)	0 (0)	0 (0)
Nepal	2 (2)	1 (1)	1 (1)
Netherlands	1 (1)	1 (1)	1 (1)
New Zealand	1 (1)	1 (1)	1 (1)
Norway	1 (1)	1 (1)	1 (1)
Paraguay	1 (1)	1 (1)	0 (0)
Philippines	2 (2)	1 (1)	1 (1)
Poland	1 (1)	1 (1)	1 (1)
Romania	1 (1)	0 (0)	0 (0)
Saudi Arabia	1 (1)	0 (0)	0 (0)
Suriname	1 (1)	1 (1)	1 (1)
Sweden	1 (1)	1 (1)	1 (1)
Taiwan	1 (1)	1 (1)	1 (1)
United Kingdom	8 (6)	5 (6)	5 (6)
United States	27 (21)	14 (16)	11 (14)
Zambia	2 (2)	1 (1)	1 (1)
Zimbabwe	1 (1)	1 (1)	1 (1)

better conversational flow and the ability to provide hands-on therapy with a patient if required as part of the treatment plan. However, delivering care via videoconferencing requires a different approach³¹ such as modulating the communication style to accommodate for any latency with the technology to optimise conversational flow, assisting patients to set up their camera for optimal viewing of the body part required for assessment/treatment, and providing clear instructions with visual aids when delivering exercises. There is currently no research outlining which capabilities physiotherapists may need the most training or support with. Further research investigating physiotherapists' confidence in each capability may provide valuable information to inform future training programs and to inform entry-to-practice curricula regarding telehealth.

Our framework has relevance to and can be used by a range of stakeholders, including individual physiotherapists, education/training providers, health insurers and the wider community. The implementation of this framework provides individual physiotherapy clinicians who have little or no experience in the digital environment, with a blueprint to what knowledge and skills are needed to deliver appropriate care via videoconferencing. Internationally, the rapid implementation of telehealth with the onset of the COVID-19 pandemic and the inexperience of many clinicians demonstrated a need for further education and upskilling of physiotherapists to produce clinicians with appropriate understanding and skills in the delivery of care in the digital environment.¹⁴ A recent study investigating the views of telehealth among allied health clinicians during

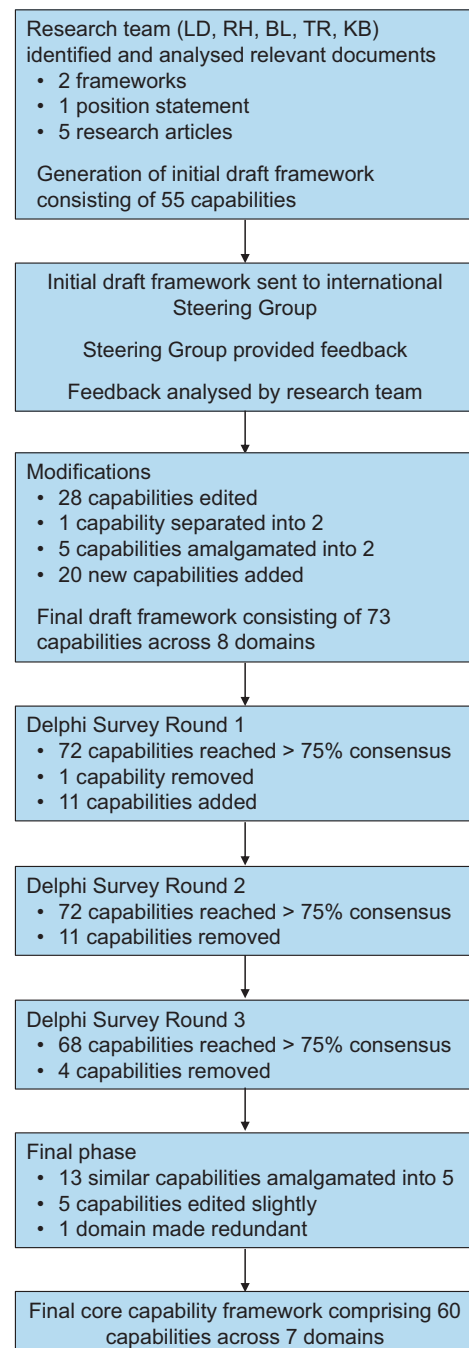


Figure 1. Development of the core capability framework.

COVID-19 revealed that only 21% of the 688 physiotherapists involved agreed that they had been trained to deliver telehealth to those with musculoskeletal conditions,³² further highlighting the need for education and training in the digital environment.

Currently, curricular guidelines and standards are lacking for the provision of care in the digital environment within entry-level and postgraduate-level education across healthcare professions.^{14,33} Thus, our framework provides an opportunity to inform future development of physiotherapy curricula in the delivery of telehealth, providing assessment strategies and learning outcomes to better prepare graduates in tertiary education settings and to upskill practising physiotherapists through continuing education courses. Although established for physiotherapists, the current framework could be used as a foundation for other allied health professions and adapted to suit their own discipline. This framework may also be used

Table 2

The core capability framework for physiotherapists to deliver quality care via videoconferencing.

Domain 1: Compliance

Physiotherapist demonstrates the ability to...

- a) identify any limitation to their individual scope of telehealth (videoconferencing) practice as dictated by relevant laws, registration requirements, organisational regulation, and/or the funding/reimbursement model relevant to the patient
- b) comply with the regulatory requirements associated with practising as a physiotherapist in the practitioners' geographical location, the geographical restrictions associated with their professional registration and the geographical location(s) of the patient
- c) have professional indemnity insurance that covers the intended scope of telehealth (videoconferencing) practice
- d) determine a patient's eligibility for receiving care via telehealth in accordance with federal and state regulations and/or the funding/reimbursement model relevant to the individual patient
- e) obtain and document informed consent from the patient and/or helper that is appropriate for the intended telehealth (videoconferencing) interactions
- f) align practice with relevant organisational telehealth procedures and protocols
- g) record and manage clinical documentation about telehealth (videoconferencing) interactions in accordance with professional association standards, state/federal regulations and medico-legal requirements

Domain 2: Patient privacy and confidentiality

Physiotherapist demonstrates the ability to...

- a) set up their and the patient's physical environment in order to maintain patient privacy
- b) obtain informed consent from the patient if videos or photos are taken during the telehealth (videoconferencing) interaction (such as for assessment purposes), and explain how these will be used and stored
- c) inform the patient/caregiver that physiotherapist consent is required for them to take photos/videos of the consultation
- d) comply with the data security requirements of telehealth (videoconferencing) practice, platforms, storage and transmission (including sharing information with other health professionals) as dictated by bodies such as federal/state/professional and/or employer organisation (eg, for USA physiotherapists, The Health Insurance Portability and Accountability Act requires technical, physical and administrative safeguards; for Australia, the Australian Privacy Principles; and for Europe, the General Data Protection Regulation)

Domain 3: Patient safety

Physiotherapist demonstrates the ability to...

- a) determine whether a patient is safe to receive care via telehealth (videoconferencing), taking into consideration a patient's health and physical environment
- b) inform the patient of potential risks, benefits and limitations associated with the delivery of telehealth (videoconferencing)
- c) describe a documented procedure in the case of a patient incident during the telehealth (videoconferencing) consultation, including being able to provide a patient's address to emergency services if required and/or notify the patient's emergency contact
- d) confirm the geographical address of the patient at the beginning of each consultation in case emergency services need to be called
- e) identify safety hazards related to remote care where the therapist is not in the same room as the patient
- f) enlist the assistance of a patient caregiver to assist with physical assessment and management tasks in order to ensure patient safety when required
- g) instruct the patient to set up the physical environment in a manner that is safe for performing the intended assessment and management tasks

Domain 4: Technology skills

Physiotherapist demonstrates the ability to...

- a) assess the digital literacy of the patient and suitability for a telehealth (videoconferencing) interaction
- b) determine if the patient has appropriate IT hardware (eg, laptop, tablet device, smart phone) to enable the delivery of the telehealth (videoconferencing) consultation
- c) select appropriate fit-for-purpose telehealth (videoconferencing) technology that is compliant with data security requirements
- d) select (if possible) a telehealth (videoconferencing) platform that is suitable for the intended assessment and management task
- e) competently use relevant functions of the telehealth (videoconferencing) platform to optimise delivery of care
- f) instruct the patient on how to use the key features of the telehealth (videoconferencing) platform
- g) understand and identify the potential problems and/or technical issues likely to be encountered by the patient when using the telehealth (videoconferencing) platform, and be able to assist the patient to deal with such problems

Domain 5: Telehealth delivery

Physiotherapist demonstrates the ability to...

- a) instruct the patient on how to connect to the telehealth (videoconferencing) consultation, including information about time of appointment, contact details of the physiotherapist, and provision of information for setting up technology prior to first consultation
- b) enact an appropriate procedure for alternative mode of contact with the patient in the event of technical/communication disruption
- c) set up their own physical environment ensuring optimal lighting, so the therapist is clearly visible to the patient
- d) set up their own physical environment ensuring optimal acoustics, including silencing and electronic notifications on the device used
- e) set up the camera angle so that the therapist is in centre frame with the head and shoulders visible, allowing for eye contact with the patient
- f) adjust their own camera angle to include the whole body or all equipment and/or props for demonstration purposes
- g) instruct the patient how to set up the physical environment, ensuring optimal lighting and an uncluttered neutral background (if possible), so he/she is clearly visible to the therapist
- h) instruct the patient how to set up the physical environment to optimise acoustics
- i) instruct the patient to set up the camera angle so that he/she is in centre frame with the head and shoulders visible, allowing for eye contact
- j) instruct the patient to set up the camera angle to visualise other patient assessment and treatment tasks appropriately (eg, walking, exercise performance) as required
- k) demonstrate telehealth (videoconferencing) etiquette when speaking, such as turn taking to optimise conversational flow
- l) modulate communication style, including clear enunciation, slower pace and lengthened pauses to reduce overlap
- m) utilise other means of instructions outside of verbal, such as use of hands to demonstrate angles of movements, other props to help convey the instructions
- n) provide written or digital information to the patient, as required, to support delivery of care
- o) encourage patient positive beliefs about telehealth to maximise adherence to treatment
- p) use the findings of evaluation to continuously improve the telehealth (videoconferencing) service

Domain 6: Assessment and diagnosis

Physiotherapist demonstrates the ability to...

- a) follow a structured process to ensure patient appropriateness for telehealth (videoconferencing) for the individual patient
- b) follow a structured process to identify risk of falls or other safety considerations prior to consultation
- c) recognise the limitations of telehealth (videoconferencing) in assessment and diagnosis
- d) adapt assessment processes (if required) to appropriately assess the patient via telehealth (videoconferencing)
- e) instruct and/or demonstrate the patient and/or helper (using videos and/or images where appropriate) on how to perform modified special tests for assessment and diagnosis if required
- f) determine the elements of care suitable for delivery via telehealth (videoconferencing) for the individual patient
- g) recognise when an in-person consultation and/or other investigations are required to supplement the telehealth assessment and/or diagnosis

Table 2. Continued

Domain 7: Care planning and management
Physiotherapist demonstrates the ability to...
a) identify and interpret the evidence for physiotherapy via telehealth (videoconferencing)
b) facilitate patient choice in choosing telehealth (videoconferencing or telephone) or in-person consultation
c) use the existing evidence base to deliver treatments that have been shown to have equivalence to in-person treatment
d) critically apply relevant clinical practice guidelines and other best available evidence on telehealth (videoconferencing) care and service delivery, identifying where local modifications may be required
e) effectively and safely adapt (if required) and deliver treatment approaches using telehealth (videoconferencing)
f) develop a patient-centred management plan, which considers the digital literacy of the individual and whether a blended approach combining telehealth (videoconferencing or telephone) and in-person delivery of care is needed
g) consider and use, as appropriate, written and digital resources to enhance information, sharing with the patient to increase knowledge about the condition, management options and prognosis
h) proficiently use the relevant features of the chosen telehealth (videoconferencing) platform and other supporting digital tools, as appropriate, to provide effective telehealth treatment for the patient
i) adapt (to the patient's environment) and implement relevant outcome measures to monitor treatment progress to guide ongoing telehealth (videoconferencing) management
j) identify opportunities for and engage in interprofessional care and collaboration via technology, where possible
k) adhere to privacy, security legislative requirements when using digital mechanisms to communicate with other healthcare professionals about a patient
l) provide an alternative treatment if the person is not appropriate for care delivered via telehealth (videoconferencing)

by the wider public to understand what standards they should expect from physiotherapists delivering care via videoconferencing.

Strengths of our study include a large Delphi panel with acceptable retention rates. It assembled 130 experts and retained more than half of the panel throughout the three survey rounds. While there is no ideal or recommended number when it comes to the size of a Delphi panel, it is suggested that typical panels are between 10 to 100 panellists.²⁰ Given the specific scope of our investigation, the Delphi panel number may therefore be considered large. Another strength was its international reach and discipline-specific breadth, comprising experts from 22 countries, across seven continents and including a range of physiotherapy clinicians, researchers, representatives of physiotherapy associations, and consumers. However, the panel did not include experts from linguistically diverse backgrounds, while only 10% were from low-middle income economies. This may have resulted in not capturing all relevant capabilities, and limits the generalisability of our framework to those populations where the physiotherapy workforce and the healthcare contexts may differ. The under-representation of consumers in this study may also be considered a limitation. However, the breadth of our panel does ensure that the current framework is relevant to physiotherapy practice internationally.

In conclusion, this framework outlines the specific core capabilities required of physiotherapists to provide high-quality care via videoconferencing, over and above generic physiotherapy capabilities. The core capability framework provides guidance for the knowledge and skills required by physiotherapists to deliver care via videoconferencing. This framework can help in the upskilling of physiotherapists in the digital environment by informing future development of physiotherapy curricula and professional development initiatives in the delivery of telehealth.

What was already known on this topic: Provision of care via telehealth is emerging as an effective and acceptable mode of delivering physiotherapy. The provision of physiotherapy via telehealth is associated with high rates of patient satisfaction, with clinical effects sometimes surpassing those of in-person care. Although the COVID-19 pandemic led to a dramatic uptake in telehealth delivery of physiotherapy, this sometimes occurred with limited training and preparation.

What this study adds: This framework outlines the specific core capabilities that an international panel of experts recommend for physiotherapists to provide quality care via videoconferencing. The capabilities cover the domains of compliance, patient privacy/confidentiality, patient safety, technology skills, telehealth delivery, assessment/diagnosis, and care planning/management.

Footnotes: ^a SurveyGizmo, Alchemer LLC, Louisville, USA.

eAddenda: Appendices 1 to 6 can be found online at <https://doi.org/10.1016/j.jphys.2021.09.001>.

Ethics approval: This research project was approved by the Human Research Ethics Committee of The University of Melbourne (2057318.1).

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