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QUALITATIVE RESEARCH REPORT



Developing a core competency and capability framework for advanced practice physiotherapy: A qualitative study

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ABSTRACT

Introduction: There is an urgent need to develop an international competency and capability framework to support standardization of education and roles in advanced practice physiotherapy (APP). This need arose due to the rapid growth of the APP model of care, implemented out of necessity in the absence of agreement as to the competencies and capabilities or formal education required for the roles. This study explores the views and perceptions of practitioners and key stakeholders on a draft competency and capability framework for advanced practice physiotherapists.

Objectives: The purpose of this study was to: 1) gather feedback from key stakeholders (advanced practice physiotherapists, researchers, and leaders) on a draft competency and capability framework and 2) use that feedback to revise and improve the draft framework.

Design: Qualitative study using a series of four multi-national online focus groups. Thematic analysis was conducted according to Braun and Clarke.

Results: Sixteen participants from the United Kingdom, Ireland, Canada, Australia, and New Zealand participated in the study. Five themes were generated after data analysis: clinical expert, experienced communicator, strong leader, collaborator, and knowledge creator). A modified competency and capability framework was developed based on feedback from the focus groups and input from subject matter experts (SMEs).

Conclusion: This study provides a modified core competency and capability framework comprising 24 competencies grouped under six domains. This study is a step toward international standardization of advanced practice physiotherapy based on a commonly agreed framework for the education and training of advanced practice physiotherapists.

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Introduction

Advanced practice physiotherapy (APP) is described as physiotherapists using an advanced and distinctly increased level of knowledge, skills and expertise to manage complex clinical cases (Desmeules et al., 2012; Kersten et al., 2007). Advanced practice physiotherapy was developed from the bottom up as healthcare organizations responded to the increasing demands on healthcare systems of people requiring care, addressing escalating costs, and addressing inequitable access to

healthcare (Aiken, 2012; Desmeules et al., 2012; Kersten et al., 2007). Based on the success of APP models of care, healthcare systems extended the model to include musculoskeletal, rheumatology, emergency department, and cardiorespiratory care, with newer models being developed for incontinence and pelvic health and chronic pain (Brennen, Sherburn, and Rosamilia, 2019; Crane and Delany, 2013; Desmeules et al., 2012; Lafrance et al., 2021; Oakley and Shacklady, 2015).

Fourteen World Physiotherapy (WP) member organizations have been identified as having APP models of care (i.e. Australia, Canada, Hong Kong, Ireland, Israel, Jordan, New Zealand, Norway, Peru, Switzerland, Taiwan, Trinidad and Tobago, United Kingdom, and the United States) (Tawiah et al., 2021). There is evidence that advanced practice physiotherapy supports healthcare delivery by improving patients' care experience, reducing waiting times to access care and reducing the cost of healthcare delivery (Ahluwalia et al., 2019; Fennelly et al., 2019; Ó Mír et al., 2019; Razmjou et al., 2013). Advanced practice physiotherapists have equivalent diagnostic accuracy to medical colleagues when assessing patients with musculo-skeletal (MSK) conditions (Oakley and Shacklady, 2015; Razmjou et al., 2013) and in surgical triage roles advanced practitioners record higher surgical conversion rates and lower referral rates for patients referred for arthroplasty (Desmeules et al., 2012; Samsson et al., 2020). The added value of an APP model of care to healthcare delivery led to the expansion of the model to several countries.

Although APP is expanding, there are concerns within the physiotherapy profession and healthcare systems about a lack of consistency in practitioners' professional development, competencies, capabilities, and training. Currently there are no standardized and internationally accepted competencies and capabilities for advanced practice physiotherapy. The lack of such standards has resulted in variations in the training of practitioners and delivery of APP services within and between institutions, national healthcare systems, provinces, states and territories, and countries. The lack of framework and standardized training of APPs impedes the implementation of APP models of care and affects how patients, healthcare professionals and the public understand their role, potentially impacting the acceptability and sustainability of the model.

This points to an urgent need for an internationally accepted set of core competencies and capabilities to ensure consistency and standardization of the education, training, and competencies for advanced practice physiotherapists (APPs) (Fennelly et al., 2020; Tawiah et al., 2021) which has been echoed in 2020 by WP in a policy statement on advanced practice (World Physiotherapy, 2020).

We have adopted the terms 'competency' and 'capability' to describe the framework throughout this paper. Competency is "an observable ability of a health professional related to a specific activity that integrates knowledge skills, values and attitudes" (Frank et al., 2010). Capability is "the extent to which

individuals can adapt to change, generate new knowledge and continually improve their performance" (Chance-Larsen et al., 2019; Fraser and Greenhalgh, 2001). The aim of this work was to gather in-depth feedback and suggestions for improvements from key participants regarding the framework developed to represent the core competencies and capabilities of APPs.

The present study is part of a larger body of work to develop an international competency and capability framework for APPs. An initial scoping review, published elsewhere, was conducted to identify the available literature (published and gray) on the competencies and capabilities of APPs (Tawiah et al., 2023). The draft framework developed comprised 27 competencies that were grouped into seven domains: 1) Clinical Expert Practitioner; 2) Communicator; 3) Collaborator; 4) Leader; 5) Health Advocate; 6) Scholar; and 7) Professional (Table 1).

The present study is a qualitative study in which we used a series of focus groups with key participant informants to generate feedback on the draft competency and capability framework. The focus groups provided a platform to obtain feedback from key participant informants representing four countries with well-developed APP models of care. This approach enabled the collection of in-depth feedback on the proposed competencies and capabilities to identify any gaps and revisions to the proposed framework. The specific objectives of this study were to: 1) Gather feedback from key stakeholders (advanced practice physiotherapists, researchers, and leaders) on a draft competency and capability framework for advanced practice physiotherapists; and 2) Revise and enhance the draft competency and capability framework based on feedback from key stakeholders.

Methods

Study design

The study used a qualitative descriptive methodology (Merriam and Tisdell, 2016; Neergaard, Olesen, Andersen, and Sondergaard, 2009; Sandelowski, 2004) which is useful in gaining firsthand knowledge of patients', relatives', or professionals' opinions and experiences with a particular topic. As this study did not aim to generate a new theory, a qualitative descriptive methodology was used. Four online international focus groups were hosted on the Zoom™ video conferencing platform. Ethical approval for this study was obtained from the Research Ethics Board at the University of Alberta (ID: Pro00099692).

Table 1. Draft competency and capability framework for advanced practice physiotherapy (Tawiah et al., 2023).

DOMAIN	COMPETENCIES
<p>1. Clinical Expert Practitioner Definition: Advanced Practice Physiotherapists employ expert physiotherapy knowledge, skills, and advanced clinical reasoning to provide high-quality, safe, patient-centered care in high-risk clinical scenarios.</p>	<p>1. Demonstrate an expert level of physiotherapy knowledge, skills and understanding of physiotherapy practices. 2. Practice advanced roles within or outside their professional scope of practice as recognized within their jurisdiction. 3. Plans and performs an appropriate assessment and implements therapeutic procedures using expert-level clinical reasoning, planning and evaluation. 4. Demonstrate knowledge of institutional factors affecting health, including the political, social, and economic factors. 5. Apply the use of diagnostic investigations based on jurisdictional provisions (X-ray, MRI, Ultrasound scan, laboratory investigations). 6. Apply the appropriate use of therapeutic medications, including therapeutic injections, prescribing and de-prescribing based on jurisdictional provisions. 7. Demonstrates accountability, practice self-reflection and ability to provide appropriate and timely referrals.</p>
<p>2. Communicator Definition: Advanced Practice Physiotherapists use effective communication to form relationships with patients and their families that facilitate the gathering and sharing of essential information for effective health care.</p>	<p>8. Establish a professional therapeutic alliance with patients and their families through engagement and developing treatment plans that reflect their health care needs and goals. 9. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families. 10. Document and share written and electronic information about the therapeutic encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy.</p>
<p>3. Collaborator Definition: Advanced Practice Physiotherapists work effectively with other healthcare professionals to provide safe, high-quality, patient-centered care by identifying their roles within the healthcare team and seeking appropriate support when needed.</p>	<p>11. Actively contribute to the continuous improvement of healthcare quality and patient safety as an individual and team member providing care. 12. Work effectively with other colleagues in the health care professions to promote understanding, manage differences and resolve conflicts. 13. Provide appropriate and timely referrals of patients to another health care professional</p>
<p>4. Leader Definition: Advanced practice physiotherapists engage with others to contribute to a vision of a high-quality health care system and take responsibility for delivering excellent patient care through their activities as clinicians, administrators, scholars, or teachers.</p>	<p>14. Contribute to the improvement of health care delivery in teams, organizations, and systems 15. Engage in the stewardship of health care resources 16. Provides clinical mentorship and training of trainees within their field of practice 17. Demonstrate leadership in professional practice, including respecting and promoting diversity.</p>
<p>5. Health Advocate Definition: Advanced practice physiotherapists contribute their expertise and influence to work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.</p>	<p>18. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment 19. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner</p>
<p>6. Scholar Definition: As Scholars, Advanced Practice Physiotherapists demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.</p>	<p>20. Engage in the continuous enhancement of their professional activities through ongoing learning 21. Teach students, colleagues, the public, and other health care professionals 22. Integrate the best available evidence into practice 23. Contribute to the creation and dissemination of knowledge and practices applicable to health</p>
<p>7. Professional Definition: Advanced Practice Physiotherapists are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behavior, accountability to the profession and society, regulation, and maintenance of personal health.</p>	<p>24. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards 25. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care 26. Demonstrate a commitment to the profession by adhering to standards and complying with legal and regulatory requirements. 27. Demonstrate a commitment to the practitioner's health and well-being to foster optimal patient care</p>

The discussion guide for the focus groups was developed based on the first version of the competencies and capabilities framework (Appendix 1). The Standards for Reporting Qualitative Research (SRQR) and the consolidated criteria for reporting qualitative studies (COREQ) 32-item checklist were used as guidelines to report and write up findings from the focus groups (O'Brien et al., 2014; Tong, Sainsbury, and Craig, 2007).

Recruitment and participants

Participants were recruited from Australia, Canada, Ireland, New Zealand, and the United Kingdom. These countries were selected because they have established APP roles. Both purposive and snowball sampling techniques were used to recruit participants. Participants were required to: 1) either currently or in the past,

Table 2. Demographic characteristics of Subject Matter Experts (SMEs).

Country	Area of Expertise	Yrs of practice	Level of Education
UK	Musculoskeletal practice, shoulder management, education, research	15+	Doctorate
UK	Musculoskeletal practice, clinical leadership, Leadership of professional association, practice development, education, advanced practice	15+	Masters
UK	Research, clinical practice, advanced practice, first contact practitioner	15+	Doctorate
Ireland	Research, education, professional practice	15+	Doctorate
New Zealand	Administration, professional practice, leadership of physio-therapy association	15+	Doctorate
Canada	Education, advanced practice, leadership, course development	15+	Doctorate

practice as APPs; and/or 2) conduct research in advanced practice; and/or 3) be involved in developing and progressing APP roles.

The authors created a list of known APPs, researchers and experts based on existing advanced practice networks. Potential participants were contacted individually via e-mail to confirm their interest and availability to participate in the study. All the participants who agreed to be part of the focus group received an e-mail package containing the informed consent form, a demographic questionnaire (Appendix 2), and the draft competency and capability framework one week before the focus group was held.

Subject Matter Experts (SMEs) were also contacted via e-mail to provide feedback on the revised framework. Six SMEs from Canada (KL), Ireland (CC), New Zealand (JW), and the United Kingdom (JL, LF, TN) were contacted. The SMEs were consultant physiotherapists, physiotherapy educators, national and international physiotherapy associations leaders, and researchers in APP. They were selected because of their extensive experience as APPs and experience in researching or developing advanced practice models of care. A full description of the SMEs and their area of expertise is presented in Table 2. Revisions made as a result of SME input are discussed in the findings section.

Data collection

The principal investigator (AT) facilitated each focus group and was the only research team member present during the focus groups. All focus groups were video recorded, and automatic transcription was generated using the Zoom™ video conferencing platform. Transcripts were audited for accuracy, and appropriate corrections were made.

All 4 focus groups were approximately one hour long. Three of the four focus groups had four to six participants, and the fourth group had two participants. AT and LW developed a discussion guide containing semi-structured questions and prompts based on the domains

of the draft competency and capability framework (i.e. Clinical Expert Practitioner, Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional).

After each focus group, the initial data analysis (exploration) and coding were conducted. On completion of the fourth focus group, minimal new ideas were generated, and duplication of ideas was occurring (i.e. saturation was reached). No additional focus groups were conducted beyond the four groups (Fusch and Ness, 2015).

Data processing and analysis

All data from the focus groups (i.e. raw video footage, automated transcripts, and edited transcripts) were transferred and managed in NVivo 12 (QRS International). Thematic analysis was conducted according to the procedures outlined by (Braun and Clarke, 2013). A participant quotation identifier was developed for each quote supporting a theme. For example, [001-F1] represents participant 1 from focus group one. The process used to conduct the thematic analysis is presented in Table 3, and a diagram describing how the final themes were developed from potential themes is presented in Figure 1.

Reflexivity, rigor and respondent validation

The principal researcher (AT) completed APP training in the UK and practiced in an APP role with an orthopedic surgeon in Ghana. One investigator, who has experience facilitating focus groups and interviews with patients, clinicians, and other researchers, facilitated all focus groups. Following each focus group meeting, AT debriefed with LW, reviewed and corrected auto transcripts in NVivo 12 QRS International and the transcripts were then independently reviewed by two investigators (LW and MW). AT generated the codes and organized the data into themes which LW and MW reviewed for completeness and accuracy. The initial themes and supporting quotes were shared with all participants for respondent validation.

Table 3. Phases and description of thematic analysis.

Phase	Description of Process
1 Familiarization with the data	All the data were transcribed by the principal researcher (AT). The process enabled AT to familiarize himself with the data through reading, re-reading and noting down initial ideas. The transcripts were collaborated by two other researchers (LW and MW).
2 Generating initial codes	AT coded interesting features of the data in a systematic fashion across all the entire data set using NVivo 12. AT aggregated data relevant to each codes and developed a coding matrix. Each code was further reviewed by LW and MW.
3 Searching for themes	AT collated all the codes and developed potential themes. AT gathered data relevant to each potential theme for further revision.
4 Reviewing themes	Through an iterative and reflective process, all themes were double checked by AT, LW and MW. These were further related to the codes extracted and to the entire data set. Several iterations of the themes were developed and discussed.
5 Defining and naming themes	Through an ongoing analysis process between AT, LW and MW, the themes were refined to specific themes and the overall story told by the analysis was generated. Clear definition and naming of the themes were performed at this stage.
6 Producing the report	AT produce the first draft of the analysis and the write up of the report. AT, LW and MW participated in redrafting the report and relating back to the research questions. All the authors read, revised and updated the report into the final manuscript.

AT, LW, and MW are contributing authors

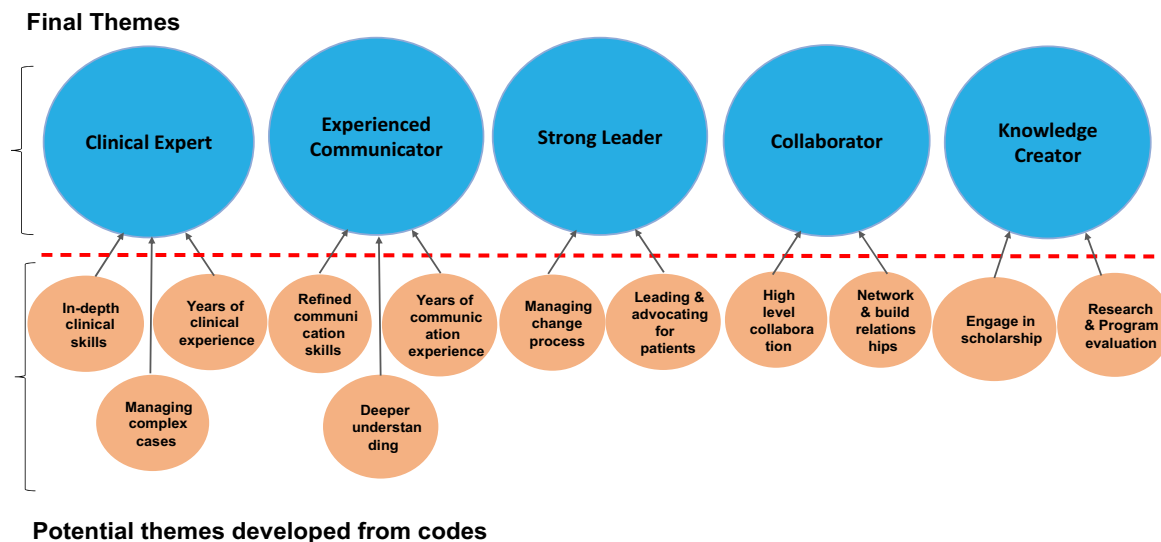


Figure 1. Diagram describing the development of final themes from potential themes.

Results

Demographic characteristics of participants

Eighteen participants agreed and confirmed their willingness to participate. Two individuals withdrew before data collection commenced for personal and unknown reasons, respectively. Sixteen participants from five countries participated in four focus groups. There were four participants from each of Australia, Canada, and Ireland, two from New Zealand, and two from the UK. Seventy-five percent (12/16) of the participants were either currently working or previously worked as APPs. The other 25% (4/16) worked in leadership roles within national physiotherapy associations, university management and were involved in setting up APP roles in various models of care. The majority of participants 81% (13/16) had more than 15 years of professional physiotherapy experience, and 94% (15/16) had graduate degrees (Table 4).

Themes

Thematic analysis identified five themes: clinical expert, experienced communicator, strong leader, collaborator, and knowledge creator, as presented in Figure 1. Participants compared the proposed competencies and capabilities of advanced practice physiotherapists to those of entry-level physiotherapists to identify the additional competencies and capabilities required for the advanced practice level.

Theme 1: clinical expert

Participants described their clinical expertise as one of the most important aspects of their practice. They believed that APPs need to develop in-depth clinical skills in physiotherapy and related disciplines such as radiology, rheumatology, family medicine, and emergency medicine. The advanced practitioner needs

Table 4. Participant's demographics (n = 16).

ID	Focus groups (F 1–4)	Advanced practice Physio	Country	Role	Job title	Years of practice	Sector	Level of education
001	F2	Yes	New Zealand	Clinician scientist	Clinical director	15+	Community practice	Post Graduate Diploma
002	F1	Yes	New Zealand	Administrator/ Educator	Consultant	15+	Public sector/ Private sector	Doctorate
003	F3	Yes	Canada	Clinician/ Administrator	Advanced practice physiotherapist/ Practice Lead	15+	Hospital	Doctorate
004	F2	No	Ireland	Researcher	Post-doctoral researcher	5–10	Public sector/ University	Doctorate
005	F3	Yes	UK	Clinician/Researcher/ Educator	Consultant Physiotherapist	15+	Community practice	Masters
006	F2	Yes	Australia	Clinician	Advanced scope physiotherapist	15+	Hospital/ Public sector	Masters
007	F1	No	Canada	Researcher/ Administrator	Vice president – Innovation	15+	Public sector/ University	Doctorate
008	F3	Yes	Ireland	Clinician-scientist/ Educator	Clinical specialist physiotherapist	15+	Hospital/ Public sector	Masters
009	F2	Yes	UK	Clinician scientist/ educator/ administrator	Consultant physiotherapist	15+	Hospital/ Public sector/ community practice	Doctorate
010	F4	Yes	Australia	Clinician, researcher, educator	Teaching and Research academic/ advanced scope physiotherapy	15+	Hospital/ public sector/ private sector	Doctorate
011	F4	No	Australia	Researcher/Educator	Associate professor	15+	Public sector/ University	Doctorate
012	F2	Yes	Australia	Clinician scientist/ Educator	Advanced scope physiotherapist	15+	Hospital/ public sector	Masters
013	F1	Yes	Canada	Clinician, researcher, administrator	Advanced practice physiotherapist/ Central intake and assessment center	15+	Hospital	Masters
014	F3	Yes	Canada	Clinician	Advanced practice physiotherapist	10–15	Hospital	Masters
015	F2	No	Ireland	Researcher/ Educator	Associate professor	10–15	Public sector/ University	Doctorate
016	F1	Yes	Ireland	Clinician/ administrator/ Educator	Clinical specialist/ MSK triage	15+	Hospital/ public sector	Masters

broad clinical skills, advanced clinical reasoning and the ability to manage complex cases compared to entry-level physiotherapists. Some relevant quotes included:

“The most important role we have is really like the expert clinician, who’s got the experience, the clinical practice, the clinical reasoning . . . we are talking about, the person, “whānau” (Extended family) centred care.” That bigger picture and all the complexities of those cases”. [001 – F2]

“Yeah, I would agree with that, and I think it’s about being an expert clinician, somebody who can deal with the complexity of cases, you know, often cases are incredibly complex, and you’re dealing with uncertainty within those cases, potentially” [005 – F3]

“Well, personally, I found that being an expert in a condition is probably the most important, or as the most important part of setting up our service. Because we needed to gain the trust of the people we were working with and collaborating with, and I think without that level of expertise, without that ability to show your autonomy with your clinical decision-making, I feel like the role or the service probably wouldn’t have been successful in being able to set up. So, we had to gain that trust with our medical and nursing colleagues by being expert clinicians,

and that has helped us concrete the service and concrete the role”. [006 – F2]

“So, it’s the whole package, but first they have to have the credibility of their clinical skills and their expert clinical skills. But it’s also those other skills that surround . . . that gives them the credibility to be accepted and recognized”. [001 – F2]

In addition, participants described that this clinical expertise is developed through years of experience and exposure to different patient populations and clinical scenarios.

“I suppose from an expert clinician point of view. It’s about that mileage. It’s about having the kind of mileage of those patients. You know, an undergraduate comes out without any of that clinical experience or knowledge that an expert clinician will have because they’ve had hundreds and hundreds of patients that they’ve looked at. So, there’s something around making sure that they’ve got that expertise.” [005 – F3]

“I like those keywords like mileage. I really like that word. Just repetition and just those experiences, time and time and time again, so that mileage piece. And then refining it that you’re just so much more efficient in homing in on what’s the actual problem”. [014 – F3]

Participants described the key differences between advanced practice and entry-to-practice physiotherapists' clinical skills as the ability to manage complex clinical cases and assume a higher level of risk.

"And I think when we're comparing it to the entry-to-practice, seeing to complex cases and the higher levels of risks and the unpredictability with cases, that's kind of the big difference." [004 – F2]

"Entry-level would have very little clinical experience. So, I think it would be very difficult to call them expert clinicians. They have the minimum required or the minimum number of hours required to get registered, but it's pretty basic. And it's also been largely supervised up until that point." [011 – F4]

Theme 2: experienced communicator

Participants identified communication as one of the core skills required of APPs. Participants described communication skills as a vital and integral part of APP, and those practitioners must have effective communication skills. Some relevant quotes included:

"I think there's a lot of different ways to educate and communicate with individuals. And certainly, over the years, I've had lots and lots of discussions with patients, and you get a sense of what is sinking in and what isn't necessarily sinking in." [013 – F1]

"I think communication is key because you can have the experience and the knowledge and skills, but if you can't communicate properly, whether with patients or your surgeons." [003 – F3]

"Maybe the word is effective communication skills, rather than higher because that's what you want, isn't it? You want people to be able to have those really good conversations. Not always in a challenging position, but here to help people make those decisions you're asking. So, I think for me, it's much more about effective communication". [005 – F3]

Participants made clear their belief that excellent communication comes with experience. They described how they built upon and improved their communication skills over the years through continual work with patients and other healthcare professionals.

"I've improved upon my delivery of certain conversations with patients through time and trial and error, to be honest. So, I've refined my communication. I'm better now at managing challenging situations, both inter professionally, whether that's patient, surgeon, primary care provider, [or] difficult family member. So, I don't like the higher level of [communication], [but] demonstrated refined style and level of communication". [014 – F3]

"Oh, it certainly comes from experience. I haven't taken any communication courses or anything like that. And again, that's so you know what you're talking about. You need sort of five years of actual clinical hands-on work with patients. You definitely need that because all those different communications you have with patients and their families certainly, give you a lot of different scenarios to draw from and a lot of experience". [013 – F1]

"Yeah, I agree. I think with experience; they're going to anticipate questions and concerns from patients and be more competent in your answers and in reassuring". [016 – F1]

"And I think as well, with more years of practice, you get better at listening for the love of it. So, it's actually just not going in with your set of questions to tick off or screen, but actually, just to be able to sit back and let their patients tell their story and have a better way of deciphering what's behind the message and also be better at retaining the details". [016 – F1]

The need to be culturally sensitive and communicate effectively by respecting different cultures was highlighted by a participant.

"I suppose, from my perspective here in New Zealand, it's about the cultural sensitivity of working with all populations. And I think that's really important under the area of communication. So, in understanding the population, you're working [with] on the cultural sensitivity as a communicator". [001 – F2]

Participants also compared the communication skills of APPs and entry-to-practice physiotherapists. Participants described that they have developed a deeper understanding of communication and can advocate for the role using their communication skills.

"I think the main difference, I would perceive between advanced practice physiotherapy communication skills and entry-level communication skills is the fact that you've probably got a deeper understanding of what the problem is so that you can convey the information a little bit more effectively, both to the patient and any other medical jurisdiction." [010 – F4]

"Certainly, you know, all our entry-level physiotherapists need to be able to communicate. But I think that probably the depths of our communication and the information we provide is probably a lot more holistic for the patient. We can weigh up the pros and cons of different management and practices where the entry-level physiotherapist would struggle with that". [010 – F4]

"But I think it's also about assertive communication. You know, to some extent, I think the entry-level physio perhaps lacks because they can't count on their clinical experience. So perhaps they lack some confidence when they're communicating, whereas I would expect that in advance practice practitioner". [011 – F4]

“The one thing I would think that the entry-level physios are not good at would be thinking more broadly about communication in the healthcare system. So, I think they would communicate well with their patients potentially, or they would do that [at] an acceptable level, but they would certainly have, I think, issues of advocating for these kinds of roles with senior staff, with hospital management that would certainly have difficulty communicating with Department of Health. You know, the kind of high-level management, I think, or high-level communication they would struggle with”. [011 – F4]

Theme 3: strong leader

Strong leadership skills were identified as critical and were needed to enable APPs to lead and advocate for the role’s implementation and address the challenges of working as an advanced practitioner and leading the change process. Some relevant quotes included:

“If you’re going to establish a role, you must have leaders and health advocates because you must be going back to the hospital management and the patient groups and the clinicians around you and advocating for these roles.” [012 – F2]

“I think you need to have a certain type of personality to fulfil this role. They need to be a leader that’s able to stand on your two feet and stand your grounds as well”. [003 – F3]

“Leading when you know things are changing. So, it’s being responsive to change that occurs that actually, you know our role is to not block those changes and to actually make sure people are aware of those changes and to be able to lead it”. [005 – F3]

“But I’d say to get this role to actually mean something, you actually have to have somebody who leads it and pushes it and brands and if you like.” [002 – F1]

Participants described having to use their leadership skills to lead the development of programs and push traditional boundaries in developing these programs.

“Instead of demonstrating commitment, [the advanced practitioner] is leading the development of best practices and standards. Because you’re actually pushing the barrier, rather than saying you’re just doing this . . . ” [002 – F1]

“You might expect these clinicians, you know, rather than applying this practice, to be leading the development of best practice [and] defining best practice. Working within regulatory frameworks to extend [and] develop regulatory requirements that reflect the changing roles that people are moving into”. [012 – F2]

The participants articulated differences in leadership competencies between advanced practice and entry-to-practice physiotherapists.

“Leader and health advocate, well, I think leadership probably. I don’t think they’re [entry-to-practice] leading anything health advocate. I think that they’re probably making attempts to advocate. So, I would hope for their patient and on behalf of their patient. But again, I think that’s a skill that improves with experience”. [011 – F4]

“. . . obviously, they’ll [entry-to-practice] be an advocate for their patients. But in terms of them thinking broadly in the health service that may not come in for some time”. [016 – F1]

Theme 4: collaborator

Participants identified collaboration and networking with other healthcare professionals as essential to APP. Participants described their ability to collaborate with other professionals, leverage new and existing networks, and work effectively with colleagues as critical to APP. Some relevant quotes included:

“Someone that’s been in the profession or in that role for a while certainly needs to have all the connections to collaborate with, say, an orthopedic surgeon so that you can use them as a mentor.” [013 – F1]

“When it comes to collaboration at an advanced level, I would say it’s more of that service redesign and development and collaborating with the researchers and government and professional bodies.” [009 – F2]

“And I think what’s really critical is to collaborate as an equal participant and that you’re a leader and that your voice and the patient’s voice is what you’re representing. That you have advocacy is a critical role as well. But you collaborate as an equal and not collaborate or contribute to something that you are kind of as a tag on or an add-on”. [012 – F2]

Participants described that they have a higher and wider level of collaboration compared to an entry-to-practice physiotherapist. Participants believed that they have the experience and confidence to collaborate with different stakeholders within health care delivery.

“It’s maybe not having that experience or that confidence to be able to do so. But as you develop as a practitioner, those are the skills you begin to develop—that kind of wider collaboration, mentoring, role modelling and leadership”. [001 – F2]

“Collaboration, in a broader sense, we think about high-level collaborations with research institutes, academic institutions or with the Department of Health, or funders or insurance companies.” [011 – F4]

Theme 5: knowledge creator

The ability to lead the creation of new knowledge, drive an evidence-based practice approach, and foster collaborative research was recognized as an essential skill of APPs. Additionally, participants described ‘scholarship’ as critical to APP. Some relevant quotes included:

“It’s with the scholar piece, and so you know, we don’t have or what we don’t do well, at least in Canada is the clinician-scientist role. Physicians are great at it, and nurses actually are pretty good at it, too. And we have not done that. And to me, what I think is an attractive piece of the advanced practice physio role is that they are the clinician-scientist role”. [007 – F1]

“So, part of the job was to implement the program, so I think you learned a lot about mastery; then you’re also a liaison between the surgeons and the patients and other health care professionals involved”. [003 – F4]

“[Advanced Practitioners] need to show mastery of education. So that’s the ability to impart knowledge, whether patient education, teaching at whatever level and multi-disciplinary team level or university level, I. And having that educational and academic background also needs to prove mastery in leadership education and research. They need to be able to show level set at level seven in the UK”. [009 – F2]

“You need the scholars because they’re the ones that demonstrate the value to the service, and values are slippery things in health organization that measures things by occasions of service and what’s happening right now with a patient, rather than thinking of patients on their trajectory and returning to their normal life roles.” [012 – F2]

Advanced practice physiotherapists have research and knowledge translation skills that differ from entry-to-practice clinicians. Participants discussed that while entry to practice physio-therapists may be consumers of information, APPs are engaged in creating knowledge.

“But, I mean, it’s something that describes the development. They [entry-level] can be mentored into contributing to education and research, maybe under the guidance or under a team approach under the guidance of the advanced practice physio. But certainly, it might just be some years before you be expecting that level of input from them with the new grads”. [0016 – F1]

“Whereas, again, you might have a more junior physiotherapist who’s not an advanced practice level but has done other things before, so maybe they were an academic before in something different or even in physiotherapy. But they weren’t that level of clinician that could contribute to the creation of dissemination of knowledge”. [009 – F2]

“I think new grads are the consumers of information, but they’re not necessarily generators of information; I would have thought that an advanced practitioner has a role in facilitating the creation of knowledge.” [011 – F4]

Revisions of the draft competency and capability framework

Several revisions were made to the draft competency and capability framework based on feedback from the focus groups. The major revision was that the number of domains was revised from 7 to 6, and the competencies and capabilities from 27 to 24. These changes included merging the Leader and Health Advocate domains into a single domain in the revised framework. This was due to a need for a greater synthesis of the competencies and capabilities under the identified domains. Changes between the draft and revised frameworks are highlighted in [Table 5](#).

The content and wording of the competencies and capabilities were modified to include the phrase “uses clinical experience and techniques.” This new phrase was included based on feedback from the focus groups. Additional changes to the clinical domain included modifications that reflect the need for APPs to acquire advanced clinical knowledge and skills, both within and beyond the entry-to-practice scope of physiotherapy practice. The communicator domain was also modified to include phrases such as “effective communication skills” and “refined level of communication.” Other additions included “evaluates the needs of patients, communities and the population through advocacy and leading change” and “supports the improvement of health care delivery teams and leads the development of best practices.” The revised version of the framework highlights the need to facilitate (lead or participate) in research, quality improvement, knowledge translation, and dissemination. The framework was also modified to reflect the need for leadership skills and the need to lead change.

Finally, after the changes from the focus groups were implemented, SMEs were given the opportunity to review and provide feedback on the revised version of the framework. The SMEs were specifically asked if they “agreed” or “disagreed” with the revised framework, and to suggest any additional changes. For context, all SMEs were provided with both the original and revised versions of the framework. The revised framework was accepted by all SMEs (i.e. all “agreed”) and the only suggestion was to change the verbs used in the framework to better reflect the higher level of learning, consistent with the revised Bloom’s Taxonomy (Bloom et al., 2001). For example, “demonstrates an expert level

Table 5. Comparison of the draft and the revised versions of the competency and capability framework (all revisions in bold and italics).

Draft version	Revised version
<p>Domain name: Clinical Expert Practitioner Definition: Advanced Practice Physiotherapists employ expert physiotherapy knowledge, skills, and advanced clinical reasoning to provide high-quality, safe, patient-centered care in high-risk clinical scenarios.</p> <p>Competencies & Capabilities:</p> <ol style="list-style-type: none"> 1. Demonstrate an expert level of physiotherapy knowledge, skills, and understanding of physiotherapy practices. 2. Practice advanced roles within or outside the normal or generally accepted scope of practice as recognized within their jurisdiction. 3. Plans and performs an appropriate assessment and implements therapeutic procedures using expert-level clinical reasoning, planning, and evaluation. 4. Demonstrate knowledge of institutional factors affecting health, including the political, social, and economic factors. 5. Apply the use of diagnostic investigations based on jurisdictional provisions (X-ray, MRI, Ultrasound scan, laboratory investigations). 6. Apply the appropriate use of therapeutic medications, including therapeutic injections, prescribing and de-prescribing based on jurisdictional provisions. 7. Demonstrates accountability, practice self-reflection and ability to provide appropriate and timely referrals. 	<p>Domain name: Expert Clinician Description: Advanced practice physiotherapist <i>applies advanced depth and breadth of</i> knowledge, skills, and clinical reasoning informed by the <i>best available evidence in providing</i> high-quality, safe, patient-centered care for <i>individuals with highly complex findings often due to multimorbidity.</i></p> <ol style="list-style-type: none"> 1. <i>Applies advanced clinical</i> knowledge, skills, and understanding of <i>best</i> practices. <i>Uses clinical experience and techniques, drawing on formal and informal education and consultation within and outside the physiotherapy profession, to make autonomous decisions.</i> 2. <i>Operates within a predefined scope of practice within the legal parameters of their jurisdiction and with appropriate authorizations (which may fall within or outside the traditionally accepted scope of physiotherapy practice).</i> 3. Plans and performs <i>comprehensive patient</i> assessment using advanced clinical reasoning, shared patient decision-making, planning, evaluation, and <i>evidence-informed clinical knowledge and skills.</i> 4. <i>Requests and interprets diagnostic investigations based on jurisdictional provisions and with appropriate predetermined authorizations (e.g., diagnostic imaging or laboratory investigations).</i> 5. <i>*Creates and Implements comprehensive patient management using advanced clinical reasoning, shared patient decision-making, and evidence-informed clinical knowledge and skills.</i> 6. <i>Plans, performs and educates the patient about appropriate</i> therapeutic interventions (e.g., medications, therapeutic injections, <i>or arterial blood gases</i>) based on the <i>patient's condition and clinician's level of expertise within their predefined and authorized additional scope of practice.</i> 7. <i>*Applies knowledge of institutional and systemic factors (including political, social, and economic factors) that affect health.</i>
<p>Domain name: Communicator Definition: Advanced Practice Physiotherapists use effective communication to form relationships with patients and their families that facilitate the gathering and sharing of essential information for effective health care.</p> <p>Competencies & Capabilities:</p> <ol style="list-style-type: none"> 8. Establish a professional therapeutic alliance with patients and their families through engagement and developing treatment plans that reflect their health care needs and goals. 9. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families. 10. Document and share written and electronic information about the therapeutic encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy. 	<p>Domain name: Communicator Description: Advanced practice physiotherapist <i>develops effective and refined communication skills to nurture</i> relationships with patients, families, other clinicians, <i>and other healthcare services.</i></p> <ol style="list-style-type: none"> 8. <i>Applies effective communication skills (verbal and non-verbal) in managing complex and challenging situations</i> intra- and inter-professionally and <i>intersectorally.</i> 9. <i>*Mentors, counsels, coaches peers and students to manage professional communication with patients, healthcare professionals, and health care systems.</i> 10. <i>*Applies a refined level of communication that embraces cultural sensitivity and safety, promoting and respecting diversity.</i>
<p>Domain name: Collaborator Definition: Advanced Practice Physiotherapists work effectively with other healthcare professionals to provide safe, high-quality, patient-centered care by identifying their roles within the healthcare team and seeking appropriate support when needed.</p> <p>Competencies & Capabilities:</p> <ol style="list-style-type: none"> 11. Actively contribute to the continuous improvement of healthcare quality and patient safety as an individual and team member providing care 12. Work effectively with other colleagues in the health care professions to promote understanding, manage differences and resolve conflicts. 13. Provide appropriate and timely referrals of patients to another health care professional. 	<p>Domain name: Collaborator Description: Advanced practice physiotherapist <i>uses inclusive, collaborative, and consultative approaches with patients, relevant health professionals, and others to provide an advanced level of evidence-informed care.</i></p> <ol style="list-style-type: none"> 11. <i>*Collaborates to triage or provide patients with advanced clinical care (e.g., accident and emergency case management, orthopedic triage/ rheumatology/ neurology/ respiratory triage, or continence and pelvic health).</i> 12. <i>Collaborates effectively intra- and inter-professionally and promotes understanding, manages differences, and contributes to building effective interprofessional and evidence-informed teams.</i> <p>**Withdrawn</p>
<p>Domain name: Leader Definition: Advanced practice physiotherapists engage with others to contribute to a vision of a high-quality health care system and take responsibility for delivering excellent patient care through their activities as clinicians, administrators, scholars, or teachers.</p> <p>Competencies & Capabilities:</p> <ol style="list-style-type: none"> 14. Contribute to the improvement of health care delivery in teams, organizations, and systems 15. Engage in the stewardship of health care resources 16. Provides clinical mentorship and training of trainees within their field of practice 	<p>Domain: Leader and Health Advocate Description: Advanced practice physiotherapist <i>leads the development of services and provision of high-quality service and advocates for their patients at all levels of care.</i></p> <ol style="list-style-type: none"> 13. <i>Evaluates the needs of patients, communities, and the populations they serve by advocating and leading change to improve their care.</i> 14. <i>Measures and evaluates the stewardship and prudent use of health care resources.</i> 15. <i>*Supports the improvement of health care delivery teams and leads in developing best practices and standards at the organization and systems level.</i> 16. <i>Mentors and educates trainees on leadership</i> within their field of practice, both within and <i>outside the profession.</i>

(Continued)

Table 5. (Continued).

Draft version	Revised version
<p>17. Demonstrate leadership in professional practice, including respecting and promoting diversity.</p> <p>Domain name: Health Advocate</p> <p>Definition: Advanced practice physiotherapists contribute their expertise and influence to work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.</p> <p>Competencies and Capabilities:</p> <p>18. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment.</p> <p>19. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner.</p> <p>Domain name: Scholar</p> <p>Definition: As Scholars, Advanced Practice Physiotherapists demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.</p> <p>Competencies & Capabilities:</p> <p>20. Engage in the continuous enhancement of their professional activities through ongoing learning</p> <p>21. Contribute to the creation and dissemination of knowledge and practices applicable to health</p> <p>22. Teach students, colleagues, the public, and other health care professionals</p> <p>23. Integrate the best available evidence into practice</p> <p>Domain name: Professional</p> <p>Definition: Advanced Practice Physiotherapists are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behavior, accountability to the profession and society, regulation, and maintenance of personal health.</p> <p>Competencies & Capabilities:</p> <p>24. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards</p> <p>25. Demonstrate a commitment to the profession by adhering to standards and complying with legal and regulatory requirements.</p> <p>26. Demonstrate a commitment to the practitioner's health and well-being to foster optimal patient care.</p> <p>27. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care</p>	<p>17. <i>Leads in</i> professional practice, including respecting and promoting equity and diversity.</p> <p>***Combined with Leadership</p> <p>**Withdrawn</p> <p>**Withdrawn</p> <p>Domain name: Scholar</p> <p>Description: Advanced practice physiotherapist <i>is a lifelong learner who engages in continuous quality improvement, knowledge translation and dissemination, and clinical research to enhance patient care and improve healthcare.</i></p> <p>18. Role models, mentors, and teachers to enhance the lifelong learning of students, colleagues, other health professionals, and the public.</p> <p>19. <i>Participates in or leads continuous quality improvement projects, knowledge translation and dissemination, and the implementation and evaluation of an evidence-based approach at all levels of care. Involves in knowledge generation through clinical research.</i></p> <p>20. <i>*Engages in continuous professional development activities by being a lifelong learner and leading the education and training of peers.</i></p> <p>**Withdrawn</p> <p>Domain name: Professional</p> <p>Description: Advanced practice physiotherapist <i>commits to the</i> health and well-being of individual patients and society through ethical practice, high personal standards of behavior, accountability to the profession and society, professional regulatory bodies, and maintenance of personal health.</p> <p>21. <i>Commits to the</i> patients, <i>physiotherapy</i> profession, and society <i>by developing and implementing</i> best practices, adhering to, and promoting ethical standards (<i>clinical and business</i>) and safety.</p> <p>22. <i>Commits to developing advanced practice physiotherapy through developing frameworks (e.g., medical directives) to support the implementation and operationalization of the role to comply with legal and regulatory requirements.</i></p> <p>23. <i>Commits to the</i> practitioner's and <i>colleague's</i> health and well-being (<i>work-life balance</i>) to foster optimal patient care.</p> <p>24. <i>*Contributes to reviews of legal, professional, ethical, and other relevant standards, codes, and guidelines and fosters ethical competence and best practices.</i></p>

Italics and bold letters indicates revised competencies and capabilities; One asterisk* indicates new competencies and capabilities which have been added to the revised framework; Two asterisks** indicates withdrawn competencies and capabilities. These were removed from the revised framework; Three asterisks *** indicates two competency and capability domains were combined into a single domain in the revised framework

of *physiotherapy knowledge ...* ” was modified to “*Applies advanced clinical knowledge, skills, and understanding of best practices ...* .” Another example is “*Engage in the stewardship of health care resources*” was modified to “*Measures and evaluates the stewardship and prudent use of health care resources.*” Verbs such as “applies,” “creates,” “operates,,” “evaluates,” and “measures” were included in the revised framework based on suggestion from the SMEs.

Discussion

This study sought feedback from key stakeholders on a draft competency and capability framework for APP. The feedback provided by key stakeholder participants in this study resulted in the revision and modification of the draft framework. This is the first study to bring together APPs and stakeholders from different countries to discuss an international competency and capability

framework. Findings from this study provide an in-depth look at the critical roles of an APP and identify the key competencies and capabilities of APPs from an international stakeholder's perspective.

Findings from this study identified that a key role and competency of APPs is to serve as expert clinicians in their area of practice. The need to develop competencies in clinical expertise was evident in the focus groups. Participants described that they developed this clinical expertise through years of clinical experience and seeing a high volume and variety of patients with varying complexities. Accumulation of years of experience was evident in the participant's characteristics for this study. Participants had an average of over 15 years of experience as physiotherapists. Our findings align with previously published studies and reports which suggest that physiotherapists, similar to nurses, need a minimum of 5 years of clinical experience before transitioning into advanced practice roles. (Chartered Society of Physiotherapy, 2016; Lunden, Shupak, Schneider, and Herold-McIlroy, 2011).

Previous studies have demonstrated that the diagnostic accuracy of APPs is equal to that of physicians and surgeons when managing patients with MSK disorders (Burn and Beeson, 2014; Chartered Society of Physiotherapy, 2016; Mir M, O'Sullivan, Lennon, and Blake, 2018). The findings from our study suggest that most APPs have over 15 years of clinical experience, of which a minimum of 5 years is spent in MSK practice. The years of clinical experience of the practitioner could explain their level of diagnostic accuracy and agreement, as suggested by the published studies (Burn and Beeson, 2014; Chartered Society of Physiotherapy, 2016; Mir M, O'Sullivan, Lennon, and Blake, 2018). The revised competency and capability framework reflects the need for advanced clinical knowledge and skills, including training traditionally undertaken by other medical disciplines such as orthopedics, rheumatology, radiology and laboratory medicine. Physiotherapy educators and institutions who educate APPs should consider the level of clinical skills required by practitioners and design their programs accordingly.

The findings from this study also suggested that APPs have skills in effective communication and health advocacy. Advanced practice physiotherapists require skillful communication competencies to connect with their patients and discuss difficult clinical diagnoses and management plans through joint decision-making. Advanced practice physiotherapists must communicate with physicians, surgeons, nurses, and other healthcare providers through direct verbal or written communication to convey their diagnosis and management strategy. This level of communication competency requires a more advanced

and skillful communication approach than that of an entry-to-practice physiotherapist. Formal and informal education on communication for advanced practitioners is critical, in addition to years of experience. Previously published studies and reports have identified communication and collaboration as important skills for APP (Australian Physiotherapy Association, 2019; Chartered Society of Physiotherapy, 2016; Harding, Prescott, Sayer, and Pearce, 2015; Lunden, Shupak, Schneider, and Herold-McIlroy, 2011; Stevenson et al., 2020).

This study found that knowledge creation skills are important to the advanced practice physiotherapist. This is similar to a previously published report that indicates completion of a research-based master's degree is one of the requirements for becoming an advanced practice physiotherapist. (Chartered Society of Physiotherapy, 2016). This requirement highlights the importance of facilitating the creation and dissemination of knowledge as opposed to being a consumer of knowledge which is the goal of entry-to-practice physiotherapists. Previously published reports have identified that APPs are lifelong learners and are committed to professional scholarship, consistent with our findings. (Australian Physiotherapy Association, 2019; Department of Health Northern Ireland, 2019; Health Education England, 2017).

Strong leadership competencies and capabilities were noted as essential for APP to support clinical care, role implementation and other colleagues. Practitioners lead patient care and provide direction in managing team-based care. Similarly, strong leadership competencies and capabilities are essential to promote the role and drive for change. Previous studies have suggested that APPs are leaders and managers within their healthcare institutions (Chartered Society of Physiotherapy, 2016; Ellis, Kersten, and Sibley, 2005; Harding, Prescott, Sayer, and Pearce, 2015; Wiles and Milanese, 2016). The need to advocate for change and influence important systems-level decisions is part of the advanced practice role. Our studies highlight the need for the development of these leadership skills in APPs. Advanced practice physiotherapists have an inherent pursuit for excellence as adult lifelong learners and a strong desire for healthcare system change. This is evident in the leadership competencies and capabilities identified in this study and supported by previously published studies (Australian Physiotherapy Association, 2019; Chartered Society of Physiotherapy, 2016; Harding, Prescott, Sayer, and Pearce, 2015; Robarts, 2018). Advanced practice physiotherapists are involved in evaluating their role and engaging with the management of healthcare institutions and systems to promote and justify the need for the APP role based on its positive impact on patient care.

Strengths and limitations

A major strength of this study is that it brings together APPs, researchers, and leaders from different countries to discuss competencies and capabilities for advanced practice physiotherapy. The participants were highly experienced physiotherapists, each with over 15 years of experience, bringing together broad and varied perspectives.

One of the limitations of this study is that, although 16 participants took part in the focus groups, they were not evenly spread across all four focus groups. Focus group 4 had only two participants, which may have limited the breadth of the discussion.

Participants were from only five countries with the most advanced implementation of the advanced practice model of care. Thus, the findings may not be generalizable to APP in countries with less well-developed or newly emerging models of APP care.

Conclusion

This study provides an international perspective from five countries with the most advanced implementation of APP roles on the core competencies and capabilities of the physiotherapists working in these care models. Focus groups of experienced APPs, physiotherapy leaders and researchers from the United Kingdom, Ireland, Canada, Australia and New Zealand were used to validate the competency and capability framework developed for APPs. This study suggests that APPs require competencies and capabilities that are more advanced than entry-to-practice physio-therapists in the areas of clinical skills, effective and refined communications, interprofessional collaborations, leadership and advocacy, knowledge creation and dissemination.

The next step is to disseminate these findings for use and verification by a wider international advanced practice physiotherapy community, including those in developing countries, to facilitate international standardization of the education and training of APPs. Findings from this study should serve as a step toward developing a globally accepted international competency and capability framework for APP. This would serve to ensure consistency in the training of APPs and, hopefully, remove some of the barriers that APPs face when relocating internationally.

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Appendix 1.

Discussion Guide for focus groups.

Discussion Guide
Advanced Practice Physiotherapy Focus Group

Researchers involved:
Andrews Tawiah: leading the focus group
Andrews Tawiah: Take procedural notes and suggestions for changes with the next group
Start Recording Plan:
 (1) Welcome participants, information and consent form, and a demographic questionnaire.
 (1) Both consent forms and demographics questionnaires will be sent out prior to the day of the focus group.
 (3) Description of the project and summary of what we have found so far:
 • A summary of the first draft of competencies will be sent out to the participants prior to the day of focus.
 (4) Objectives of the focus group;
 (5) Description of the plan of the focus group;
 (6) Questions:

Questions
 (1) How do you define Advanced Practice within jurisdiction?
 • How well do you think patients, other healthcare professionals and healthcare management within your jurisdiction understand this role?
 (Provide a description of the 6 roles)
 (2) Within your jurisdiction, what is the difference between the roles compared to entry-to-practice?
 • Expert Clinician
 • Communicator
 • Collaborator
 • Leader and Health Advocate
 • Scholar
 • Professional
 (3) Which of these 6 roles do you perceive to be the most crucial in establishing advanced practice roles compared to entry-to-practice?
 • Can you provide some reasons to support your selection?

(Continued)

Discussion Guide
Advanced Practice Physiotherapy Focus Group

(4) (Focusing on Competencies)
 For each role: which competencies do you consider key.
 ○(Give an example of competencies)
 ○PowerPoint slides of competencies on screen
 ○Can you provide some reasons to support your selection?
 (5) Focusing on APP and Specialist
 How can we distinguish the differences in competencies between APP and Specialists based on your jurisdiction?
 (6) Is there anything else that you would like to include?

Appendix 2.

Demographic Questionnaire for focus groups.

DEMOGRAPHIC QUESTIONNAIRE

(1) What is your country of practice?
 Australia
 New Zealand
 Canada
 United Kingdom
 Ireland
 (2) Are you currently an advanced practice/scope physiotherapist, or have you ever been an advanced practice/ scope physiotherapist?
 Yes
 No
 3A. Which role do you most associate with? (You can select all that applies and provide percentages if possible)
 Clinician
 Researcher
 Administrator
 Clinician-Scientist/Researcher
 Educators
 3B. For clinicians, where do you practice? (Select all applicable responses)
 Hospital
 Community practice
 Public sector
 Private sector
 (4) What is your current job title?
 (5) For how many years have you been a physiotherapist?
 0–5 years
 5–10 years
 10–15 years
 Over 15 years
 (6) What is your highest level of education?
 Doctorate
 Masters
 Bachelors
 Other relevant credentials
