Identifying goals, roles and tasks of Advanced Practice Physiotherapy in Dutch primary care

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ABSTRACT

Aim

To identify a framework of Advanced Practice Physiotherapy(APP) incorporating goals, roles and tasks, to provide a consistent approach for the implementation of APP in Dutch primary care.

Methods

A qualitative multi-step design was used containing focus groups and semi-structured interviews. The study population consisted of patients, physiotherapists, general practitioners and indirect stakeholders like lecturers, health insurers and policy makers related to primary care physiotherapy. The main topics discussed in the focus groups and semi-structured interviews were the goals, skills and roles affiliated with APP. The 'framework' method, developed by Ritchie & Spencer, was used as analytical approach to refine the framework.

Results

Two focus groups and twelve semi-structured interviews were conducted to explore stakeholders perspectives on APP in Dutch primary care. A total of eleven physiotherapists, six general practitioners, five patients and four indirect stakeholders participated in the study. There was a lot of support for 'decreasing healthcare costs', 'tackling increased health demand' and 'improving healthcare effectiveness' as main goals of APP. The most consensus was reached on 'triaging', 'referring to specialists' and 'ordering diagnostic imaging' as tasks fitting for APP. Most stakeholders also supported 'working in a multidisciplinary team', 'working as a consultant' and 'an APP role separated from a physiotherapist role' as roles of APP.

Conclusion

Based on focus groups and interviews with various direct and indirect stakeholders, it appears that there is sufficient support for APP in the Netherlands. A trial focused on determining the (cost)effectiveness of APP in Dutch primary care will be the next step.

Clinical Relevance

Rising healthcare costs, an increasing shortage of physicians and an aging population have made healthcare organization transformation a priority. To meet these challenges, traditional roles of non-medical members have been reconsidered. Within the domain of physiotherapy, there has been significant interest in APP. Although studies have focused on the perceptions of different stakeholders in relation to APP, there is a large variety in the fulfillment of APP. This study provided a clear representation of how APP ought to be conceptualized in Dutch primary care.

Keywords: Physical The Care	erapy Modalities; A	Advanced Practic	e; Multi-step Des	ign; Primary Health

INTRODUCTION

Over the past few decades, the demand for healthcare has increased due to an aging population and an increase in the number of chronically ill patients.¹ Simultaneously, the rising healthcare costs and an increasing shortage of physicians have made healthcare organization transformation a priority in several countries.^{1–3} In the Netherlands, general practitioners(GPs) in primary care face increasing workloads due to an increase of healthcare consumption while the average of weekly work hours remains the same.⁴ These developments put pressure on sustaining the quality of healthcare.

One of the ways these challenges in (primary) healthcare have been met, is to reconsider the roles of non-medical members of the healthcare team and substitute tasks traditionally carried out by physicians.⁵ With these new 'Advanced Practice' Roles, healthcare providers aim to increase patient satisfaction and improve access to care with comparable or better quality and efficacy at lower healthcare costs.^{6,7} With respect to the domain of physiotherapy, there has been significant interest on Advanced Practice Physiotherapy (APP) over the last 20 years within health economies like the United Kingdom, Canada and Australia.^{7–11} Especially in settings providing services to patients with musculoskeletal disorders, physiotherapists have emerged as key providers in new redistributed roles. Research suggests that advanced practice physiotherapists achieve similar or better results in musculoskeletal complaints regarding diagnostic accuracy, effectiveness of care, care utilization and cost of care compared to GPs.¹²

Based on the presented data in previous research, there seems to be sufficient evidence to implement APP in daily practice. However, a successful implementation is dependent on the perceived legitimacy from the stakeholder groups, which is largely based on the clarification of the advanced practice role.¹³ More joined up thinking, support and development opportunities are also required between stakeholders for the advanced practice role to flourish.¹⁴

Three most important stakeholder groups regarding APP in primary care are patients, physiotherapists and GPs. Several studies have been performed regarding patient perceptions on APP. A qualitative study concerning patient perceptions of the APP role showed themes that were important concerning the quality of service: provision of information, professional skills, interpersonal skills, outcome, and patient care pathway.¹⁵ A survey which focused on APP in primary care showed that participants supported the intended new roles of the APPs regarding the treatments of patients with musculoskeletal disorders.¹⁶

Perspectives of physiotherapists on APP have been studied as well. A qualitative study with the purpose to look at the experiences of APPs working in an orthopaedic outpatient clinic concluded the physiotherapists experienced that, although the job can be stressful, it is also very satisfying.¹⁷ Furthermore, a survey of physiotherapists and physiotherapy employers on

clinical specialization and advanced practice showed participants are supportive of the roles of the clinical specialists and advanced practitioners within the profession.¹⁸

Although many studies have focused on inventorying the perceptions of different stakeholder groups in relation to APP, there is a large variety in the fulfillment of the role and the setting in which APP is studied. Most of these studies also focus on APP in hospital based settings. Furthermore, the perspectives of GPs on APP have not been extensively studied. Therefore, a clear representation of how APP in primary care ought to be conceptualized is currently lacking.

This is why we aim to identify a framework of APP, incorporating goals, roles and tasks, to provide a consistent approach for the implementation of APP in primary care. We will use the multi-step approach previously used by Harding et al. for implementation of APP in a hospital setting. This multi-step approach includes a scoping review, focus groups and a Delphi study. The scoping review has already been performed, in which we explored the characteristics and aspects featured in the paradigm of APP (Bastiaens F, Barten JA, van Schoot L. Veenhof C. A qualitative paradigm of Advanced Practice Physiotherapy; in preparation). The current study aims to refine the obtained paradigm through collaboration with patients, physiotherapists, GPs and remaining stakeholders in primary care in order to acquire a widely supported framework for the implementation of APP in Dutch primary care.

METHODS

Design

A qualitative multi-step design was used, based on the iterative process used by Harding et al. and Bravo et al. in order to complete the framework(Figure 1). 19,20

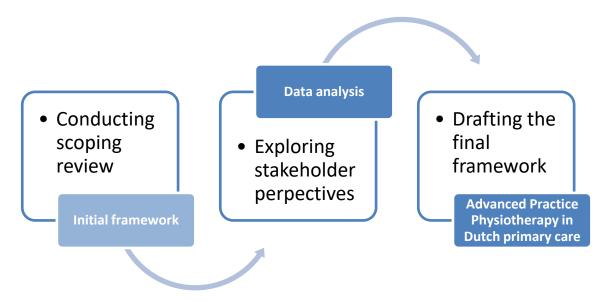


Figure 1: Iterative process of developing the framework of Advanced Practice Physiotherapy in Dutch primary care

Scoping literature review on APP

An initial framework incorporating goals, roles and tasks of APP in primary care was built on 159 studies identified by the scoping literature review. The current study focused on the exploration of stakeholders' perspectives and the draft of the final framework of APP in Dutch primary care.

Exploring stakeholder perspectives

The initial framework was further discussed by a range of direct stakeholders of APP in Dutch primary care, including physiotherapists, GPs and patients. Qualitative data was collected through separate focus groups, supplemented with semi-structured interviews. Subsequently, perspectives of several indirect stakeholders regarding APP, like policymakers, financiers and lecturers on the domain of primary care, were gathered. In order to get a clear view of the different perspectives of the stakeholder groups, homogeneity was preferred in the forming of the groups.²¹

Drafting the final framework

The stakeholder perspectives were analyzed in order to index the data and to identify

themes. These themes were then used to adjust the initial framework in order to make the framework fitting for Dutch primary care. Finally, the framework was visualized through a diagram and supporting tables to give a clear view on the paradigm of APP in Dutch primary care.

Participants

Direct stakeholders

Physiotherapists working in a primary care setting were approached to participate in this study. Recruitment has occurred by various ways. First, recruitment focused on lecturers and internship supervisors of the University of applied Sciences Utrecht. Second, recruitment focused on students and alumni of Physiotherapy Science, Program in Clinical Health Sciences, Utrecht University. Students were recruited by word of mouth, alumni were approached during a symposium. Third, online platforms such as Twitter and LinkedIn were used to recruit eligible participants.

The recruitment strategy of GPs initially focused on primary care settings in and around Utrecht, but was expanded to GPs nationwide. Both regional and national professional associations for GPs were contacted for participation as well. Furthermore, recruitment was undertaken at the postgraduate General Practice training at the University Medical Center Utrecht. Lastly, recruitment of GPs took place through personal contacts.

Patients were contacted via physiotherapists working in primary care practices in and around Utrecht.

Indirect stakeholders

Healthcare departments of several insurance companies were approached as financial stakeholders. Lecturers from both General Practice and Physiotherapy programs were contacted as educational stakeholders, respectively related to the University Medical Center Utrecht and the Utrecht University of Applied Sciences. Professional associations from both GPs and physiotherapists were contacted as well. Other indirect stakeholders that we contacted were the Ministry of Health, Welfare and Sport, a physiotherapy accreditor organization and the Dutch Extended Scope Society.

Selection criteria

Participants were included if they were ≥18 years, able to speak the Dutch language and had personal or professional experience with musculoskeletal complaints in the primary care setting respectively. Additionally, Physiotherapists and GPs had to be involved with the primary care setting during their participation of the study. No exclusion criteria were used in this study.

Informed consent

Participants received the participant information letter and an informed consent form (Appendices 1 and 2) by e-mail from the primary researcher prior to their participation. A reminder was sent a few days before the start of the study.

Procedure

Focus groups

Physiotherapists and GPs were invited to participate into separate focus groups. A focus group with physiotherapists took place at the Utrecht University of Applied Sciences. Taking into account the limited amount of time to participate, GPs were invited to take part in an online focus group by way of FocusgroupIT (www.focusgroupit.com). The aimed number of participants for the focus groups was between six and twelve persons per group.²² The primary researcher (FB) led the focus group discussions.

Semi-structured interviews

The views of patients and indirect stakeholders on APP were gathered by semi-structured interviews. To increase the chance of saturation, physiotherapists who were unable to participate in the focus group were invited for a semi-structured interview. Those interviews were done at a location of their choice or by telephone. Voice recording was used during the focus group sessions and the semi-structured interviews. In accordance with the Medical Research Involving Human Subjects Act (WMO), participants could leave the study at any time for any reason if they wished to do so without any consequences. The study procedure is graphically presented in Figure 2.

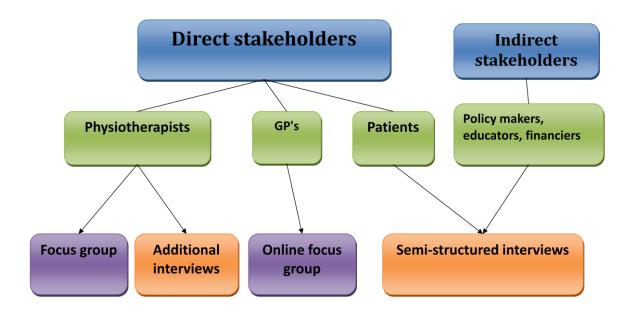


Figure 2: Graphical presentation of the study procedure

Data collection

Demographics

Prior to the focus groups and semi-structured interviews respectively, characteristics were taken from the participants (Table 1).

Table 1: Participant characteristics of stakeholders of Advanced Practice Physiotherapy

Parameter (Measured in)

Age (years)

Sex (male/female)

Familiarity with Advanced Practice Physiotherapy (yes/no)

Patients only:

Type of health problem ('Nonspecific low back pain' / 'Nonspecific neck pain' / 'Back pain, not further specified' / 'Nonspecific shoulder pain'/ 'Syndromes of cervical spine' / 'Other', nominal)

Level of education (lower/middle/higher)

Physiotherapists, general practitioners and experts only:

Work experience (years)

Postgraduate degree (yes/no)

Indirect stakeholders only:

Professional discipline/Area of specialisation (nominal)

Views on Advanced Practice Physiotherapy

Elaborating on the results of the conducted scoping review, three major topics regarding participant's views on APP were discussed: potential goals, tasks and roles for APP in Dutch primary care. The topic of potential goals for APP was not discussed with patients due to their limited knowledge of the larger developments in the Dutch healthcare organization and the goals related to these developments. An overview of the topics is presented in Table 2. The full topic list can be seen in appendix 3.

Table 2: Topic overview of a study aimed at Advanced Practice Physiotherapy (APP) in Dutch primary care

Topic	Sample question
Goals APP	What do you see as a goal of APP?
Tasks APP	Can you give examples of which tasks can be executed by an APP?
Roles APP	Looking at the roles, which can be filled by an APP?

Data analysis

Demographics were analyzed by IBM SPSS Statistics using descriptive charts and frequency charts in descriptive statistics.

The 'framework' method, developed by Ritchie & Spencer, was used as analytical approach to refine the initial framework of APP in Dutch primary care.²³ The method involves the initial framework as a working analytical framework that is used to index the data, whilst remaining sufficiently flexible to allow the incorporation of additional themes. The first step was familiarization of the collected data by reading transcripts. Secondly, all key themes were indentified in order to further develop the thematic framework. Thirdly, data were indexed in textual form by coding the transcripts. Fourthly, data were classified according to the relevant part of the thematic framework. Finally, the identified themes were mapped using tables and diagrams. This process is in accordance with approaches to establish rigor in qualitative research, particularly in establishing credibility, which represents means of granted value to qualitative findings.²⁴

The final framework of APP has been drafted by the researchers capturing the themes adopted by direct and indirect stakeholders. NVivo software was used to aid the analysis and generation of additional themes. Analyses were performed by the primary researcher (FB) and checked by another researcher (DB).

Ethical considerations

Ethics approval is received from the Medical Ethics Committee of the University Medical Center Utrecht (18-137/C).

Data gathered by this study were storaged on a secure file storage service to which only the involved researchers have access (SURFdrive). Raw data is kept for 15 years according to the 'Nederlandse gedragscode voor wetenschapsbeoefening'.²⁵

RESULTS

Initial framework

Based on the included studies by the scoping review, an initial framework was formed containing goals, roles and tasks associated with APP in primary care. This initial framework was the starting point for discussions with stakeholders in focus groups and interviews (Figure 3).

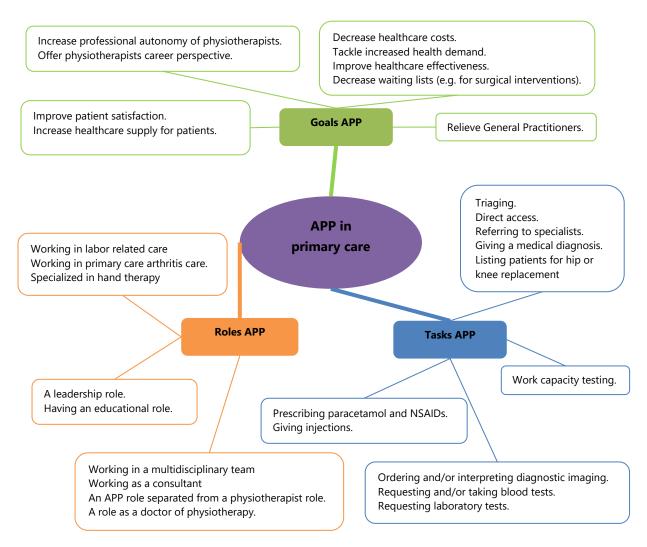


Figure 3: Initial framework Advanced Practice Physiotherapy (APP) in Dutch primary care

Participants

Two focus groups and twelve semi-structured interviews were conducted to explore stakeholders perspectives on APP in Dutch primary care. One focus group contained nine physiotherapists and one online focus group contained six GPs. One GP stopped participating during the focus group. Two physiotherapists were interviewed additionally to enlarge the chance of saturation. Furthermore, five patients and four indirect stakeholders were interviewed. Characteristics of all stakeholder groups can be seen in Table 3.

Table 3: Participant characteristics

Characteristics of Physiotherapists(N=11)	Median(range)	N
Age(years)	32 (23-53)	
Sex(male)		8
Familiarity with APP(yes)		1
Work experience(years)	10 (2-33)	
Postgraduate degree(yes)		5
Characteristics of General Practitioners (N=6)	Median(range)	N
Characteristics of General Practitioners (N=6) Age(years)	Median(range) 40 (35-60)	N
		N 5
Age(years)		N 5 0
Age(years) Sex(male)		5

Characteristics of Patients (N=5)	Median(range)	N
Age(years)	53 (35-63)	
Sex(male)		2
Familiarity with APP(yes)		0
Type of health problem(nominal)		
Nonspecific low back pain		1
Nonspecific neck pain		1
Back pain, not further specified		0
Nonspecific shoulder pain		1
Syndromes of cervical spine		0
Other		2
Level of education(lower/middle/higher)		1/1/3

Characteristics of indirect stakeholders (N=4)	Median(range)	N
Age(years)	37(32-64)	
Sex(male)		4
Familiarity with APP(yes)		3
Professional discipline/Area of specialisation (nominal)	Policy worker	1
	Lecturer	1
	Healthcare buyer	1
	Chairman	1
	professional	
	organization	

(APP: Advanced Practice Physiotherapy)

Stakeholder perspectives

The perspectives of stakeholders regarding the goals, tasks and goals of APP are summarized below. An extended summary of examples illustrating contributions of the stakeholders in narrative form are presented in appendix 4.

Goals of APP

In general, participants experienced difficulties in envisioning clear goals for APP. Nevertheless, there was a noticeable difference in the support of the different potential goals as extracted by the scoping review.

Regardless the different stakeholders, there was a lot of support for 'decreasing healthcare costs', 'tackling increased health demand' and 'improving healthcare effectiveness'. A majority also supported 'relieving GPs'. However, some participants questioned whether the addition of APP would have that effect. A physiotherapist mentioned: "So, what we are already doing a bit is to take out that musculoskeletal group in particular. A nurse practitioner also tackles the easier conditions. With the result that the GP, who hoped for a milder consultation, but what you actually see is an increase in the consultation hour." (physiotherapist, 42 years).

Moreover, most participants viewed 'improving patient satisfaction', 'increasing professional autonomy of physiotherapists' and 'offering physiotherapists career perspective' as potential positive effects rather than goals. Little support was given to 'decreasing waiting lists' and 'increasing healthcare supply' for patients, because the goals were irrelevant to the Dutch healthcare system.

Tasks of Advanced Practice Physiotherapists

Physiotherapists tended to be more willing to assign tasks to APP than GPs. However, most consensus was reached on 'triaging' and 'referring to specialists' as tasks fitting for APP. This consensus is illustrated by a GP who indicated: "As far as I am concerned, estimations and differential diagnostics in the musculoskeletal area could be useful." (GP, 35 years). GPs were divided on 'requesting diagnostic imaging', but there was consensus in favor of the task among the other stakeholders. In contrast, only little support was shown for 'interpreting diagnostic imaging'. While 'direct access' and 'work capacity testing' were supported, most stakeholders did not see it as tasks specifically related to APP. 'Listing patients for hip or knee replacement' was not supported by GPs, patients and indirect stakeholders, illustrated by the participating lecturer: "Yes, I think this goes pretty far too. If you are going to do that, then you do not need orthopedics. The question is whether you should want that. When you need orthopedics, they have to give that judgment. And then the orthopedic surgeon will provide surgical care. You can say: I refer to the secondary care." (Lecturer, 37 years). The stakeholders expressed mixed reactions on 'giving a medical diagnosis', 'requesting laboratory tests' and 'giving injections'. Reactions on 'requesting blood tests' were mixed as well, although the stakeholders generally did not support the 'taking of blood tests'. When 'prescribing' was discussed, the majority of the stakeholders was in favor of prescribing paracetamol, but the prescription of NSAIDs received less support. A patient noted: "Paracetamol, yes. Anti-inflammatory drugs I think it is tricky. I would like to have a second opinion from a doctor then." (Patient, 53 years).

Roles of Advanced Practice Physiotherapists

There was large consensus among stakeholders regarding the potential roles in APP. Most stakeholders supported 'working in a multidisciplinary team', 'working as a consultant' and 'an APP role separated from a physiotherapist role'. A GP stated: 'Ideally, in collaboration with the GP and especially specialists')'(GP, 40 years).

Additionally, the majority of the stakeholders opposed having 'an educational role', 'a leadership role' and 'a role as doctor of physiotherapy'. An example illustrating a patient's views on the leadership role: "No, when I look at my own work, you have people who grow into a [leadership role]. And sometimes you do not do any work at all that you used to do, but you know how the whip works. So yes, but you need different qualities and not every APP could do it."(Patient, 47 years).

The roles 'working in labor related care', 'working in primary care arthritis care' and 'specialized in hand therapy' were mostly viewed as optional specializations instead of key aspects of APP.

Additional themes

Additional themes also arose from the data. 'Sufficient work experience' was noted by all stakeholders as a requirement for APP. A physiotherapist mentioned: "I wonder if, if you look at setting it up and dividing it in the neighborhood, if a GP is waiting for an APP of 26 that takes over many of its tasks. I think that a lot of experience and age makes sense." (Physiotherapist, 29 years).

Physiotherapists also indicated the 'profiling of their profession' as an important goal related to APP. This goal focuses more on the physiotherapeutic profession in the Netherlands, where offering physiotherapists' career perspective focuses on a personal perspective. Another theme that arose was 'APP structured as a specialist or as a generalist'. Some participants showed interest in an APP framework aimed at enhancing physiotherapeutic specialists in certain niches, where other participants focused more on APP as a generalist aimed at triaging and diagnosing patients with musculoskeletal complaints in general practice. The participating policy worker viewed it as such: "I really see an APP as a kind of super specialist. So the moment you really start working in a part of your domain, then I think you need a good basis for that. So also be able to apply those extra skills to be able to develop well in that area." (Policy worker, 37 years). While both roles do not have be mutually exclusive in APP, some participants showed concerns of APP being set up too widely.

Drafting the final framework

Based on all the data gathered from the stakeholder perspectives, the initial framework was adjusted in order to fit the framework to Dutch primary care. The final framework is illustrated in Figure 4.

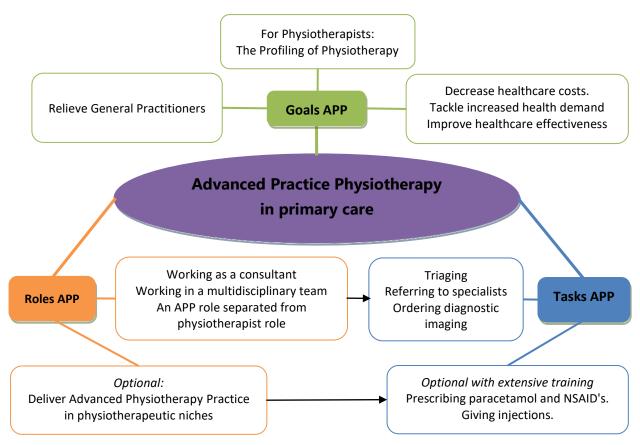


Figure 4: Final framework Advanced Practice Physiotherapy in Dutch Primary care

DISCUSSION

The purpose of this study was to establish a framework incorporating goals, roles and tasks of APP in primary care based on perspectives from several stakeholders. Looking at the established framework, the main goals of APP are to decrease healthcare costs, to tackle increased health demand and improve healthcare effectiveness. The roles in which an APP acts are more generic in nature, focusing on consulting and/or participating in a multidisciplinary team. The main task of an APP will be triaging and, if necessary, referring to specialists and ordering diagnostic imaging. Additional themes in the framework are required work experience and a possibility for APP in physiotherapeutic niches.

Several studies previously examined advanced practice through the perspectives of different stakeholders. Wiles et al. studied the perceptions of different key stakeholders on the APP role in Australia.²⁶ They found consensus on the value of APP in improving the efficacy and efficiency of health service delivery, achieving positive patient outcomes and offering opportunities for interdisciplinary learning among colleagues. This largely corresponds with the findings in our study related to the goals of APP. Although it was not stated as a goal of APP, the identified support for APP in a multidisciplinary team reflects a positive view of interdisciplinary learning. Looking at the implementation of advanced practice, previously

identified key themes consisted for example of proactively addressing barriers; legislative issues; developing, accrediting and delivering a curriculum supporting physiotherapists to work outside of the usual scope.²⁷ These themes have not been studied in our study, due to the lack of an established form of APP. However, these are important points that need to be taken into account in expanded research on the framework of APP.

Looking at contemporary reforms of the Dutch primary care, the constructed framework provides clinical relevance on the potential role of APP. The Dutch government plans to shift care from secondary care to primary care.^{28,29} With the increased pressure on GPs, more supporting healthcare providers are needed to relieve the GPs and, simultaneously, to maintain quality of healthcare. Therefore, substitution is seen as a driving force to innovations in healthcare professions.³⁰ Substitution can also aid to reduce healthcare costs, with APP improving diagnostic accuracy and decreasing unnecessary referrals to specialists.³¹ Furthermore, the APP goal to improve healthcare effectiveness fits in the restructuring model 'continuum van bekwaamheden voor de gezondheidszorg'. This model sets up an expansion of tasks, focusing on improving function instead of the illness.³⁰

Strengths and limitations

One of the strengths of this study was the iterative design. This design made it possible to draft the framework in a thorough manner. The literature review provided a broad foundation in which the majority of final themes were present. In addition, the diverse groups of stakeholders provided a broad spectrum of perspectives on APP applicable to the Dutch healthcare system. Furthermore, discussions with stakeholders have helped to create support for APP in Dutch primary care. Additionally, due to the systematic interview style and the explanations of how the tasks, roles and goals worked out in practice, participants received a clear understanding during the interview. This provided a beneficial contribution to the cohesiveness of the final framework.

Some limitations should be mentioned as well. First, the recruitment of GPs appeared to be more difficult than expected. Maybe, their busy schedule played a role or their interest in the topic of APP. Moreover, the barrier to assemble in one location at the same time withheld participants as well. This was partly tackled by setting up the online focus group for the GPs and taking individual interviews. However, a sample bias still occurred. Polled participants who were less invested in APP, were more eager to refuse participation. Furthermore, the recruitment strategy mainly focused on participants in Utrecht and its metropolitan area, which is predominantly urban. Therefore, the results cannot be generalized to the Netherlands in its entirety. Stakeholder perspectives from rural areas might provide benefits to the framework in future studies.

Recommendations

The final framework provides a realistic and advantageous model for the development of APP

in primary care in the Netherlands. There seems to be sufficient support regarding the paradigm of APP in view of several direct and indirect stakeholders. Therefore, it would appear that the time has come to study APP more thoroughly by determining its' (cost)effectiveness by way of a randomized trial. In consistence with the identified goals, tasks and roles of APP, diagnostic accuracy and patient and GP satisfaction should be used as outcome measures in this trial. More research is also recommended on the perspectives of healthcare providers related to primary care, like general practice based nurse specialists, district nurses and specialists in secondary care, such as neurologists, orthopedic surgeons and rheumatologists. Looking at the established framework, these healthcare providers will most likely be influenced in their work by the introduction of APP and therefore can be counted as direct stakeholders.

CONCLUSION

Building on a literature study in which goals, roles and tasks have been identified for APP, this study aimed to create a framework for APP that fits to Dutch primary care. Based on focus groups and interviews with various direct and indirect stakeholders, it appears that there is sufficient support for APP in the Netherlands. The main goals of APP are to decrease healthcare costs, to tackle increased healthcare demand and to improve healthcare effectiveness. The roles in which an APP acts are more generic in nature, focusing on consulting and/or working in a multidisciplinary team. The main task of an APP will be triaging and, if necessary, referring to specialists and ordering diagnostic imaging. A trial focused on determining the (cost)effectiveness of APP in Dutch primary care will be the next step.

REFERENCES

- 1. ONU. World population ageing 2015 Report [Internet]. 2015. Available from: www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Report.pdf1.
- 2. Shipton D, Badley EM MN 85-A. Critical shortage of orthopaedic services in Ontario, Canada. J Bone Jt Surg Am. 2003;85(9):1710–1715.
- 3. Department of Health. Meeting the Challenge: A Strategy for the Allied Health Professions: Arts Therapists, Chiropodists and Podiatrists, Dietitians, Occupational Therapists, Orthoptists, Paramedics, Physiotherapists. Prosthetists and Orthotists, Diagnostic Radiographers, Ther. Department of Health. 2000.
- 4. Ineen. Benchmarkbulletin huisartsenposten 2016 [Benchmark report GP cooperatives 2016]. 2017.
- 5. Gezondheidsraad, [Health Council of the Netherlands]. Taakherschikking in de gezondheidszorg. 2008.
- 6. MT L, CE J. The physical therapist as a musculoskeletal specialist in the emergency department. J Orthop Sport Phys Ther. 2009 Mar;39(3):221–9.
- 7. Kersten P, McPherson K, Lattimer V, George S, Breton A, Ellis B. Physiotherapy extended scope of practice -- who is doing what and why? Physiotherapy. 2007 Dec;93(4):235–42.
- 8. Aiken AB, Atkinson M, Harrison MM HJ. Reducing hip and knee replacement wait times: an expanded role for physiotherapists in orthopedic surgical clinics. Heal Q. 2007;10(2):88–91.
- 9. Kilner E. What evidence is there that a physiotherapy service in the emergency department improves health outcomes? A systematic review. J Heal Serv Res Policy. 2011;16(1):51–8.
- 10. Li LC, Westby MD, Sutton E, Thompson M, Sayre EC, Casimiro L. Canadian physiotherapists' views on certification, specialisation, extended role practice, and entry-level training in rheumatology. BMC Health Serv Res. 2009 Jun;9:88.
- 11. McPherson K, Kersten P, George S, Lattimer V, Breton A, Ellis B, et al. A systematic review of evidence about extended roles for allied health professionals. J Health Serv Res Policy. 2006 Oct;11(4):240–7.
- 12. Desmeules F, Roy J-S, MacDermid JC, Champagne F, Hinse O, Woodhouse LJ. Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. BMC Musculoskelet Disord. 2012 Jun;13:107.
- 13. Jakimowicz M, Williams D, Stankiewicz G. A systematic review of experiences of advanced practice nursing in general practice. BMC Nurs. 2017;16:6.
- 14. Jones A, Powell T, Watkins D, Kelly D. Realising their potential? Exploring

- interprofessional perceptions and potential of the advanced practitioner role: a qualitative analysis. BMJ Open. 2015 Dec;5(12):e009740.
- 15. Reeve S, May S. Exploration of patients' perspectives of quality within an extended scope physiotherapists' spinal screening service. Physiother Theory Pract. 2009;25(8):533–43.
- 16. Desjardins-Charbonneau A, Roy J-S, Thibault J, Ciccone VT, Desmeules F. Acceptability of physiotherapists as primary care practitioners and advanced practice physiotherapists for care of patients with musculoskeletal disorders: a survey of a university community within the province of Quebec. BMC Musculoskelet Disord. 2016 Sep;17(1):400.
- 17. Dawson LJ, Ghazi F, LJ D, Ghazi F, Dawson LJ, Ghazi F, et al. The experience of physiotherapy extended scope practitioners in orthopaedic outpatient clinics. Physiotherapy. 2004 Dec;90(4):210–6.
- 18. Yardley D, Gordon R, Freeburn R, So C, Beauchamp D, Landry MD, et al. Clinical specialists and advanced practitioners in physical therapy: a survey of physical therapists and employers of physical therapists in ontario, Canada. Physiother Can. 2008;60(3):224–38.
- 19. Harding P, Prescott J, Sayer J, Pearce A. Advanced musculoskeletal physiotherapy clinical education framework supporting an emerging new workforce*. Aust Heal Rev. 2015 Jun;39(3):271–82.
- 20. Bravo P, Edwards A, Barr PJ, Scholl I, Elwyn G, McAllister M. Conceptualising patient empowerment: a mixed methods study. BMC Health Serv Res. 2015;15(1):252.
- 21. Boeije H. Analysis in qualitative research. Sage Publications, Ltd.; 2008.
- 22. Holloway I, Galvin K. (2016). Qualitative research in nursing and healthcare. John Wiley & Sons. John Wiley & Sons, Inc.; 2016.
- 23. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Analyzing qualitative data. Routledge; 2002. p. 187–208.
- 24. Biddyr S, Jones A. Preventing sight loss in older people. A qualitative study exploring barriers to the uptake of regular sight tests of older people living in socially deprived communities in South Wales. Public Health. 2015;129(2):110–6.
- 25. Universiteiten VV. De Nederlandse gedragscode wetenschapsbeoefening—principes van goed wetenschappelijk onderwijs en onderzoek. 2014.
- 26. Wiles L, Milanese S. Stakeholder perspectives of the Extended Scope Physiotherapy Practitioner (ESPP) role in Australia a qualitative study. Phys Ther Rev. 2016 Jun;21(3–6):228–35.
- 27. Morris J, Grimmer K, Gilmore L, Perera C, Waddington G, Kyle G, et al. Principles to guide sustainable implementation of extended-scope-of-practice physiotherapy workforce redesign initiatives in Australia: stakeholder perspectives, barriers, supports,

- and incentives. J Multidiscip Healthc. 2014;7:249–58.
- 28. Rijksoverheid. Begroting Volksgezondheid, Welzijn en Sport 2014. Betere zorg, beheerste uitgaven. [Internet]. [cited 2018 Jun 15]. Available from: https://www.rijksoverheid.nl/onderwerpen/eerstelijnszorg/grotere-rol-voor-eerstelijnszorg
- 29. Ministerie van Volkgezondheid W en S [VWS]. Kamerbrief over gezamenlijke agenda VWS 'Van systemen naar mensen'. 8 februari 2013. [Internet]. 2013. Available from: https://www.rijksoverheid.nl/documenten/kamerstukken/2013/02/18/kamerbrief-overgezamenlijke-agenda-vws-van-systemen-naar-mensen
- 30. Kaljouw M, van Vliet K. Naar nieuwe zorg en zorgberoepen: de contouren. Diemen; 2015.
- 31. Ministerie van Volkgezondheid W en S [VWS]. Kamerbrief over onderzoek "Taakherschikking en kostprijzen in de praktijk". 4 oktober 2016. 2016.

APPENDIX 1: Participant information letter

Informatie voor deelname aan groepsinterview

In kaart brengen van het perspectief op Advanced Practice Physiotherapy in de eerstelijns zorg bij patiënten/ fysiotherapeuten/ huisartsen in Nederland

Geachte heer/mevrouw,

Wij vragen u om mee te doen aan een medisch-wetenschappelijk onderzoek over een nieuwe rol voor de Fysiotherapie in Nederland. Meedoen is vrijwillig. Om mee te doen is wel uw schriftelijke toestemming nodig.

Voordat u beslist of u wilt meedoen aan dit onderzoek, krijgt u uitleg over wat het onderzoek inhoudt in deze informatiebrief. Lees deze informatie rustig door en vraag de onderzoeker om uitleg als u vragen heeft. Natuurlijk kunt u er ook over praten met uw partner, vrienden of familie. Verdere informatie over meedoen aan zo'n onderzoek staat in de bijgevoegde brochure 'Medisch-wetenschappelijk onderzoek'.

Algemene informatie

Dit onderzoek is opgezet door onderzoekers van het UMC Utrecht en de Hogeschool Utrecht. Het onderzoek wordt uitgevoerd op de Hogeschool Utrecht. Naar verwachting zullen 36 personen meedoen, waaronder (voormalig) patiënten, fysiotherapeuten of huisartsen. Het onderzoek valt buiten de 'Wet medischwetenschappelijk onderzoek met mensen'. Maar: aangezien het binnen het UMC Utrecht een goede gewoonte is om al het medisch-wetenschappelijk onderzoek te toetsen is ook dit onderzoek getoetst en goedgekeurd.

Achtergrond van het onderzoek

Wereldwijd is de vraag naar zorg gegroeid door de vergrijzing en een toename van chronische ziektes. Tegelijkertijd zijn de zorgkosten gegroeid en dreigt er een tekort aan huisartsen. Om deze problemen aan te pakken, worden er bepaalde taken en rollen binnen de zorg herverdeeld. Binnen de fysiotherapie doet 'Advanced Practice Physiotherapy'(APP) haar intrede. APP is een beroep dat al bestaat in andere landen. Het geldt als een uitbreiding op de algemene fysiotherapeut, met meer opties om patiënten te behandelen Onder deze naam is de zorg in verschillende landen verbeterd. Op dit moment bestaat APP nog niet in Nederland. Voordat dit beroep goed kan worden ingevoerd in ons land, is het belangrijk dat de betrokken groepen (waaronder patiënten, fysiotherapeuten en huisartsen) achter het beroep staan. Dit is voor een groot deel gebaseerd op duidelijkheid over de inhoud van het beroep. Deze duidelijkheid ontbreekt op dit moment. Het werk van de APP-er is momenteel nog verschillend van elkaar. Er is nog geen duidelijk beeld van hoe APP er uit zou moeten zien in de eerstelijns zorg in Nederland. De Universiteit Utrecht gaat dit nu in kaart brengen.

Doel van het onderzoek

Het doel van dit onderzoek is om in kaart te brengen hoe APP ingevuld zou kunnen worden in de eerstelijnszorg in Nederland.

Wat meedoen inhoudt

U komt één keer naar de Hogeschool Utrecht voor een bezoek van maximaal 1,5 uur. Daar zult u deelnemen aan een groepsinterview. In dat groepsinterview gaat u samen met anderen bespreken wat APP volgens u in moet houden. In totaal zullen drie groepsinterviews plaatsvinden: één met patiënten, één met

fysiotherapeuten en één met huisartsen. Voor het groepsinterview begint, krijgt u een korte beschrijving van APP zoals dat in andere landen georganiseerd is. Bij het groepsinterview zijn twee onderzoekers aanwezig. Een van de onderzoekers zal het gesprek leiden en op de tijd letten. De andere onderzoeker zal observeren en notuleren. Het groepsinterview zal worden opgenomen met behulp van geluidsapparatuur.

Wat zijn de mogelijke voor- en nadelen bij deelname aan dit onderzoek?

Door deel te nemen aan dit onderzoek draagt u bij aan de ontwikkeling van het vak Fysiotherapie. Deelname kent geen voordelen voor uw persoonlijke situatie. De tijd die het kost om mee te doen aan het groepsinterview, kan mogelijk een nadeel zijn.

Als u niet wilt meedoen of wilt stoppen met het onderzoek

U beslist zelf of u meedoet aan het onderzoek. Deelname is vrijwillig. Als u besluit om niet mee te doen, heeft dit geen enkel gevolg. U hoeft ook niet te zeggen waarom u niet wilt meedoen. Als u wel meedoet, kunt u zich altijd bedenken en toch stoppen, ook tijdens het onderzoek. U hoeft niet te zeggen waarom u stopt.

Einde van het onderzoek

Uw deelname aan het onderzoek stopt als het groepsinterview voorbij is of als u zelf kiest om te stoppen.

Gebruik en bewaren van uw gegevens

Voor dit onderzoek is het nodig dat er gegevens van u worden verzameld en gebruikt, zoals leeftijd, geslacht, opleidingsniveau en type klacht. Elke proefpersoon krijgt een code die op de gegevens komt te staan. Uw naam en andere persoonsgegevens worden weggelaten.

Al uw gegevens blijven vertrouwelijk. Alleen de onderzoekers weten welke code u heeft. Wij geven uw gegevens door aan de opdrachtgever van het onderzoek, maar alleen met die code, nooit met uw naam. De sleutel voor de code blijft bij de onderzoeker. Ook in rapporten over het onderzoek wordt alleen die code gebruikt. Alleen het onderzoeksteam kan uw gegevens inzien. Uw gegevens en de geluidsopnamen van het groepsinterview zullen worden bewaard op een beveiligde server. Als u de toestemmingsverklaring ondertekent, geeft u toestemming voor het verzamelen, bewaren en inzien van uw gegevens. De onderzoeker bewaart uw gegevens 10 jaar.

Verzekering voor proefpersonen

Als u deelneemt aan het onderzoek, loopt u geen extra risico's. Het onderzoeksteam hoeft daarom van de medisch ethische toetsingscommissie van het UMC Utrecht geen extra proefpersonenverzekering af te sluiten.

Geen vergoeding voor meedoen

Wij kunnen u helaas geen vergoeding bieden voor het deelnamen aan het onderzoek.

Heeft u vragen?

Bij vragen kunt u contact opnemen met een van de onderzoekers: de heer Ferdinand Bastiaens (telefoonnummer: +31 6 33939774 / emailadres: f.bastiaens@students.uu.nl).

Bij klachten kunt u terecht bij de onafhankelijke klachtencommissie van het UMC Utrecht: UMC Utrecht, klachtenbemiddeling, Huispost D01.343, Postbus 85500, 3508 GA UTRECHT, +31 88 75 56 208.

Ondertekening toestemmingsformulier

Wanneer u voldoende bedenktijd heeft gehad, wordt u gevraagd te beslissen over deelname aan dit onderzoek. Indien u toestemming geeft, zullen wij u vragen deze op de bijbehorende toestemmingsverklaring schriftelijk te bevestigen. Door uw schriftelijke toestemming geeft u aan dat u de informatie heeft begrepen en instemt met deelname aan het onderzoek. U krijgt een kopie of een tweede exemplaar van deze toestemmingsverklaring.

Tot slot

Wij stellen het zeer op prijs als u wilt deelnemen aan het onderzoek.

Dank voor uw aandacht.

Met vriendelijke groet,

Ferdinand Bastiaens, fysiotherapeut & fysiotherapiewetenschapper in opleiding

Di-Janne Barten, senior-onderzoeker lectoraat Innovatie en Beweegzorg

Cindy Veenhof, lector Innovatie en Beweegzorg & hoogleraar Fysiotherapiewetenschappen

Appendix 2: Informed consent form participant

Titel van het onderzoek:

In kaart brengen van het perspectief op Advanced Practice Physiotherapy in de eerstelijns zorg bij patiënten/ fysiotherapeuten/ huisartsen in Nederland

Ik verklaar dat:

- Ik de informatiebrief heb gelezen. Ik heb de mogelijkheid gehad om vragen te stellen. Mijn vragen zijn voldoende beantwoord. Ik had genoeg tijd om te beslissen of ik meedoe.
- Ik weet dat meedoen vrijwillig is. Ook weet ik dat ik op ieder moment kan beslissen om toch niet mee te doen of te stoppen met het onderzoek. Daarvoor hoef ik geen reden te geven.
- Ik weet dat leden van het onderzoeksteam mijn gegevens kunnen inzien.
- Ik toestemming geef voor het verzamelen en gebruiken van mijn gegevens op de manier en voor de doelen die in de informatiebrief staan.
- Ik toestemming geef om mijn gegevens op de onderzoekslocatie nog 10 jaar na dit onderzoek te bewaren.
- Ik mee wil doen aan dit onderzoek.

Naam deelnemer :	
Datum :/	
Plaats :	
Handtekening :	
In te vullen door de onderzoeker	
Ik verklaar dat ik deze deelnemer volledig heb geïnformeerd over h	net genoemde onderzoek.
Naam onderzoeker (of diens vertegenwoordiger):	
Handtekening:	Datum: / /
-	
(Indien van toepassing)	
(Indien van toepassing) Aanvullende informatie is gegeven door: Naam:	
(Indien van toepassing) Aanvullende informatie is gegeven door: Naam: Functie:	
(Indien van toepassing) Aanvullende informatie is gegeven door: Naam:	

Appendix 3: Topic list focus groups

Topic	Voorbeeldvragen(optioneel)
Doelen APP	Wat zie je als het doel van een APP?
Taken APP	Kan je voorbeelden geven welke taken een APP volgens jou uit kan voeren?
	Zijn er taken die een APP niet uit kan voeren volgens jou?
Rollen APP	Kijkend naar de rollen, welke zou je de APP zien vervullen?
	Welke rollen passen er niet bij de APP?
	Kan je vertellen of dit de samenwerking met anderen verandert?
Ondersteunende voorwaarden	Welke dingen heeft de APP nodig om zijn werk goed uit te voeren?
	Kan je vertellen wat er zou veranderen in de samenwerking van de APP met anderen?
Opleiding APP	Kan je vertellen wat er in de opleiding aan bod zou moeten komen?
	Hoe denk je over toelatingseisen voor de opleiding? Kan je voorbeelden bedenken?
Vertrouwen APP	Zou je zelf naar een APP toe gaan met een klacht? Waarom?
	Wat zou je laten meewegen in de keuze voor een APP of een andere behandelaar?

Appendix 4: Typical quotes of direct and indirect stakeholders per topic

Goals	Physiotherapist	General Practitioners	Indirect stakeholder
Decrease waiting lists	No, I do not see that as a goal. Due to the emergence of independent treatment centers and the current healthcare system, you actually see that there are no or hardly any waiting lists.	This does not currently play in my region.	When an APP is used and prevents a patient from unnecessarily going to the orthopedist and therefore occupying the consultation hour, I think the waiting lists will be shortened.
Increase healthcare supply for patients	But what [physiotherapist] just rightly points out is that the supply is shifting. It does not change, so in principle it is not a larger supply. Instead of going to the doctor, you now go to the APP, which basically performs the same tasks.	Patients often do not know what the best care is by the forest of healthcare providers. More care provision does not lead to better care.	I wonder if you will increase the healthcare supply. I do not think you can shed the healthcare supply, but you are trying to send insured patients directly to the right place where they can receive care.
Decrease healthcare costs	Yes, we are of course cheaper than the GP. So that certainly applies to this. I do not know if a different rate applies. If there are other training requirements, there may also be a higher rate than a physiotherapist You should see it as a specialism.	The biggest challenge of care will be that we have to do more and more for less and less money (and ensure sufficient staff working in the healthcare sector).	I certainly think that it can lead to a reduction in healthcare costs, because I am convinced that some of the patients who are referred to the second line do not actually have to be there. If you can get that percentage of people out of the front, then you reduce those healthcare costs
Tackle increased health demand	Yes, we have a lot to do with this. And we often look at patients differently than the GP. In that sense, I think that the quality is only better if we also look at it. We also have a lot of experience with the elderly, so we can also help them a lot.	Particularly in the elderly, there is a lot to be gained (therapeutic and preventive) with low-threshold access to good movement care and advice.	I think there is a place for it. It is also being said that the second-line care will disappear. Hospitals in the current form are going to disappear. This is increasingly going to the periphery. And that is precisely where that super specialist who is needed in practice and the community. You will need more of that.

Goals	Physiotherapist	General Practitioners	Indirect stakeholder
Relieve General Practitioners	So what we are already doing a bit is to take out that musculoskeletal group in particular. A nurse practitioner also tackles the easier conditions. With the result that the GP, who hoped for a milder consultation, but what you actually see is an increase in the consultation hour	That may be a welcome side effect, but should not be a reason to (yet) introduce a new profession. Complaints of the musculoskeletal system are not a big burden for most GPs, and there are also many abnormalities (rheumatic, paraneoplastic and otherwise) that do not belong primarily to the physiotherapist.	I certainly see that. You also hear that the GPs are too busy. Because they are the gatekeeper, they obviously need to know something. What we hear is that there are also quite a few people with musculoskeletal complaints. We think that the physio has much more knowledge of it. So yes, if they are already taken away from the GP, then you are sure to relieve the GPs.
Increase professional autonomy of physiotherapists	I thought more with professional autonomy that you have more handles as a physio to do more things. But that you will get more opportunities for the patient outside of exercise therapy, mobilization, etc. That it is something that is more for yourself. That is indeed possible, it could make it more attractive.	Especially nice for the physiotherapist, but that is in itself insufficient reason and should not be a primary goal. We must not introduce a new medical profession "because we want it so badly"	I do not think it is an important goal, but it is a result that occurs when you have that function. But then it must be guaranteed. It cannot be the case that every physiotherapist suddenly has such a forward position. So you will demonstrably have to have knowledge and skills.
Improve healthcare effectiveness	I think that there should be a kind of shift and that this is just a nice step for a person who really sends the whole team or a neighborhood or a village and ensures that the care is more effective.	You can never be opposed to that, right?	It is an important point to put physiotherapy on the map as the professional in movement care who knows what it is about. That it will show added value in the context of sensible efficient care
Improve patient satisfaction	In my experience we do it very well with the patients, high marks. While the care is not always good, or equally efficient. So I would like to place an exclamation mark at patient satisfaction in the sense of: Let's focus on that carefully before we get a very satisfied patient and deliver something half-baked.	If the physio does what a patient would want immediately, perhaps, but more patient satisfaction? There remains a group that wants to have the doctor's opinion.	I think that patients might ultimately be more satisfied with care in general. That less sending from the box to the wall and just to one person who understands business. But we do not have to do anything about patient satisfaction with physiotherapy, because on average it is very high. So we do not have to do much about that, but maybe in general healthcare.

Goals	Physiotherapist	General Practitioners	Indirect stakeholder
Offer physiotherapists career perspective	I graduated three years ago and from the group I graduated a number of them have already stopped because they no longer find it attractive. They started working in other places, in other branches. How can we keep those people in the end?	That would be a good side effect, but it would not be a primary goal.	I certainly think so. It offers new challenges, new possibilities. You will profile yourself even more as a specialist. You can put yourself down well, so it does offer perspective. Maybe not financially, but in professionalism. I think it is a bycatch.

Tasks	Physiotherapist	General Practitioners	Patients	Indirect stakeholder
Triaging	Yes, very suitable as APP I would say. Perhaps the most important task.	As far as I am concerned, estimations and differential diagnostics in the musculoskeletal area could be useful.	I think that a physiotherapist has more knowledge of the musculoskeletal system and a GP has more general knowledge. I think it is good to take over.	Yes I think that's fine, as long as it falls within the domain of the physiotherapist.
Prescribing paracetamol and NSAID's	Yes, that you can do so with additional knowledge. If we indeed know when you can or cannot prescribe it. That you cannot do it in combination with other medication. Anyway, if that is in the training that makes you APP, I can imagine it is one of the tasks.	I find the assessment of which medication goes quite far if you cannot properly interpret comorbidity	Paracetamol, yes. Anti- inflammatory drugs I find tricky. I would like to have a second opinion from a doctor then.	Yes, both are basically over the counter medicine. So whether you say that, or whether the neighbor says it, or if someone thinks that he is going to swallow painkillers. That is not really an extra task. These are freely available products in the Netherlands. That is their own responsibility. You can advise that. But if you want to prescribe it as an advice for pain management, if you are aware of the effect and dosage, I do not think that's a problem.
Ordering and/or interpreting diagnostic imaging	Personally, I'm mainly for requesting it. For example, the simple ankle complaint that we get as a physio. If the Ottawa Ankle rules are positive, you first have to refer the patient via the GP. I think that task can easily be done by a physiotherapist	I would rather expect an explosion in the cost of applied treatments if this is given in the hands of an APP or an explosion in consultation time (multidisciplinary consultations)	Well that diagnostic imaging, that seems excellent to me. I think that as a physiotherapist you are very much helped if there is an image known, or a scan or something.	I think it fits very well within the scope of APP. To bet on that. You can decide with a relatively limited amount of extra training.
Direct access	Yes, direct access. But that is more a matter of definition. I think we already do that.	Х	Yes, as you said: That is already here. And I only like it as a patient that I can come and that I do not have to go to the doctor first.	Yes, fine for me. Then you also see that it does not deliver any calamities. Because actually it is already a form of triage, the screening of red flags.

Tasks	Physiotherapist	General Practitioners	Patients	Indirect stakeholder
Giving injections.	Yes, I think so. I think you should do that in the same way as a GP or orthopedist. You have to make a good diagnosis, take the right considerations for why you use it. Then it must be possible. But then I would also limit it to the shoulder and knee, because they are the easiest, and stay away from the other joints.	I would rather expect an explosion in the cost of applied treatments if this is given in the hands of an APP or an explosion in consultation time (multidisciplinary consultations)	If an APP proposes to give me an injection, I would first like to check with the doctor. I personally believe that people have to do what they are good at. And if that is what they are trained for and good at and the doctor does that once in a blue moon. Then I would certainly let that be done by the APP.	You get so much on your neck, and why? What are you going to inject? And why do not you leave that to the professionals who are now trained for it?
Referring to specialists	-	X	Yes, I think it's fine. I do not know what the second line thinks about it? But I think it must be possible. Well, I think they should consider when they should refer. Because I think you have to prevent the specialists from saying: "Stop, we are going mad, all these physio's that just refer. I'm already so busy.	Yes, selecting which patients go to the second line and which do not. It is on the one hand the possibility to refer, and an important task is also to limit it and prevent it from being referred.
Requesting and/or taking blood tests	But I also think that vitamin B, all kinds of other vitamins, a piece of fatigue. I would be very happy if I did not have to ask the GP every time	To do this really well and safely, extensive physiological knowledge is needed.	I do not quickly see an application for that. Perhaps I am too pragmatic, but then I would say: There are better posts for it. They are hygienic and they are all on temperature. In the context of efficiency, the hospitals do no different and are professional in it and I would say: let them continue to do it.	I think blood tests go pretty far. Sure, everything is possible, but I think it's going pretty far.

Tasks	Physiotherapist	General Practitioners	Patients	Indirect stakeholder
Work capacity testing	That is a very difficult one. The GP is not able to do that either. This is often only a company doctor who can actually and legally establish this. So I have my doubts about that.	There is a great need for this, and the current GP and physio cannot judge this.	I also find this a difficult one and I wonder if patients will accept it instead of a company doctor. That is a very sensitive subject, whether people are allowed to work or what kind of work or what percentage. I don't know if patients would accept that from someone who isn't a doctor. I think they can do it, but only in an advising role	Yes, I find an interesting one. I think that there are opportunities. That an occupational physiotherapist may be more useful to a labor physician.
Requesting laboratory tests	But I also think that vitamin B, all kinds of other vitamins, a piece of fatigue. I would be very happy if I did not have to ask the GP every time.	To do this really well and safely, extensive physiological knowledge is needed.	Well, that also depends a bit on whether the APP has enough know-how to make that assessment.	I do not see that at all so that an APP should do that. I think that if there is any doubt about it, he has to go to the doctor.
Giving a medical diagnosis	Yes, if you can have additional research done and you get these things inside, then you could certainly make a medical diagnosis.	X	Yes, I also find a difficult one because you are not a medical doctor. I do not think so. I also think of an advisory role again, but do not really make a diagnosis.	No that is not possible. In the end you can never, according to me, make a medical diagnosis as long as you do not yet have the status of a medical practitioner.

Tasks	Physiotherapist	General Practitioners	Patients	Indirect stakeholder
Listing patients for hip or knee replacement	You can of course refer. If you have someone with obvious osteoarthritis of the knee and that is limiting their function and so on, then you can say: well, it is an idea to think about a new knee, I will send you to the orthopedist. Putting it actually on the operation list seems complicated to me. The person can use certain medication that must first be stopped for a while. The orthopedist wil probably say: I want to see that patient first before I use a knife.	Assessing whether and which surgery is required is the domain of the operator. Is it better to apply a valving osteotomy or hemiprosthesis, and which surgical technique? The operator must take into account additional issues such as urgency. All things that only the surgeon can judge.	Well, but it seems to me that the specialist would like to know what kind of patient he gets on the table and that he does not just get people from his or her hospital in all sorts of places. I do not know how that goes with responsibilities and things like that.	Yes, I think this goes pretty far too. If you are going to do that, then you do not need orthopedics. The question is whether you should want that. When you need orthopedics, they have to give that judgment. And then the orthopedic surgeon will operate. You can say: I refer to the second line.

Roles

	Physiotherapist	General Practitioners	Patients	Indirect stakeholder
Working in a multi- disciplinary team	For sure. I think that we sometimes have to be a little more multi-disciplinary and also thrive very well, because other care providers depend on other care and vice versa we also depend on their care. If we were to make better use of it, the quality of the total package would be better.	In collaboration with the GP and especially specialists ideal	It seems to me, it is never wrong to have some other disciplines in a team, if you work in a health center, that you still have someone to discuss the situation.	Yes, that is perfect. If you are talking about: Someone comes in with musculoskeletal complaints and they report to a central desk. As far as I am concerned, it will not go to the GP but to the APP who can properly assess this. You have to see it like that.

Working as a consultant	Not so much to really start a whole treatment process with the patient, but to look at it: okay, this patient is suitable for this type of physio and then goes there, or just goes there. But that you coordinate or determine that as a GP role, but no more than that.	X	Yes, it seems to me a task in itself. Provided sufficient work experience as a physiotherapist. You know what you're talking about, I think. Seems fine	I think that is a very good one. Because I think that's what the doctor is missing. You will be very happy with this if you do as APP.
Having an educational role	I think that someone must have certain qualities, but in the end I have also become a teacher here. But that does not mean that every master must be able to do that.	I do not see why an APP would be pre- eminently qualified as a teacher	Yes, but I would say: stay in practice. Because everything changes quickly, so stay up to date. Then it seems right to me to teach your colleagues.	I do not see it that way, no. In my opinion, this should not necessarily be a role for APP. A physio can also like to do that. An APP could do that too, but in my opinion that does not have to be a role for an APP.
An APP role separated from a physiotherapist role	Difficult. You will probably also work in primary care as a physiotherapist. Only it is not the intention that you as APP will fill your own agenda or that of your colleagues. My advice will then still be to separate as good as possible.	X	That seems to me very difficult for the person concerned. To just be a physio in one moment. You always take it with you.	Yes, that depends on how technically it is regulated. If it's a new profession, or. And otherwise you stay in the basic physiotherapist, so you can put your skills and knowledge in different places. But I do not care if you are APP in the general practice or the physiotherapy practice.
A leadership role	Yes, especially musculoskeletal complaints. Very good though! The GP is in charge of patients with comorbidities. This is how the care is now also organized. Maybe sometime in the future an APP, but now it is clear the GP.	I do not think it's useful in a medical team.	No, when I look at my own work, you have people who grow into a manager. And sometimes you do not do any work at all that you used to do, but you know how the whip works. So yes, but you need different qualities and not every APP could do it.	The role of case manager could well lie with the APP in the primary care practice. Up to a certain level. Up to and including the movement-related aspect.

A role as a doctor of physiotherapy	I have a little trouble with physio-doctor. I think a doctor does a bit more than the points we just went through. So if you put yourself down as a doctor, then I wonder if that does not give a wrong picture.	X	Then they should have started studying medicine hahaha. Yes, I do not know. I also do not know how that is with such an oath and so. Of course you also have to deal with that.	I do not think so. I do not see that for me. Then you also have to get a lot of medical training. And then you go more towards the GP and the orthopedic surgeon. I do not see the added value of why someone should do that.
Working in labor related care	I do not think you should see this as an APP role.	If independent of the own patient	I think that moving, how you sit, how you deal with stress. I also think that physical therapy can play a positive role.	Yes, you mentioned a few and I think: In principle an APP could function here, all per specialism. Only then must he be trained more specifically.
Working in primary care arthritis care	Yes is part of it, but not as a specific role I think.	It has a more chronic and specialized character. I see APP more as a quick and generalist, I would rather find guidance in rheumatism fit with a regular (specialized or not) physio	Yes, I'm pretty open to that. Because otherwise you have to go through a whole circle before you get help. Those roads are much shorter.	Yes, I think you should rather see it as a leading role and consultant. That the person then indeed, depending on the specialist setting, that you can refer the person to the right physiotherapists or first-line practices or health centers.
Specialized in hand therapy	Hand therapy already exists. I wonder what specifically for APP is then.	X	Yes, I think it is possible. As I see it: the APPs can simply specialize in certain areas and they only become more expert. So I would applaud that, I think.	Yes, I find it difficult. I am not so familiar with hand therapy myself, so now I do not know what the level of the hand therapist is. But it is true that there are some good things about it and there will also be a lot of demand for it. So that as a super specialist can also find a place.

SAMENVATTING

Doelstelling

Het identificeren van een framework van Advanced Practice Physiotherapy(APP), waarin de doelen, rollen en taken zijn meegenomen, om een consistente aanpak te leveren voor de implementatie van APP in de Nederlandse eerstelijnszorg.

Methode

Er is een kwalitatief meerstappen ontwerp gebruikt met focusgroepen en semigestructureerde interviews. De onderzoekspopulatie bestond uit patiënten, fysiotherapeuten, huisartsen en indirecte belanghebbenden zoals docenten, zorgverzekeraars en beleidsmakers met betrekking tot de eerstelijnszorg. De belangrijkste onderwerpen die werden besproken in de focusgroepen en semigestructureerde interviews waren de doelen, vaardigheden en rollen verbonden aan APP. De 'framework'-methode, ontwikkeld door Ritchie & Spencer, werd gebruikt als analytische benadering om het raamwerk te verfijnen.

Resultaten

Twee focusgroepen en twaalf semigestructureerde interviews werden uitgevoerd om de perspectieven van belanghebbenden op APP in de Nederlandse eerstelijnszorg te verkennen. In totaal namen elf fysiotherapeuten, zes huisartsen, vijf patiënten en vier indirecte belanghebbenden deel aan het onderzoek. Er was veel steun voor 'vermindering van de zorgkosten', 'aanpak van de toegenomen zorgvraag' en 'verbetering van de effectiviteit van de gezondheidszorg' als hoofddoelen van APP. De meeste consensus werd bereikt over 'triageren', 'verwijzen naar specialisten' en 'aanvragen van beeldvormende diagnostiek' als taken passend bij APP. De meeste belanghebbenden ondersteunden ook 'werken in een multidisciplinair team', 'werken als consultant' en 'een APP rol gescheiden van een fysiotherapeutische rol' als rollen van APP.

Conclusie

Op basis van focusgroepen en interviews met verschillende directe en indirecte belanghebbenden lijkt er voldoende ondersteuning te zijn voor APP in Nederland. Een proef gericht op het bepalen van de (kosten)effectiviteit van APP in de Nederlandse eerstelijnszorg is de volgende stap.

Klinische relevantie

Stijgende zorgkosten, een toenemend tekort aan huisartsen en een vergrijzende bevolking hebben de organisationele transformatie van de gezondheidszorg tot een prioriteit gemaakt. Om deze uitdagingen aan te gaan, zijn traditionele rollen van niet-medische leden heroverwogen. Met betrekking tot het domein fysiotherapie, is er aanzienlijke interesse geweest in APP. Hoewel studies zich hebben gericht op de percepties van verschillende

belanghebbenden met betrekking tot APP, is er een grote verscheidenheid in de uitvoering van APP. Deze studie heeft een duidelijke weergave gegeven van hoe APP in de Nederlandse eerstelijnsgezondheidszorg kan worden geconceptualiseerd.