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Consensus on occupational health competencies for UK first contact physiotherapists[☆]

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Abstract

Background Patients at risk of preventable sickness absence frequently attend at primary care. First contact physiotherapists (FCP) may provide an optimal way of reducing this risk; however, there is significant variability in clinical practice, limited research directing best practice and this work and health role is traditionally seen as outside of the ‘therapeutic relationship’. If FCP’s training and development in this area is considered, FCP’s will be able to effectively conduct fitness for work and sickness absence certification within UK primary care settings.

Aims This study aimed to reach expert consensus for work-related competencies for FCP practice for patients at risk of preventable sickness absence.

Methods A modified Delphi technique involved a UK-wide FCP expert panel completing three rounds of an online questionnaire. The initial 30-competency questionnaire, based on two separate Nominal Group Techniques in a FCP and Association of Chartered Physiotherapists in Occupational Health and Ergonomics (ACPOHE) physiotherapist cohort and Health Education England’s published Roadmap to Practice, covered occupational health specific items (knowledge and skills) related to the topic. Consensus threshold was set a priori at 70% level of group agreement. Items not reaching consensus were modified and new items added based on themes from qualitative data from the open-ended free text questions present in each section. Items that reached values greater than or equal to 70% of agreement among experts were considered definitive for the competency items. Items between 51% and 69% of agreement were included for the next round and those items with less than or equal to 50% of agreement were considered unnecessary and were excluded. In the third round, the occupational health (OH) specific contents for primary care were classified according to the degree of consensus as follows: strong ($\geq 70\%$ of agreement), moderate (51–69% of agreement) and weak (50% of agreement) based on the maximum consensus reached.

Results Of the 30 initial competencies, 20 (67%) reached a strong degree of consensus and 2 (7%) reached a moderate degree of consensus and 8 (27%) competencies were not recommended ($\leq 50\%$ of agreement). 20 OH specific competencies reached a priori consensus level of agreement to provide the final group list.

Conclusions This paper provides an empirically derived list of OH competencies for FCP education in primary care ‘first point of care’ physiotherapy with a high level of expert agreement and high retention rate between rounds.

Contribution of the paper

- The role of certifying sickness absence and providing fitness for work advice within primary care settings has normally been conducted by General Practitioners, largely due to the legislative aspects that require a ‘Fit Note’.
- FCPs may be ideally suited in ensuring that work is considered at an early stage to help support and prompt conversations about work.
- Most individual’s health needs are addressed within Primary Care (first point of contact in the NHS).
- There is a lack of empirical evidence on the competencies needed for the new ‘first point of contact role’ whereby FCPs manage undiagnosed and undifferentiated musculoskeletal (MSK) conditions.

[☆] Within this article FCPs denotes UK physiotherapists within primary care settings, the authors acknowledge that FCP as a title covers a range of clinical settings and job roles.

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Introduction

Primary care may be an ideal environment to influence work-related outcomes for those living with undifferentiated and undiagnosed conditions in the community, as it acts as the first point of contact in the healthcare system and the ‘front door’ of the National Health Service (NHS) [1]. Despite this, sickness absence (SA) management and fitness for work (FFW) recommendations are not consistently provided within a General Practitioner’s (GPs) consultation and GPs rarely use structured measures to enquire about patients’ work situation unless it is raised [2]. Indeed, many GPs perceive their role being more a support and management role (‘therapeutic relationship’) for health-related conditions rather than one that can consider pragmatic work-related advice [2]. Some also deliberately do not initiate work-related conversations in fear of raising patient expectations for a Statement of Fitness for Work/Med 3 (Fit Note) as they do not feel adequately informed to offer advice or have the time to initiate discussions [2]. It is for the employer to decide whether an employee is incapable of work in the UK, and they are entitled to ask for evidence through self-certification up to seven days’ absence and after that by a Fit Note (Med 3) certified by a medical doctor (until 1st July 2022). In the UK, the Departments of Health and Work and Pensions have outlined Legislation for extension of Fit Note sickness absence certification to other non-medical Allied Health Professionals (AHPs) [3] to encourage patients to resume some work while managing a common health problem. More recently, AHPs have been increasingly encouraged to use the UK’s AHP Health and Work report to provide information to the employee and employer on the functional impact of a patient’s reported problem and for the employee to avail of statutory sick pay. Finally, since 1st July 2022, nurses, occupational therapists, pharmacists, and physiotherapists have been able to certify Fit Notes in order to reduce pressure on doctors, especially General Practitioners (GPs).

Traditionally, as GPs have been the ‘gatekeepers’ within primary care for sickness absence certification, this role has been seen as outside of the role and responsibility of the majority of physiotherapists, outside of Occupational Health physiotherapy settings. Although this may still be the case for many, within primary care, the role of certification and providing fitness for work advice is potentially amenable within the first contact physiotherapist (FCP) model of care. This model provides patients with direct access to diagnostic physiotherapists at the top of their scope of practice (advanced level of knowledge, skills and experience), to assess and manage musculoskeletal (MSK) conditions and is supported within the

NHS’s Long-Term Plan and the Five-Year Framework for GP Contract Reform [4,5]. With the UK primary healthcare setting, FCPs are autonomous, first point of contact practitioners who operate within the ‘front door’ of the NHS and are dispersed over a wide geographical area. Managing primary care patients within this setting is important as MSK conditions in the UK cause around 28 million days lost in work as the second largest cause of sickness absence, and they account for approximately £4.76 billion spending each year and around 20–30% of England’s GP consultations each year [6–8]. It could be argued that the FCP model of care could be used to provide occupational health advice and to overcome some of the challenges of the Fit Note [9] but it is unknown as to whether FCPs have the sufficient skills and knowledge to assess, manage and influence the occupational health aspects associated in patients at risk of nonessential and preventable sickness absence with a MSK condition. Within primary care, most patients present with mild to moderate severity conditions and illnesses as recorded on Fit Notes, yet only 6% of these are documented as ‘may be fit for work’ [9]. This suggests that there are large numbers of patients advised to take sickness absence without any support listed to help keep them in work.

Many healthcare professionals understand that their role can be powerful in helping patients return to or stay in work and prevent further work-related absence, but this confidence is strongly associated with prior training, education and exposure to work-related themes and conversations [10]. Therefore, the main aim of this UK study was to generate and reach expert consensus on the work-related competencies (knowledge and skills) needed for FCP practice to reduce the risk of preventable sickness in primary care. This may allow FCPs to embed work conversations in routine practice and assume the role ‘health and work’ champions within primary care.

Methods

Ethical approval was granted by Glasgow Caledonian University’s Health and Life Sciences Research Ethics Committee (Reference: HLS/PSWAHS/19/144).

This study used the Delphi Technique (method) to achieve the research aim and provide consensual guidance and resolve uncertainty on the topic that has a lack of published guidance [11]. This was chosen as: a) it enabled the involvement of experts throughout the UK, irrespective of their geographical location, b) feedback was anonymous to avoid social pressure and conformity to a dominant FCP’s view, c) due to the emergent themes, iterative rounds



Fig. 1. The modified Delphi Technique detailed.

of enquiry allowed an exploration of the topic and d) the design of rounds was flexible and informed by the FCP expert response in the previous round. The details are summarised in Fig. 1.

Research design

Group consensus methods, including Delphi, are useful when faced with the need to make a decision but have few

empirical data available to guide the process. They synthesise information on a given topic and measure or develop consensus through the democratic representation of a wide range of expert's opinion. The Delphi method uses sequential 'rounds', interspersed by controlled feedback that seeks to reach consensus of opinion within a group of identified experts [11]. The evidence base on FCP practice was considered an incomplete state of knowledge and these experts were deemed important to provide individual judgements in the absence of empirical evidence. In this

regard, the Delphi method is used widely in healthcare and education to provide practice competencies in a range of settings [12].

Panel selection and composition

For consensus studies of a clinical nature, authors recommend that it is appropriate to utilise expert's specialist knowledge in the area [13]. We defined an 'expert' as a specialist physiotherapist who was undertaking the FCP credentialing process by Health Education England and working in primary care settings [14]. This specialization recognises physiotherapists with advanced and specialized knowledge and clinical skills in a MSK setting, who can manage undiagnosed conditions in primary care.

Recruitment

This study followed the recommendations of Conducting and Reporting Delphi Studies [15]. Data were gathered from experts, defined as FCPs involved in the management of MSK conditions in primary care with the expectation of providing sickness absence certification and fitness for work advice and therefore the professional stakeholder group in the relevant clinical setting. Participants (only physiotherapists) were recruited online via advertising in the Chartered Society of Physiotherapy's (CSP) online interactive CSP Research Network and shared within the FCP Professional network; all of those involved in the delivery of an FCP service in primary care were invited to participate. The CSP is the UK's membership organization of more than 60,000 chartered physiotherapists, associate and physio students.

Some FCPs assisted in recruitment via snowballing by sharing within their local networks and via social media. The Delphi Study was also advertised via social media on Twitter (@black_cameron). The invitation to participate in the study was sent by email and all details of the study including design, aims and procedures (the estimated time to answer the questionnaire, the importance of completing all rounds and nomination of possible candidates eligible for the study). After reading the information sheet and signing the consent form, a second email was sent containing the link to access the questionnaire of the respective round (Microsoft Forms). All contacts were invited to the three rounds of the questionnaires, including those who did not respond in the preceding rounds (exception for those who had chosen not to participate). No incentives were offered to participants. Prior research has suggested that a panel with a minimum of twelve members is required for the findings of a Delphi exercise to be considered valid [14], with more members limiting new idea generation and lower than this in homogenous groups providing little difference in ideas.

Delphi process and timeline

A priori criterion or cut-off for consensus was at the 70% of group agreement in line with other published literature in the field [16]. Consensus was defined as the percentage of ratings for Rounds 1 and 3 and median and interquartile range for Round 2. The number of rounds was 3 over 5 weeks and the purpose of these rounds is documented in Fig. 1. We included open-ended free text boxes, allowing participants the ability to explain their disagreement or consider new competencies for group review. Questionnaires and participant information sheets were circulated in English using a Microsoft Forms link via electronic mail and the questionnaire was piloted in advance as per below. The data were stored and analysed using Microsoft Forms with each questionnaire designed to take around 15 min to complete. Participants were sent a personalised link to the questionnaires and asked to indicate whether they Agreed / Had No opinion/ Disagreed to the knowledge and skills based competencies needed for FCPs to undertake FFW and SA certification in primary care settings for rounds 1 and 3, the initial questionnaire was developed by the competency frameworks at the time [17–22], one Nominal Group Technique (NGT) published on a FCP group [23] and one NGT undergoing peer review based on an OH physiotherapy group. Its specific intention was to consider if consensus already existed on the knowledge and skill items from the published literature and two NGTs but open to generating and exploring additional competencies through expert responses.

The first-round questionnaire underwent several revisions and was piloted using a convenience sample of ten physiotherapists (age range 30–59) from musculoskeletal (n = 7), OH (n = 2) and orthopaedics (n = 1) areas who did not participate within the study. This was used to gain feedback on the structure, content and flow of the questionnaire and to ensure an adequate number of items could be generated from the questionnaire for data analysis. Feedback resulted in minor wording changes and editing for clarity only. Round 1 then went live post feedback cycle of 2 weeks in duration.

In round 2, expert panellists used a 5-point Likert scale (1 = strong disagreement, 3 = no agreement, 5 = strong agreement) to rate the level of their agreement on the competencies and were shown summary results from round 1 to allow re-evaluation of responses in light of those of their peers [24]. In round 3, participants were shown summary results from round 2 (mean Likert score, percentage agreement of ratings and de-identified comments on items) to allow for further clarification and enable them to make an informed final decision that contributed to the expert group's collective opinion. Participants were encouraged to refer to the Round 2 data during rating in Round 3.

The first-round questionnaire went live on the 10th March 2021 and each of the three rounds were open for two weeks. Each round incorporated two reminders, including a

statement to reinforce the importance of complete participation [25]. Non-responders were reminded to participate in subsequent rounds unless they explicitly expressed to withdraw, in which case they were asked to provide reasons.

Data analysis

Consensus in Delphi studies is said to have been achieved when a given proportion of participants agree on an item (competency) under debate; this proportion varies in the literature. For this study, achievement of ‘good’ consensus was assumed when $\geq 70\%$ of participants agreed [16] and was considered definitive for the final competency list. Descriptive syntheses and statistics were reported for demographic characteristics, response rates, withdrawals, and items Likert scale ratings [mean, standard deviation (SD), percentage agreement] for each item. The final and definitive list of competencies was then determined.

Open text comments from all rounds were subjected to framework analysis as recommended for Delphi studies [26] using NVivo version 12 (QSR International) [27]. The principal researcher familiarised themselves with the data and read through all data multiple time to sensitise to the meanings ascribed to SA and FFW knowledge and skills-based practice competencies. Each potential theme was then discussed by the research team. This summary of qualitative comments was deemed important to ensure that expert views were recorded, with valuable expert judgments on further challenges, including implicit and tacit knowledge, pertaining to FCP practice and the topic overall. The depth of free text responses may have provided expert rationale and experiential expertise that highlighted their arrival at justifiable, valid and credible competencies for FCPs.

Results

Participant characteristics

The initial digital offer to participate returned 89 FCPs (Table 1). After email invitation, 7 (8%) individuals refused to participate in the study, 5 (6%) did not answer and 13 did not meet the inclusion criteria of working as a FCP in primary care. A total of 64 (72%) individuals with expertise in the topic agreed to participate and the final sample of the expert panel’s characteristics are presented in Table 1. Most of the participants in the final round were female ($n = 38$; 59%) with the age of 30 and 44 years ($n = 41$, 64%) from England ($n = 46$, 72%). The majority of experts professionally had a BSc degree ($n = 30$, 46%) and were working at least 6 months in post as a FCP or Advanced Practice Physiotherapist ($n = 16$, 25%) and 16 (25%) had between 15 and 20 years working as a Physiotherapist. Regarding participation in the rounds, 64 experts

Table 1
Demographic and professional characteristics of the expert group.

Characteristics	Round 1 (n=64)	Round 2 (n=62)	Round 3 (n=64)
<i>Age (years), n (%)</i>			
21-29	12 (19)	10 (16)	12 (19)
30-44	41 (64)	41 (66)	41 (64)
45-59	10 (16)	10 (16)	10 (16)
≥ 60	1 (2)	1 (2)	1 (2)
<i>Gender, n (%)</i>			
Female	38 (59)	37 (60)	38 (59)
Male	26 (41)	25 (40)	26 (41)
Other	0 (0)	0 (0)	0 (0)
<i>Highest Qualification</i>			
PGCert	3 (5)	3 (5)	3 (5)
BSc	30 (47)	28 (44)	30 (47)
MSc	28 (44)	28 (44)	28 (44)
MA	1 (2)	1 (2)	1 (2)
Doctorate	2 (3)	2 (3)	2 (3)
<i>Months as a FCP or APP (Scotland), n (%)</i>			
0-6	16 (25)	14 (23)	16 (25)
6-12	8 (13)	8 (13)	8 (13)
12-18	10 (16)	10 (16)	10 (16)
18-24	7 (11)	7 (11)	7 (11)
30-36	11 (17)	11 (18)	11 (17)
36+	12 (19)	12 (19)	12 (19)
<i>Years of experience as a Physiotherapist, n (%)</i>			
0-5	5 (8)	5 (8)	5 (8)
5-10	16 (25)	14 (23)	16 (25)
10-15	12 (19)	12 (19)	12 (19)
15-20	16 (25)	16 (26)	16 (25)
20+	15 (23)	15 (24)	15 (23)
<i>Place of work (Primary care network location)</i>			
England	46 (72)	44 (71)	46 (72)
Scotland	12 (19)	12 (19)	12 (19)
Wales	4 (6)	4 (6)	4 (6)
N.Ireland	2 (3)	2 (3)	2 (3)
<i>Type of organization</i>			
NHS/GP Practice Direct	42 (66)	41 (66)	42 (66)
Private provider of FCP services	22 (34)	21 (34)	22 (34)

participated in the first and third round and in round 2, 62 experts participated (97% overall retention rate).

Delphi scores

Round 1. Of the initial 30 competencies (knowledge and skills) judged by the expert panel, 22 (73%) reached an a priori defined strong degree of consensus ($\geq 70\%$ of group agreement) and 8 (27%) reached a moderate degree of consensus (between 51% and 69% of group agreement). These 8 items were included for the second round and no items were excluded at the $\leq 50\%$ of agreement. None of the new competencies were suggested by $> 10\%$ of the participants and were therefore not included in the next round.

Round 2. The five-point Likert scale (higher values mean higher importance) was used, and no further competencies **were included** using the following definition of consensus; median ≥ 3.5 , third quartile (Q3) ≥ 4 , interquartile range ≤ 2 and competencies greater or equal to 70% level of agreement (definitively included). No competencies reached between 51% and 69% of agreement to be included for the next round and now new competencies were suggested. Eight competencies were excluded due to low group level of agreement.

Round 3. Establishment of consensus on contents for primary care training. Round 3 allowed experts to review Round 2 feedback for further clarification and enable them to make an individual final decision that contributed to the expert group's collective opinion on the topic. The degree of consensus in this final round was classified as strong in 20 competencies (91%) and moderate for 2 others (10%) with 4 competencies gaining maximum level of group agreement at 100%. The final competency list is documented in [Table 2](#). Two competencies at the moderate level of agreement were excluded.

Themes from comments

Free-text comments contextualized and explained individual responses, mostly on the challenges involved in providing sickness absence and fitness for work recommendations. Four themes were identified from the group response, which reflected the reasons, changes, and differences in the rating of outcomes (time constraints, depth of expertise, work-related rehabilitation and communication). The subthemes are described herein and reflect the perspectives of expert FCPs. The group suggested that **time constraints** ($n = 34$, 53%) and **depth of expertise** ($n = 32$, 50%) may be limiting factors for the expectation of providing sickness absence certification and fitness for work recommendations. An awareness of **work-related rehabilitation** was acknowledged in around 10%, and many reported that **communication** ($n = 50$, 78%) was important, but overall work-related rehabilitation may be too in depth to be considered by FCPs. The group suggested that FCPs need to collaborate and communicate within the primary care team, so that further roles and responsibilities can be conducted. They questioned what other training primary healthcare professionals receive, e.g., GPs. They questioned what organizations and stakeholders were doing to address this, e.g., Health Education England, NHS Education for Scotland, Medical Training etc. Overall, experts suggested that it is the patient's own individual expectations as to whether they return to work, i.e., it may not be the injury, condition, job role per se, more the individual assessing whether they can be accommodated with the injury, condition etc. Some experts suggested that patient's employment status would influence this, e.g., self-employment, policy related to employment, sedentary behavior, certain job demands. Two experts suggested that patients

within manual industries may require higher resourced support and ongoing follow ups. Illustrative quotations for each theme are provided in [Table 3](#) and in [supplementary Table 1](#).

Discussion

This study established current competency priorities for OH practice for UK-based FCP physiotherapists within primary care, determined by an expert FCP physiotherapist panel using an empirical approach to reach consensus. A total of 20 competencies were generated through a three-round Delphi process using UK-based FCPs in primary care. This study provides an important foundation for knowledge of these roles and OH competencies of physiotherapists in MSK first point of contact primary care. An explicit set of competencies in this new and exciting area provides a common language for FCP training, and potential to have a shared understanding of outcomes for sickness absence management and fitness for work recommendations. The results of this study may enable stakeholders to pursue competency-based curricula design and develop relevant measures to conduct work-relevant conversations in primary care.

Several themes are prominent throughout the competency list that have not been considered in the primary literature previously. The knowledge and skills-based competencies include a mix of sickness absence framework considerations and how to effectively manage a MSK presentation and work-related aspects in primary care through skills-based management, such as '**interpersonal communication skills**', '**advising that work can be part of rehab**' and '**identify psychosocial factors that influence fitness for work.**' Competencies are consistent with the current FCP educational pathway, '*A Roadmap to Practice*' [12] but a range of competencies outside of patient centered MSK care are considered, including to '**make recommendations to employers regarding individuals' fitness to work**' and '**knowledge of employer factors and their impact on work and health**'. Furthermore, the selected illustrative quotations present opinion based on current clinical practice and highlight potential solutions to the current challenges for primary care practice.

Our findings suggest that FCPs report deficiencies in the advanced knowledge and skill items presented in the final competency list and the OH topic itself outside the traditional therapeutic role of physiotherapy, and one that has been conducted by GPs in primary care settings [13]. FCPs have now assumed the role of MSK gatekeeper and advisor in primary and it is likely that FCPs will be able to certify sickness through the Statement for Fitness for Work [3]. Despite this, a national evaluation of the FCP model in primary care suggests that only 29% of employed patients surveyed reported receiving specific work advice from an FCP (with a predefined service success criterion target of

Table 2

Final competency list of learning and development needs for UK-based FCPs within primary care.

Competency	Consensus Level %(Number of Participants)		
	R1	R2	R3
Knowledge-based Competency			
The sickness absence framework within the UK. (Including policy, procedure, benefits system, statutory sick pay, legal aspects of fitness for work – statute and common law aspects, employer sickness absence policy, Equality Act 2010 etc.).	100% (64)		100%+ (64)
Knowledge of temporary disability and health-related work advice and return to work. (Including rehabilitation, re-integration into work and advice post-surgery).	100% (64)		100%+ (64)
Knowledge of the AHP Health and Work report and GP's statement of Fitness for Work 'Fit Note'/ Med 3.	91% (58)		98% (63)
Knowledge of health promotion and preventative care programmes (Behavior and lifestyle services, promoting workplace good health and wellbeing, better relationships, mental and physical health).	84% (54)		88% (56)
Using best evidence and patient preferences to influence fitness for work decisions.	81% (52)		87% (55)
Knowledge of the biopsychosocial (BSP) model and its application to work and disability. (BSP assessment and management of those who are off work, predictors of poor outcome or trigger to change outcome through management).	80% (51)		86% (54)
Knowledge of employer factors and their impact on work and health. (System or contextual factors e.g., reasonable adjustments, job demands, job content, social support at work, management support, employer legislation and/or policy related to return to work).	80% (51)		83% (52)
Knowledge of ergonomic advice. (Adaption of a technique, work process or as a prevention strategy, e.g., display screen equipment for computer tasks, ergonomic equipment for job tasks)	68% (43)	47%* (30)	
Knowledge of graded and paced occupational and vocational rehabilitation. (Graduated return to work, rehabilitation plans)	64% (41)	50%* (32)	
Select and use a work-related outcome measure or screening tool. (E.g., for those at risk of disability, absence, or work instability)	62% (40)	48%* (31)	
Knowledge of risk assessment. (MSK risk assessment, ergonomic factors and assessments related to upper limb, spine or lower limb work)	61% (39)	45%* (29)	
Ensure work is a routine and consistent focus in every consultation	59% (38)	45%* (29)	
Skill-based Competency			
Use interpersonal communication skills. (Communicating complex topics such as pain in the absence of pathology to employers or patients/employee, adaption as needed, use of advanced communication skills, empathy etc.).	100% (64)		100%+ (64)
Advise individuals on how work can be part of rehabilitation for a MSK condition. (E.g., work is an outcome, prolonged absence to be discouraged due to risk of longer term worklessness).	100% (64)		100%+ (64)
Identify psychosocial factors that influence fitness for work.	97% (62)		97% (62)
Assess a patient's fitness for work. (E.g., physical and psychosocial health, general medical review, job demands, factors influencing performance etc.).	95% (61)		95% (61)
Promote the importance of physical activity. (E.g., continuing 'good' work, MSK best practice guidance relating to staying active).	88% (59)		94% (60)
Gather, synthesize, and appraise information relating to the MSK condition(s) and work performance.	75% (48)		92% (59)
Share decision making process and guide patients to independently manage their own conditions as appropriate.	75% (48)		92% (59)
Make recommendations to employers regarding individuals' fitness to work. (AHP fitness for work report, impairment of function, reasonable adjustments, work accommodation and capability).	70% (45)		88% (56)
Ascertain the impact of persistent pain and MSK-related disability on an individual's work participation and risk of worklessness.	70% (45)		86% (54)
Identify other factors affecting an individual's ability to participate in work and their perceptions of work and health. (E.g., cognition, mental state, attitude & motivation, work demands and social determinants of health).	75% (48)		84% (53)
Review and apply evidence to promote health, support behavioral change and support individual(s) in work.	73% (47)		75% (48)

Table 2 (Continued)

Competency	Consensus Level %(Number of Participants)		
	R1	R2	R3
Encourage employers to risk assess and refer to an Occupational Health provider for specialist intervention.	70% (45)		73% (47)
Use of technology, social media, and applications. (Attract the attention and reinforce positive health behaviors, information signpost).	70% (45)		70% (45)
Use of coaching techniques. (To influence movement, graded loading, physical activity, healthy living, social and work engagement)	70% (45)		64%* (41)
Effectively manage time so that work-related advice can be provided in primary care	70% (45)		64%* (41)
Engage stakeholders to assist individual's work performance, return to, or stay in work. (Therapeutic management, rehabilitation, and non-clinical services such as Access to Work)	68% (43)	50%* (32)	
Using a range of behavioural and specialist techniques to challenge beliefs, behaviours, movement, work activities to achieve beneficial outcome. (E.g., cognitive behavioural therapy and motivational interviewing)	61% (39)	37%* (24)	
Application of thinking and reflection strategies. (E.g., Grounding and mind-mapping techniques to reduce symptoms in patients)	52% (33)	50%* (32)	

*Denotes items excluded from Delphi +Denotes full group level of agreement.

>75%) [14]. In fact, this specific criterion was the only criterion out of twelve not met in the evaluation, with less than half of patients receiving advice about work, even when they solely reported MSK-related days-off-work. The authors concluded that supporting FCPs to deliver work advice is an unmet need and that training in the use of the AHP health and Work Report is inconsistent. This is

important as studies suggest that up to 35% of MSK consultations in primary care necessitate the use of GP Fit Notes and therefore may need work focussed conversations [17]. In fact, many studies suggest that GPs are reluctant to give work-related advice and it is seen as outside of their scope, yet there is robust evidence to suggest that a lack of work-focused healthcare to address work issues within a

Table 3

Selected illustrative quotations.

Theme	Illustrative quotations
Time Constraints	<p>'I do think FCPs are best placed to issue fitness to work as, although we only have 20 min appointments, we have longer with the patient that the GP does. In addition, in an ideal world we would all be using behavior change techniques, exploring patient beliefs, however in a very busy time constrained practice it is not always possible.'</p> <p>'All great points to include in this questionnaire but I do think we only get 10–20 min with patients and therefore needs to be concise. Making sure we get the accurate data off the patient to provide a plan for their workplace and also have the resources to refer the patient onto other services like psychosocial CBT and wellness.'</p>
Depth of expertise	<p>'Having worked in Occ. Health for 13 years it is really their role to facilitate the person back to work. In the absence of an active OH then agree that it is the role of PC professional to facilitate and guide pts back to work asap. As we know work is good for our health but only if it is meaningful and rewarding which unfortunately is not the true for all. Perhaps some information on this topic would be valuable also.'</p> <p>'There may be more info needed on a stepped care based approach, especially for those with a disability? Or are we just targeting those mild presentations and aiming to keep people in work. What are the guiding principles for returning to work, staying in or leaving work - it seems to be employer factors, e.g., substandard line management or no support etc.'</p>
Work-related rehabilitation	<p>'If work is an important topic to the patient and time is limited, further appts could be made to discuss work-related advice.'</p> <p>'Sickness Absence Certification and Fitness for Work Recommendations should be universally accepted across the health professions. The competencies, training and standards for first contact physiotherapists (FCP's) should be the same as those for nurses and doctors. Even a work-related conversation could be conducive for work-related rehab.'</p>
Communication	<p>'A key part of this advice is the embedding of the FCP post within a primary care team where there is evidence of good relationships and communication between professional colleagues. With the way that current FCP delivery is being arranged I am not sure that this is going to work.'</p> <p>'I can readily confirm that someone who is using crutches or fears bending or lifting or has an acute injury is assessed already for fitness to work. The individual's own motivations are important to gauge my advice. Assuming those of us doing this work have a good, broad experience before moving into this role, a lot of this is 'soft' knowledge and confidence, including honest and clear communication.'</p>

clinical encounter is an obstacle to work participation [17]. Therefore, with adequate training and skill development in the national FCP consensus competencies identified here, there is great potential for clinicians to take on the roles and responsibilities traditionally seen as outside their breadth of scope, such as fitness for work and sickness absence certification. Thus far, the only other study to consider a summary of skills, knowledge and attributes needed to work as a FCP in MSK healthcare did not identify any qualitative work-related themes [18]. This is despite the CSP's FCP project team and FCP evaluation steering group reporting that supporting patients to remain in and return to work is a key success criterion. Occupational health specific topics are also supported within the core capabilities document [19], a roadmap to practice capabilities [16] and in the wider UK Government and employer context of empowering sick patients to be supported in work. Lastly, there is a paucity of evidence on the complexity of FCP roles in general, the experiences of FCPs and whether they feel ready and prepared to offer higher breadth of practice information and complex work-related decision making. The free text illustrative quotations suggests that they feel they can take on this role with further support through training and development.

Several government policies have embedded work as a health outcome by encouraging healthcare professionals to provide work-focused health conversations and tackle obstacles to work participation [28]. This is important as it has been estimated that MSK conditions are the greatest contributor of lost productivity life years in the workplace [29] and healthcare providers may have a key role in preventing unnecessary work loss. Despite this, evidence suggests that work and work-focused conversations are not incorporated into clinical encounters and healthcare professionals **experience** many barriers to adopting a work-focused approach [30]. One of the key barriers is a lack of specific knowledge in this work and health sphere and how to address work-related factors in those with MSK conditions [31]. If this continues to be the case, it will continue to create a barrier to work participation in those with MSK conditions at risk.

This study has complied with published reporting checklists on Delphi studies, including free text comments, using iterative rounds with feedback and ensuring anonymity between participants to promote uninhibited responses, and establishing a priori definition of consensus to reduce bias. There is no universally accepted definition of consensus in Delphi studies; we used $\geq 70\%$ to represent a substantial and strong level of agreement. Steps were taken to maximise the breadth of expertise and relevance of the findings. The electronic method was used to facilitate distribution to geographically dispersed professionals. However, due to the new policy and new model of practice exclusively within UK primary healthcare, participants were limited to UK FCPs. The definition of expert is controversial [32], but the breadth of experience within our participants may indicate that the

participants had the expertise to address the Delphi aim and objectives [33]. Due to the time constraints, pragmatic considerations and FCP topic, only FCPs were recruited, without involvement of others involved in the process, for example, GPs, patients, other AHPs and stakeholder advocates. This is likely to limit the generalisability of the results to the FCP group solely.

Whilst the findings have furthered knowledge and provided a consensus study within a geographically dispersed expert group, there are limitations to the study. The study was designed with a mix of non-peer-reviewed and peer-reviewed research, due to the emergent nature of the topic. Furthermore, there were no definitions given to topics such as 'fitness for work' or 'sickness absence' etc., and although this was deliberate, with the intended aim of experts giving their individual opinions and contributing to the overall group consensus, it could have resulted in uncertainty for them as this was a new topic of debate for most participants. There is some evidence to suggest in a homogenous group that more than 30 participants can result in no new ideas generated, but due to the emergent theme it was deemed acceptable for higher numbers ($n = 64$) to contribute to the overall group decision-making process. The study was conducted early in the COVID-19 pandemic response and experts had to be flexible to meet service demands, the increase in clinical pressures and pressures in participating during a national lockdown may have influenced some answers. The response rate was extremely high, likely due to the digital pivot during the national lockdown response.

Implications

The work and health competencies for FCP education generated in this study may be utilised in several ways. Firstly, the set provides a common work and health theme in the field of physiotherapy training, for educators and faculty to have a shared understanding of outcomes for professional practice FCP standards and assessment. The results of this study may inform existing under- and post-graduate curricula or the potential for targeted training related to FCP education on FFW and SA certification. This is likely to be difficult, considering the significant breadth of practice needed to be evidenced in the HEE's credentialling process. However, appealing to stakeholders to investigate the feasibility of integrating specific FCP education training into existing courses or through stand-alone M-level modules is warranted.

Translating competencies into practice are a key challenge in competency-based teaching and assessment. Evaluating the use of these health and work competencies and, developing performance attributes or more specific enabling competencies that facilitate FFW and SA certification assessment from these competencies are required. The importance of training and development was suggested in a review [28], stressing that work-focussed care must form part of generic

competencies in undergraduate education, including beliefs and attitudes to work and health and confidence and signposting for work issues. Of the research available throughout the world, a pilot study among four physiotherapy education programmes (Spain, Brazil, Australia, and Kenya) focussed on how the programmes include work and work-related conditions in their curricula [34]. It suggested that programme content was divergent regarding the extent to which work injury management, return to work and prevention strategies are addressed, indicating ways to improve [34].

It could be argued that simple, inexpensive approaches that comprise open questions on patient's work can be beneficial and many of the knowledge and skills listed above may already be used in clinical practice, through the provision of advice and education on MSK recovery. Research highlights that when additional training for healthcare professionals is provided on health and work, positive work-outcomes result that can enable better recovery and management of new and existing MSK conditions [2,35-37].

This competency list provides a basis for future research which may include exploring student, new and post-graduate self-efficacy and identify in this area and developing and testing new and specific training approaches. Overcoming a major weakness, by replicating the study with other panels, such as GPs, AHPs, educational experts and patients may provide further insight into different competencies across other settings and shared competencies across professions. Additionally, this study can provide a reference point to contrast future generated competencies.

Conclusion

Opportunities exist for further exploration of the drivers and barriers for implementing work-related conversations, sickness absence management and fitness for work strategies within primary care for FCPs. If FCPs can become competent in this area, it will ensure light coverage for now (not comprehensive Occupational Health services) of work-related advice for the vast majority of MSK conditions in the UK, to potentially reduce the burden of work-related ill health. A more focused intervention could be considered with more specialised training. If FCPs are trained in OH aspects and are willing to commit to work-related conversations in primary care, this may overcome the barriers identified from other clinicians that are hesitant in providing sickness absence certification and fitness for work advice. Providing patient-centred and shared-decision care to people with MSK conditions is high on the agenda of many stakeholders, including work as a health outcome. Our competency list considers the knowledge and skills competencies needed to conduct FFW and SA

certification within primary care based on a FCP 'expert' panel.

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Appendix A. Supporting information

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