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Sarigiovannis, P; Foster, Nadine E; Jowett, Sue; Saunders, Benjamin

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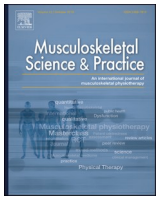

Original article

Delegation of workload from musculoskeletal physiotherapists to physiotherapy assistants/support workers: A UK online survey

P. Sarigiovannis [a,b,*], N.E. Foster [c,a], S. Jowett [d], B. Saunders [a]

[a] Primary Care Centre Versus Arthritis, School of Medicine, Keele University, Staffordshire, ST5 5BG, United Kingdom
[b] Midlands Partnership NHS Foundation Trust, Newcastle Under Lyme, Staffordshire, ST5 1QG, United Kingdom
[c] STARS Education and Research Alliance, Surgical Treatment and Rehabilitation Service (STARS), The University of Queensland and Metro North Health, Herston, Brisbane, Australia
[d] Health Economics Unit, Institute of Applied Health Research, Public Health Building, University of Birmingham, Edgbaston, Birmingham, B15 2TT, United Kingdom

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ABSTRACT

Purpose: There are approximately 9000 physiotherapy assistants/support workers in the UK. Many of them work in NHS physiotherapy outpatient services treating patients with musculoskeletal conditions, but their role(s) are relatively undefined and as such there is considerable variation in the duties and tasks they undertake. This study aimed to explore current practice of UK musculoskeletal physiotherapists in relation to delegation to physiotherapy assistants/support workers.

Methods: An online cross-sectional descriptive survey was designed and collected data on delegation practice and training in delegation. The survey was piloted with 10 physiotherapists. The final questionnaire was distributed via the interactive Chartered Society of Physiotherapy's website and the authors' professional networks via Twitter. Responses were collected over a five-week-period from October to November 2020.

Results: Of 302 survey responses, 232 were analysed (46 incomplete, 24 ineligible). The majority of respondents (66.3%, 154/232) had worked as physiotherapists for over 10 years. Most respondents indicated they had neither formal training (84%, 195/232) nor informal training (60.3%, 140/232) regarding how to delegate tasks. The clinical tasks most commonly delegated by physiotherapists were supervision of exercises (81.0%, 188/232) and walking aid provision (78.5%, 182/232) whereas the least delegated clinical task was the application of electrotherapy (19.8%, 46/232).

Conclusion: These survey results provide evidence for the need to improve training in delegation for both physiotherapists and physiotherapy assistants, and to ensure clearer delegation processes to facilitate good delegation practice in the musculoskeletal setting.

1. Introduction

Musculoskeletal (MSK) conditions such as low back pain and osteoarthritis affect one in four people globally, are increasingly common with age, are the leading cause of pain and disability in the UK and the second leading cause of sickness absence from work (Versus Arthritis, 2019). People with musculoskeletal conditions are the largest patient population treated by physiotherapists (CSP, 2013). Patients are assessed by physiotherapists and if they need follow-up treatments, they are usually treated by either a physiotherapist or a physiotherapy support worker. Physiotherapy support workers are non-registered staff who work alongside physiotherapists to provide delegated interventions and responsibilities. Physiotherapy support workers may also be known as physiotherapy assistants (PAs), rehabilitation assistants, technical instructors or physiotherapy technicians. There are approximately 9000 PAs/support workers in the UK, forming 15% of the total physiotherapy workforce and a large proportion of them work in the National Health Service (NHS). In many services they take responsibility, under professional supervision, for certain types of clinical work traditionally undertaken by qualified physiotherapists, such as leading exercise classes and treating individual patients. However, their role(s) are relatively undefined and as such, there is considerable variation in their duties and tasks (Sarigiovannis and Cropper, 2018). National guidance from the Chartered Society of Physiotherapy (CSP) about delegation of tasks to

* Corresponding author. Primary Care Centre Versus Arthritis, School of Primary, Community and Social Care, Keele University, Staffordshire, ST5 5BG, United Kingdom.
E-mail address: p.sarigiovannis1@keele.ac.uk (P. Sarigiovannis).

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support workers largely leave decision-making to the individual physiotherapist, their judgement of the task and their assessment of the competence of the support worker (CSP, 2017). As a result, in some physiotherapy services, PAs/support workers have a predominantly clinical role whereas in others they fulfil primarily an administrative role such as inputting data and booking appointments. This latter situation leads to PAs/support workers not being able to utilise their clinical skills, experiencing job dissatisfaction, as well as to unjustified variation in care and clinical services (Sarigiovannis and Cropper, 2018).

Results from a recent systematic review which explored the clinical and cost-effectiveness and perceptions of delegation by Allied Health Professionals to Allied Health Assistants internationally (Sarigiovannis et al., 2020), highlighted that delegation is not standardised within physiotherapy and that there are clear knowledge gaps regarding delegation by physiotherapists in current practice. These relate to the clinical and cost-effectiveness of delegation as well as patients' preferences, experiences of and attitudes about delegation. Nevertheless, the majority of the studies included in the systematic review were published over 15 years ago, which poses questions about their relevance to current practice, especially when considering some of the recent changes in healthcare delivery affecting workforce planning such as the use of virtual consultations/telehealth, or the introduction in the UK of first contact (physiotherapy) practitioners[1] (Stynes et al., 2021). Gaining a broader understanding of current practice in relation to delegation in musculoskeletal physiotherapy is an important first step prior to consideration of the potential need for future guidelines and frameworks to optimise the use of physiotherapy assistants in clinical practice and reduce variation in practice. This research study aimed to explore current practice of UK musculoskeletal physiotherapists in relation to delegation to physiotherapy assistants/support workers.

2. Methods

An online cross-sectional descriptive questionnaire survey was developed on the LimeSurvey platform and distributed via the interactive Chartered Society of Physiotherapy (CSP[2]) website and the authors' professional networks via Twitter. Responses were collected over a five week period (October to November 2020). Ethical approval was granted by Keele University's Faculty of Medicine and Health Sciences Research Ethics Committee (MH-200142).

2.1. Survey development and validity testing

The survey tool was designed by the authors and pre-piloted with 10 physiotherapists who worked in NHS musculoskeletal physiotherapy services. The initial version was amended based on the feedback received and two clinical vignettes were added depicting different clinical scenarios: a patient with chronic knee pain (Fig. 1) and a patient with acute low back pain (Fig. 2). Participants were asked about the decisions they would make in relation to delegating clinical tasks to PAs/support workers for each case. The survey was then piloted again by the same 10 physiotherapists who completed the initial pilot. Clinicians completed the amended survey twice; four days apart and fed back to the lead author about time to complete, flow of the survey and any edits they would like to see. The suggestions from this process fed into the development of the final survey tool which was agreed upon by all authors.

The final survey consisted of 47 questions; however, respondents were not necessarily required to answer all questions, as some were dependent on the response to a previous question. The survey was divided into seven sections: preliminary questions, physiotherapists' employment and qualifications, information about the team/service, delegation practice and the two clinical vignettes with questions about the approach to delegation for each patient case. The final section of the survey was an open-ended question which invited participants to include any additional comments as free text.

2.2. Participant eligibility criteria

The survey was open to Health and Care Professions Council (HCPC[3]) registered physiotherapists currently practising in the UK treating patients presenting with musculoskeletal conditions. Respondents were excluded if they did not confirm HCPC registration and/or whether they were treating patients with musculoskeletal conditions.

2.3. Data analysis

Questionnaire data were downloaded to Excel spreadsheets from the LimeSurvey platform and reported as frequencies and percentages. Data from the final section (additional comments) were analysed using a thematic analysis approach which included systematic data coding, generating initial themes from coded and collated data, and refining themes (Braun and Clarke, 2020).

3. Results

3.1. Study response

A total of 302 physiotherapists responded to the survey. Forty-six questionnaires were incomplete and were excluded since respondents either answered only the preliminary questions or failed to complete the questions about their employment and qualifications and they did not answer any questions related to their team and/or delegation. From the remaining fully completed questionnaires (n = 256) 24 participants failed to meet the eligibility criteria as they either did not currently practice in the UK (n = 13) and/or they did not treat patients with MSK conditions (n = 12). Therefore, 232 surveys (76.8%) were included in the analysis.

3.2. Posts, qualifications, experience and banding

Most respondents (202/232; 87.1%) worked in the NHS in Band 6 (82/301; 35.3%) and Band 7 roles[4] (82/301; 35.3%). The majority (204/232, 87.9%) worked in a clinical role. 66.3% (154/232) reported having worked as a physiotherapist for over 10 years. More than half of the respondents (59%, 137/232) stated that an undergraduate degree was their highest qualification. Full characteristics of the respondents are listed in Table 1.

3.3. About the team/service

In total 73.6% of physiotherapists reported that they worked in teams that employed 11 physiotherapists or more. 93.1% (n = 216)

[1] First Contact Practitioners (FCPs) work in primary care as the first point of contact in the assessment and management of patients presenting with a wide range of common conditions. The vast majority of musculoskeletal FCPs are physiotherapists with enhanced skills.

[2] The Chartered Society of Physiotherapy (CSP) is the professional, educational and trade union body for the UK's chartered physiotherapists, physiotherapy students and support workers.

[3] HCPC are a regulator of health and care professions in the UK. Physiotherapists need to have HCPC registration to work in the NHS.

[4] Physiotherapists working in the NHS are employed under the Agenda for Change (AfC) grading and pay system where higher bandings are associated with higher qualifications and pay. Newly qualified physiotherapists work in Band 5 positions; while physiotherapists who have completed their junior rotations are in band 6 positions. Experienced physiotherapists and those working with extended scope, primarily occupy Band 7 or Band 8 roles.

Presented below is a clinical scenario of a patient with knee pain that you see for the first time. The questions that follow relate to the care you would give this particular patient.

Mrs K is a 60 year-old woman who has been referred by her GP with a two-year history of right knee pain, which was of insidious onset and has gradually worsened over time. She has just retired, she was a teacher, and she would like to take advantage of her time and go out for walks with her husband and daughters. She usually enjoys walking with her husband, but this has become difficult over the last 6 months due to her knee problem. Her general health is good, despite being overweight and suffering from mild hypertension. Today she rates the intensity of her knee pain as 5 out of 10. Descending stairs, bending and rising from sitting all aggravate her knee pain. She has some difficulty when walking for a mile or longer, and has started to use a stick when going for longer walks. Her knee is stiff first thing in the morning and after staying in one position for too long. She finds some relief from an anti-inflammatory gel, and takes up to three 200mg ibuprofen tablets per day. On examination the right knee has a mild effusion and a valgus alignment. Flexion is limited and the quadriceps are weak. The joint line is tender on palpation. No other examination findings are remarkable.

Fig. 1. Clinical Vignette 1 - knee pain.

Presented below is a clinical scenario of a patient with Low Back Pain (LBP) that you see for the first time. The questions that follow relate to the care you would give this particular patient.

Mr B is 45-year-old man who has been referred by his General Practitioner (GP) with a 4-week-history of LBP. He suffered rapid onset severe low back pain with radiation to the right buttock seven days ago while lifting a pack of cement. He is a bricklayer and has been unable to work since, but he is keen to return as soon as possible. He has a history of recurrent back pain but has been pain-free for the last 2 years. His general health is good and he takes no regular medication, but he has started taking ibuprofen since the back pain started (average 6 per day). He is anxious that he will have to take more time off work. There has been some improvement the last week, but the patient has had to lie down for most of the first 2 weeks due to the severity of the pain. He reports that he is better when he is gently moving and worse when still, when sitting or lying for longer than 30 minutes. Range of movement testing shows moderate loss of lumbar flexion and extension. Neurological examination is normal and all red flags are cleared. He wants to return to all activities, particularly to return to work, but needs guidance as his job involves bending and lifting.

Fig. 2. Clinical Vignette 2 – low back pain.

stated that their teams employed administrative staff and 90.9% (n = 211) that their teams employed physiotherapy assistants/support workers. Most respondents highlighted that the physiotherapy assistants/support workers in their teams were trained to undertake clinical tasks (197, 93.4%). Of those physiotherapists working in teams that employ physiotherapy assistants/support workers, 184 stated that they delegate clinical tasks to them (87.2%).

3.4. Physiotherapists' delegation guidance and training

When asked whether they had a Trust Policy, Clinical Guideline, Standard Operating Procedure, or any other guidance to guide delegation to physiotherapy assistants/support workers in their Trust/team/service, 14.7% (31/211) indicated that they had a Trust Policy, 33.6% (71/211) a Clinical Guideline, 27.9% (59/211) a standard operating procedure and 6.6% (14/211) stated that they had other guidance. Other guidance reported included competencies and job descriptions, pathways, training records and verbal instructions. Only 17.7% (41/

Table 1
Respondents' roles, qualifications, experience and banding.

Location of post	Number of respondents/ (232)	Percentage of respondents
NHS England	180	77.6%
NHS Scotland	15	6.5%
NHS Wales	7	3.0%
Health and Social Care (NI)	4	1.7%
Private hospital	7	3.0%
Private practice	12	5.2%
Other	7	3.0%
Type of role	**N/232**	**%**
Clinical	204	87.9%
Managerial	11	4.7%
Clinical academic	7	3.0%
Other	10	4.3%[a]
Highest qualification	**N/232**	**%**
Graduate Diploma	18	7.8%
BSc	137	59.0%
MSc	71	30.6%
MPhil	1	0.4%
PhD	5	2.2%
Years worked as physiotherapist	**N/232**	**%**
0–1 years	9	3.9%
2–5 years	28	12.1%
6–10 years	41	17.7%
10–19 years	75	32.3%
20 years or more	79	34.0%
Clinical setting	**N/232**	**%**
Primary care	124	53.4%
Secondary care	82	35.3%
Private practice	16	6.9%
Other	10	4.3%[a]
NHS/AfC banding	**N/232**	**%**
Band 5	12	5.2%
Band 6	82	35.3%
Band 7	82	35.3%
Band 8A	34	14.7%
Band 8B	7	3.0%
Band 8C	2	0.9%
Not applicable	13	5.6%

NHS: National Health Service (UK).
AfC: Agenda for Change (pay structure, NHS UK).
[a] Only one decimal point is displayed in the figures and due to rounding, percentages do not add up to 100%.

232) of respondents stated that they were aware of a national/professional guidance in relation to delegating tasks to physiotherapy assistants/support workers. Most of them (75.6%, 31/41) named the guidance from the Chartered Society of Physiotherapy (Accountability and delegation to support workers). In relation to training on how to delegate tasks to physiotherapy assistants/support workers, only a small minority of respondents indicated that they had either formal training (9.9%,23/232) and/or informal training (30.2%, 84/232) about how to delegate tasks to physiotherapy assistants. Finally, 8.6% of respondents (20/232) indicated that they had another form of informal training which included discussions with colleagues (35%, 7/20), supervision (10%, 2/20), information passed on from colleagues (15%, 3/20) or previous experience working as a physiotherapy assistant (10%, 2/20).

3.5. Delegation practice (administrative tasks)

Responding to telephone enquiries was the administrative task most likely to be delegated by physiotherapists (69.3%, 161/232), followed by booking and sending appointments (61.7%, 143/232). Full details of the administrative tasks that physiotherapists undertake and delegate are included in Table 2.

3.6. Delegation practice (clinical tasks)

The clinical tasks most commonly delegated by physiotherapists were supervision of exercises (81.0%, 188/232), and walking aid provision (78.5%, 182/232), preparation and cleaning of clinical equipment (77.2%, 179/232) and teaching of exercises (70.7%, 164/232). Most respondents stated that they do not use electrotherapy (62.9%,146/232), while only 7.0% (18/232) indicated that they used it daily and 4.3% (10/232) that they would delegate this daily. A detailed list of the clinical tasks that physiotherapists undertake and delegate are shown in Table 3.

3.7. Clinical vignette 1 (knee pain)

The vast majority of respondents reported that their treatment plan would include exercise therapy (99.6%, 231/232) and advice (95.3%, 221/232). Other treatment modalities included manual therapy (14.6%, 34/232), acupuncture (8.2%, 19/232) and electrotherapy (7.8%, 18/232). Most of the respondents indicated that they would delegate their treatment plan or part of it to a physiotherapy assistant/support worker (76.7%, 178/232). Most of the clinicians who would delegate their plan stated that they would do so because it was a 'straightforward' case (82.0% (146/178), while 47.2% (84/178) reported that they would delegate because the physiotherapy assistants/support workers in their team were trained and competent in delivering this treatment plan. Table 4 lists the clinicians' reasons for delegating or not delegating their treatment plan.

3.8. Clinical vignette 2 (low back pain)

The vast majority of respondents indicated that their treatment plan

Table 2
Administrative tasks undertaken and delegated by physiotherapists.[a].

	Do not undertake	Undertake daily	Do not delegate	Occasionally delegate	Delegate weekly	Delegate daily <5 patients	Delegate daily >5 patients	Total/ 232
Data inputting	50	72	**100**	65	28	12	27	232
	21.5%	31.1%	**43.1%**	28.0%	12.7%	5.2%	11.6%	%
Recording of referrals	120	33	**135**	39	18	6	34	232
	51.7%	14.2%	**58.2%**	16.8%	7.8%	2.6%	14.6%	%
Preparation of patient notes	61	74	**120**	50	20	11	31	232
	26.3%	31.9%	**51.7%**	21.6%	8.6%	4.7%	13.4%	%
Booking/sending appointments	56	86	**89**	73	27	15	28	232
	24.1%	37.1%	**38.4%**	31.5%	11.6%	6.5%	12.1%	%
Telephone enquiries	16	70	71	**95**	27	14	25	232
	6.9%	30.2%	30.6%	**40.9%**	11.6%	6.0%	10.8%	%
Typing letters/patient reports	32	67	**139**	60	10	13	10	232
	8.9%	18.7%	**59.9%**	25.9%	4.3%	5.6%	4.3%	%

[a] Checkboxes were used and the total number of answer choices selected for the question were greater than the number of respondents that answered the question. Therefore, the total response percentages exceed 100%. The most common response per delegation category is shown in bold.

Table 3
Clinical task(s) undertaken and delegated by physiotherapists.[a].

	Do not Undertake	Undertake daily	Do not delegate	Occasionally delegate	Delegate weekly	Delegate daily <5 patients	Delegate daily >5 patients	Total/ 232
Falls/mobility assessment	53	35	**115**	**73**	28	14	2	232
	22.8%	15.0%	**49.6%**	**31.5%**	12.1%	6.0%	0.9%	%
Walking aid provision	36	25	50	**99**	49	25	9	232
	15.5%	10.8%	21.5%	**42.7%**	21.1%	10.8%	3.9%	%
Teaching of exercises	1	196	**68**	65	50	30	18.2%	232
	0.4%	84.4%	**29.3%**	28.0%	21.5%	12.9%		%
Supervision of exercises	19	152	44	50	**68**	39	31	232
	8.2%	65.5%	19.0%	21.5%	**29.3%**	16.8%	13.4%	%
Application of electrotherapy	146	18	**186**	29	7	8	2	232
	62.9%	7.7%	**80.2%**	12.5%	3.0%	3.4%	0.9%	%
Preparation/cleaning of clinical equipment	28	133	53	56	**60**	35	28	232
	12.1%	57.3%	22.8%	24.1%	**25.9%**	15.1%	12.1%	%
Patient education	3	207	**119**	53	30	19	11	232
	1.3%	89.2%	**51.3%**	22.8%	12.9%	8.2%	4.7%	%
Provision of appliances	37	23	**105**	86	27	10	4	232
	15.9%	9.9%	**45.3%**	37.1%	11.6%	4.3%	1.7%	%

[a] Checkboxes were used and the total number of answer choices selected for the question were greater than the number of respondents that answered the question. Therefore, the total response percentages exceed 100%. The most common response per delegation category is shown in bold.

Table 4
Reasons for delegating/not delegating the treatment plan (vignette 1).

Reasons for delegating the treatment plan or part of it to a physiotherapy assistant/support worker (vignette 1)	Number of respondents (/178)	Percentage of respondents
Straight forward case, I have a clear treatment plan in place that could be carried out by a physiotherapy assistant/support worker	146	82.0%
Physiotherapy assistants/support workers in our team are trained and competent in delivering this treatment plan	84	47.2%
My physiotherapy assistant/support worker is very experienced and able to do it	78	43.8%
Other	18	10.1%
My clinical diary is fully booked so I do not have any other choice	12	6.7%
Reasons for not delegating the treatment plan or part of it to a physiotherapy assistant/support worker (vignette 1)	**Number of respondents (/45)**	**Percentage of respondents**
I have the time in my diary to treat this patient so there is no need to delegate	11	24.4%
This patient does not need further treatment sessions	9	20.0%
Physiotherapy assistants/support workers in our team are neither trained nor competent in delivering this treatment plan	8	17.8%
I want to treat this patient to ensure that she fully improves	5	11.1%
My physiotherapy assistant/support worker has no experience in treating knees	1	2.2%
Complex case, needs to be treated by a physiotherapist	1	2.2%

would include exercise therapy (98.3%, 228/232), and advice (97.0%, 225/232). Other reported treatment modalities included manual therapy (31.9%, 74/232), acupuncture (8.2%, 19/232) and electrotherapy (5.6%,13/232). Only 18.9% (44/232) of respondents said that they would delegate their treatment plan or part of it to a physiotherapy assistant/support worker whereas 74.6% (173/232) reported that they would not and 6.5% (15/232) were unsure. Of those who would delegate their plan, 52% (23/44) stated that the reason was that it was a 'straightforward' case and 68.2% (30/44) that their physiotherapy assistant/health care support workers were trained and competent in delivering the treatment plan. Table 5 lists the clinicians' reasons for delegating or not delegating their treatment plan. Fig. 3 shows the clinicians' responses about whether they would delegate part of their treatment for both clinical vignettes.

3.9. Additional comments

The final section of the survey was completed by 38 participants

Table 5
Reasons for delegating/not delegating the treatment plan (vignette 2).

Reasons for delegating the treatment plan or part of it to a physiotherapy assistant/support worker (vignette 2)	Number of respondents (/44)	Percentage of respondents
Physiotherapy assistants/support workers in our team are trained and competent in delivering this treatment plan	30	68.2%
Straight forward case, I have a clear treatment plan in place that could be carried out by a physiotherapy assistant/support worker	23	52.3%
My physiotherapy assistant/support worker is very experienced and able to do it	22	50.0%
My clinical diary is fully booked so I do not have any other choice	1	2.3%
Reasons for not delegating the treatment plan or part of it to a physiotherapy assistant/support worker (vignette 2)	**Number of respondents (/173)**	**Percentage of respondents**
Complex case, needs to be treated by a physiotherapist	72	41.6%
Physiotherapy assistants/support workers in our team are neither trained nor competent in delivering this treatment plan	56	32.4%
My physiotherapy assistant/support worker physiotherapy has no experience in treating patients presenting with low back pain symptoms	49	28.3%
I want to treat this patient to ensure that she fully improves	46	26.6%
I have the time in my diary to treat this patient so there is no need to delegate	14	8.1%
This patient does not need further treatment sessions	4	2.3%

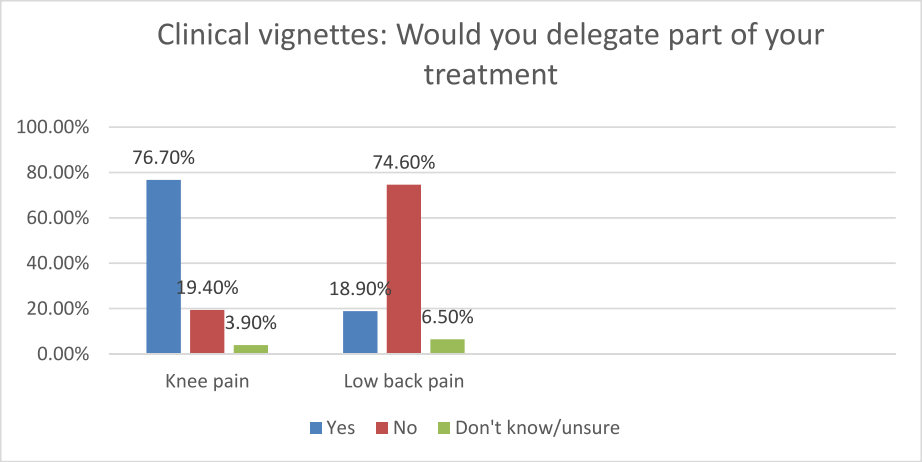

Fig. 3. Clinical vignettes and reported delegation of treatment.

(16.4%). Six main themes were identified: facilitators for delegation, barriers to delegation, support workers' skills and tasks, Covid-19, positive comments and negative comments. The six themes, along with the codes included within each theme, are listed in table 6 (appendix 1).

Appropriate training for support workers was the facilitator of delegation mentioned most frequently, followed by support workers' competence:

> "Training for the support workers is essential to ensure their confidence, competence and that they are happy to refer back"

> "Our assistants are trained at different levels to undertake tasks that they feel comfortable with but also helps them feel valued and helps them achieve personal goals with competence."

> "Our support workers are only allowed to see what they have completed competencies in."

Another facilitator for delegation was a clear delegation procedure which includes good communication between the physiotherapist and the support worker, as well as guidance in identifying the patients that need to be re-assessed by the physiotherapist:

> "Most important factor to have with assistant workforce is trust of the pathways they are following so you know they will highlight when they're not comfortable with treating a patient."

Barriers to delegation included the lack of standardised competence and working in multiple clinical sites:

> "There is a wide spectrum of competence within the physiotherapy assistants' workforce - some are able to manage patients well and competently and some are not."

> "We work across 30 sites and have only 1 support worker. This therefore impacts on his duties."

Comments in relation to support workers' skills and the tasks they undertake varied:

> "I use assistants to assist with exercises where patients need extra supervision."

> "I personally mostly use assistant staff for admin roles."

There were multiple comments about Covid-19 and more specifically how the pandemic affected physiotherapists' clinical practice:

> "Due to Covid-19 assistant time is limited - and used mainly for post op pathways."

> "Since Covid we do not have any assistants and so my answers relate to pre Covid situation."

Negative comments highlighted the potential impact of delegation on the profession:

> "This (delegation of clinical tasks) happened in nursing some years ago to some benefit but this ends up [with the] devaluation of our services and profession."

Overall, there were more positive comments than negative regarding the delegation of clinical tasks to support workers:

> "(Physiotherapy) assistants have a very important role to play"

> "All (physiotherapy) MSK departments should have a physiotherapy assistant"

> "I have previously found (physiotherapy) assistants a real asset to the teams I have worked in."

4. Discussion

4.1. Main survey findings

This paper reports the findings of a cross-sectional survey of UK physiotherapy delegation practice in the musculoskeletal setting. The vast majority of respondents working in teams that employ physiotherapy support workers, stated that they delegate clinical tasks to them. Supervision of exercises was the clinical task most commonly delegated by physiotherapists while application of electrotherapy was the least commonly delegated clinical task. Most respondents indicated they had neither formal training nor informal training about how to delegate tasks. Appropriate training for support workers and competence were highlighted as facilitators of delegation as well as having a clear delegation process and/or guidance.

4.2. Comparison with previous research literature

Older studies on physiotherapy delegation in the musculoskeletal setting reported that the level of complexity of a procedure influenced delegation in physiotherapy (Hart et al., 1990; Lee, 1998). Specifically, physiotherapists were found to be more likely to delegate the application of passive modalities such as electrotherapy to physiotherapy assistants (Hart et al., 1990). However, declining trends have been reported in relation to the availability and usage of electrotherapy modalities (Shah and Farrow, 2012; Greco et al., 2018); therefore, findings from older studies may have only limited relevance for delegation in

current physiotherapy practice. The latter is supported by the findings of this survey as most of the participants indicated that they either do not use electrotherapy or they use it infrequently. Nevertheless, the results of this survey confirmed that physiotherapists were more likely to delegate what clinicians perceive as less complex cases and/or clinical tasks, especially when they had a clear treatment plan in place that could be carried out by a physiotherapy assistant/health care support worker as well as when physiotherapy assistants/care support workers in their team were trained and competent in delivering a specific treatment plan.

A number of barriers to delegation across Allied Health Professions, including physiotherapy, have been reported elsewhere (Lizarondo et al., 2010; Munn et al., 2013; Sarigiovannis et al., 2020). These include lack of clarity around delegation such as what tasks should be delegated and who is accountable for the delegated tasks; as well as clinicians not being trained for the tasks of, firstly, delegating work to assistants, and secondly, supervising them to complete the delegated tasks (Sarigiovannis et al., 2020). Most of the respondents in this survey highlighted that they did not have any formal or informal training on how to delegate, nor did they have a clear delegation process in place in their clinical setting. Delegation is a complex process which seems to be more acceptable within a framework that adequately supports the process, backed by appropriate policy, skills, training and adequately resourced supervisory arrangements (Huglin et al., 2021; Shore et al., 2021). Whilst there may be an expectation that physiotherapists, once qualified, are able to supervise and give direction to physiotherapy assistants, training in supervision and delegation skills is often not included in undergraduate training, or when it is included, it is insufficient (Ellis and Connell, 2001; Plack et al., 2006). These deficiencies in delegation and supervision skills are not restricted to newer graduates (Brown et al., 2020).

The survey was conducted between October and November 2020 during the Covid-19 pandemic. Respondents highlighted that physiotherapists' clinical practice had changed due to Covid-19, which affected their practice of delegation as face-to-face appointments were discontinued. However, participating clinicians emphasised that their responses were based on their clinical practice before Covid-19. The fast spread of Covid-19, and the fact that healthcare facilities could be sources of contagion, has placed an added level of complexity and concern for face-to-face health care and has focused attention on new models of care that avoid face-to-face contact between clinician and patient (Greenhalgh et al., 2020; Malliaras et al., 2021). Video consultations have been widely adopted in physiotherapy to maintain continuity of care and ensure access to treatment. Further research is needed to investigate the impact of such changes in physiotherapists' delegation practice.

4.3. Strengths and limitations

To the best of our knowledge this is the first survey to explore delegation practice by physiotherapists working in the musculoskeletal clinical setting in the UK in the last 15 years. Therefore, the survey gives important insight into contemporary physiotherapy practice.

This survey was limited to UK-based physiotherapists who were recruited via the appropriate professional networks within the Chartered Society of Physiotherapy and Twitter. Although the use of Twitter enhanced recruitment, it may have also contributed to the large number of incomplete surveys (15%) since the tweets about the survey were shared widely and were visible to individuals who perhaps had no professional interest in completing the questionnaire but were just curious to find out more about it. On the other hand, it is possible that physiotherapists with an interest in delegation may have been more likely to respond to the survey, thus some non-response bias may be present. It was not feasible to understand potential explanations for, or the extent of, the non-response bias as there were no data available about non-responders. Therefore, we acknowledge that these results may not be generalisable to all UK physiotherapists. However, our findings provide important insights about delegation in the MSK setting which may be of relevance to physiotherapists practising in the MSK setting both in the UK and internationally.

Finally, we used clinical vignettes to elicit information about clinicians' practice and a more accurate assessment of clinical behaviour in relation to delegation. It has been shown that clinical vignettes are a valid measure of what clinicians do during actual clinical encounters with patients (Peabody et al., 2000, 2004). However, as vignettes are "artificial", responses may not reflect true behaviour that occurs in real clinical practice (Gliner et al., 1999), and physiotherapists may have reported practice that is in line with clinical guidelines, given social desirability bias.

5. Conclusion and implications

The findings reported in this paper provide new insights in relation to physiotherapists' contemporary practice when they delegate clinical tasks to physiotherapy assistants/support workers. They show that delegation is very common and is most common for supervision and/or teaching of exercises as well as walking aid provision. Nevertheless, there is considerable variation in practice and delegation appears very patient-dependent. Findings also highlight that to see improvements in delegation practice, training for both physiotherapy assistants/support workers and physiotherapists is needed, as well as clear delegation processes and/or guidance. Delegating part of the treatment plan to support workers and supervising the care provided by them requires physiotherapists to use different competencies and skills than those they use when they provide the care directly. Therefore, upgrading physiotherapists' delegation skills would result in more effective delegation to physiotherapy assistants/support workers.

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Declaration of competing interest

The authors have no competing interests to declare.

APPENDIX 1

Table 6
Coding and themes of additional comments

Additional Comments	
Codes (number of respondents)	Themes
- Appropriate training (11)	Facilitators for delegation

(*continued on next page*)

Table 6 (*continued*)

Additional Comments	
Codes (number of respondents)	Themes
- Formal qualification (1)	
- Appropriate competence (7)	
- Support worker availability (1)	
- Professional body support (1)	
- Less complex pathology/symptoms (1)	
- Good communication (2)	
- Acceptability of delegation (1)	
- Good process (2)	
- Safety net (2)	
- Private insurance (1)	Barriers to delegation
- Availability of support worker/staff shortages (3)	
- Too many clinical sites (1)	
- Lack of competence/various levels of (2)	
- Lack of experience (1)	
- Lack of knowledge (1)	
- Lack of space (1)	
- Complex pathology e.g. red flags (2)	
- Covid (7)	
- Virtual classes (1)	
- Post op pathways (3)	Support workers' skills and tasks
- Shoulders (1)	
- Knees (5)	
- Hips (1)	
- Exercises/rehab (14)	
- Admin tasks (3)	
- Psychological support (1)	
- Splint provision (1)	
- Ordering equipment (1)	
- Walking aid (1)	
- Delegation pre Covid (7)	Covid-19
- Delegation during Covid (2)	
- Valuable resource (7)	Positive Comments
- Better patient care (2)	
- Positive patient feedback (1)	
- Professional erosion (1)	Negative Comments

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