

1 **Title page**

2 **Authors**

3 Clare Killingback^{a*}, Mark Thompson ^a, Sarah Chipperfield ^a, Carol Clark^b, Jonathan
4 Williams^b

5 ^aUniversity of Hull, Hull, UK

6 ^bBournemouth University, Bournemouth, UK

7
8 *** Corresponding author:** ckillingback@hull.ac.uk

9 Tel - + 44 (0)1482 463641

10 Faculty of Health Sciences, University of Hull

11 Cottingham Road, Hull, HU6 7RX

12
13 **Title:** Physiotherapists' views on their role in self-management approaches: A qualitative
14 systematic review

15

1 **ABSTRACT**

2 Self-management has been an increasingly important aspect of helping people manage their
3 long-term conditions. The aim of this qualitative review was to synthesise the views of
4 physiotherapists concerning their delivery of a self-management approach. A systematic search
5 was conducted on six electronic bibliographic databases to identify relevant primary studies.
6 Studies were assessed for quality and data extracted. Qualitative data were analysed using
7 thematic synthesis. A total of 1189 studies were identified and screened. Eleven studies met the
8 inclusion criteria. Findings suggest that for self-management approaches to work,
9 physiotherapists believe that patients need to actively participate. Boundaries on who is the
10 expert were blurred at times with some physiotherapists struggling to relinquish control. High
11 quality patient-therapist relationships are required to build trust in order to support patients in the
12 self-management of their long-term conditions. It is also important to consider the competing
13 paradigms in which a service is delivered as this may facilitate or hinder self-management.
14 Seeing patients as people is integral to supporting self-management approaches. Physiotherapists
15 are well placed to support self-management but there is still a need for a cultural and
16 paradigmatic shift in the physiotherapy profession and in some environments, this shift as yet is
17 to be realised.

18

19 **Keywords:** Physiotherapists; Self-management; Qualitative synthesis

20

1 INTRODUCTION

2 Health systems globally have been challenged by the rising burden of chronic illness and long-
3 term conditions (World Health Organisation, 2014). In response, self-management has become
4 an increasingly important aspect of helping people manage with their long-term conditions
5 (Department of Health, 2001; Naylor et al, 2015). With this shift from acute to chronic disease
6 came the understanding that healthcare providers are required to become partners with patients in
7 supporting them to make informed choices about their long-term health and disease management
8 (Lorig and Holman, 2003). Clinicians are now called upon to work with patients to be co-
9 producers of health and self-management is viewed as being inseparable from high-quality care
10 for long-term conditions (Elwyn, 2011; Taylor et al, 2014).

11 Self-management has been defined as an: “Individual’s ability, in conjunction with
12 family, community, and the appropriate healthcare professionals to manage the symptoms,
13 treatment, physical, psychosocial, cultural, and spiritual consequences and inherent lifestyle
14 changes required for living with a chronic disease” (Wilkinson and Whitehead, 2009). It involves
15 consideration of the medical management of a condition (such as taking medication, or the use of
16 an inhaler), role management (involving the maintenance or creation of new meaningful
17 behaviours or roles in life), and emotional management (dealing with the emotional sequelae of a
18 long-term condition such as anger, fear, frustration) (Corbin and Strauss, 1988; Lorig and Holman,
19 2003). Interventions to support self-management are predominantly based on behavioural change
20 theories (Lorig et al, 2006) with the intention of helping patients take the lead in managing their
21 own health and wellbeing.

22 Despite the fact that the term self-management first appeared in healthcare almost 60
23 years ago (Loris and Homan, 2003), the evidence of its effectiveness remains equivocal (Sadler,
24 Wolfe, and McKevitt 2014). Some suggest that the evidence for supporting self-management is
25 only moderate due to it being used to describe a wide range of activities from initiatives that

1 focus on information provision to interventions that target behaviour change and self-efficacy
2 and that combining these leads to a dilution of findings (De Silva, 2011). Different clinical
3 conditions may necessitate varying approaches such as technical structured education for those
4 with diabetes compared to cognitive or behavioural interventions for chronic pain conditions (De
5 Silva, 2011). These range of approaches can make self-management a complex intervention to
6 evaluate (Taylor et al, 2014). No single component of self-management has been identified as
7 more important than any other, however, several core components have been highlighted
8 including education about the condition; psychological strategies to help patients adjust to life
9 with a long-term condition; strategies to support treatment adherence; practical support around
10 activities of daily living and action plans for conditions with marked exacerbations; and social
11 support (Taylor et al, 2014).

12 A synthesis of over 550 studies to appraise the role of self-management noted that
13 although the findings of individual studies are mixed, the overall evidence suggests that self-
14 management can lead to positive outcomes (De Silva, 2011). In particular, proactive,
15 behaviourally focused self-management approaches, which are designed to increase self-efficacy,
16 can impact positively on patient's clinical symptoms, attitudes, quality of life, and healthcare
17 resource use (De Silva, 2011). However, barriers to self-management from the perspective of
18 patients living with multiple chronic conditions are noted. These include challenges with
19 healthcare professionals around contradictory knowledge, limited access to healthcare providers,
20 and difficulties with medications, such as overreliance on medications and issues related to side
21 effects (Liddy, Blazkho, and, Mill, 2014). To overcome these barriers, patients identified the
22 importance of sharing power and responsibility; they wanted to be able to ask questions of
23 healthcare professionals and seek answers to health concerns (Bardach, Tarasenko, and
24 Schoenberg, 2011). Patients also wanted to be listened to and set mutually agreed goals (Bair et
25 al, 2009). To be able to live well with a long-term condition, it was important for individuals to

1 stay socially connected and they valued the role of self-care (Stenberg and Furness, 2017). The
2 physical and emotional challenges of living with multiple long-term conditions, such as pain and
3 depression, impacted on patients' ability at times to successfully self-manage (Liddy, Blazkho,
4 and, Mill, 2014).

5 Therefore, it is evident that a healthcare professional requires a unique skill set to enable
6 the support of self-management strategies. Qualitative reviews have explored the perceptions of
7 health and social care practitioners concerning the delivery of self-management approaches and
8 their experiences of supporting adults with long-term conditions (Morgan et al, 2016; Mudge,
9 Kayes, and McPherson, 2015; Sadler, Wolfe, and McKevitt 2014). Control was a central theme
10 with practitioners expecting patients to have control over their condition and for practitioners to
11 have control over their patients (Mudge, Kayes, and McPherson, 2015). Clinicians who
12 integrated self-management into their practice noted a transformation in their clinical encounters
13 as they moved away from a didactic model of interaction to a partnership approach which valued
14 patient expertise and involvement (Mudge, Kayes, and McPherson, 2015).

15 Physiotherapists regularly work with individuals who have long-term conditions and seek
16 to promote independence (Chartered Society of Physiotherapy, 2019). Self-management
17 strategies are important in physiotherapy practice, which routinely incorporates the use of self-
18 efficacy strategies, supported goal setting, active adaptive coping, and active patient involvement
19 (National Health Service Education for Scotland, 2012). Therefore, this review sought to build
20 on the work of broader studies which explored the views of health and care practitioners
21 regarding self-management (Morgan et al, 2016; Mudge, Kayes, and McPherson, 2015; Sadler,
22 Wolfe, and McKevitt, 2014) by examining the views of physiotherapists. The aim of this study
23 was to explore the views of physiotherapists concerning their delivery of a self-management
24 approach. The new knowledge generated from this review will provide insight into the barriers

1 and enablers to implementing self-management approaches within physiotherapeutic encounters
2 to inform future practice.

3

4 **METHODS**

5 Information Sources and Search Strategy

6 This review followed a systematic review protocol (PROSPERO reference number
7 CRD42019131242). A search was carried out on the following electronic bibliographic
8 databases: AMED, Academic Search Premier, CINAHL Complete, MEDLINE, PsycINFO,
9 SPORTDiscus with full text to identify relevant primary studies. Reference lists of eligible
10 studies were hand searched. No date limits were applied, and the final search was carried out 21
11 March 2019. The search was limited to peer-reviewed papers, published in English. A Boolean
12 search strategy was employed to search the databases using key concepts and their alternatives
13 (physiotherapist* OR "physical therapist*" AND "self manag*" or "self?manag*" or "self?care"
14 or "self care").

15

16 Eligibility Criteria and Study Selection

17 Since the aim of this review was to explore the views of physiotherapists concerning their
18 delivery of a self-management approach, qualitative or mixed-methods studies with a substantive
19 qualitative component were sought. The inclusion and exclusion criteria outlined in Table 1 were
20 developed based on the population (physiotherapists), phenomena of interest (views concerning
21 delivery of a self-management approach) and context (physiotherapy practice) and was used to
22 screen papers. Papers were initially screened for eligibility by CK using their title and abstract.
23 Studies were included if they contained participants who were physiotherapists or physical
24 therapists with qualitative data on their perceptions, views, experiences, or beliefs regarding their
25 role in the delivery of self-management approaches. Where it was difficult to determine if a
26 paper met the **inclusion** criteria based on title and abstract, they underwent full-text screening.

1 Search results were handled using an excel spread sheet to facilitate an audit trail and article
2 screening. Full-text articles were independently reviewed by CK and SC. Discrepancies
3 regarding eligibility for inclusion were resolved by discussion and consensus with CC and JW.
4 Studies were excluded if it was not possible to distinguish the views of physiotherapists from the
5 views of others. This was carried out to ensure that only the views of physiotherapists were
6 included in the synthesis.

7 Included studies were critically appraised for quality by CK and MT through the use of
8 the Qualitative Findings Critical Appraisal Scale using an excel spreadsheet (Pearson, 2004).
9 Discrepancies were resolved by discussion and consensus with the review team. Studies were not
10 excluded based on their quality appraisal as studies with lower quality may still yield valuable
11 insights and as such was included in the synthesis (Noyes et al, 2008). The methodological
12 quality of included papers is reported to allow the reader to make an informed judgement about
13 the credibility or trustworthiness of the findings, and transferability or relevance of the research
14 findings to other settings (Tong et al, 2012).

15

16 Data Extraction and Synthesis

17 The framework for data synthesis was Thomas and Harden's (2008) method of thematic
18 synthesis. The findings sections of each study were imported verbatim into QSR International
19 NVivo 12 and were coded line-by-line in the first open coding phase. The second stage of
20 synthesis involved the free codes being organised into related areas to construct descriptive
21 themes. These first two stages sought to stay as close as possible to the primary studies. In stage
22 three, analytical themes were generated which went beyond the data of the original studies to
23 generate interpretive constructs in relation to the research question being addressed in this
24 synthesis.

1 Data were initially coded by CK before other members of the review team (MT and SC)
2 independently cross-checked sections by comparing the initial codes, descriptive themes, and
3 analytical themes generated to the text and research question. This process of cross-checking led
4 to valuable discussions which helped in refining themes (Barbour, 2001). The process of theme
5 development can be seen in table 3. The authors sought to follow the statement on enhancing
6 transparency in reporting the synthesis of qualitative research (ENTREQ) as a methodological
7 guide (Tong et al, 2012).

8

9 **RESULTS**

10 Study Selection

11 A total of 1189 studies were identified through the search strategy. Eleven studies met the
12 inclusion criteria. Figure 1 shows the process of study selection based on the Preferred Reporting
13 Items for Systematic Reviews and Meta-Analysis (Liberati et al, 2009). Quality appraisal results
14 for each included study are shown in table 2. For ease of comparison across studies, a total
15 quality score has been noted. However, caution should be used with interpreting these as an
16 equal weighting cannot be assumed for each of the quality criteria. Overall, studies were of
17 moderately high quality with 10 of the 11 studies meeting at least 7 of the 10 quality criteria. The
18 main limitations were a lack of reporting of the influence of the researchers on the research and
19 the philosophical perspectives used.

20

21 Study Characteristics

22 The research studies included in this review employed a range of data collection methods,
23 including focus groups, semi-structured interviews, and observations. The included studies
24 analysed their qualitative data using a range of approaches including thematic analysis, grounded
25 theory, framework analysis, and content analysis.

1 Study sample sizes ranged from two to 100 participants, although participant age and
2 gender were reported sporadically. Only one study (Solvang and Fougner, 2016) detailed
3 participant age, with a range of 30-65 years. Of the seven studies which detailed participant
4 gender (Cooper et al, 2017; Cowell et al, 2018; Norris, Jones, Kilbride, and Victor, 2014; Norris
5 and Kilbride, 2014; Robinson, Newton, Jones, and Dawson, 2014; Satink, Cup, de Swart, and
6 Nijhuis-van der Sanden, 2014; Solvang and Fougner, 2016), a total of 92 females and 25 males
7 were recorded. The experience of the participants was from a number of healthcare settings,
8 including primary, secondary clinical, outpatient, community, acute, rehabilitation, and stroke
9 units. Physiotherapists reported managing a range of long-term conditions, including stroke
10 survivors, chronic obstructive pulmonary disease, chronic lower back pain, and older persons in
11 falls prevention programmes. The majority of studies were based within the UK (Cooper et al,
12 2017; Cowell et al, 2018; Norris, Jones, Kilbride, and Victor, 2014; Norris and Kilbride, 2014;
13 Robinson, Newton, Jones, and Dawson, 2014; Sadler, Wolfe, Jones, and McKeivitt, 2017; Wilson,
14 Kendall, and Brooks, 2006). The remaining studies were based in the Netherlands (Satink, Cup,
15 de Swart, and Nijhuis-van der Sanden, 2014; Visse et al, 2010), Norway (Solvang and Fougner,
16 2016) and New Zealand (Crowe et al, 2010). Table 4 provides an overview of the included
17 studies.

18

19 Qualitative Synthesis

20 Thematic synthesis of the included studies led to five themes that were important from the
21 perspective of physiotherapists in regard to their role in the delivery of self-management
22 approaches. These themes will be presented with direct quotes taken from the participants of the
23 included studies.

24

1 **Focus on Active Patient Participation**

2 The focus on active patient participation theme was defined from the viewpoints of
3 physiotherapists that for self-management approaches to work they were aware that they would
4 need to "...always try and get people actively involved. Looking after themselves" (Crowe et al,
5 2010, p. 1482). In particular, the attitude or expectation of the patient towards physiotherapy was
6 perceived to be important in determining whether patients would be willing to adopt self-
7 management approaches (Norris, Jones, Kilbride, and Victor, 2014; Norris and Kilbride, 2014;
8 Sadler, Wolfe, Jones, and McKeivitt, 2017; Satink, Cup, de Swart, and Nijhuis-van der Sanden,
9 2014; Solvang and Fougner, 2016). For example, patients who had a particular expectation or
10 preference for 'hands on' physiotherapy were perceived to be more difficult to engage in active
11 self-management strategies: "These patients also expect treatment to be by the therapists' use of
12 hands on soft tissue. This way of providing treatment, however, is not the way physiotherapists
13 work." (Solvang and Fougner, 2016, p. 595).

14 For the patients who did not wish to engage in self-management approaches,
15 physiotherapists felt there was little they could do to change this:

16 *"You can talk to them till you're blue in the face and explain why, but if they don't want to*
17 *be there and they're not really interested, then there's not really a lot you can do."*

18 *(Robinson, Newton, Jones, and Dawson, 2014, p. 383).*

19 In terms of supporting active participation, physiotherapists reported using a range of strategies.
20 This included practical approaches such as writing down the exercises, exercise diaries, and
21 visual reminders (Robinson, Newton, Jones, and Dawson, 2014). This would indicate a
22 professional compliance model of care which runs contrary to the principles of self-management
23 since the aim of the therapists was more often to:

1 “monitor and track adherence levels rather than to support the older person to play an
2 active role in managing their treatment programme.” (Robinson, Newton, Jones, and
3 Dawson, 2014, p. 384).

4 Taking an individualised approach to patient goal setting was perceived to be an important
5 aspect of helping patients actively self-manage their conditions (Cowell et al, 2018; Norris, Jones,
6 Kilbride, and Victor, 2014; Norris and Kilbride, 2014; Robinson, Newton, Jones, and Dawson,
7 2014; Sadler, Wolfe, Jones, and McKeivitt, 2017; Solvang and Fougner, 2016). However, it was
8 felt that those with cognitive impairment following a stroke for example, or those with vascular
9 dementia might struggle with active self-management strategies (Robinson, Newton, Jones, and
10 Dawson, 2014; Sadler, Wolfe, Jones, and McKeivitt, 2017; Satink, Cup, de Swart, and Nijhuis-
11 van der Sanden, 2014; Solvang and Fougner, 2016). The level of social support available to a
12 patient was viewed as having an impact on a person’s ability to actively participate in self-
13 management (Norris, Jones, Kilbride, and Victor, 2014; Sadler, Wolfe, Jones, and McKeivitt,
14 2017; Satink, Cup, de Swart, and Nijhuis-van der Sanden, 2014).

15 Targeting individual factors was viewed as more likely to engage the patient and
16 therefore having listening and communication skills were central to self-management and
17 agreeing collaborative goals:

18 *I think it's just got to be really, really patient specific. I think you need to sit and spend*
19 *your time listening to all the factors involved in that particular patient's back pain to find*
20 *an approach that's tailored to them and then I think you've really got to get them on*
21 *board to buy into whatever the best approach you feel is for them. (Cowell et al, 2018, p.*
22 *116).*

23 However, the notion of getting the patient “on board to buy into whatever the best approach you
24 feel is for them” is again focusing on a professional compliance model which does not align with
25 self-management approaches.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

The Physiotherapist as the Expert

The theme of the physiotherapist as the expert expresses the views of physiotherapists as having a professional authority and a desire to be in control. This professional authority created an uneven power structure that was suggested to stem from professional training with the expectation that as professionals they held the necessary knowledge (Norris and Kilbride, 2014). In one instance, prior to any specific self-management training, stroke physiotherapists noted that although they were committed to helping patients, they were most often comfortable when they were in control and could dictate to patients (Norris and Kilbride, 2014).

Therapists for some reason I think when they're qualified they have this unerring belief that they are now the professional, they know everything, and that from their professional standpoint they get to almost dictate if you will to clients, to patients, about what they think should be happening. (Norris and Kilbride, 2014, p. 34).

Interestingly, after self-management training, the perspectives of these same therapists had shifted to placing a greater emphasis on the agenda of stroke survivors. Physiotherapists had a fear of losing control either through the increased risk that came with patients self-managing their condition, a fear of doing nothing through not meeting measurable goals (as determined by the therapists) or through a lack of time since self-management approaches were deemed to be more time consuming. In addition, self-management was not their highest priority (Norris and Kilbride, 2014).

This sense of being an expert and a desire to remain in control was similarly noted in the context of rehabilitation for patients who are at risk of falling (Robinson, Newton, Jones, and Dawson, 2014). Therapists felt that older people should be supported in taking responsibility for their health, however, they as therapists had a conflicting desire to keep control of the treatment (Robinson, Newton, Jones, and Dawson, 2014). If their advice was rejected by patients it was

1 predominantly viewed as a threat to their professional identity and a sense that they had failed:
2 “you feel like you’ve failed, and maybe you have, I don’t know” (Robinson, Newton, Jones, and
3 Dawson, 2014, p. 384).

4 Physiotherapists working with those with long-term conditions recognised that the patient
5 is the expert in their condition, but they are the expert in their therapeutic skills: “they might be
6 experts but what we’re expert in is our skills” (Wilson, Kendall, and Brooks, 2006, p.809).
7 Stroke therapists, whilst viewing themselves as the expert felt that their role was “to guide and
8 support people rather than dictate” (Sadler, Wolfe, Jones, and McKeivitt, 2017, p. 5). Education
9 was seen as being an important aspect in helping patients work out where they would like to get
10 to (Sadler, Wolfe, Jones, and McKeivitt, 2017; Solvang and Fougner, 2016).

11 An area that physiotherapists did not perceive themselves to be expert in was the area of
12 self-management. A gap in knowledge was identified by several therapists in that they noted they
13 did not have the necessary skills to explore self-management strategies with patients (Satink,
14 Cup, de Swart, and Nijhuis-van der Sanden, 2014). This was highlighted as a lack in pre-
15 registration physiotherapy training with its focus on physiology and diagnosing conditions rather
16 than on supporting individuals in making choices:

17 *After completing our basic training at the school of physiotherapy, we thought our work*
18 *would focus on diagnosis – if you know what I mean. But we work with a person and that*
19 *person has a life, a family and a history. That’s where the challenge lies. (Solvang and*
20 *Fougner, 2016, p. 597).*

21

22 **Valuing the Quality of the Patient-Therapist Relationship**

23 This theme reflects the views of physiotherapists on the value of a high-quality patient-therapist
24 relationship in supporting self-management. Valuing the quality of this relationship was seen as

1 being central to collaborative working with patients and empowering patients in their self-
2 management.

3 Part of this patient-therapist relationship was developed through communication and
4 importantly, listening to a patient (Visse et al, 2010). It was this listening which helped the
5 therapists understand the patient’s challenges and helped develop a personalised, tailored
6 approach which supported patient engagement (Cowell et al, 2018; Norris, Jones, Kilbride, and
7 Victor, 2014; Norris and Kilbride, 2014). Understanding the cultural background of patients was
8 especially important for physiotherapists utilising self-management approaches in working with
9 those from minority ethnic backgrounds:

10 *“...for me it’s allowed me to learn what’s important for their culture. So you know*
11 *having goals around getting to church and um . . . volunteering for church, and the kind*
12 *of foods that they like to eat and what time of day they like to eat. So I’d say it’s helped*
13 *me to understand their culture more...” (Norris, Jones, Kilbride, and Victor, 2014, p.*
14 *2258).*

15 In order to facilitate self-management, some physiotherapists spoke about their role as
16 being a guide or coach such that they would work collaboratively to share decision-making. This
17 positive patient-therapist relationship was viewed as a prerequisite for success in helping patients
18 self-manage (Sadler, Wolfe, Jones, and McKeivitt, 2017). The therapists on occasion needed to
19 be someone that the patients could lean on and work with to achieve an agreed goal (Solvang and
20 Fougner, 2016) and a strong patient-therapist relationship was necessary to enable this
21 supportive role. Having a good patient-therapist relationship supported motivation and patient
22 engagement such that they were able to achieve their goals as part of the self-management
23 process (Cowell et al, 2018; Sadler, Wolfe, Jones, and McKeivitt, 2017; Solvang and Fougner,
24 2016; Visse et al, 2010). Trust was also important in developing a high-quality relationship and

1 promoting self-management since “successful patient engagement was deemed to be contingent
2 on a trusting therapeutic relationship...” (Cowell et al, 2018, p. 116).

3

4 **Competing Paradigms**

5 This theme reflects the challenges experienced by physiotherapists based on the competing
6 paradigm of their practice environment. For example, in an acute hospital setting the highest
7 priority was dictated by the hospital with its focus on safety, assessment, and early discharge.

8 Acute stroke units tended to reinforce a sick patient model with high pressure to discharge
9 patients quickly. In this context, patients did not have to think about their own self-management
10 because there was someone there to help them:

11 *When they're in the hospital and the hospital is looking after them, the hospital is dealing*
12 *with all the problems, they don't necessarily have to think about that [self-management]*
13 *as much as when they are actually having to put on a pad, to put on a splint which can be*
14 *difficult for some people. (Physiotherapist 7, stroke unit) (Sadler, Wolfe, Jones, and*
15 *McKevitt, 2017, p. 6).*

16 A number of physiotherapists perceived that self-management was further limited in the
17 acute stroke rehabilitation context by the competing paradigms of other members of the multi-
18 disciplinary team who in some instances tended to provide care for patients rather than
19 promoting independence: “...the first who takes away independence are the nurses who put a bed
20 pan below a patient instead of helping them to go to the toilet” (Satink, Cup, de Swart, and
21 Nijhuis-van der Sanden, 2014, p. 1749).

22 The biomedical model and culture of the in-patient hospital environment was perceived
23 by physiotherapists to be the problem and blamed for these challenges. This was because it
24 perpetuated the passive patient role where patients were passive recipients of care: “...they're on
25 your patch and they have to play the patient role, sick role...I don't think it is even sick role...but

1 they're very vulnerable but also passive" (Norris and Kilbride, 2014, p. 34). Keeping patient's
2 passive was seen as helpful by some physiotherapists as it meant they could continue with a
3 therapist centred agenda; others perceived that the in-patient environment meant that patients had
4 no choice but to be passive recipients (Norris and Kilbride, 2014).

5 If self-management approaches are to become embedded then, as one physiotherapist
6 stated, there may need to be a shift in perspective away from biomedical models:

7 *I think that in general we are focussed to treat within medical-technical frameworks, but*
8 *when you talk about self-care...self-management, then it is not directly related to that*
9 *framework. So you should think from another perspective and that is more a social*
10 *framework. (Satink, Cup, de Swart, and Nijhuis-van der Sanden, 2014, p. 1749).*

11 The increased focus on targets and reduced staffing levels led to time and service
12 constraints. This affected therapy time which was perceived by therapists to be a barrier to
13 enabling self-management approaches (Norris and Kilbride, 2014; Robinson, Newton, Jones, and
14 Dawson, 2014; Satink, Cup, de Swart, and Nijhuis-van der Sanden, 2014)

15 On a more practical note of resourcing, physiotherapists from rural locations bemoaned
16 the lack of referral options for patient's post-discharge, which would facilitate ongoing self-
17 management through exercise such as walking groups or exercise classes: "We do signpost to
18 what's available, but I do tend to find in a small rural area, there's not the same facilities as there
19 might be in [City name]" (Cooper et al, 2017, p. 141).

20 Physiotherapists felt that the community setting was more conducive to self-management
21 approaches (Robinson, Newton, Jones, and Dawson, 2014; Sadler, Wolfe, Jones, and McKeivitt,
22 2017; Satink, Cup, de Swart, and Nijhuis-van der Sanden, 2014; Solvang and Fougner, 2016).
23 This was because physiotherapists perceived that in their own environment patients would be
24 more likely to discuss what was important for them. Understanding the patients' environment
25 and how they interact with it may help steer towards a more person-centred approach to

1 supporting self-managing in their home environment (Sadler, Wolfe, Jones, and McKeivitt, 2017;
2 Solvang and Fougner, 2016).

3

4 **Seeing Patients as People**

5 This theme reflects the views of physiotherapists that if patients are to be successful at self-
6 managing then they need to be viewed as people (Norris, Jones, Kilbride, and Victor, 2014;
7 Norris and Kilbride, 2014; Sadler, Wolfe, Jones, and McKeivitt, 2017; Solvang and Fougner,
8 2016; Visse et al, 2010). Physiotherapists were aware that they needed to understand that they
9 had to view patients holistically as people with personal biographies, within the context of their
10 lives and their environment.

11 *The lived life of the patient and the life they have lived with the affliction. The lived life in*
12 *their environment can sometimes be the thing we should work with, as opposed to what*
13 *we find out about their bodily problem. (Solvang and Fougner, 2016, p. 597).*

14 When patients were viewed as people, both emotional and mental health were deemed to
15 be as important as the physical challenges experienced. Physiotherapists needed to develop an
16 integral view of the mind-body connection to help patients self-manage their conditions because
17 the physiotherapists “noticed that there is a very strong connection between someone’s physical
18 and mental or emotional state” (Visse et al, 2010, p. 365). This was important because, for
19 example, in stroke rehabilitation, community physiotherapists noted that patients needed to be
20 supported in managing the longer-term consequences of having a stroke, including the
21 psychological and emotional effects as well as the immediate physical effects of the stroke:

22 *“...self-management it’s not just talking about more physio, but more holistically.*
23 *They’ve got to manage post stroke, how they are feeling in relation to activities, but also*
24 *their mood, their future, what medication they may be on as well. So it’s kind of the*
25 *bigger picture” (Sadler, Wolfe, Jones, and McKeivitt, 2017, p. 5).*

1 Some physiotherapists expressed that the key to seeing patients as people was in listening
2 to patients and finding out about their histories and life stories. This was not necessarily a new
3 practice for therapists but was felt to be “key to the process of rehabilitation itself” (Norris and
4 Kilbride, 2014, p. 35). This was perceived to be important in helping set individualised goals,
5 which promoted engagement (Norris, Jones, Kilbride, and Victor, 2014; Norris and Kilbride,
6 2014).

7

8 **DISCUSSION**

9 The aim of this review was to explore the views of physiotherapists concerning their delivery of
10 a self-management approach. This knowledge is important in understanding barriers and enablers
11 to implementing self-management approaches with patients in the context of physiotherapy
12 practice. This study has four contributions to make to how best to support patients in the self-
13 management of their conditions.

14 Firstly, this review has highlighted that from a self-management perspective, where
15 patients and physiotherapists are partners (Lorig and Holman, 2003), it is important to raise the
16 question of ‘who is the expert?’ Findings from this study suggest that some physiotherapists
17 view themselves as the experts leading to attitudes and behaviours akin to professional authority
18 and a desire to control. In some instances, physiotherapy advice rejected by patients was
19 perceived as a threat to professional identity. This is echoed in the broader healthcare context
20 where in traditional models of practice, the clinician is positioned as the expert and as such leads
21 to them being in a position of authority over the patient (Mudge, Kayes, and McPherson, 2015).
22 This type of thinking does not align with self-management approaches where clinicians and
23 patients work together in sharing decision making (Elwyn, 2001).

24 Some physiotherapists were willing to acknowledge the patient was an ‘expert’ in the
25 knowledge of their condition but believed that as a physiotherapist they were the expert in

1 therapeutic skills. Beliefs about who is the expert and shared expertise appeared to be important
2 in promoting collaborative working, trust and a positive patient-therapist relationship. This
3 collaborative bond between patient and therapists, also known as therapeutic alliance (Krupnick
4 et al, 1996), has been shown to be facilitated through prioritised goals, autonomy, support and
5 motivation (Babatunde, MacDermid, and MacIntyre, 2017). This has implications for practice
6 and the authors suggest that it would be important for therapists to reflect on where their
7 expertise lies, what expertise the patients bring to therapeutic encounters and who is in control. A
8 recently coined term, ‘mansplaining’, a portmanteau of man and explain, is typically used to
9 describe men speaking to women in a patronising manner (Bridges, 2017). If physiotherapists do
10 not reflect on the shared expertise between patient and therapist, there is a risk of assuming
11 control and of ‘physiosplaining’ in therapeutic encounters, patronising individuals with
12 significant lived experience, thus hindering the facilitation of a positive patient-therapist
13 relationship, which is vital for self-management.

14 Secondly, it is important to consider how self-management is conceptualised by
15 physiotherapists, as this will determine how it is implemented in practice. If self-management is
16 characterised by whether someone adheres to their exercises or not, then physiotherapists may
17 have missed the point of supporting people in self-management. After all, self-management is
18 based on supporting patient empowerment so that they can make their own decisions whilst
19 partnering with physiotherapists, not on a model of compliance (Holman and Lorig, 2000; Sadler,
20 Wolfe, and McKevitt 2014). This was exemplified in the study by Robinson, Newton, Jones, and
21 Dawson (2014), who in the context of falls rehabilitation noted that strategies such as exercise
22 diaries, writing down exercises, visual reminders and outcome measures were more often used to
23 monitor exercise adherence rather than to support a person in playing an active role in self-
24 management. Self-management is not synonymous with exercise adherence, although an aspect
25 of self-management may include exercise and indeed the keeping of diaries. Rather, self-

1 management also includes the psychological and social aspects of living with a long-term
2 condition (Newman, Steed, and Mulligan, 2004; Sadler, Wolfe, and McKeivitt 2014). The
3 authors would suggest that promoting adherence to exercise is not getting to the heart of
4 supporting people in the self-management of their long-term conditions as this would be a
5 reductionist and narrow approach to self-management.

6 Narrow and broader approaches to supporting self-management have been documented
7 by Morgan and colleagues (2016). Narrow approaches of support focus on helping people
8 *manage their condition well* and include aspects such as disease or symptom control. Broader
9 approaches seek to support people in *managing well with their condition*, with an approach that
10 includes quality of life goals such as maintaining social roles, exercising autonomy, finding
11 meaning as well as physical health. The two conceptualisations of narrow and broader
12 practitioner approaches to support are important in the context of understanding
13 physiotherapists' views of self-management and thus how they engage in promoting active
14 patient involvement. It is clear from the findings that physiotherapists can reconceptualise their
15 understanding of self-management through education, therefore perhaps the idea of confidence
16 and competence is important. Within a new conceptualisation, do therapists have the depth of
17 skills and agility in application that is key to facilitating individuals to manage well with their
18 condition, such as those found in coaching and behavioural change? As highlighted by Hartley
19 (2019), the role of the physiotherapist needs re-imagining when working with people with long-
20 term conditions to ensure physiotherapists evolve to stay contemporary in approach to support
21 the changing needs of people with long-term conditions.

22 Furthermore, promoting adherence or compliance with rehabilitation has been described
23 in terms of the task orientations of physiotherapists (Terry and Kayes, 2019). An alternative
24 perspective relates to the role of the therapist as someone who enhances efficacy and autonomy
25 through the rehabilitation process (Terry and Kayes, 2019). This suggests that a broader question

1 could be raised not of how self-management is conceptualised, but how the role of a
2 physiotherapist conceptualised. Thus, the authors challenge physiotherapists to consider whether
3 they view themselves as task orientated in their rehabilitative encounters or focused on
4 promoting efficacy and autonomy; the latter being aligned to the premise of self-management.

5 Thirdly, moving beyond the way in which a physiotherapist conceptualises their role, this
6 study has highlighted challenges around the competing paradigms of the context in which
7 physiotherapy services are delivered and the impact this can have on physiotherapists in
8 supporting patients in self-management. The breadth of physiotherapists' perspectives relating to
9 self-management appear to have been influenced by the paradigm of the clinical environment.
10 For example, in the acute setting, physiotherapists were less likely to encourage self-
11 management as they dictated and controlled the therapy, while in the community setting there
12 appeared to be a partnership approach that was more holistic in nature, taking account of
13 psychological and social factors. Thus, the paradigm or worldview of the environment in which
14 therapy is delivered could be a contributing factor in whether self-management is promoted or
15 hindered.

16 Modern healthcare has been said to be influenced by two main paradigms: biomedical
17 practice and person-centred practice (Hughes, 2004). Self-management comes from the
18 ontological framework of person-centred approaches of empowerment and shared decision
19 making (Anderson and Funnell, 2005), whereas traditionally, physiotherapy as a profession has
20 aligned itself with biomedical models of healthcare underpinned by positivist paradigms (Wiles
21 and Barnard, 2001). The adoption of biomedical paradigms by the founders of modern
22 physiotherapy was important in establishing the legitimacy of the profession in bringing them
23 closer to the medical practitioner and gaining public trust (Nicholls and Gibson, 2010). The
24 introduction of the biopsychosocial model in the 1970s (Engel, 1978) challenged the biomedical

1 discourse of dualism and reductionism by offering a more holistic alternative (Borrell-Carrio,
2 Suchman, and Epstein, 2004).

3 The physiotherapy profession has adopted a paradigmatic shift towards a biopsychosocial
4 model of care which considers the patient as a whole including their social, cultural and
5 environmental context (Sanders, Foster, Bishop, and Nio Ong, 2013). The challenge for
6 physiotherapists is how to balance collaborative patient-therapist approaches that encourage self-
7 management, within positivist healthcare services of efficiency and economic limitations which
8 tend towards the biomedical paradigm, especially evident in acute hospital environments.
9 Although there are challenges to self-management in this biomedical acute environment, this
10 could in fact provide an opportunity for physiotherapists to rise to the challenge and realise a
11 shift from hierarchical practitioner-patient relationships towards more person-centred,
12 collaborative approaches. This would be important because the quality of the relationship
13 between the patient and health care professional has been noted as an important factor in
14 fostering self-management practice (Sadler, Wolfe, and McKeivitt 2014).

15 Furthermore, there are calls to move away from seeing biomedical approaches and
16 person-centred care as dichotomous but rather on a continuum (Mudge et al, 2020; Terry and
17 Kayes, 2019). Adopting a view of person-centredness as a continuum would encourage an
18 understanding that improvements are possible (Mudge et al, 2020; Terry and Kayes, 2019). This
19 view would help physiotherapists make small, incremental changes within biomedical healthcare
20 environments, towards approaches that support the empowerment of patients in actively self-
21 managing their long-term conditions such as seeking to involve patients in decision making or
22 seeing patients as people and collaborative partners.

23 Finally, physiotherapists and patients need to have a shared understanding of how
24 psychological and social aspects can contribute positively to self-management. For self-
25 management approaches to be effective, physiotherapists must see patients as people. Some

1 physiotherapists in this current study viewed this whole person approach, which aligns with the
2 biopsychosocial paradigm, as integral in supporting people in the self-management of their long-
3 term conditions. Central to this was listening to patients' life stories to help develop collaborative
4 goals. The notion of taking a holistic, empowering approach towards physiotherapy
5 rehabilitation and seeking to involve the patient directly in their own care is not new knowledge
6 (Nicholls and Gibson, 2010; Pratt, 1989). However, for some this became a stronger feature of
7 their clinical practice after specific training in self-management approaches (Norris, Jones,
8 Kilbride, and Victor, 2014; Norris and Kilbride, 2014). This suggests that there are benefits in
9 ensuring physiotherapists are trained in self-management approaches, an area in which
10 physiotherapists felt they lacked expertise.

11 Like other clinicians (Mudge, Kayes, and McPherson, 2015), physiotherapists face
12 challenges in supporting patients in the self-management of their long-term conditions.
13 Ultimately, physiotherapists are well placed to facilitate self-management, however, challenges
14 remain.

15 This review raises a number of implications for practice and future research. First,
16 reflective practice is an important part of being a physiotherapist and, as such, qualified
17 physiotherapists are encouraged to reflect on their role. The following questions might be a
18 helpful starting place. Where do the boundaries of expertise lie between the patient and therapist?
19 Do physiotherapists view their role as task oriented or focused on promoting patient autonomy?
20 Do physiotherapists view their philosophy of practice of self-management from a narrow
21 perspective of helping people manage their condition well, or is it broader where they see their
22 role as helping people manage well with their condition? What is the healthcare paradigm of the
23 environment in which they work and what can they do to move closer to approaches which
24 empower collaborative relationships between themselves and their patients? Do they view

1 patients as people? The answers to these questions may lead to very different types of
2 physiotherapy practice.

3 Second, physiotherapists did not perceive themselves to be experts in self-management
4 and felt that they lacked knowledge in this area. This is hardly surprising given the focus in pre-
5 registration education on the number of hours spent on anatomy, biomechanics, and pathology as
6 opposed to psychosocial factors (Darnell, 2007). It is suggested that approaches to supporting
7 patients in the self-management be taught explicitly as part of pre-registration training to equip
8 the future workforce with the skills needed to support patient empowerment. The authors would
9 suggest that pre-registration physiotherapy programmes also build in opportunities for students
10 to consider the type of physiotherapist they wish to become. This should include opportunities to
11 develop a philosophy of practice which is regularly reviewed and aligned with the **concepts** of
12 person-centred care and self-management approaches within a biopsychosocial framework. This
13 would be important in challenging assumptions of professional authority (Mudge, Kayes, and
14 McPherson, 2015; Norris and Kilbride, 2014) and help student physiotherapists see patients as
15 people. Longitudinal research studies which track students in how they develop their philosophy
16 of practice and skills in supporting self-management would add new knowledge in terms of
17 optimal pedagogic approaches to teaching self-management.

18

19 Study Limitations and Strengths

20 The main limitation of this systematic review is the diverse contexts of studies, with four related
21 to physiotherapists who work with stroke patients; three in the context of low back pain; two
22 with those who worked with patients with a wide range of long-term conditions; one with falls
23 rehabilitation physiotherapists, and one with respiratory physiotherapists. It could be that
24 different types of patients need different self-management approaches. For example, stroke
25 survivors might have cognitive limitations or severe physical disabilities and as such low ability

1 to care for themselves, while individuals with back pain might have more resources for self-
2 management. Having said this, the diversity could also be seen as a strength since it considers
3 the views of physiotherapists from a wide range of patient populations. The included studies
4 were from the UK, the Netherlands, Norway, and New Zealand, offering an international
5 perspective on the views of physiotherapists.

6 As there were no date limits applied to the search strategy, it is important to be mindful
7 of the fact that over time, the healthcare context in which self-management takes place can
8 change and therefore, so may the views of physiotherapists in relation to this. The robustness of
9 the review might have been affected by only one reviewer (CK) conducting the initial screening
10 of articles by title and abstract which could have resulted in errors being made. However, the
11 validity of the review was strengthened by having full-text screening, quality appraisal, and data
12 analysis carried out by two reviewers. The studies included in this review were limited to those
13 published in English, grey literature was not included, citation tracking was not used to locate
14 further articles, and experts in the field were not consulted. This may have led to the exclusion of
15 some relevant studies.

16

17 **CONCLUSIONS**

18 This study sought to synthesise the views of physiotherapists on their role in the delivery of self-
19 management approaches with a view to understanding how self-management approaches can be
20 optimised within a physiotherapy practice setting. Findings suggest that for self-management
21 approaches to work, physiotherapists believe that patients need to actively participate.

22 Boundaries on who is the expert were blurred at times with some physiotherapists struggling to
23 relinquish control. High quality patient-therapist relationships are required to build trust in order
24 to support patients in the self-management of their long-term conditions. It is also important to
25 consider the competing paradigms in which a service is delivered as this may facilitate or hinder

1 self-management. Finally, seeing patients as people is integral to supporting self-management
2 approaches. Self-management has been an increasingly important aspect of helping people
3 manage their healthcare needs and physiotherapists are well placed to support self-management.
4 However, there is still a need for a cultural and paradigmatic shift in the physiotherapy
5 profession and the findings of this review suggest that in some environments this shift as yet is to
6 be realised.

7

1 REFERENCES

- 2 Anderson RM, Funnell MM 2005 Patient empowerment: reflections on the challenge of fostering
3 the adoption of a new paradigm *Patient Education and Counselling* 57: 153-157.
- 4 Babatunde F, MacDermid J, MacIntyre N 2017 Characteristics of therapeutic alliance in
5 musculoskeletal physiotherapy and occupational therapy practice: a scoping review of the
6 literature *BMC Health Services Research* 17: 375.
- 7 Bair MJ, Matthias MS, Nyland KA, Huffman MA, Stubbs DL, Kroenke K, Damush TM 2009
8 Barriers and facilitators to chronic pain self-management: a qualitative study of primary care
9 patients with comorbid musculoskeletal pain and depression *Pain Medicine* 10: 1280-90.
- 10 Barbour RS 2001 Checklists for Improving Rigour in Qualitative Research: A Case of the Tail
11 Wagging the Dog? *British Medical Journal (International Edition)* 322: 1115–1117.
- 12 Bardach SH, Tarasenko YN, Schoenberg NE 2011 The role of social support in multiple
13 morbidity: self-management among rural residents *Journal of Health Care for the Poor and*
14 *Underserved* 22:756-71.
- 15 Bernhardsson S, Larsson ME, Johansson K, Oberg B 2017 “In the physio we trust”: A qualitative
16 study on patients’ preferences for physiotherapy *Physiotherapy Theory and Practice* 33: 535-
17 549.
- 18 Borrell-Carrió F, Suchman AL, Epstein RM 2004 The biopsychosocial model 25 years later:
19 principles, practice, and scientific inquiry *Annals of family medicine* 2 (6), 576–582.
- 20 Bridges J 2017 Gendering metapragmatics in online discourse: “Mansplaining man gonna
21 mansplain...” *Discourse, Context and Media* 20: 94-102.
- 22 Chartered Society of Physiotherapy 2019 What is Physiotherapy? Chartered Society of
23 Physiotherapy London, UK. <https://www.csp.org.uk/careers-jobs/what-physiotherapy>.
- 24 Cooper K, Schofield P, Klein S, Smith BH, Jehu LM 2017 Exploring peer-mentoring for
25 community dwelling older adults with chronic low back pain: a qualitative study
26 *Physiotherapy* 103: 138-145.
- 27 Corbin J, Strauss A 1988 *Unending Work and Care: Managing Chronic Illness at Home*. San
28 Francisco: Jossey-Bass.
- 29 Cowell I, O’Sullivan P, O’Sullivan K, Poyton R, McGregor A, Murtagh G 2018 Perceptions of
30 physiotherapists towards the management of non-specific chronic low back pain from a
31 biopsychosocial perspective: A qualitative study *Musculoskeletal Science & Practice* 38:
32 113-119.
- 33 Crowe M, Whitehead L, Jo Gagan M, Baxter D, Panckhurst A 2010 Self-management and
34 chronic low back pain: a qualitative study *Journal of Advanced Nursing* 66: 1478–1486.
- 35 Darnell RE 2007 *Corpus: The philosophical meaning of body in physical therapy theory and*
36 *practice*. Flint, MI, University of Michigan–Flint.
- 37 Department of Health 2001 *The Expert Patient: A New Approach to Chronic Disease*
38 *Management for the 21st Century* Department of Health London.
- 39 De Silva D 2011 *Helping People help themselves*. London: The Health Foundation.
- 40 Elwyn G 2011 Salzburg statement on shared decision making *British Medical Journal* 342:d1745.
- 41 Engel GL 1978 The biopsychosocial model and the education of health professionals *Annals of*
42 *the New York Academy of Sciences* 310: 169-181.
- 43 Hartley SE 2017 Re-imagining the role of the physiotherapist when managing people with long-
44 term conditions *Physiotherapy Theory and Practice* 11: 1005-1014.
- 45 Holman H and Lorig K. 2000 Patients as partners in managing chronic disease *British Medical*
46 *Journal* 320: 526–527.
- 47 Hughes S 2004 Promoting self-management and patient independence *Nursing Standard* 19: 47-
48 55.

- 1 Krupnick L, Sotsky SM, Simmens S, Moyer J, Elkin I, Watkins J, Pilkonis PA 1996 The role of
2 the therapeutic alliance in psychotherapy and pharmacotherapy outcome: Findings in the
3 National Institute of Mental Health Treatment of Depression Collaborative Research
4 Program *Journal of Consulting and Clinical Psychology* 64: 532–539.
- 5 Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JP, Clarke M, Devereaux
6 PJ, Kleijnen J, Moher D 2009 The PRISMA Statement for Reporting Systematic Reviews
7 and Meta-Analyses of Studies that Evaluate Healthcare Interventions: Explanation and
8 Elaboration *BMJ (Clinical Research Ed.)* 339, b2700.
- 9 Liddy, C, Blazkho, V, Mill K 2014 Challenges of self-management when living with multiple
10 chronic conditions: systematic review of the qualitative literature *Canadian family physician*
11 *Medecin de famille canadien* 60: 1123–1133.
- 12 Lorig K, Holman H 2003 Self-management education: history, definition, outcomes, and
13 mechanisms *Annals of Behavioral Medicine*. 26: 1-7.
- 14 Lorig, K, Holman, H, Sobel, D, Laurent, D, Gonzalez, V, Minor M 2006 *Living a Healthy Life*
15 *with Chronic Conditions* (3rd ed.). Boulder, CO: Bull Publishing Company.
- 16 Morgan HM, Entwistle VA, Cribb A, Christmas S, Owens J, Skea ZC, Watt IS 2016 We need to
17 talk about purpose: a critical interpretive synthesis of health and social care professionals’
18 approaches to self-management support for people with long-term conditions *Health*
19 *Expectations* 20: 243-259.
- 20 Mudge S, Kayes N, McPherson K 2015 Who is in control? Clinicians’ view on their role in self-
21 management approaches: a qualitative metasynthesis *BMJ Open*. 5:e007413.
- 22 Mudge S, Sezier A, Payne D, Smith G, Kayes N 2020 Pilot trial of The Living Well Toolkit:
23 qualitative analysis and implications for refinement and future implementation *BMC health*
24 *services research*, 20 (1), 69.
- 25 National Health Service Education for Scotland 2012 *Supporting people to self-manage*.
26 National Health Service Education for Scotland. Edinburgh, UK.
27 <https://www.chss.org.uk/documents/2014/03/supporting-people-self-manage.pdf>.
- 28 Naylor C, Imison C, Addicott R, Buck D, Goodwin N, Harrison T, Ross S, Sonola L, Tian Y,
29 Curry N 2015 *Transforming our Health Care System: Ten Priorities for Commissioners* The
30 Kings Fund. UK.
- 31 Newman S, Steed L, Mulligan K 2004 Self-management interventions for chronic illness *The*
32 *Lancet* 364: 1523-1537.
- 33 Nicholls DA, Gibson BE 2010 The body and physiotherapy *Physiotherapy Theory and Practice* 8:
34 497-509.
- 35 Norris M, Jones F, Kilbride C, Victor C 2014 Exploring the experience of facilitating self-
36 management with minority ethnic stroke survivors: a qualitative study of therapists’
37 perceptions *Disability and Rehabilitation* 36: 2252–2261.
- 38 Norris M, Kilbride C 2014 From dictatorship to a reluctant democracy: stroke therapists talking
39 about self-management *Disability and Rehabilitation* 36: 32–38.
- 40 Noyes J, Popay J, Pearson A, Hannes K, Booth A 2008 *Qualitative Research and Cochrane*
41 *Reviews* John Wiley and Sons.
- 42 Pearson A 2004 Balancing the evidence: incorporating the synthesis of qualitative data into
43 systematic reviews *International Journal of Evidence-Based Healthcare* 2:45–64.
- 44 Pratt JW 1989 Towards a Philosophy of Physiotherapy *Physiotherapy* 75:114-120.
- 45 Robinson L, Newton JL, Jones D, Dawson P 2014 Self-management and adherence with
46 exercise-based falls prevention programmes: a qualitative study to explore the views and
47 experiences of older people and physiotherapists *Disability and Rehabilitation* 36: 379–386.
- 48 Sadler E, Wolfe C, Jones F, McKeivitt C 2017 Exploring stroke survivors’ and physiotherapists’
49 views of self-management after stroke: a qualitative study in the UK *BMJ Open* 7: e011631.

- 1 Sadler E, Wolfe CD, McKeivitt C 2014 Lay and health care professional understandings of self-
2 management: A systematic review and narrative synthesis SAGE Open Medicine 2:
3 2050312114544493.
- 4 Sanders T, Foster NE, Bishop A, Nio Ong B 2013 Biopsychosocial care and the physiotherapy
5 encounter: physiotherapists' accounts of back pain consultations BMC Musculoskeletal
6 Disorder 14: 65.
- 7 Satink T, Cup EH, de Swart BJ, Nijhuis-van der Sanden MW 2014 Self-management: challenges
8 for allied healthcare professionals in stroke rehabilitation – a focus group study Disability
9 and Rehabilitation 37: 1745-1752.
- 10 Solvang PK, Fougner M 2016 Professional roles in physiotherapy practice: Educating for self-
11 management, relational matching, and coaching for everyday life Physiotherapy Theory and
12 Practice 32: 591–602.
- 13 Stenburg N, Furness PJ 2017 Living well with a long-term condition: service users' perspectives
14 of a self-management intervention Qualitative Health Research 27: 547-588.
- 15 Taylor SJC, Pinnock H, Epiphaniou E, Pearce G, Parke HL, Schwappach A, Purushotham N,
16 Jacob S, Griffiths C, Greenhalgh T et al. 2014 A rapid synthesis of the evidence on
17 interventions supporting self-management for people with long-term conditions: PRISMS –
18 Practical systematic Review of Self-Management Support for long-term conditions.
19 Southampton (UK): NIHR Journals Library. Health Services and Delivery Research.
- 20 Terry G, Kayes N 2019 Person centered care in neurorehabilitation: a secondary
21 analysis Disability and rehabilitation, 1–10. Advance online publication.
- 22 Thomas J, Harden A 2008 Methods for the Thematic Synthesis of Qualitative Research in
23 Systematic Reviews BMC Medical Research Methodology 8:1–10.
- 24 Tong A, Flemming K, McInnes E, Oliver S, Craig J 2012 Enhancing transparency in reporting
25 the synthesis of qualitative research: ENTREQ BMC Medical Research Methodology 12:
26 181.
- 27 Visse MA, Teunissen T, Peters A, Widdershoven GAM, Abma TA 2010 Dialogue for air, air for
28 dialogue: towards shared responsibilities in COPD practice Health Care Analysis: HCA:
29 Journal of Health Philosophy and Policy 18: 358–373.
- 30 Wiles R, Barnard S 2001 Physiotherapists and evidence-based practice: an opportunity or threat
31 to the profession? Sociological Research Online 6: 62-74.
- 32 Wilkinson A, Whitehead L 2009 Evolution of the concept of self-care and implications for
33 nurses: A literature review International Journal of Nursing Studies. 46: 1143-1147.
- 34 Wilson PM, Kendall S, Brooks F 2006 Nurses' responses to expert patients: the rhetoric and
35 reality of self-management in long-term conditions: a grounded theory study International
36 Journal of Nursing Studies 43: 803–818.
- 37 World Health Organisation 2014 Assessing chronic disease management in European health
38 systems: concepts and approaches. World Health Organisation. Geneva, Switzerland.
39 [http://www.euro.who.int/en/publications/abstracts/assessing-chronic-disease-management-in-european-health-
40 systems-concepts-and-approaches-2014](http://www.euro.who.int/en/publications/abstracts/assessing-chronic-disease-management-in-european-health-systems-concepts-and-approaches-2014).

2 Table 1. Inclusion and exclusion criteria for eligibility.

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> • Focus on the perceptions, views, experiences, or beliefs of physiotherapists or physical therapists regarding their role in the delivery of self-management. • Primary research with a qualitative or mixed-method (where the qualitative data can be extracted) study design. • English language studies published in a peer-reviewed journal. 	<ul style="list-style-type: none"> • Perceptions, views, experiences, or beliefs of patients, carers, or others. • If it is not possible to distinguish the physiotherapists views from the views of others. • If the focus was not on the physiotherapists' role in the delivery of the self-management approach, (e.g. focused on the views of the intervention rather than the self-management approaches). • Grey literature and systematic reviews. • Quantitative study design.

Table 2. Quality appraisal of included studies

Criteria	Cooper et al, 2017	Cowell et al, 2018	Crowe et al, 2010	Norris et al, 2014	Norris and Kilbride 2014	Robinson et al, 2014	Sadler et al, 2017	Satink, et al, 2014	Solvang and Fougner, 2016	Visse et al, 2010	Wilson et al, 2006
1. There is congruity between the stated philosophical perspective and the research methodology	Y	N	U	Y	Y	Y	U	Y	U	Y	U
2. There is congruity between the research methodology and the research question or objectives	Y	Y	Y	Y	Y	Y	Y	Y	Y	U	Y
3. There is congruity between the research methodology and the methods used to collect data	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4. There is congruity between the research methodology and the representation and analysis of data	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
5. There is congruity between the research methodology and the interpretation of results	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
6. There is a statement locating the researcher culturally or theoretically	U	N	N	U	N	Y	Y	N	N	N	N
7. The influence of the researcher on the research, and vice-versa, is addressed	N	Y	N	Y	Y	Y	N	Y	Y	N	N
8. Participants and their voices are adequately represented	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
9. The research is ethical according to current criteria or, for recent studies, there is evidence of ethical approval by an appropriate body	Y	Y	Y	Y	Y	Y	Y	U	Y	N	Y
10. Conclusions drawn in the research report appear to flow from the analysis or interpretation of the data	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Total number of items with Y response	9	8	7	9	9	10	8	8	8	6	7

N, no; U, unclear; Y, yes

Table 3. Table of theme development

Stage 1: Open coding	Stage 2: Descriptive themes	Stage 3: Analytical themes
<p>Importance of individualised approach and goal setting Patients should be encouraged to take control and responsibility Poor cognition Best patients Expert patient Little could be done to encourage those who did not wish to participate Older people poorly motivated Patients responsible for own functional decline Patient response to self-management Patient inexperience in self-management Patient specific barriers to self-management Self-efficacy Patient treatment preferences Patient views of physiotherapy Patients want to please the physiotherapist Dependence on professional support Personal responsibility of the patient</p>	<p>Attitude of the patient</p>	<p>Focus on active participation</p>
<p>Communication Education Functional approaches</p>	<p>Strategies to promote exercise adherence</p>	
<p>Medical model Changes in service delivery Environmental constraints to exercise or rehabilitation Lack of onward options MDT in self-management Phase of illness Acute versus community Resistance to patient self-management Stages of rehabilitation Time Vulnerability of patients</p>	<p>Constraints to service delivery</p>	<p>Conflicting paradigms</p>

Mind body connection Whole person approach Life world	Mind body connection	Seeing patients as people
PT desire to remain in control Uneven power structure Therapeutic control Personal views impact on professional role Relinquishing control Risk in self-management	PT desire to remain in control	Physiotherapist as the expert
PTs require skills or training	PTs require skills or training	
Trusting therapeutic relationship Therapeutic alliance Empowering patients Collaboration Ownership Lack of trust in patient testimony Listening to patients PT needs to be able to motivate PT views on who is motivated	Trusting therapeutic relationships	Valuing the quality of the patient-therapist relationship social
Supportive social environments Socio cultural background	Socio cultural background	

Table 4. Overview of included studies

Study	Patient groups	Context	Data collection methods	Aims
Cooper et al, 2017	Older persons with chronic lower back pain	Setting: United Kingdom – primary care 13 National Health Service Physiotherapists (11 female). Experience cannot be determined from details given.	Focus groups and semi-structured interviews	To explore the perceptions of patients, physiotherapists, and potential peer mentors on the topic of peer-mentoring for self-management of chronic low back pain following discharge from physiotherapy.
Cowell et al, 2018	Non-specific chronic low back pain	Setting: United Kingdom – primary care 10 National Health Service Physiotherapists (3 female) who had 3-14 years' experience working in the musculoskeletal field.	Semi-structured interviews	To explore the perceptions of physiotherapists' in primary care in England adopting a biopsychosocial approach to managing non-specific chronic lower back pain patients.
Crowe et al, 2010	Chronic low back pain	Setting: New Zealand – primary care 15 Healthcare professionals including physiotherapists. Exact number of physiotherapists not stated. Gender/Experience cannot be determined from details given.	Semi-structured interviews	To investigate how healthcare professionals perceive their role in facilitating self-management.
Norris, Jones, Kilbride, and Victor, 2014	Stroke survivors	Setting: United Kingdom – rehabilitation (acute and community) 12 physiotherapists (10 female) who had been qualified between 2-36 years.	Semi-structured interviews	To explore the experience of healthcare professionals in using an individualised self-management approach with stroke survivors from minority ethnic backgrounds.
Norris and Kilbride 2014	Stroke survivors	Setting – United Kingdom – rehabilitation (acute and community) 7 physiotherapists (6 female) who had been qualified between 7-36 years.	Semi-structured interviews	To present the views of trained therapists about the utility of a specific self-management approach in stroke rehabilitation.

Robinson, Newton, Jones, and Dawson, 2014	Older persons at risk of falls	Setting: United Kingdom – rehabilitation (hospital and community) 17 physiotherapists (14 female) who had been qualified between 1-28 years.	Focus groups	To involve older people and physiotherapists in the development of acceptable strategies to promote uptake and adherence with an exercise-based falls prevention programme.
Sadler, Wolfe, Jones, and McKeivitt, 2017	Stroke survivors	Setting: United Kingdom – inpatient stroke unit and community 13 physiotherapists with between 1-7+ years' experience in stroke rehabilitation. Gender not stated.	Semi-structured interviews	To explore physiotherapists' views of self-management, focusing on what self-management means and factors perceived to enable and hinder self-management after stroke.
Satink, Cup, de Swart, and Nijhuis-van der Sanden, 2014	Stroke survivors	Setting: The Netherlands – primary care and private practice 4 physiotherapists. Gender/experience not stated	Focus groups	To explore allied healthcare professionals' perceptions and beliefs regarding the self-management of stroke survivors and their knowledge and skills regarding stroke self-management interventions.
Solvang and Fougner, 2016	Patients with a "wide range of health problems"	Setting: Norway – sports clinics, orthopaedic rehabilitation and a rehabilitation hospital 12 physiotherapists (11 female) with between 7-37 years' experience.	Focus groups	To gain an understanding of how physiotherapists in practice understand their interactions with patients during the treatment process.
Visse et al, 2010	Chronic Obstructive Pulmonary Disease	Setting: The Netherlands – centre for people with Chronic Obstructive Pulmonary Disease 2 lung physiotherapists (four interviews in total). Gender/experience not stated.	Semi-structured interviews	To evaluate a Chronic Obstructive Pulmonary Disease programme and examine the possibilities to enrich the notion of self-management.
Wilson, Kendall, and Brooks, 2006	Long-term conditions	Setting: United Kingdom – community, primary, and secondary care settings 32 physiotherapists. Gender/experience not stated.	Focus groups and semi-structured interviews	To explore how patient expertise is viewed, interpreted, defined and experienced by patients and healthcare professionals, to analyse how patient expertise is promoted and enabled through the self-management process.

Figure 1. Flow chart of study selection

