

## Title page

**Title:** Transitions from healthcare to self-care: A qualitative study of falls service practitioners' views on self-management

**Running head:** Transitions from healthcare to self-care

Clare Killingback<sup>a\*</sup>, Mark A Thompson<sup>a</sup>, Sarah Chipperfield<sup>a</sup>, Carol Clark<sup>b</sup>, Jonathan Williams<sup>b</sup>

<sup>a</sup> University of Hull, Hull, UK

<sup>b</sup> Bournemouth University, Bournemouth, UK

\* **Corresponding author:** [ckillingback@hull.ac.uk](mailto:ckillingback@hull.ac.uk)

Tel - + 44 (0)1482 463641

Faculty of Health Sciences, University of Hull

Cottingham Road, Hull, HU6 7RX

Word count (excluding reference list): 5,395

### Implications for falls rehabilitation

- Falls rehabilitation practitioners need to take a person-centred approach to engage patients in self-management of falls prevention exercises.
- Providing information and signposting to exercise opportunities such as community-run programmes following falls service interventions should be viewed as being within the scope of the role of falls service practitioners.
- Rehabilitation practitioners should consider viewing falls risk as a long-term condition, to promote longer-term behavioural change approaches to ongoing engagement of exercise for falls prevention.

### **Transitions from healthcare to self-care: A qualitative study of falls service practitioners' views on self-management**

#### **Abstract**

Purpose: The aim of this study was to understand the views of falls service practitioners regarding: their role in supporting self-management of falls prevention; and a transition pathway from National Health Service (NHS) exercise-based falls interventions to community-run exercise programmes.

Method: Semi-structured interviews were conducted with physiotherapists, nurses, and rehabilitation assistants (n=8) who worked in an NHS falls service. Data were analysed using thematic analysis.

Results: Certain aspects of supporting patients in self-management were deemed to be within or beyond the scope of falls service practitioners. Challenges in supporting transition to community-run programmes included: practitioner awareness and buy in; patient buy in; and patient suitability /programme availability.

Conclusion: Practitioners sought to be patient-centred as a means to engage patients in self-management of falls prevention exercises. Time-limited intervention periods and waiting list pressures were barriers to the promotion of long-term self-management approaches. A disconnect between falls service interventions and community-run programmes hindered willing practitioners from supporting patients in transitioning. Unless falls risk and prevention is seen by healthcare providers as a long-term condition which requires person-centred support from practitioners to develop self-management approaches, then falls services may only be able to offer short-term measures which are potentially not long lasting.

## **Keywords**

Self-management

Falls prevention

Falls service

Patient-centred care

Physiotherapists

Rehabilitation assistants

Nurses

Community exercise programmes

## **Background**

The cost of falls and subsequent fragility fractures is high. Falls can result in reduced independence and function, and considerable morbidity and mortality [1]. Exercise has been found to be the single most effective way to prevent falls [2,3]. As such, recent guidelines state that older people at risk of falls should be referred for strength and balance exercise training [4].

For strength and balance exercise programmes to be effective they should involve a minimum of 50 hours or more (2 hours per week) over a six-month period [2]. Strength and balance exercise programmes delivered by National Health Service (NHS) falls services in the United Kingdom typically last between 6-8 weeks; thus, not providing a high enough exercise dose to prevent falls [2,5]. The time limited nature of NHS strength and balance exercise programmes highlights the importance of helping individuals' transition from NHS-based to ongoing exercise programmes if they are to get the long-term health gains. Literature suggests that many older people would like the opportunity to join follow-on classes following their exercise-based falls intervention [6].

One possible solution to support ongoing exercise is to provide a pathway so that patients from NHS-run programmes seamlessly transition to community-run exercise programmes. A service evaluation of such a transition found that 63.3% of patients successfully transitioned from an NHS referral strength and balance exercise programme to a continuous open access community programme [7]. This model demonstrated improved functional outcomes and lower falls risk from baseline attendance at falls and fracture service to follow up (24 weeks) [7].

Health care practitioners have a key role to play in supporting individuals in transitioning from structured interventions to independent exercise to allow sustained behaviour change [8].

One of the key stakeholders in the possible implementation of a transition pathway are the healthcare practitioners involved in delivering NHS strength and balance exercise programmes. Literature suggests that practitioners involved in falls prevention programmes often struggle to relinquish control of the treatment programme and to empower patients in their own self-management [9]. A focus on self-management support has been suggested as a means to promote uptake and adherence to exercise-based falls prevention [9]. Given this, understanding the views of healthcare practitioners involved in falls prevention regarding their role in supporting self-management of falls prevention and ongoing sustained exercise is important if older people are to be empowered in self-managing their risk of falls. Therefore, this exploratory study will seek to address the following research questions:

1. What are the views of falls service practitioners regarding their role in supporting those at risk of falls in the self-management of falls prevention?
2. What are the views of falls service practitioners regarding a transition pathway from NHS exercise-based falls interventions to community-run exercise programmes?

## **Methods**

### ***Study design***

A qualitative methodology was used to explore the views of practitioners and was located within a critical realist paradigm. This research paradigm embraces a complex view of reality and is cognisant of the effect of agency and structural factors prevalent within human behaviour [10]. As such, the type of knowledge produced is to some degree subject to the questions asked in relation to the world being studied and inevitably a reflection of the perspective of the researcher's own world view [11,12]. It is therefore important to state that four members of the research team were physiotherapists by background (CK, SC, CC, and JW) with one of those four having worked as a community physiotherapist in an integrated rehabilitation team with a high caseload of patients at risk of falls (CK). The other member of the research team (MT) was a research assistant with a background in psychology. As experienced physiotherapists, the researchers held views and assumptions about falls rehabilitation which may have influenced the research process. Therefore, the lead researcher (CK) and research assistant (MT) documented their pre-conceptions prior to data collection and through the analytical journey in a reflexive diary. To further address any epistemological conflicts of the world views of the research team, regular peer debriefing sessions were held to minimise risk of researcher bias.

Semi-structured interviews provided the falls service team with the opportunity to reflect upon their views of and assumptions regarding current approaches to falls service delivery and possible pathways to promote long-term self-management strategies for those at risk of falls. This qualitative approach was deemed the most appropriate to understand the perspectives of practitioners in-depth from an emic perspective [13].

### ***Participant recruitment***

A sample of convenience was used to recruit participants [14]. To be eligible for the study, participants had to be members of the falls service team who worked face-to-face with older people at risk of falls. All practitioners were invited to participate in the study through an email invitation by the team leader for the falls service. They were provided with an information sheet about the study and informed written consent was obtained prior to data collection. Ethical approval for the study was obtained from the University of Hull Research Ethics Committee (FHS156).

### ***Study context***

The falls service under study is delivered by an organisation which is commissioned to provide falls rehabilitation in the North East of England. It is an integrated team involving physiotherapists, nurses, occupational therapists, and rehabilitation assistants. The falls service receives approximately 400 referrals per month which typically come from a wide range of sources including: general practitioners, consultants, health and social care professionals, acute hospitals, social services, the ambulance service or care homes.

To access the service, patients needed to be 18 years or over, registered with a local general practitioner, and have had one or more fall in the last six months. The falls service assesses patients and provides support with a view to reducing the risk of falls and falls related injuries. This could be through providing aids or adaptations to a person's home, medications review, and strength and balance exercises. This is predominantly provided in a patient's home setting to help those with a history of falls to remain independent. Patients are involved with the service for up to 8 weeks.

### ***Data collection***

Interviews were conducted between June and July 2019 and were carried out at a time and location convenient for participants using a semi-structured interview guide (table 1). The interview guide was developed through consideration of the literature, the overarching aim of

the study, and the research questions. Interviews were conducted by a research assistant (MT – a male, postdoctoral researcher trained in qualitative methods who had no prior relationship with the study participants). Interviews were digitally recorded and no one else was present for the interviews beside the participant and the research assistant. The interviewer was introduced to participants as a researcher.

table 1. Interview guide

<b>Question</b>	<b>Prompt</b>
Tell me about the exercise-based falls prevention programmes your team runs.	
Please tell me about how long you've been working with exercise-based falls prevention programmes?	How did you come to be involved? What's the best thing about working with these programmes? What's the most challenging thing about working with these programmes?
What factors do you think make it easy for your patients to participate in an exercise-based falls prevention programme?	
What factors do you think make it difficult for your patients to participate in an exercise-based falls prevention programme?	
What strategies have you or your patients used to promote adherence with an exercise-based falls prevention programme?	Which of these strategies have worked best? What have not been as successful as you would have hoped?
How do you think patients might feel if there was an option to keep exercising after the programme finished?	
What are your views (positive and negative) of patients transitioning to an on-going exercise programme in the community?	
Tell me about what you think some of the	Location?

<p>facilitators and barriers / challenges to patients transitioning to an on-going exercise programme in the community might be?</p> <p>What things might help patients transition?</p>	<p>Cost?</p> <p>Transport?</p>
<p>Who do you think might need to run these on-going exercise programmes in the community?</p> <p>How do you feel about exercise instructors delivering the programme and handing ‘your’ patients over to them?</p>	<p>What sort of qualifications might they need?</p>
<p>Is there anything else that you want to add which we haven’t already spoken about?</p>	

***Data analysis***

The digitally recorded interviews were transcribed verbatim. Data were analysed using inductive thematic analysis [15]. Computer-assisted qualitative data analysis software was used in the process of data analysis to ensure transparency and provide an audit trail of the data analysis process [16].

Data were read and re-read to allow immersion to the extent of being familiar with the depth and breadth of the content. CK and MT inductively coded the data. Codes were sought to express the data in the forms of concepts by segmenting data, followed by sorting codes into potential themes, refining, defining, and reporting themes [15]. SC, CC and JW independently cross-checked sections of the qualitative data analysis by comparing the codes and themes to the transcripts. Any discrepancies with the coding or themes were resolved through discussion with the research team to reach a consensus. These discussions included the review of reflexive diaries to ensure the research team were cognisant of their influence on the study findings. This was a valuable process as it assisted in the refinement and interpretation of themes [17].

## Results

### *Participant demographics*

At the time of data collection, the falls service was made up of five physiotherapists, three occupational therapists, four nurses, and seven rehabilitation assistants. A total of eight participants consented to be involved in the study (five female and three male). These included three physiotherapists, two nurses, and three rehabilitation assistants. Participants had been working in exercise-based falls rehabilitation for between 1-10 years with a mean of 5 years. Interviews were between 12 – 32 minutes in length. Further participant demographic information can be found in table 2.

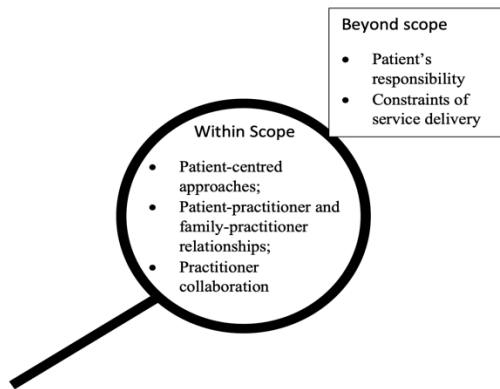
table 2. Participant demographic information

Participant	Gender	Age (years)	Years in practice	Years working in exercise-based falls prevention	Profession
1	Male	45-54	8	5	Rehabilitation assistant
2	Female	35-44	18	6	Physiotherapist
3	Female	Not stated	Not stated	1	Rehabilitation assistant
4	Female	45-54	6	6	Physiotherapist
5	Male	45-54	20	1.5	Nurse
6	Male	35-44	16	7	Physiotherapist
7	Female	55-64	14	1	Rehabilitation assistant
8	Female	55-64	40	10	Nurse

### *Supporting people at risk of falls in self-managing falls prevention*

There were two overarching themes: within scope and beyond scope. These highlighted what the falls team perceived to be within their scope and beyond their role in supporting those at risk of falls in their self-management of falls prevention. The overarching themes and sub-themes are displayed in figure 1.





[figure 1 near here] Thematic schema of supporting people at risk of falls in self-managing falls prevention

***Theme One: Within scope***

Three sub-themes are included as part of this overarching theme: patient-centred approaches; patient-practitioner and family-practitioner relationships; and practitioner collaboration.

### *Patient-centred approach*

Rehabilitation staff within the falls service sought to practice using a patient-centred approach. This was seen as important in supporting patients in the long-term self-management of falls. As part of the initial assessment, they focused on the specific needs of the patient rather than a “cookie cutter approach”. This was important in tailoring treatments specifically to an individual. Central to the patient-centred approach was the setting of goals relevant to the individual, which was typically undertaken by the same practitioner to aid continuity. This was seen as an important self-management enabler due to the rapport and understanding built up between practitioner and patient over time.

I like to get my own aims and goals with the patient, once I’ve actually met them, because it’s alright just completing the exercise programme, but their aim might be, actually I want to go to the shops, you know, and be able to feel confident doing that, so that’s a personal aim. (Participant 3, Rehabilitation Assistant)

A range of strategies were utilised to support patients in their ongoing adherence to falls prevention exercises. For example, motivational charts, memory sheets and innovative technology such as smart speakers were used to help patients monitor their personal progress:

We’ve got charts where they can tick it to see how their progress is going... if they’re improving, ‘This week you’ve managed to do that without holding on,’ tick it, and they think, ‘Ooh,’ then that motivates them further on because they can see that chart. (Participant 4, Physiotherapist)

However, there was also an unavoidable acceptance by staff that there was the ongoing risk of falls within this population of older people; scope for improvement for some was limited. Furthermore, there was an understanding that even with a strong emphasis on patient-centred rehabilitation, some patients were not motivated. This was not necessarily viewed in a judgemental way, but rather in the sense that if someone was not motivated, there was little that could be done to change that.

### *Patient-practitioner and family-practitioner relationships*

The importance of a good patient-practitioner relationship was viewed as being helpful in supporting patients in their self-management of falls. Key to this relationship was rapport building with the patient, which was perceived as an important factor in patient exercise motivation and adherence.

I've seen it elsewhere how that chops and changes from week to week and you've got a different person. So, the quality of the input and obviously, they don't get to develop a rapport with that person and confidence in the person that's leading their therapy really. (Participant 6, Physiotherapist)

Educating patients regarding the rehabilitation process and what it can achieve was seen as central to a practitioner's role in supporting patients in the management of falls. Building a rapport with a patient's family was also seen as an essential part of a practitioner's role. Indeed, family members were described as potentially significant facilitators in a patient's rehabilitation. As such, practitioners took the time to communicate with a patient's family as they felt that patients who have the most favourable outcomes are those who have family members who can support them with their exercises on a regular basis.

#### *Practitioner collaboration*

Given the complexity of individual patients at risk of falls, a multidisciplinary team, problem-solving approach was developed by practitioners. This took the form of weekly meetings where any practitioner can discuss a patient they have concerns about. They were passionate about practitioner collaboration as they felt that such discussions served as an opportunity to exchange knowledge and expertise and help patients overcome barriers.

If I've been seeing somebody for a couple of weeks... I'm struggling with how to get the patient to progress... then I'll bring that patient to the meeting and say, 'Does anybody suggest anything? Am I missing something?' So, it's quite nice to talk it through with people, there might be something really simple and obvious, there's a wealth of knowledge and expertise. (Participant 3, Rehabilitation Assistant)

The falls team appreciated the diversity of the disciplines within the team to facilitate a multifactorial approach to falls prevention with a focus on patient-centred rehabilitation.

#### ***Theme Two: Beyond Scope***

Two sub-themes are included as part of this overarching theme: patient's responsibility and constraints of service delivery.

### *Patient's responsibility*

Significant aspects of the falls rehabilitation programme were deemed to be the patient's responsibility. A core aspect of this was the idea that to make progress, there was an onus on the patient to take ownership of their recovery, as well as to motivate themselves to conduct their exercises.

What we want patients to do is take responsibility for their own care as well. I mean we give them the tools to do these exercises, but we can't nanny them. They take responsibility. (Participant 5, Nurse)

Regardless of practitioner efforts, there were some patients that could not be motivated.

If they're still not being compliant after we've addressed the barriers... then it's a case of saying, 'Well, I can't come anymore. I can't justify coming to continue with these sessions if you're not doing the exercises because there is a large waiting list of people, and a number of them on there will do'. A bit harsh, but it needs to be said sometimes. (Participant 1, Rehabilitation Assistant)

As such, whilst practitioners were there to develop falls prevention plans, they did not view themselves as there to enforce them. One practitioner believed that patient's aversion to the prescribed rehabilitation programme may be attributed to cultural values and beliefs about healthcare in the United Kingdom in relation to other European countries. They felt it was difficult for patients to take responsibility for their health since they had been "looked after all their life with regards to their health" (Participant 5, Nurse).

Aside from the justification of reducing waiting list levels, the importance of patient responsibility was emphasised due to the lack of practitioner involvement after the eight-week programme had finished. Thus, they sought to encourage patients that they would need to self-manage and maintain the exercises for the rest of their life to help them reduce the risk of falling.

### *Constraints of service delivery*

Falls service practitioners were conscious of the constraints of service delivery. This was a challenge in that the apparent need to reduce the falls service waiting list gave the sense that care was designed for brevity with a limited effect rather than for long-term patient progress.

I think the issue is that there's such an emphasis on getting through a waiting list, getting the patients seen and moved through and looking at the short-term outcome, they haven't had any falls in the time that we've seen them, but is that as good as we could get them? Is that the optimal that we could get them? (Participant 6, Physiotherapist)

To combat this, regular follow-up checks by the falls service was recommended. This would ensure an individualised programme for each patient to improve their experience and progress. However, no such input currently exists, and was viewed as being at the detriment of a patient's ability to self-manage their risk of falls long-term. This resulted in a cycle in which patients were regularly being referred back to the falls service due to further falls. This re-admittance was suggested to be due to patient non-adherence following the completion of the falls programme, although it was also suggested that non-optimal progress during the programme had a part to play due to the limited eight-week timeframe for involvement.

### **The views of falls service practitioners regarding transition pathways**

Challenges in supporting transition to community run programmes was the overarching theme with three sub-themes: practitioner awareness and buy in; patient buy in; and patient suitability / programme availability. The themes are displayed visually in figure 2.



[figure 2 near here] Thematic schema of challenges in supporting transition to community run programmes

### *Practitioner awareness and buy in*

Practitioner awareness of community-run exercise programmes was limited. Whilst some practitioners believed that community programmes were available, acquiring information regarding them and referring patients on appeared to be challenging.

I have to spend a lot of time ringing and saying, you know, 'Is there anything available?' So, I think if I don't find that information readily available, I'm assuming that patients don't either. (Participant 3, Rehabilitation Assistant)

This lack of practitioner awareness inevitably translated through to a lack of signposting to patients. However, one practitioner felt that a patient's knowledge regarding community-run programmes was their own responsibility.

One reason for the lack of awareness regarding community-run programmes was suggested to be a lack of collaboration between practitioners and individuals who worked within community programmes. To alleviate this, some practitioners believed that they should be involved within community-run programmes to smooth the patient transition.

I think if it was done on a group basis, you know, if they were going from the setting of the exercises that we were practicing at home to a community-based approach... we should have links to that. We should at least be present in the first two or three sessions so that they can see that there's someone there that they've built up a rapport with... It also, I think, gives colleagues that are running that group some degree of credibility that we've got confidence in them to continue that as well and then we can withdraw from that for a period of weeks (Participant 6, Physiotherapist).

Practitioners were at least theoretically comfortable with the idea of referring suitable patients towards community-run exercise programmes. This practitioner buy in related to the social benefits a successful transition could offer as well as the potential for a patient improving beyond the eight-week falls service programme offered by the falls service.

On the last week, it is, like, ‘Right, referral on. Where else do we want to go with this?’ ... it’s one of the things that we automatically look at, thinking about... What else can we do? (Participant 2, Physiotherapist)

However, despite these positive views, the referral rate for patients making the transition into community-run exercise programmes was low, with an estimate from one practitioner as little as 25-30%. A number of barriers were identified as contributing to low referral rate including patient buy in, patient suitability and programme availability.

#### *Patient buy in*

Patient buy in would be necessary to support transition to community-run exercise programmes. Practitioners were aware that after the falls service intervention, some patients had reached their goals and wished to progress further. As such, they could then refer onto ongoing community exercise programmes.

Central to patient buy in was the social involvement offered within community programmes.

It’s the social aspect they like sometimes more than actually doing the exercises. That they’re going somewhere else and seeing other people who are in very similar circumstances to themselves, that they like. (Participant 4, Physiotherapist)

Following the eight-week falls service intervention, a number of patients were unwilling to receive further input as they did not feel it would be beneficial for them.

It comes down to patient choice, and that’s the problem that we have. Because we may look at somebody and go, ‘Oh God, you’d be great for OTAGO class,’ or, ‘You’d be great for Red Cross, or for the health trainers’ ... ‘No, not interested’. They have no interest. (Participant 2, Physiotherapist)

One explanation offered by practitioners for a lack of patient buy in was due to the perception that exercise was a new concept: “They’re from a generation that didn’t do the gym and physio, and stuff, they just kept busy... Exercise is a fairly new concept to some of the older ones.” (Participant 7, Rehabilitation Assistant)

Psychological factors were also suggested as potential inhibitors of patient buy in. Patients who were anxious about interacting with other people were deemed less likely to want to make the community programme transition.

#### *Patient suitability / programme availability*

Patient suitability was viewed as being an important factor in whether it would be possible to transition onto community-run programmes. Even if patients wished to make the transition into community programmes, some simply were not well enough or physically able to participate. Challenges around transport were also noted with reduced community transport or family not being able to take patients.

Practitioners emphasised that the range and suitability of programmes available impacted on patient transition. Indeed, the more types of programmes offered, the more likely a patient was to be interested in participating. The availability of community programmes was viewed as being a postcode lottery. Practitioners noted that a number of community programmes had shut down over time due to financial challenges. This was seen as directly inhibiting patient self-management of falls prevention, as these services encouraged patients to continue with their prescribed exercises.

We did have a great big list of group sessions things and you ring them up, ‘No, that’s no longer going.’ It’s a lot to do with funding, unfortunately. If they (patient) could keep going to something, it would make them think, ‘I’m doing this there. I’ve got to continue doing what the physio told me at home as well.’ So that’s the big problem.  
(Participant 4, Physiotherapist)

In particular, community-run programmes suitable for men were perceived as under-represented. Female patients particularly benefitted from a wide range of gender-oriented programmes which catered to their needs and enhanced the likelihood of them making the transition, although these were often more socially focused rather than exercise-based. Taken together, these feasibility issues led one practitioner to describe the transition pathway to community-run exercise programmes as a “gaping hole” (Participant 5, Nurse).

## **Discussion**

This study has found that falls service practitioners employ patient-centred approaches, seek to develop strong patient-practitioner and family-practitioner relationships, and collaborate with practitioners in supporting people at risk of falls in self-managing falls prevention. These aspects were deemed to be within the scope of their role. Beyond the scope of their role were aspects of the patient’s responsibility and constraints of service delivery. Several challenges were noted by falls service practitioners in supporting those at risk of falls in transitioning to community run exercise programmes, namely, practitioner awareness and buy in; patient buy in; and patient suitability / programme availability. This knowledge is



important because it adds understanding to the role that a transition pathway could play in supporting people in the self-management of falls prevention. This study has three contributions to supporting patients in the self-management of falls and transition to ongoing community-run exercise programmes.

Firstly, practitioners reported that they worked hard to be patient-centred in their practice as a means to engage patients in ongoing self-management of falls prevention exercises. This is important because patient or person-centred care and self-management are closely linked. Self-management is one of the five themes at the heart of what high-quality, patient-centred care should involve [18]. If teams delivering exercise-based falls interventions are to be successful in helping people self-manage falls, then taking a patient-centred approach is of utmost importance. Moreover, this needs to be underpinned by a model of shared decision making so that practitioners involved in falls prevention do not adopt a ‘take it or leave it’ approach to patient adherence to falls exercises [9]. It could be suggested that falls rehabilitation practitioners within this current study sought to avoid this ‘take it or leave it’ attitude through weekly multidisciplinary meetings where they developed strategies to help overcome any barriers patients may have with strength and balance falls prevention exercises. However, the language used by practitioners was revealing in that if patients were “still not being compliant” after seeking to address barriers then patients were simply discharged. This could indicate that practitioners were aware of patient choice and autonomy, or suggestive of a paternalistic, reductionist approach to exercise for falls prevention which was not as patient centred as was first thought. It is important to recognise that views on person-centredness are on a continuum and as such practitioners will be at varying points on that continuum [19,20]. Perhaps some practitioners still have a way to go before practice is truly patient-centred.

The second point raised from the perspective of the falls service which hindered the promotion of long-term self-management was the pressures from waiting lists and the eight-week, time-limited intervention period. This is reflective of the current political climate of efficiency and cost savings with challenges from the rising health burden of long-term conditions [21] and is why self-management interventions have been promoted as increasingly important aspects of helping people manage their long-term chronic conditions [22]. However, whilst it is recognised that falls are a symptom, there have been calls in the literature for falls risk to be considered a long-term condition [9]. Viewing falls risk as a long-term condition would pave the way for longer-term behavioural approaches to be introduced, including behaviour change in the promotion of ongoing engagement of exercise

for falls prevention [8]. Falls rehabilitation practitioners in this current study did not explicitly discuss behaviour change, however, elements such as goal setting, reviewing outcomes of goals, self-monitoring of behaviour through exercise diaries or motivational charts, shaping knowledge on how to perform the exercises, and habit formation were included [23]. The challenge is that behaviour change guidelines recommend that practitioners involved in behaviour change programmes and interventions should seek to support people in maintaining their behaviour change in the long-term which is classed as more than one year [24]. The one-year recommendation is a long way from the eight-week falls service intervention period and highlights a systems issue which is orientated and funded to only provide eight-weeks of support. Given the challenging economic healthcare environment, helping people transition to ongoing community-run exercise programmes could be key in helping those at risk of falls maintain exercise behaviours. This would offer an alternative model to home-based programmes with the community exercise group instructors supporting the long-term behaviour change of maintaining exercise to minimise falls risk.

In this study, practitioners recognised the wider social wellbeing benefits of community programmes beyond exercise. This could be reflective of the patient-centred approach undertaken by practitioners who tried to focus on the whole person rather than just falls risks. Social aspects of community-based exercise programmes have been found to be a source of enjoyment, support, and belonging for older people which in turn support ongoing engagement [7,25-27] and longer term behaviour change [24]. These social, group dynamics support social connectivity over the latter part of older people's lives [27]. This is important because the quality and quantity of a person's social relationships are a key health determinant, not only in terms of mental health but also with regards to morbidity and mortality [28]. These authors suggest there is a need for more joined up conversations in the falls prevention literature and in practice about the role of ongoing community-run exercise programmes in enhancing wellbeing.

Thirdly, in terms of transition there was a disconnect between NHS-run exercise-based falls prevention services and community-run exercise programmes. This disconnect was evident in a lack of perceived availability of programmes suitable for the range of patient groups and the lack of awareness of community-run programmes. This was in part due to a lack of relationship and collaboration with community-run programmes which raises the question of who is responsible for helping older people maintain their exercise behaviours beyond the

time limited NHS interventions. Literature suggests that health care professionals can facilitate individuals' transition to new exercise programmes by providing information and signposting to exercise opportunities [7-9,29,30]. This indicates that it should be within the scope of those involved in falls services to provide appropriate, up-to-date, and relevant information about these opportunities. However, challenges around the sustainability of community exercise programmes with a lack of consistent provision are recognised as a difficulty for those who wish to transition at the end of their NHS intervention [5].

### ***Strengths and limitations***

The strength of this study is that it considered the views of a range of healthcare practitioners involved in a falls service to better understand how to help older people sustain exercise beyond a time-limited intervention. Limitations include that no occupational therapists consented to be involved in the study. This study was limited to one falls service in one geographical location which may reduce the transferability of the findings. There were a limited number of participants who consented to be involved in the study, which made it difficult to determine whether data saturation was reached.

### **Conclusion**

This study sought to explore the views of healthcare practitioners involved in falls prevention in understanding how they support older people in self-managing falls and the potential for a transition pathway to community-run exercise programmes. This is important in developing knowledge regarding how to promote self-management strategies for falls prevention and support sustained engagement with strength and balance exercise beyond time-limited health service interventions. This study found that the time-limited nature of falls service interventions was a barrier to long-term self-management of falls. Unless falls risk and prevention is seen as a long-term condition, which requires person-centred support from practitioners to help those at risk of falls develop self-management approaches, then falls services may only be able to offer quick, short-term measures which are potentially not long lasting. The authors would urge healthcare practitioners involved in falls service interventions to reflect carefully on what is within and what is beyond their scope in supporting individuals at risk of falls. This might include how they connect with and advocate for community-run exercise programmes with a view to supporting individuals who wish to transition to community groups.

### **Acknowledgement**

This work was carried out by funding from the Higher Education Innovation Fund.

### **Declaration of interest**

The authors report no conflict of interests.

### **References**

1. Masud T, Morris RO. Epidemiology of falls. Age and ageing. 2001;30 Suppl 4:3-7.
2. Sherrington C, Michaleff ZA, Fairhall N, et al. Exercise to prevent falls in older adults: an updated systematic review and meta-analysis. British Journal Of Sports Medicine. 2016.
3. Sherrington C, Fairhall NJ, Wallbank GK, et al. Exercise for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews. 2019 (1).
4. NICE. Falls in older people. Quality standard [QS86]. UK: National Institute for Health and Care Excellence; 2017.
5. Centre for Ageing Better. Raising the bar on strength and balance: The importance of community-based provision. UK2019.
6. Dickinson A, Machen I, Horton K, et al. Fall prevention in the community: what older people say they need. British Journal of Community Nursing. 2011;16(4):174-180.
7. Hawley-Hague H, Roden A, Abbott J. The evaluation of a strength and balance exercise program for falls prevention in community primary care. Physiotherapy Theory & Practice. 2017 2017-08;33(8):611.
8. Finnegan S, Bruce J, Seers K. What enables older people to continue with their falls prevention exercises? A qualitative systematic review. BMJ open. 2019;9(4):e026074.
9. Robinson L, Newton JL, Jones D, et al. Self-management and adherence with exercise-based falls prevention programmes: a qualitative study to explore the views and experiences of older people and physiotherapists. Disability and Rehabilitation. 2014 2014;36(5):379-386.
10. Given LM. The SAGE Encyclopedia of Qualitative Research Methods. SAGE Publications; 2008 2008.
11. Danermark B, Ekstrom M, Jakobsen L, et al. Explaining Society: An Introduction to Critical Realism in the Social Sciences. Taylor & Francis; 2005 2005.
12. Maxwell JA. A Realist Approach for Qualitative Research. SAGE Publications; 2012 2012.

13. Guba EG, Lincoln YS. Competing paradigms in qualitative research. In: Denzin NK, Lincoln YS, editors. Handbook of qualitative research. Thousand Oaks, CA, US: Sage Publications, Inc; 1994. p. 105-117.
14. Polit D, Beck C. Nursing research : generating and assessing evidence for nursing practice.: Philadelphia : Wolters Kluwer Health/Lippincott Williams & Wilkins, c2012.; 2012 2012.
15. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006 2006;3:77-101.
16. Saunders M, Lewis P, Thornhill A. Research methods for business students. Harlow, England ; New York : Pearson, 2012. 6th ed.; 2012 2012.
17. Barbour R. Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ: British Medical Journal (International Edition)*. 2001;322(7294):1115-1117.
18. Foot C, Goodwin N, Sonola L. From vision to action: Making patient-centred care a reality. UK: The King's Fund; 2012.
19. Mudge S, Sezier A, Payne D, et al. Pilot trial of The Living Well Toolkit: qualitative analysis and implications for refinement and future implementation. *BMC Health Services Research*. 2020;20(1):69.
20. Terry G, Kayes N. Person centered care in neurorehabilitation: a secondary analysis. *Disability and Rehabilitation*. 2020;42(16):2334-2343.
21. Nolte E, Knai C, Saltman R. Assessing chronic disease management in European health systems: concepts and approaches. World Health Organisation; 2014.
22. Tyreman S. The expert patient: outline of UK government paper. *Medicine, health care, and philosophy*. 2005;8(2):149-151.
23. Michie S, Richardson M, Johnston M, et al. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*. 2013;46(1):81-95.
24. NICE. Behaviour change: Individual approaches. Public health guideline [PH49]. UK: National Institute for Health and Care Excellence; 2014.
25. Hartley SE, Yeowell G. Older adults' perceptions of adherence to community physical activity groups. *Ageing & Society*. 2015 2015-09;35(8):1635-1656.

26. Farrance C, Tsofliou F, Clark C. Adherence to community based group exercise interventions for older people: A mixed-methods systematic review. *Preventive Medicine*. 2016 2016-06-01;87:155-166.
27. Killingback C, Tsofliou F, Clark C. Older people's adherence to community-based group exercise programmes: a multiple-case study. *BMC Public Health*. 2017 2017-01-25;17(1):1-12.
28. Steptoe A, Shankar A, Demakakos P, et al. Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences of the United States of America*. 2013 2013;110(15):5797-5801.
29. Yardley L, Donovan-Hall M, Francis K, et al. Attitudes and beliefs that predict older people's intention to undertake strength and balance training. *Journals of Gerontology Series B: Psychological Sciences & Social Sciences*. 2007 2007;62B:P119-25.
30. Stathi A, Mckenna J, Fox KR. Processes Associated with Participation and Adherence to a 12-month Exercise Programme for Adults Aged 70 and older. *Journal of Health Psychology*. 2010 2010;15(6):838-847.