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RESEARCH ARTICLE

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Staff experiences of integrating community and secondary care musculoskeletal services: A qualitative investigation

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Abstract

Introduction: Integrated models of care intend to provide seamless and timely access to health and social care services. This study investigated the integration of musculoskeletal services across community and secondary care boundaries, including the introduction of a single point of access from which patients were triaged.

Methods: Staff ($n = 15$) involved in service development and delivery were interviewed about how, why and to what extent integration impacted service delivery. The analysis focused on staff experiences of using an on-line patient self-referral form and co-located clinics to enhance decision-making in triage, and on the provision of educational materials and de-medicalising language in patient consultations to support self-management.

Results: Single point of access, including online self-referral, were operationalised during data collection, but co-located clinics were not. Triage staff explained that the volume of referrals and quality of information provided in online self-referrals sometimes constrained decision-making in triage. Secondary care staff discussed concerns that the single point of access might not consistently identify patients with hard to diagnose conditions that require timely surgical intervention. This concern appeared to constrain staff engagement with integration, potentially inhibiting the delivery of co-located clinics. However, triage staff accessed support to inform secondary care referral *via* alternate modes. Patient circumstances, for example, need for reassurance, necessitated multiple self-management strategies and innovative approaches were developed to provide patients ongoing and professionally led support.

Conclusion: Findings emphasise that restructuring services requires engagement from diverse stakeholders. Collaborating with stakeholders to address their concerns about the impact of restructures on well-established pathways may help cultivate this engagement.

KEYWORDS
implementation, integrated care, musculoskeletal conditions, service delivery

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1 | INTRODUCTION

Musculoskeletal (MSK) conditions encompass acute and chronic disorders, such as bone fractures and persistent pain, and contribute significantly to disability in developed and developing countries (Ernstzen et al., 2022). In England, MSK conditions are the most common cause of disability; they constitute up to 30% of primary care consultations, and the annual cost of the National Health Service (NHS) is estimated at £7 billion (Public Health England, 2019). Due to the burden placed on individuals, the community and health services, attention has been directed at developing non-surgical interventions for MSK conditions, often involving multidisciplinary health professionals and requiring active patient engagement (O'Leary et al., 2020).

Ensuring patients have timely access to appropriate services is complicated because individuals may require multidisciplinary input across community and secondary care sectors, sometimes over the longer-term. Therefore, avoiding multiple visits and referrals to different services is challenging. Integrating services offers a potential solution—it is considered a mechanism to provide comprehensive, coherent and synergistic healthcare within health systems (O'Farrell et al., 2021). Integrated care has been used for different conditions including diabetes and stroke (Allen & Rixson, 2008; Busetto et al., 2016; Van Exel et al., 2005), but there is less understanding of how it works in the context of MSK care. Additionally, integration is not without documented challenges; previous studies suggest that difficulties delivering integrated care include a lack of successful cooperation, collaboration and communication between professionals (Dunlea et al., 2022), inadequate payment mechanisms (Nicholson et al., 2013) and inadequate referral pathways (Dowd et al., 2017).

In 2018, community and secondary care services across two organisations in England were recommissioned to form an integrated model of care. Service objectives included reducing patient referrals (hand offs) between healthcare professionals and supporting patients to successfully self-manage in the community, both of which were intended to help manage the escalating cost of MSK services. An innovative approach to achieve these objectives was to introduce a single point of access through which patients were triaged to self-management, community services, or secondary care. The aim of this study was to investigate the impact of integration efforts on service delivery.

2 | METHODS

The integrated service consists of four patient pathways: upper limb, lower limb, spine, and complex musculoskeletal/persistent pain. To understand how integration impacted service delivery and variations in impact across the different pathways, realist evaluation, a programme theory approach, was used as a study framework (Pawson et al., 1997). Realist evaluation builds an explanation by constructing, testing, and refining programme theory configured as hypotheses in the form of Context + Mechanism = Outcome (CMO) configurations. Mechanisms are conceptualised as how individuals reason about and respond to programme resources, for example, the single point of access; Contexts are the circumstances that may influence individuals' responses to resources, for example, individual attitudes and beliefs, and work cultures; and Outcomes are the intended and unintended impacts of interactions between Contexts and Mechanisms. Using this framework, the research questions addressed were how, why and in what circumstances has integration impacted service delivery?

The study comprised three stages: (1) CMOs were constructed *via* semi-interviews with individuals involved in commissioning and implementing the integrated model of care, (2) a ranking exercise was conducted to prioritise CMOs for testing, and (3) CMO testing was conducted *via* interviews with professionals who deliver the integrated model of care.

2.1 | Study setting and sampling strategy

The integrated service serves a population of 496,254 and is delivered by staff from two NHS organisations across ten (four hospital and six community) sites. From these sites, a purposive sampling strategy was used to recruit staff involved in the commissioning process and delivery of the integrated service (Etikan et al., 2016). Recruitment took place within designated time periods to meet study deadlines, with consideration of resources available for data collection. Between May 2021 and October 2021, professionals who developed the integrated service model and implemented the restructures were invited to participate in stage 1. These participants were also invited to take part in the stage 2 ranking exercise to prioritise CMO hypotheses for testing. Between June 2022 and September 2022, professionals who deliver the integrated service in the community and acute setting and across the four pathways were invited to participate in stage 3. During each recruitment period, local collaborators identified and approached appropriate individuals and asked if they would be happy to have their contact details (email/phone) passed to the researcher to be invited to participate in the study. The researcher contacted all individuals who provided their details and arranged a convenient date and time for the interview to take place if they agreed to participate. Informed consent was obtained on the day of the interview.

2.2 | Data collection

Interview schedules were developed drawing on realist theory gleaning (stage 1) principles and the 'teacher-learner' cycle (stage 3) (Manzano, 2016). In stage 1, participants were encouraged to describe the integrated model of care, for example, its resources and processes, how they were anticipated to impact service delivery, and what might influence (the contexts) how resources were used and acted upon by staff. To prioritise CMOs, interview participants from stage 1 were emailed a document summarising the initial programme theory (IPT) and the CMOs derived from the IPT. Participants were asked to rank the CMOs in order of importance and to provide explanations for their top three. CMOs were prioritised based on what participants felt were key restructures likely to impact service delivery. In stage 3, an interview schedule was developed based on the CMOs prioritised in stage 2. The schedule prompted the researcher to explain the CMO to the interviewee and to ask the participant if it reflected their lived experience, why or why not. In this way, the interviewee and researcher were teaching and learning from each other. All interviews were digitally recorded *via* Microsoft Teams and transcribed for analysis.

2.3 | Data analysis

Interview transcripts were checked for accuracy against the Teams recording and anonymised. The team recording was then deleted. The main unit of analysis in the realist evaluation is the CMO (Tilley, 2000). Framework analysis was used (Srivastava & Thomson, 2009) to elicit and organise data to test the CMOs. The researchers familiarised themselves with the data through close reading of the transcripts and then constructed a thematic framework informed by the CMOs under investigation. Thematic framework was uploaded into NVivo (software for qualitative data analysis) and data were indexed using the themes. Data matrices (participant by CMO) were then constructed in NVivo and the indexed data were summarised into the cells to understand the extent to which findings supported or refuted the CMOs under investigation.

3 | RESULTS

In total, 15 participants were interviewed; seven in stage 1 (four of which contributed to prioritisation of CMOs) and eight in stage 2 including physiotherapists delivering the upper limb, lower limb, and complex pain pathways, based in acute and secondary care. Interview duration ranged between 15 and 62 min.

3.1 | Constructing and prioritising CMOs

Participants summarised the overall service aims as improving patient satisfaction, service efficiency and reducing costs. These aims would be achieved by reconfiguring services so that (1) patients would be triaged to appropriate services (reducing hand offs) in a timely manner, ideally within 48 h; (2) reducing unnecessary referrals into secondary care (that were escalating service costs); and (3) supporting patients to successfully self-manage in the community. Restructures underpinning these efforts included funding arrangements that brought professionals in acute and secondary care into the same team, interoperability of information systems that allowed the staff to access patient records across organisations and sectors, and the introduction of a single point of access to MSK services. Using this information, a tentative, IPT was created, see Figure 1.

CMO hypotheses were derived from the IPT using stakeholder explanations elicited in interviews. For example, as part of the single point of access, an on-line self-referral system was introduced that was described by participants as '*unique*' in the level of detail it elicited from patients. It was anticipated that the detail provided on the

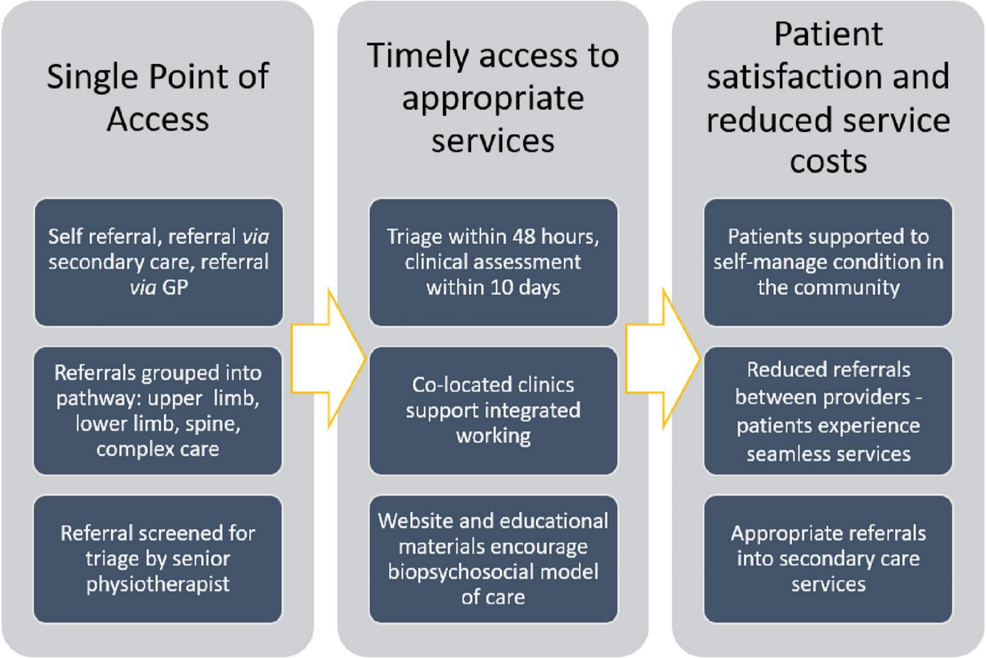

FIGURE 1 Initial programme theory.

self-referral form would enable senior physiotherapists triaging patients in each of the four pathways to make an accurate and timely decision. Enhancing decision-making in triage was also achieved by knowledge sharing between secondary care (orthopaedic consultants) and community staff (physiotherapists) using co-located clinics:

> How do you know that you're making the right decision *[secondary care referral]*? And the envisaged service structure, which we still aren't quite there, was to have joint and co-located clinics…they *[orthopaedic consultant and physiotherapists]* can learn from each other and find out what you want referring through.
>
> [Service lead 1]

Regarding self-management, participants discussed that a service aim was to '*demedicalise, and to work towards having a more bio-psychosocial approach to managing patients*'. *[Service lead 2]*. There were several ways in which the service attempted to enact a bio-psychosocial approach; two discussed in interviews were educational resources for patients and the language used in staff/patient interactions. Educational resources comprised a service website and a range of detailed information leaflets. The website had not existed before integration and the previous information leaflets were much less directed at encouraging patients to self-manage. A letter notifying the patients of their triage to self-management explained that patients should contact the service if their problem did not improve for a face-to-face appointment. In face-to-face contacts, staff would be mindful of the language used, de-medicalising terms to help reduce patient fear of their condition and empower their self-management (Table 1).

Participants' explanations about how anticipated impacts would be realised were configured as 10 CMOs, see Supporting Information S1. Four CMOs were prioritised by stakeholders for testing, see Table 1. Findings from CMO testing are presented below under the headings (1) triage within 48 h, (2) decision-making for secondary care referral and (3) promoting self-management; additional quotes reflecting participant experiences are presented in Table 2.

3.2 | Triage within 48 h

Participants understood that the online self-referral form was intended to provide the detail necessary to inform accurate and timely decision-making in triage, but explained that information in the referral was dependent on the individual completing the form and their interpretation of the question:

> I think the online referral is only as good as the person that's filling it in and that's either the admin person or the patient. […] So they might put very limited information, so it's not really helping. And the person that's filling it in, if they are filling it in for the patient is an admin person, so they can't explore the clinical aspects that you might want to explore if you're a physio speaking to the patient.
>
> [Physiotherapist, Participant 7, Upper Limb Pathway]

Consequently, physiotherapists needed to make follow-up phone calls to patients to clarify their responses, particularly for questions that indicated potential 'red flags' (a problem that needs urgent attention):

> it's almost like those questions *[red flag questions]* are overly sensitive for sort of detecting what we're looking for and that we're ringing many, many, many more people than have true bladder or bowl symptoms related to their back pain.
>
> [Physiotherapist, Participant 6, Complex Pain Pathway]

TABLE 1 CMOs prioritised for testing.

		Mechanism		
No.	Context	Resource	Response	Outcome
1	Patients with access to Internet use self-referral systems	Online referral system means that quality of information about MSK problem provided by patient improves	**Enhanced decision-making**: Physios with MSK expertise screen all referrals	Patients receive appropriate triage within 48 h
2	Where triage staff work closely with Ortho surgeons in intermediate care	Knowledge exchange between surgeons and physiotherapists	**Enhanced decision-making** re. Referrals for orthopaedic surgery	Increased rates of 'conversion' to surgery in secondary care
3	Patients who are 'health literate' and appropriate for self-management	Patients provided with educational materials and signposted to website with information to support self-management	**Knowledge acquisition:** Patients learn how to self-manage their condition	Increased number of patients self-manage in the community
4	Patients appropriate for self-management with support from service	Service staff use language to reduce medicalisation of problem and reduce patient fear about condition	**Patients empowered** to self-manage in the community, with appropriate service support	Increased number of patients self-manage in the community

Abbreviation: MSK, musculoskeletal.

TABLE 2 Examples of additional data categorised by theme.

Theme	Examples of data categorised in each theme	
Triage within 48 h	Unfortunately, yes you do get a lot of detail but you do get a lot of noise in that detail. So, for example, when I do triage, we've got red flags as part of the questionnaire because we want to know about dangerous things that could be happening to the person. But the patient doesn't understand why you're asking that question. [Physiotherapist, Participant 2, Complex Pain Pathway]	They do come in, you know, rapidly but I think we've got the right amount of triage time in our diaries now to be able to manage that. It does vary a little bit when we get new staff started and they're needing to be trained up and they're maybe not as fast as someone that's been doing it for a while. [Physiotherapist, Participant 8, Lower Limb Pathway]
Decision-making for secondary care referral	That was the way of thinking was, don't just send everybody through to secondary care and then back to physio, do physio first. So, when you're triaging, your choice…it's when you're triaging actually, most patients don't go through to secondary care from triage. [Physiotherapist, Participant 1, Upper-Limb Pathway]	Anyone with less experience basically, before they refer onto orthopaedics we ask them to just run it by us just for us to say, yes, that's appropriate. So, that should happen that they don't get referred into secondary care unless it's been run by the senior team in the pathway. [Physiotherapist, Participant 8, Lower Limb Pathway]
Promoting self-management	When I've got someone in my clinic or they're coming to one of my groups, I can sort of talk to them and check in on their understanding of whether or not the information I've given them or the education that we've gone through in sessions has been useful, if they've got any fears or worries that we've not addressed yet and gauge their confidence for sort of taking things on and managing themselves after the bit of work that we do together. [Clinical Psychologist, Participant 3, Complex Pain Pathway]	My personal opinion is sometimes people just want to be seen, to have that fear reduced and once you've actually seen them, you know, they relax about their problem, they know what it is, they know what to do. […] That's my personal opinion. I think if we could get everyone in and just see them, give them a good assessment, tell them what the issue is, would they be more likely to self-manage at that point. [Physiotherapist, Participant 7, Upper-Limb Pathway]

The development of self-referral was an iterative and ongoing process. However, a participant reflected '*You're never going to get quite as clear a picture as you would get if you spoke to them or saw them face to face and have that conversation*'. *[Physiotherapist, Upper Limb Pathway]*. The need for a face-to-face consultation to triage patients was emphasised as necessary in certain pathways:

> One of the things with triage is it's meant to, kind of, screen up things that would straight to secondary care. […] but you can't make that decision from the triage. It *[the physical problem]* still has to be seen to say, yeah, this needs to go to secondary care.
>
> [Physiotherapist, Participant 5, Upper Limb Pathway]

Whilst 'red flag' questions were part of the self-referral form, in the context of the upper limb pathway, participants discussed that some conditions may not present as a red flag but require timely surgical intervention. Additionally, participants explained that physiotherapists conducting a face-to-face consultation needed adequate experience to accurately identify these hard to diagnose conditions. Therefore, some staff questioned whether time to triage should be defined differently for complex conditions that require a face-to-face consultation to inform decision-making.

Across pathways, participants also discussed that, rather than follow-up phone calls, it was the number of referrals compared to the number of staff available to screen referrals that constrained their ability to triage within 48-h:

> Really to me *[achieving triage within 48 hours]* it would be how many people need to be triaged and how many people are triaging. Like I think occasionally if there's not enough information, you'll call them, or if there's something that you need to check, you'll call them, but I don't really think calling is the problem, it's just having enough people to deal with the amount of referrals and of time allocated to it.
>
> [Physiotherapist, Participant 4, Upper Limb Pathway]

Participants reported that this issue was exacerbated when teams do not have a full quota of staff, when staff are new in post and need training to triage referrals and where there are 'spikes' in numbers of referral: '*Our allocation of triage time [..], doesn't increase based on the quantity of referrals that we're getting*' *[Physiotherapist, Upper Limb Pathway]*. The impact of trying to balance triage and therapy delivery within expected timelines was discussed:

> That's the battle really trying to think of ways of managing that list and getting them in as well as seeing the patients that are still referring in and still wanting treatment. It's hard in [the service] to, sort of, take time out from patients. You feel like every little spare half hour you have to squeeze a patient in because they need to go somewhere.
>
> [Physiotherapist, Participant 7, Upper Limb Pathway]

In summary, rather than the quality of information provided in self-referral, the ability to triage patients within 48 h was constrained by the number of referrals received *via* the single point of access. Additionally, although many referrals are triaged to self-management and/or routine care, more complex conditions may require physical examination to inform timely decision-making about secondary care referral.

3.3 | Decision-making for secondary care referral

The commissioning process allocated 6-months to implement restructures to integrate MSK services. In this period, efforts were made to engage stakeholders in the delivery of the new pathways, for example, meetings were held to communicate the new pathways and service aims to secondary care teams. This process revealed concerns by some secondary care staff that the new pathways may compromise patient care, for example, access to timely surgery, as discussed above. Participants reflected that 6 months were not sufficient to implement the scale of change necessary for integrating MSK services, including work to engage diverse stakeholders in the delivery of integrated pathways and where existing pathways were being delivered to the point of implementation. The challenge of engaging stakeholders may be a contributing factor for why co-located clinics (for orthopaedic surgeons and community physiotherapists) had not been established at the time of this evaluation:

> That was the plan *[to introduce co located clinics]* and I think…[..] co-located clinics. So, we could, you know, use them there for opinions and build up links - but that's never happened. And I think it would be helpful. […] Having links with the consultants is really useful, but unfortunately, we haven't had the buy-in from the consultants, I guess, for the co-located clinics.
> [Physiotherapist, Participant 8, Lower Limb Pathway]

Co-located clinics were not in operation, but participants recognised the benefits of joint working and described ways in which they accessed information to support their decision-making, for example, checking secondary care referrals with senior physiotherapists, liaising with physiotherapists that were partially based in secondary care settings where they worked closely with consultants, and a physiotherapist in the complex care pathway commented:

> I don't work with the surgeons necessarily, but I do work with the secondary care team in pain management. So the consultants in like anaesthetics and things. As part of our team we have like a multidisciplinary meeting each week and they're invited along to that. So we get an opportunity to discuss patients with them and difficult cases and those types of things.
> [Physiotherapist, Participant 3, Complex Pain Pathway]

Multidisciplinary team meetings were described to build knowledge including the care that colleagues in different disciplines can offer patients and how to structure referrals in a way that is most informative to recipients. A participant further explained:

> Let's say the patient was pressuring wanting to see a consultant, I felt it wasn't appropriate or helpful for them I would say, I'm going to take it to the meeting. This meeting is held with a consultant and I will see whether there is any benefit for you being on a waiting list and then seeing them or whether we can crack on at our end.
> [Physiotherapist, Participant 2, Complex Pain Pathway]

Multidisciplinary team meetings provided a mechanism to reassure patients that a secondary care referral was not necessary because a secondary care consultant had reviewed and confirmed that decision.

In terms of impact, participants explained that referrals to secondary care are likely to have reduced because most patients are not triaged directly to secondary care through the single point of access. Therefore, there is more opportunity for a patient's condition to improve without the need for hospital-based visits. However, this outcome was described as dependent on patients receiving physiotherapy in the community that enables them to improve—this may be dependent, in some pathways, on the expertise of the physiotherapist.

> To stop people going to secondary care that [..] don't need surgery, they need proper physiotherapy. [..] *[after triage]* They go to quite a junior physiotherapist […] They haven't got the experience, they haven't got the knowledge, so they make a decision, that decision usually takes three or four sessions […] And then […] the consultant says, this is not for surgery, […]. And then they come back.
> [Physiotherapist, Participant 5, Upper Limb Pathway]

Where physiotherapists do not have the necessary experience, patients may be referred into secondary care when they do not require surgery.

In summary, although co-located clinics for secondary and community staff had not been established, joint working was recognised as beneficial to inform decision, particularly for secondary care referral and participants drew on different sources to inform their decision-making.

3.4 | Promoting self-management

Patients enrolled in self-management received a letter sign-positing them to the service website with materials that patients could use to educate themselves and inform their self-management. Participants spoke of how important it was to ensure that the information offered led patients to feel valued, and not to see such information as a poor alternative to a face-to-face appointment. Additionally, they discussed contextual influences that may impact patients' ability to use the materials offered, for example, practical issues such as lack of confidence using the Internet and websites, and individual factors such as health literacy (as suggested in the CMO), motivation, age, and lifestyle:

> It depends what their lifestyle is as well, you see, 'cause somebody who's in a busy job would probably love just to get information and if it starts to help, they'll think oh yeah, this is all I need, whereas somebody more elderly, likes that contact with somebody.
> [Physiotherapist, Participant 1, Upper Limb Pathway]

Therefore, several factors were suggested to influence whether educational materials provide the necessary impetus to encourage self-management, but participants explained that they could not gauge the extent of self-management resulting from educational resources alone as they only saw patients who made an appointment on receipt of the initial letter. Participants emphasised that patients have different needs regarding professional contact:

> And some people, yes, want to be seen, […] they'll literally say to you, I just feel better that somebody's looked at it and now I'm happy. So, it might just take one appointment, […] that face to face appointment and then they're happy to engage in self-management.
> [Physiotherapist, Participant 8, Lower Limb Pathway]

A face-to-face contact was therefore a powerful tool, helping to provide patients with reassurance and acceptance of their condition. In face-to-face consultations, participants recognised the importance of language in '*shaping their* [patient's] *expectation*s' about the service but in relation to de-medicalising terms, as expressed in CMO4, highlighted:

> I think there's a percentage of people […] think they perceive it as you don't necessarily know what you're on about or they don't believe you.
> [Physiotherapist, Participant 4, Upper Limb Pathway]

Participants explained that patients need to feel listened to and that physical examination may be required to provide reassurance to support self-management. Patients with a sports injury, *'a trauma to the knee for instance'*, were provided as an example of where physical examination might provide the necessary impetus for self-management, as a physiotherapist explained

> If you fully assess them, that they feel that they've been looked at, listened to, and then you say, you know, on assessment there's nothing that worries me at all, and I think if you carry on…'cause exercises don't get people better within a few weeks, you know, they have to keep doing them.
> [Physiotherapist, Participant 1, Upper Limb Pathway]

Participants also explained that one session may not be sufficient, particularly for patients with chronic conditions who need messaging (e.g., that pain is normal) repeating and reinforcing before they are accepted. A participant commented

> Possibly in a good phase of life someone with, let's say, chronic back pain can go away and plod on. But things happen sometimes where they are not able to manage. So, then they need to dip in back into the service and that sort of barn door type of patient.
> [Physiotherapist, Participant 2, Complex Pain Pathway]

Patients may need to access services intermittently over the longer-term to maintain their confidence, knowledge, and ability to self-manage. Group sessions have been introduced in some pathways for chronic conditions, such as *planta fascia pain or Achilles pain.* These sessions were described as a way in which physiotherapists could check patients' understanding of information, gauge the extent to which they were confident in self-managing and where practical advice could be shared among peers. However, participants noted that:

> There is an odd few where you think, this person is not going to engage with us unless they've had that scan or that X-ray. And then they'll come back and they'll go, oh right, so I just need to crack on in the gym, […] There are a few that you do have to give in to them for that.
> [Physiotherapist, Participant 8, Lower Limb Pathway]

Like the physical examination, some patients may only receive the reassurance necessary to self-manage through secondary care referral where additional information can be provided to them, for example, *via* a scan.

In summary, patient circumstances varied including their conditions and need for reassurance; these variations mean that differing modes of support are necessary to support self-management including access to professional contact over the longer-term. The integrated service accommodated these needs to differing extents in the four pathways.

4 | DISCUSSION

The CMOs prioritised for investigation hypothesised that integration of MSK services would result in (1) timelier and more accurate referral to appropriate services and (2) provision of support that enables patients to successfully self-manage their condition. How, why and in what circumstances these impacts were delivered were explored as part of this evaluation.

Previous studies have found that co-located clinics support service integration (Elston et al., 2022). Co-located clinics embedded within the integrated MSK service were expected to enable knowledge sharing between community and secondary care staff to enhance decision-making for secondary care referral. However, these clinics were not established at the time of study. The absence of co-located clinics may represent an issue of functional integration, referring to practicalities such as provision of finance and information systems (Fineide et al., 2021); issues that also constrained triage within 48 h, for example, the number of referrals entering the single point of access. In comparison to functional integration, normative integration refers to a common culture, shared vision, or frame of reference between stakeholders (Fineide et al., 2021). Difficulties developing such a vision across community and secondary care stakeholders where there were concerns that new pathways may compromise the delivery of secondary care may also have constrained engagement with integration efforts including joint working in co-located clinics.

These findings point to the implementation process and the relational and practical work involved in integrating diverse services. Service commissioners and stakeholders tasked with the implementation and delivery of new patient pathways could draw on theories such as Normalisation Process Theory (NPT) for guidance (Murray et al., 2010). NPT addresses how innovations are integrated and implemented, that is, normalised within existing workflows, and identifies factors that promote and inhibit normalisation. Of particular relevance to this study is the NPT construct of cognitive participation that discusses how diverse stakeholders become committed, and collectively contribute, to delivering new practices.

A further aim of integration was to support patient self-management. The use and impact of educational materials offered by the service was thought to be influenced by health literacy, resonating with the work of Adams et al. (2019) who suggested that patients are less likely to engage in self-management if they have lower levels of health literacy. However, patient circumstances, for example, their condition (acute/chronic), and their need for reassurance and repeated messaging, meant that, alongside educational materials, patients required varying amounts of professional contact. Other studies emphasise the importance of a collaborative approach between patient and provider in self-management, often practitioner-led (Lambrinou et al., 2019; Spink et al., 2021). While this contact may at times be to provide practical support, it may also be important for practitioner support to comprise reassurance, non-judgement, and validation (Haverfield et al., 2018). In their review of self-management plans for chronic obstructive pulmonary disease, Boyer (2023) found that a portfolio of techniques and tools was effective in supporting different patients in self-management. A range of approaches is therefore likely to result in wider engagement in self-management and the integrated service offered such a range across pathways.

4.1 | Strengths and limitations

The strengths of this study are that it provides a detailed account of staff experiences integrating community and secondary care services in the context of MSK conditions. These accounts identify constraints in service delivery that point to how and where improvement efforts could be targeted to support ongoing integration. However, there are also limitations including the sample size—the study would benefit from capturing the experiences of a broader range of stakeholders including secondary care consultants who expressed concerns about the new pathways. Even so, we were able to interview physiotherapists with experience working in secondary care and realist evaluation provides a solid basis for future evaluations, identifying outcomes to be explored.

4.2 | Conclusion

Integrating MSK services brings together diverse stakeholders and requires them to change their normal modes of working across traditional care boundaries. The findings emphasise that restructuring well-established referral pathways requires a shared understanding across community and secondary care stakeholders that the changes will benefit the service. Cultivating this shared frame of reference requires collaborative work to identify and resolve opposing viewpoints and perspectives, for example, in this case, establishing a process to filter priority from routine cases in triage. Working together to address fundamental issues such as these may also provide an opportunity to resolve additional integration constraints such as operationalising co-located clinics.

AUTHOR CONTRIBUTIONS

Natasha Alvarado led the study and wrote the main manuscript text. Natasha Alvarado conducted data collection. Natasha Alvarado and Jane Montague conducted data analysis. Rebecca Randell provided expertise in study design and analysis. Gerard Hargreaves, Karen Storey, and Rowena Broughton were local collaborators and supported recruitment. All authors reviewed, commented on, and agreed to the final manuscript for submission.

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CONFLICT OF INTEREST STATEMENT

The work was funded by the Newcastle Upon Tyne Hospitals NHS Foundation Trust. GH, KS, and RB are employed by the Newcastle Upon Tyne Hospitals NHS Foundation Trust. NA, JM, and RR undertook data collection and analysis and are based at and employed by the University of Bradford.

DATA AVAILABILITY STATEMENT

The datasets generated during the current study are not publicly available because ethical approval for the study does not allow sharing of data outside the study team. The datasets analysed during the current study are available from the corresponding author on reasonable request and subject to necessary ethical approval.

ETHICS STATEMENT

This study was conducted in accordance with the University of Bradford Research Governance Framework and received a favourable opinion from the Chair of Humanities, Social and Health Sciences Research Ethics Panel at the University of Bradford on 30/10/2020.

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REFERENCES

Adams, J., Lowe, W., Protheroe, J., Lueddeke, J., Armstrong, R., Russell, C., Don, N., & Ballinger, C. (2019). Self-management of a musculoskeletal condition for people from harder to reach groups: A qualitative patient interview study. *Disability and Rehabilitation*, *41*(25), 3034–3042. https://doi.org/10.1080/09638288.2018.1485182

Allen, D., & Rixson, L. (2008). How has the impact of 'care pathway technologies' on service integration in stroke care been measured and what is the strength of the evidence to support their effectiveness in this respect? *International Journal of Evidence-Based Healthcare*, *6*(1), 78–110. https://doi.org/10.1111/j.1744-1609.2007.00098.x

Boyer, P. (2023). What are the benefits of using self-management plans for COPD patients in the community: A critical review of the literature. *British Journal of Community Nursing*, *28*(1), 22–32. https://doi.org/10.12968/bjcn.2023.28.1.22

Busetto, L., Luijkx, K. G., Elissen, A. M. J., & Vrijhoef, H. J. M. (2016). Intervention types and outcomes of integrated care for diabetes mellitus type 2: A systematic review. *Journal of Evaluation in Clinical Practice*, *22*(3), 299–310. https://doi.org/10.1111/jep.12478

Dowd, T., Ivers, J., & Handy, D. (2017). *A future together building a better GP and primary care service*. Trinity College Dublin.

Dunlea, S., McCombe, G., Broughan, J., Carroll, Á., Fawsitt, R., Gallagher, J., Melin, K., & Cullen, W. (2022). Priorities in integrating primary and secondary care: A multimethod study of GPs. *Journal of Integrated Care*, *31*(5), 1–14. https://doi.org/10.1108/jica-06-2022-0030

Elston, J., Gradinger, F., Asthana, S., Fox, M., Dawson, L., Butler, D., & Byng, R. (2022). Impact of 'enhanced' intermediate care integrating acute, primary and community care and the voluntary sector in Torbay and South Devon, UK. *International Journal of Integrated Care*, *22*(1). https://doi.org/10.5334/ijic.5665

Ernstzen, D. V., Hillier, S. L., & Louw, Q. A. (2022). Synthesis of clinical practice guideline recommendations for the primary health care of chronic musculoskeletal pain. *Journal of Evaluation in Clinical Practice*, *28*(3), 454–467. https://doi.org/10.1111/jep.13644

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*, 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Fineide, M. J., Haug, E., & Bjørkquist, C. (2021). Organisational and professional integration between specialist and primary healthcare services: A municipal perspective. *International Journal of Integrated Care*, *21*(2). https://doi.org/10.5334/ijic.5606

Haverfield, M. C., Giannitrapani, K., Timko, C., & Lorenz, K. (2018). Patient-centered pain management communication from the patient perspective. *Journal of General Internal Medicine*, *33*(8), 1374–1380. https://doi.org/10.1007/s11606-018-4490-y

Lambrinou, E., Hansen, T. B., & Beulens, J. W. J. (2019). Lifestyle factors, self-management and patient empowerment in diabetes care. *European Journal of Preventive Cardiology*, *26*(2_suppl), 55–63. https://doi.org/10.1177/2047487319885455

Manzano, A. (2016). The craft of interviewing in realist evaluation. *Evaluation*, *22*(3), 342–360. https://doi.org/10.1177/1356389016638615

Murray, E., Treweek, S., Pope, C., MacFarlane, A., Ballini, L., Dowrick, C., Finch, T., Kennedy, A., Mair, F., O'Donnell, C., Ong, B. N., Rapley, T., Rogers, A., & May, C. (2010). Normalisation process theory: A framework for developing, evaluating and implementing complex interventions. *BMC Medicine*, *8*, 1–11. https://doi.org/10.1186/1741-7015-8-63

Nicholson, C., Jackson, C., & Marley, J. (2013). A governance model for integrated primary/secondary care for the health-reforming first world–results of a systematic review. *BMC Health Services Research*, *13*, 1–12. https://doi.org/10.1186/1472-6963-13-528

O'Farrell, A., McCombe, G., Broughan, J., Carroll, Á., Casey, M., Fawsitt, R., & Cullen, W. (2021). Measuring integrated care at the interface between primary care and secondary care: A scoping review. *Journal of Integrated Care*, *30*(5), 37–56. https://doi.org/10.1108/jica-11-2020-0073

O'Leary, S., Gale, J., Volker, G., Kuipers, P., Dalton, M., & McPhail, S. (2020). Fostering patient uptake of recommended health services and self-management strategies for musculoskeletal conditions: A Delphi study of clinician attributes. *Musculoskeletal Care*, *18*(2), 161–168. https://doi.org/10.1002/msc.1448

Pawson, R., Tilley, N., & Tilley, N. (1997). *Realistic evaluation*. Sage.

Public Health England. (2019). *Musculoskeletal health: A 5 year strategic framework for prevention across the lifecourse department of health and social care working with public health England and department for work and Pensions*. Public Health England.

Spink, A., Wagner, I., & Orrock, P. (2021). Common reported barriers and facilitators for self-management in adults with chronic musculoskeletal pain: A systematic review of qualitative studies. *Musculoskeletal Science and Practice*, *56*, 102433. https://doi.org/10.1016/j.msksp.2021.102433

Srivastava, A., & Thomson, S. B. (2009). Framework analysis: A qualitative methodology for applied policy research. *Journal of Administration and Governance*, *4*(2), 72–79.

Tilley, N. (2000). Realistic evaluation: An overview. In *Presented at the founding conference of the Danish evaluation society*.

Van Exel, N. J. A., Koopmanschap, M. A., Scholte op Reimer, W., Niessen, L. W., & Huijsman, R. (2005). Cost-effectiveness of integrated stroke services. *QJM*, *98*(6), 415–425. https://doi.org/10.1093/qjmed/hci065

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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