Joint Pain Advisor

Greenwich

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Authors

Amy Semple, Senior Project Manager, Health Innovation Network
Fay Sibley, Senior Project Manager, Health Innovation Network
Shelia Taylor, Head of Live Well Primary Care
Professor Mike Hurley, Clinical Director, Health Innovation Network
Fran Thompson, Project Support Officer, Health Innovation Network

In partnership with Royal Borough of Greenwich Public Health and Charlton Athletic Community Trust

Executive Summary

Overview

Chronic knee, hip and back pain are extremely prevalent. Although NICE Guidelines in the management of osteoarthritis (OA) show giving people better understanding of their condition, advising them to lose excess weight and increasing physical activity are effective ways of reducing pain and its impact, in reality few people receive this advice.

Health Innovation Network (HIN) developed an innovative 'Joint Pain Advisor' (JPA) approach to support people manage chronic knee hip and back pain, based on NICE guidelines. Within the JPA model, participants are invited to attend up to four face to face consultations over a six month period. In a pilot study, physiotherapists successfully delivered the JPA service across six GP practices to 500 people, who reported improvements in pain, physical function and activity, mental wellbeing and reduced GP consultations. Greenwich Public Health decided to test whether upskilling Health Trainers to deliver the JPA approach could produce similar results in community settings.

Results

Ten Health Trainers were trained as JPAs by the HIN and offered the JPA service across six community sites in Greenwich. 85 participants accessed the service between March 2017 - January 2018. The majority of participants were female (76%) and aged between 55 and 74 years old. Primary presenting complaint was chronic lower back pain (47%), knee pain (39%) or hip pain (14%). Of the 85 participants, 69 (81%) returned for a 2nd appointment, 45 (53%) for a 3rd appointment and 25 (29%) for a final appointment. Most people said they chose not to attend later appointments because their pain, function and understanding of their condition had improved sufficiently for them to self-manage their joint pain. Others did not attend because they had expected to see a physiotherapist, did not want to undertake exercise or felt it was too long between appointments.

There were objective and subjective improvements in participants:

- function – participants moving from below average to recommended levels of function based on the Sit to Stand function measure of lower body strength[8];
- number of days participants were physically active for 30 minutes or more – moving from an average of three days at first appointment to five days at 3rd and 4th appointment;
- reduction in body weight;
- reduced pain and its impact, with some participants no longer using analgesia, walking aids and resuming activities of daily living;
- feeling of empowerment and better mental wellbeing;
- better diet and eating habits – using portion control and joining cookery clubs or weight management support;
- large number of participants exercised at home and joined local activity classes and balance classes e.g. Tai Chi Yoga, walking groups, walking football.

Participants were very satisfied with the JPA service, and attributed the success in helping them change behaviour to:

- better understanding of their problem – learning about OA and how to manage pain, specifically removing the fear associated with movement or activity;
- more time and quality of consultations and interaction – Advisors had time to explain their condition and support them in exploring options / goal setting to manage their condition and change behaviour;
- the JPA's more personal, holistic approach – Advisors were not judgmental or directive, didn't tell them what to do and participants were not just a 'knee, hip or back'. Instead participants describe how Advisors built trust and rapport, encouraged them to want to adopt healthier lifestyles and then worked with them, signposting to local activities and supporting people with loneliness, financial concerns or social isolation.

The Health Trainers described how they enjoyed delivering the service and how increased knowledge about joint pain enabled them to better support their clients. They felt the consultations in community-based settings worked well.

Summary

Using the JPA approach Health Trainers in community settings are well placed to deliver Musculoskeletal (MSK) advice to people with chronic knee, hip or back pain. They can increase participants' physical activity, physical function and help them adopt healthier diets to aid weight loss, resulting in a reduction in pain and improvements in feelings of physical and mental wellbeing.

Participants accepted the JPA service and valued the time Advisors spent with them. They liked the focus on information-giving that helped them understand their condition and removed fear of activity. They also liked the person-centred, holistic approach to behaviour change, goal setting, and signposting to other support services.

Upskilling Health Trainers to deliver MSK advice has the potential to reduce the burden of MSK consultations on GPs, increase access to MSK support to people in the community (including harder-to-reach groups) and delay or prevent the need for surgery. JPAs may also contribute to a reduction of co-morbidities such as obesity, diabetes and depression, thereby improving the public health of local populations.

Learning and recommendations

- the JPA approach is effective at supporting people with back, knee and hip pain and should be considered for inclusion in MSK pathways,
- wider promotion across primary care, voluntary sector and the public would increase awareness and uptake of the service,
- although there was large attrition after the 1st appointment, this was mainly because participants felt the service had already improved their understanding and reassurance so that they did not need to use the service further. Some people failed to attend because they expected to be seen by a clinician. Better explanation and "marketing" of the service might uptake and reduce attrition,
- complex outcome measures were disliked because they were too long and intrusive. Simple user-friendly outcome measures and collection methods would facilitate the collection of data.

Introduction

Background

In the UK osteoarthritis (OA) is the most common musculoskeletal (MSK) condition in older people affecting nearly 10 million people[2]. 90% of people with OA are managed by GPs, accounting for two million GP consultations[2]. OA impacts adversely on all aspects of a person's personal, social and working lives and results in a large burden to the health and social care system. OA can develop in any joint in the body, but when it affects the knee or hip, mobility can be affected leading to disability.

The core advice in the National Institute for Health and Care Excellence (NICE) evidence-based guidelines for the management of OA[3] is to use a patient-centered, holistic approach using education and self-management strategies, with a particular focus on increasing physical activity and maintaining a healthy body weight. Changing entrenched behaviours (e.g. inactivity and/or being overweight) takes time to initiate and sustained effort to maintain. Current pressures in primary care prevents successful delivery of the NICE core advice as GPs do not have the time to effect sustained behavioural change and consequently, few people receive advice and support that would help them.

Health Innovation Network (HIN) developed a new model of care, JPA, delivered by allied health professionals to support people with chronic knee or hip pain. In 2016, a feasibility study[1] of 500 people in the London Borough of Lewisham demonstrated that physiotherapists trained as JPAs can effect behaviour change, resulting in significant pain and weight reduction, significant increases in physical activity and functionality and a reduction in GP consultations for knee and hip pain. A social return on investment evaluation[4] found a 15% increase in mental wellbeing and that the JPA intervention offered a social return on investment of between £2 and £4 for every £1 invested.

Royal London Borough of Greenwich Pilot

Greenwich Public Health secured funding from Health Education England South London Small Grants Programme to test whether the JPA approach could be successfully delivered by Health Trainers in community settings.

Greenwich Health Trainers work in GP practices and community settings across the Borough, supporting people living in Greenwich to live healthier lives. They are highly skilled in helping people to make positive behaviour changes using motivational interviewing approaches. Typically, the issues presented have been around increasing physical activity, eating choices, stopping smoking, reducing alcohol consumption and managing stress. Recently (2017) as part of the "Live Well Greenwich" approach to prevention, the re-named Live Well Coaches (LWC) have received additional training to enable them to support the people with wider issues that may affect health e.g. money worries, social isolation, housing concerns, domestic violence, unemployment and volunteering.

The trainers had:

- City & Guilds Level 3 Health Trainer qualified as a minimum,
- Between one and seven years' experience as a Health Trainer,
- Completed additional training e.g. motivational interviewing skills, mental health first aid and safeguarding as part of their Health Trainer role.

Prevalence of knee and hip OA in Greenwich is similar to the England average with 14,751 (18%) people aged 45 living with knee OA and 8,936 (11%) hip OA[5]. 72% of the hip and 76% of the knee osteoarthritis population are overweight or obese and 45% of people with hip or knee osteoarthritis are sedentary[5]. In 2011-12 the total cost of hip and knee replacements to Greenwich CCG was £3,039,631[5]. Greenwich is ranked 78th out of 326 local authorities as the most deprived, with a difference of 5.5 years life expectancy between the least and most deprived households.

Upskilling Health Trainers to deliver NICE recommendations in the management of OA was seen as an opportunity to increase access to support for people with MSK conditions and test whether the JPA approach could be delivered by non-clinical staff. Unlike the Lewisham feasibility study, back pain was included along with hip and knee OA. Self-management advice for back pain is similar to knee and hip pain and the pilot provided the opportunity to test whether back pain advice could be incorporated into the JPA service.

Method

Participants

Eligibility criteria

Participants were eligible to access the service if they lived in and/or registered with a GP practice in Greenwich and had a clinical or radiographic diagnosis of osteoarthritis i.e.

- 45 years or older,
- Chronic back, knee or hip pain for more than three months,
- Morning joint stiffness (if present) lasting less than 30 minutes.

Referral route

Participants referred to the service from:

- Primary care,
- Greenwich Live Well Line, a free helpline staffed by local, trained health and wellbeing advisors for signposting and support to live well,
- Health Check Clinics,
- Prevention programmes available in the Borough such as 'Walking away from Diabetes',
- Self-referral.

Exclusion criteria

Participants were excluded from the service if they were less than 45 years (as the incidence of OA increases greatly after this age), had acute or inflammatory musculoskeletal conditions e.g. sprains, Rheumatoid Arthritis or were unable to speak English.

Promotional materials

Leaflets and flyers were produced and displayed in community venues and local workplaces and used at promotional health and wellbeing events across the Borough.

Joint pain advisors

Training

Health Trainers attended a one-day training course in January 2017 delivered by the HIN. The training covered basic joint anatomy, changes occurring with joint damage, handling of inappropriate / ineligible referrals / red flags and explored how a healthy lifestyle and keeping active can improve MSK health. A "Myth Busting" section was particularly effective at clarifying the do's and don'ts around joint pain and movement and had a great impact on the learning and confidence of the team.

The pathway

Consultations

Participants were invited to attend up to four face-to-face and/or telephone appointments lasting between 30-45 minutes (see Table 1). Advisors worked in collaboration with participants using behavioural change techniques, primarily motivational interviewing, as well as goal setting, action and coping planning, and monitoring progress and feedback to nurture healthier lifestyles.

Table 1: Joint Pain Advisor Pathway	

Initial consultation *Face to Face*	• Assessment of physical function, pain and symptoms, quality of life and lifestyle, Body Mass Index (BMI), waist circumference, number of Sit to Stands in 30 seconds and number of days physically active for 30 minutes or more a week.
	
	• Discussion and joint development of an individualised care plan tailored to their needs based on NICE CG177: Management of OA:
	  • Increasing physical activity
	  • Simple pain management techniques (hot/cold packs; rest/activity cycling)
	  • Weight reduction
	  • Signposting to activities in local area to support care plan e.g. exercise and healthy eating.

Three week review *Telephone*	• Reinforcement of health messages and advice based on NICE CG177: Management of OA • Provision of on-going support, reassurance, motivation and encouragement • Performance against baseline measures (e.g. Sit to Stands, BMI, days physically active for 30 minutes or more a week).
Six week review *Face to Face*	• Baseline measures repeated and discussion about progress • Revision of goals (if appropriate) • Reinforcement of health messages and advice based on NICE CG177: Management of OA • Provision of on-going support, reassurance, motivation and encouragement • Participants encouraged to take up activities through sign-posting if they haven't already done so.
Six month final review *Face to Face or Telephone*	• As above and referred back to the GP if needed based on NICE CG177: Management of OA.

Data

Clinical outcome measures

The following clinical outcomes were collected at various intervals during the pilot (see Table 2):

Table 2: Clinical Outcome Measures	Initial consultation	Three weeks	Six weeks	Six months
Knee injury and Osteoarthritis Score (KOOS)[6]	X		X	X
Hip disability and Osteoarthritis Score (HOOS)[7]	X		X	X
KEELE STarT Back Screening Tool (SBST)[8]	X			
Numbers of days physically active for 30 minutes or more *(self-reported)*	X	X	X	X
Number of sit to stands in 30 seconds[9]	X	X	X	X
Body weight / Height/ BMI / Waist circumference	X		X	X

[6] Knee /hip injury and Osteoarthritis Score (H/KOOS). Validated widely used measure for pain, physical function and quality of life (Davies et al, 2009)

[7] Keele STarT Back Screening Tool (SBST). Brief validated decision-making tool for primary care patients with low back pain (Hill et al, 2008)

[8] Sit to Stand Functionality measure. Widely used measure to assess function and strength by participants moving from a seated position with arms folded to standing in 30 seconds (Jones et al, 1999).

Other data

Age, gender, ethnicity and information on existing medical conditions was collected for each participant. Failure to attend, attrition rates and adverse events were documented to understand adherence to the service to inform future spread of the model.

Data management and analysis

Quantitative and qualitative data was collected electronically via the provider's Customer Relations Management (CRM) database except for H/KOOS and STarT Back clinical outcomes that were recorded on paper. Forms were scanned by CACT and sent via secure email to the HIN for input to an ACCESS database developed for this pilot. CRM data was exported monthly and sent via secure email to the HIN for analysis. Statistical analysis was carried out by the HIN Data Analysis team. Analyses were conducted in RStudio (Version 1.1.383, RStudio Inc.) Effect sizes (Cohen's D) were calculated and used to calculate power. A paired two sample T test was used to compare the means at baseline and follow-up.

Evaluation data: focus groups and feedback forms

As part of the evaluation, participants were invited to attend a focus group. Participation was voluntary and a £15 gift voucher was offered in recognition of their contribution. Two HIN Senior Project Managers led the focus group which was digitally recorded for transcription. A semi-structured interview schedule was used to guide the conversation. Advisors were invited to attend a focus group, which was digitally recorded. The HIN transcribed the recordings verbatim.

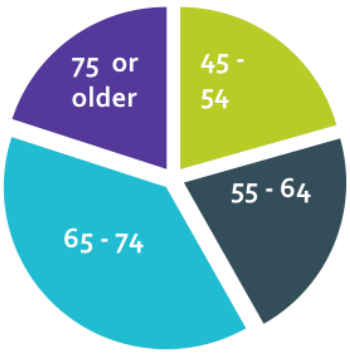
Results

Participants

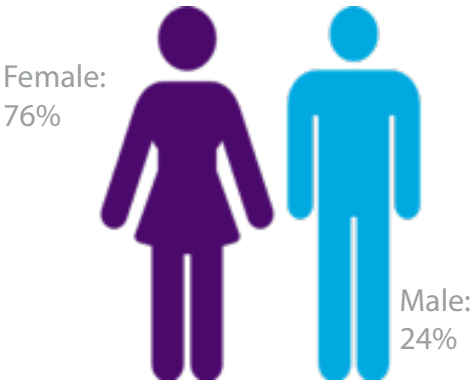
Demographics

85 participants accessed the service over a ten-month period (March 2017 – January 2018). The majority of participants were female and aged between 55 and 74 years old.

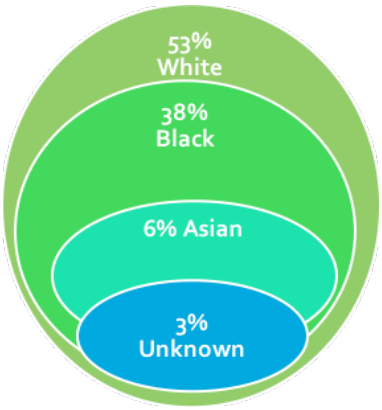
Age



Gender



Ethnicity



Primary reason for attendance

Back and knee pain were the most common reasons to access the service. Many participants had a combination of knee and/or hip and /or back pain. Baseline outcome measures were used for the condition that was causing the most pain e.g. back or hip or knee.

Knee (39%)

Hip (14%)

Back (47%)

Referral route

Participants referred into the service through existing contact with Greenwich Health Trainers or via leaflets and promotion at Greenwich events.

Appointments

Completed appointments

105 people enquired about the service, of these 85 (81%) considered the service might be of use to them and booked an initial assessment appointment, and the remaining 20 chose not to use the service. Of the 85 participants who decided to use the service, 69 (81%) returned for three-week review, 45 (53%) for six week review and 25 (29%) for six month review (See Table 3).

Table 3: Number of Appointments		
Appointment	Complete	% of clients
Initial	85	100%
Three weeks	69	81%
Six weeks	45	53%
Six months	25	29%

Cancelled / incomplete appointments

Reasons for cancelling or not attending subsequent appointments were captured on the CRM database by CACT. Ill health was the main reason for cancelling or not showing for an appointment. Other reasons cited were that people thought they were seeing a physiotherapist, the exercises were too difficult or a conflicting engagement. Advisors used the opportunity of the telephone cancellation to reiterate key messages, encourage and motivate participants or signpost to support services if required.

At six weeks just under half of participants did not return for follow up appointments. The main reason cited was they had learned enough about how to manage their pain, had increased activity and felt better. Ill health from other health conditions e.g. COPD or a decline in functionality e.g. now using a wheelchair or need for pain injections were reported by a small number of participants. Individual participants cited a language barrier, inconvenient location, preference for GP or physiotherapist or not wanting to do exercise as reasons to leave the service.

Results

DATA

Clinical outcomes

Table 4 shows improvement against baseline measures at three weeks, six weeks and six months. An increase of number of days physically active was statistically significant at three weeks with an average increase by two days per week at six months. Improvements in functionality (Sit to Stands) were statistically significant at six weeks, with participants moving from below average levels (n.6) at baseline to expected levels (n.12) at six months. 27 participants provided baseline measurements to calculate BMI. At six months (n.17) improvements in weight were statistically significant.

A large number of participants did not want to complete the K/HOOS and STarT Back paperwork. Reasons given were that the forms were too lengthy or that participants didn't want to share information about themselves with the Advisors. In some cases, participants would not have wanted to continue with the consultations if they had to complete the paperwork, which was not mandatory for inclusion. Therefore, not enough follow-up data was available to calculate changes in K/HOOS and STarT Back at any of the follow-up time periods.

Table 4: Outcome Data at Baseline and Follow-up Appointments

	Baseline		Three weeks			Six weeks			Six months		
	No.	Mean (SD)	No.	Mean (SD)	Diff	No.	Mean (SD)	Diff	No.	Mean (SD)	Diff
BMI	85	31.98 (7)	27	32.09 (6)	0.11	26	31.39 (6)	-0.59*	17	31.76 (7)	-0.22*
Waist (cm)	85	103.32 (18)	20	106.10 (16)	2.78	20	100.6 (16)	-2.72*	12	98 (2)	-5.32
Days	85	3.04 (2)	68	3.97 (2)	0.94**	44	4.45 (2)	1.42**	25	5.28 (2)	2.24**
30 second Sit-to-stand	85	6.67 (4)	68	7.94 (5)	1.27	44	8.84 (5)	2.17*	25	12.64 (7)	5.97**

Notes
No: number of participants attending each appointment at each time point
SD: standard deviation
Diff: difference: change from baseline value
BMI: body mass index
Cm: centimetres
**: statistical improvement from baseline p<0.05*
***: statistical improvement from baseline p<0.01*

Qualitative data: participant focus group

12 participants were recruited for the focus group. Two participants didn't attend and no reason was given for non-attendance. Feedback was grouped into four themes: reasons for attending the service; experience; advice and support and beneficial outcomes.

Reasons for attending

Although the majority (8/10) had received advice or prescriptions from their GP, they reported being dissatisfied with the brief consultations and management they had received. They thought a specialist service may provide more specific advice and was worth trying. None of the participants had been referred to the service from the GP and it was presumed GPs didn't know about service.

> "I was diagnosed with arthritis by the GP. He sat one side of the desk, me the other he went 'yeah that's arthritis' and scribbled a prescription – didn't even examine me. He gave me no advice on how to manage it – nothing."
> "Physio was a waste of time because going to the physio is exactly the same as what I've got from the pain clinic."

Prior to using the service participants were using analgesia and GPs to manage their condition. After seeing the Advisor participants reported using less or stopping pain medication as their pain improved.

> "I was taking four or five painkillers a day – I don't take any now."
> "I threw away my painkillers."
> "I was getting a lot of pain but that was before I went to the Advisor."

Experience

Participants described the JPA service as a very positive experience. They felt the consultations were unrushed and Advisors had more time to explain the problems and how to manage them. The Advisors used non-judgmental language and supported them to make steps to lifestyle changes which previously had been difficult, such as increasing physical activity and healthier eating. As a consequence participants' reported feeling more knowledgeable about their condition, how to self-manage, felt listened to, cared for, and more motivated towards achieving their goals.

> "I felt [Advisor] had the time to listen to me and me to them. It wasn't rushed- if it took 5 minutes to explain something that was fine."
> "She [Advisor] understood me and didn't press me to take painkillers or go for an operation."

Advice and support

Participants liked receiving personalised lifestyle support which they considered individually focused and therefore more relevant and practical to them. In particular they valued guidance about simple exercises that could improve their mobility and function and how to incorporate physical activity into their normal routines such as walking, using stairs and sitting less. The Advisors spent time exploring activities they would enjoy and signposted to appropriate local and affordable activities such as walking football and dance classes. They attributed this change in their attitude to the JPA.

"I can get in and out the bath better now."
"I can now put my own tights on now!"
"I do dancing now on Tuesday – would I have done that before? No."
"She directed me to the local tai chi group and I'm a different person now".
"It is really important about the fear – it [the service] took away the fear of doing exercise in case it makes it worse."

Participants felt the advice was holistic and person-centred. Taboo subjects such as losing weight were tackled sensitively and participants liked the practical solutions that were offered (such as portion control and pacing when exercising). The local healthy cooking club was attended by a number of participants' and was rated highly.

"The Advisor had a very human approach to this."
"I've lost weight because, you know, I feel I want to."
"It enabled me to look at my diet – eating the same things but cooking them in less fat"

Beneficial outcomes

Participants reported a wide range of benefits. Better knowledge about their condition and clearer understanding about how physical activity and weight control can alleviate symptoms, enabled them to improve their own symptoms and manage their condition. Participants reported less pain, increased physical activity, improved mobility and greater independence with everyday activities e.g. getting dressed and using the stairs. Once again, they attributed these changes to the JPA service.

"Knowing what it [osteoarthritis] is and knowing the alternatives that are there to support you."
"She [Advisor] helped me realise that exercise and moving it will help me maintain it [the knee]."
"I am more able and willing to keep on the path with the knowledge I've been given."

They liked the ease of access, its convenience and how effective it was. It was felt the service addressed their unmet needs, offering 'bespoke' advice. Participants valued advice from Advisors over that received from GPs and largely attributed this to the amount of time the Advisor was able to spend with them.

"She [Advisor] worked with me, she wasn't lecturing me, she was asking questions 'what do you think you can do' and by the time I left her I felt very empowered, that I had to change."
"When you go to the GP you have this GP and that GP – tell them one thing and see another and they never know about you. JPA is very good as you see the same person and they know you."
"GPs are limited in what they can do – all they can do is give you painkillers."

Qualitative data: advisor focus group

Four Advisors were recruited for the focus group. One Advisor was unable to attend due to sickness. Two were employed by CACT and one employed by Greenwich Public Health. Feedback was collated into five themes: understanding of the intervention, enablers, barriers, fit with existing services, and effects on practice. Advisor's notes on improvement in symptoms captured on the CRM database are included.

Understanding the intervention

Advisors understood the reasons why the service had been set up and the issues within the healthcare system it sought to address. Advisors emphasised the importance they placed on promoting non-pharmacological management and described how they used motivational interviewing and coaching to support self-management, predominately through encouraging participants to be more physically active and adopt healthier diets.

> "What we offer is a different understanding of how to manage pain through lifestyle changes."
> "I think it is good, in terms of saving the public money erm, isn't it? The same person would be going to the GP so many times, prescribed so many drugs – but still no improvement – but increased side effects and more drugs to mitigate the side effects – and GP time. We are cheaper than GPs."

They highlighted participants' desire to find solutions that would work and recognised the wider psychosocial benefits the service had to patients. Advisors understood the current time and financial pressures within primary care and felt this had negatively affected patient experience.

> "People were really desperate to find out what else would work – being able to support them."
> "I've had quite a few, actually really good feedback that people have managed to be less in pain. They went out more, they socialised more – able to bath themselves without a family member, or someone else helping them, erm you know, stuff like that – they were much happier in general to be honest."

Enablers

Advisors attributed the high user satisfaction and positive feedback to the non-judgmental approach. Building rapport and relationships was integral to the success of the service particularly helping people to overcome the fear of exercising. The ability to signpost participants to other services within the borough and the quality of these services was seen as integral to the success of the service.

> "We don't say you need to lose weight, give up smoking, the changes we help them come up with are the changes they are ready to make."
> "And the fact that people find out that pain doesn't damage - that really worked for my clients, it was the fear that held them back – not being confident to do any exercise or too scared to move as they thought they would damage their knee more. That was another fact why it really worked."
> "The most useful thing was our knowledge of resources, signposting them."

Barriers

Advisors felt that participants would benefit from more frequent appointments. It was felt that the time between the 3rd and 4th appointment attributed to poor adherence to the advice and subsequent missed appointments.

> "It was definitely between the 3rd and 4th [appointment] as it was a three-month gap, which for some people is a long time."

Advisors felt there was a mismatch between participant expectations of what the service was about and what they were able to offer e.g. expectation of receiving a scan or manual therapy. It was felt in some cases this impacted on the relationship Advisors were able to build with participants, but felt it could easily be overcome with clearer marketing and engagement.

> "Some people wanted a scan, but people who knew what we offered they achieved it [managing their pain better]."
> "On the first session we had to make it clear what we did and didn't do – people accepted it once they were there but I think the letter needs to be clearer i.e. this is what we do."

Fit within existing services

Overall it was felt the service filled a gap in provision and fits well with existing 'Live Well' services delivered across Greenwich.

> "A lot of them are just on medication but it stops working as well as our systems get used to it. The ice, the heat, the sit to stands it really works and the outcomes are really good – it would really benefit to have it as a service."
> "I think going forward it would definitely work in the borough – or in any borough – and I think that it is having the time to actually have someone to talk to about it. A lot of them do say – I go to the GP, and they say here's your medication take that – come back in 3 weeks see how it is. Whereas we're actually listening to them, trying to help in a different way."

The ability to signpost participants to other support services in the Borough strongly enhanced its effectiveness. People had accessed activity/ exercise groups in the community provided by CACT such as strength and balance, walking groups etc. as well as combining physical activity with healthy eating advice.

> "And knowing what we know – the services to refer to was a massive help. If you know that they need more help you would be sitting there thinking I don't know what I can do to help this person – with depression or money problems. Whereas we move in those circles, we knew how we could help people – right here right now. We've built the partnership with the council, with other services."
> "The client really enjoyed the support we provided at JPA clinic. She made so many changes in her lifestyle, she is now eating more healthy and active. She has joined exercise classes and cookery clubs."

It was felt that GPs were unware of the service and this limited the number of participants that were referred to and benefited from the service. Similarly, that the service could be linked with community support services such as social prescribing.

"If it was advertised via GPs I think we could have more people – and you may find GPs saying 'got joint pain go to them' straight away – as it probably is half their list over that day."

"It could easily link up with social prescribing – for those who have joint pain to be referred in easily."

Effects on practice

Advisors felt that the acquisition of new knowledge around managing joint pain had enhanced their day to day practice. Where they had previously referred people with joint pain to their GP they now felt confident to support people in the community.

"Before, it would be go back to your GP, but now we can help them."

They felt the Joint Pain Advisor had become an integrated part of their role and they would continue to use the knowledge and skills they had developed."

"I can really use the joint pain advice and experience as part of the live well service."

Improvement in symptoms and health

Advisors captured participant's progress at each appointment on the CRM database. People specifically reported a reduction in pain, reducing or stopping pain medication, using heat/ice instead of painkillers to manage pain and less or no reliance on aids such as walking sticks or knee supports.

"[Client] is off painkillers completely."

"She still has pain in her knee and back but feels she can manage this better. She does not wish to have any more pain killers and uses heat pads instead."

"Knee is better, not using walking stick any longer."

"Client has increased the amount of sit - to - stands she can do and is feeling better within herself. She has noticed some reduction in her lower back/hip pain"

"Now walking on regular basis while traveling for work, made changes to her diet (much healthier), she feels the benefits of it"

Conclusion

Health Trainers are well placed to deliver MSK advice to people with chronic knee, hip or back pain. Prior to this study Greenwich Health Trainers had limited knowledge of MSK conditions or how to support clients that presented with knee, hip or back pain when accessing other services supported by CACT or Greenwich Public Health. Upskilling Health Trainers as JPAs has addressed a gap in service provision, particularly as prevalence of knee, hip and back is common amongst its service users.

Most participants had received advice from their GP before participating in the JPA service. Although understanding GPs had limited time, it was felt by most participants that GPs did not provide effective advice or support outside the prescription of pain medication, particularly with regard to self-management. Health Trainers delivering MSK advice was acceptable to most participants, only a few decided not to use the service and preferred to see a GP or physiotherapist. It was felt Health Trainers were skilled in their approach in terms of educating participants about OA and pain management, and preferable to GPs in terms of providing patient-centred holistic advice and support such as adopting healthy behaviours and goal setting. Perceptions of having more time, not being rushed, building trust and rapport were cited as key to participants' satisfaction with the consultations.

Improvements in clinical outcomes (e.g. pain, BMI), adoption of healthier lifestyles and behaviours (physical activity and function) and less reliance on medication and walking aids were reported by participants and were attributed to the JPA service. Greenwich Public Health working with their local partners (CACT) provide a number of free healthy living services across the Borough and many participants accessed these as part of the JPA service, e.g. cookery clubs, strength and balance classes or walking groups. A small number of participants needed support with isolation, finances or depression. The Health Trainers were knowledgeable about their local landscape and were able to signpost these individuals to local support services in addition to the providing the JPA service.

Limitations of this study

- The small number of participants who completed the K/HOOS and STarT Back outcomes limited the information we could gather. Participants reported the forms were too long and complex, and administrative errors that meant some data was lost. Simplifying the outcomes used and collecting these electronically would increase the completion rate providing important quantitative data about the benefit of the JPA service.

- High attrition after the initial consultation was evident. This is partially explained by most participants being very satisfied with the service. However, the Advisors felt the intervals between the appointments may have been too long for some participants which impacted on their adoption of and adherence to healthier behaviours, and forgetting about appointments. Shorter intervals and reminders could reduce attrition.

- Referral to the service was limited to existing CACT / Greenwich Public Health clients. Advisors suggested that raising awareness and better marketing of the service, particularly to GPs, would have increased referral rates.

Summary

The pilot was successful as an intervention to improve participants' ability to self-manage their joint pain. Health Trainers trained as JPAs are valued by people with chronic knee, hip or back pain and able to positively influence and support people in self-managing their condition. Although a small study, the improvements in clinical outcomes, participant satisfaction and behavioural change corroborate the findings from the Lewisham study, and confirm the value of the JPA service.

Upskilling Health Trainers to deliver MSK advice is cost effective and has the potential to reduce the burden of MSK consultations on GPs, increase access to MSK support to people in the community (including harder-to-reach groups) and delay or prevent the need for surgery. JPA as an approach contributes to improving individuals' joint health as well as contributing to a reduction of known co-morbidities such as obesity, diabetes and depression, therefore improving the public health of local populations.

Recommendations

- The JPA as an approach can be delivered in community settings by non-clinicians such as Health Trainers. Upskilling such personnel as JPA's could increase access to MSK support for a larger number of people.

- The JPA approach successfully supports people with back pain. 47% of participants had back pain, therefore people with back pain should have access to JPAs.

- Simple measures of pain, function, other relevant clinical outcome data, service costs and healthcare utilisation, are needed to provide more, better and more convincing data about the value of the JPA service.

- To increase participation numbers, wider engagement and promotion of JPA as a service is needed across primary care, public health, social care and community/third sector.

- The JPA service should be embedded in MSK pathways to help to keep people living with joint pain independent for longer periods of time and reduce use of and pressures on clinical services.

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