ESCAPE-pain for backs: An evaluation of a 12-month pilot

February 2020

Health Innovation Network South London

escape pain

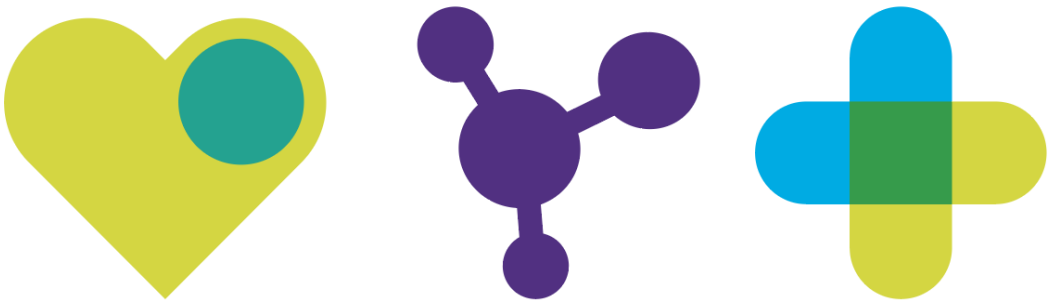
Contents

About

ESCAPE-pain for backs was piloted in 2019 to assess whether the model and principles behind the evidence-based ESCAPE-pain programme (for knee and hip osteoarthritis) are effective in the self-management of non-specific low back pain.

The pilot was implemented across six outpatient physiotherapy departments, representing four NHS Foundation Trusts in London, between January and December 2019. The pilot was an opportunity to provide access to an intervention in line with The National Institute for Health and Care Excellence (NICE) recommendations and guidelines for people with non-specific low back pain.

This evaluation by the Health Innovation Network (HIN) aims to understand the impact and effectiveness of ESCAPE-pain for backs in the self-management of non-specific low back pain, delivered in 'real world' settings. It explores the clinical efficacy and acceptability of the programme, as well as its feasibility for participants and staff.



Acknowledgements

St George's University Hospitals NHS Foundation Trust

- St John's Therapy Centre
- St George's Hospital
- Queen Mary's Hospital

Kingston Hospital NHS Foundation Trust

University College London Hospitals NHS Foundation Trust

University Hospital Lewisham

Executive Summary

Overview

Non-specific low back pain (LBP) is the leading cause of disability worldwide and affects roughly 1/3 of adults in the UK each year.[1] LBP is the second most common cause for time off work[2], having a major impact on healthcare expenditure and productivity costs.[3] The National Institute for Health and Care Excellence (NICE) guidelines for the management of non-specific LBP recommend improving people's understanding of their condition, increasing physical activity and advising them to maintain a healthy body weight to reduce pain and its impact. Unfortunately, few people receive this advice.

In 2019, the HIN, with support from a number of subject matter experts, co-developed "ESCAPE-pain for backs" and piloted the programme in six outpatient physiotherapy departments in London. This report evaluates the efficacy and feasibility of ESCAPE-pain for backs.

Key findings

A total of 286 participants undertook ESCAPE-pain for backs. The majority were female (67%) with a mean age of 54 years. Improvements in physical and mental well-being and overall musculoskeletal health were seen.

Participant feedback was enthusiastic and reported an increased understanding of the condition. Participants described improvements in their physical abilities and returning to activities they had previously enjoyed but avoided due to fear of pain. They felt better able to manage flares in pain and attributed their improvements to the content, format and delivery of the programme.

Clinical leads and physiotherapists enjoyed delivering and overseeing the programme. Many facilitators reported that the training increased their knowledge base, as well as their confidence to facilitate group discussions and navigate more complex topics with participants.

Adherence to the governance structure (steering group calls, programme core components, facilitator training), staff knowledge and buy-in from administrative teams, referral colleagues and service leads were all key elements in ensuring efficient pathways for participants, as well as shaping uptake, retention, success and overall satisfaction.

Conclusion and recommendations

The evaluation shows that ESCAPE-pain for backs delivers effective care, managed in line with NICE guidelines, that significantly improves participant outcomes. All six sites saw mean improvements in participant clinical outcome measures, found ESCAPE-pain for backs beneficial for participants in the self management of non-specific LBP and have since adopted the programme into regular practice.

Current pressures in primary care prevent delivery of the NICE core advice, as GPs do not have the time to effect sustained behavioural change. Consequently, few people receive advice and support that would help them. Scaling up access to effective group-based interventions that promote self-management and are popular with clinicians and service users should be widely implemented.

---

[1] Arthritis Research UK. State of musculoskeletal health 2018: Arthritis and other musculoskeletal conditions in numbers [Internet]. 2018. Available from: https://www.arthritisresearchuk.org/arthritis-information/data-and-statistics/state-of-musculoskeletal-health.aspx

[2] Department of Health. The Musculoskeletal Services Framework [Internet]. 2006 [cited 2014 Dec 16]. Available from: http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4138413

[3] National Collaborating Centre for Chronic Conditions (UK). Osteoarthritis: National Clinical Guideline for Care and Management in Adults [Internet]. London: Royal College of Physicians (UK); 2008 [cited 2018 Jan 13]. (National Institute for Health and Clinical Excellence: Guidance). Available from: http://www.ncbi.nlm.nih.gov/books/NBK48984/

Background

Back pain is one of the most common musculoskeletal (MSK) conditions and impacts adversely on all aspects of a person's personal, social and working lives. This results in a large burden on the health and social care system.

Over 70% of the population will experience a significant episode of back pain during their lives. It is the most common reason why middle-aged people visit their GP, with one in 12 adults presenting each year with this complaint.[4]

In a series of reviews for *The Lance*t, an international team of researchers found that LBP is usually treated with bad advice, inappropriate tests, risky surgeries and painkillers, often against treatment guidelines.[5] Despite this, there is consensus among clinicians and patients that more can be done to improve the way back pain is managed, including by using self-management techniques to educate and help people care for their conditions.

NICE core advice and evidence-based management guidelines for non-specific LBP call for a patient-centred, holistic approach that uses education and self-management strategies and focuses on increasing physical activity and maintaining a healthy body weight.

Changing entrenched behaviours and maintaining this change takes time and sustained effort. Current pressures in primary care prevent the successful delivery of NICE core advice, as GPs do not have sufficient time to effect sustained behavioural change. Consequently, few people receive helpful advice and support.

In 2019, the HIN developed the ESCAPE-pain for backs programme. The programme was piloted in six outpatient physiotherapy departments in London as an opportunity to increase access to support, in line with national guidelines, for people living with non-specific LBP.

The purpose of this evaluation was to understand the impact and effectiveness of the ESCAPE-pain for backs programme on the self-management of non-specific LBP. The evaluation specifically aimed to:

- Determine if there were improvements in clinical outcomes such as pain, function, physical activity levels and mental well-being for people with LBP
- Understand participant acceptability of ESCAPE-pain for backs
- Determine clinicians' and physiotherapists' acceptability of implementing ESCAPE-pain for backs
- Understand the factors influencing the implementation of ESCAPE-pain for backs

The evaluation was undertaken by the HIN and took a mixed-methods approach, incorporating clinical outcomes and participant and facilitator feedback. This report summaries the 12-month pilot to evaluate the efficacy of ESCAPE-pain in the management of non-specific LBP, delivered to participants in 'real world' MSK outpatient settings.

This was a collaborative project between the HIN and four NHS Foundation Trusts.[6] Each of the six pilot sites implemented ESCAPE-pain for backs as a service improvement project utilizing their existing resources (i.e. staff, venue, patients, processes). They received no funding or additional resources from the HIN other than advice and support to facilitate implementation.

[4] Hartvigsen J, Hancock MJ, Kongsted A, Louw Q, Ferreira ML, Genevay S, et al. What low back pain is and why we need to pay attention. The Lancet. 2018 Jun 9;391(10137):2356–67.
[5] Foster NE, Anema JR, Cherkin D, Chou R, Cohen SP, Gross DP, et al. Prevention and treatment of low back pain: evidence, challenges, and promising directions. The Lancet. 2018 Jun 9;391(10137):2368–83.
[6] Kingston Hospital NHS Foundation Trust, St George's University Hospitals NHS Foundation Trust, University College London Hospitals NHS Foundation Trust, University Hospital Lewisham.

Model

ESCAPE-pain for backs is a group rehabilitation programme for people with non-specific LBP that integrates educational self-management and coping strategies with an exercise regimen individualised for each participant.

The programme implements the NICE clinical guidelines for the management of LBP [NG59][7] and is borne from the evidence-based ESCAPE-pain programme, a group rehabilitation programme that promotes self-management for people with chronic knee/hip pain.[8]

The ESCAPE-pain for backs programme is delivered over 12 sessions, twice weekly for six weeks. Each session is approximately an hour long and split between a brief group discussion around a specific topic relating to back pain and approximately 40 minutes of a simple exercise circuit tailored to suit individual needs. The focus is on promoting and progressing functional exercises that improve strength, balance, range and coordination and get participants back to doing the physical activities they enjoy.

The ESCAPE-pain for backs programme has four core components:

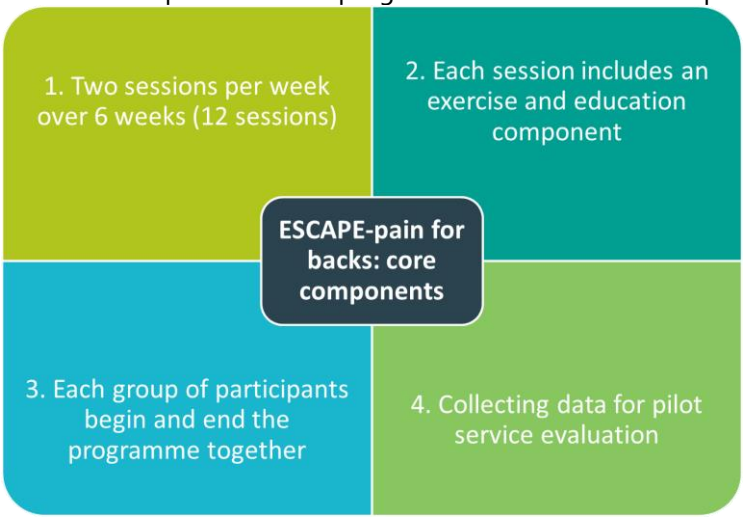


Figure 1 ESCAPE-pain for backs: core components

Design and development

St George's University Hospitals NHS Foundation Trust (SGUH), a HIN member organisation with a strong history of collaboration on various projects (including the early adoption of the ESCAPE-pain programme), worked with the HIN to develop and pilot ESCAPE-pain for backs.

A planning workshop between the HIN and SGUH was held in October 2018 with the aim of refining programme content and designing the operational model for the pilot.[9] The outputs from the design workshop were established referral pathways, inclusion and exclusion criteria, outcome measures and next steps for identifying and training staff. Once the implementation timeline was agreed, the HIN had discussions with a further three London-based Trusts who adopted the pilot as a service improvement project. The initial facilitator training was held in January 2019, and monthly steering group calls were scheduled for the duration of the pilot (see Appendix B). Response to support needs, including further staff training, in-service support, interim data reports and additional support resource documents were developed throughout the pilot (see Appendix A).

[7] https://www.nice.org.uk/guidance/ng59

[8] ESCAPE-pain programme, developed by Professor Michael Hurley, is an evidence-based group intervention for people with knee/hip osteoarthritis. The programme was referenced in the NICE Guidelines for the Management of Osteoarthritis [2008] and adopted as a case study in NICE's Quality, Innovation, Productivity and Prevention Programme [2013]. The programme is now being delivered in over 280 sites across the United Kingdom. More information: www.escape-pain.org

[9] The planning workshop was attended by two consultant physiotherapists, a clinical psychologist, two senior physiotherapists from SGUH and MSK clinical and deputy clinical directors from the HIN.

Method

Participants

Eligibility criteria

The programme was available for all participants:

- Over 18 years old with no contraindications to exercise
- Experiencing non-specific LBP for more than three months or recurrent episodes (with or without radicular pain)
- Identified as medium risk using the Keele STarT Back Screening Tool[10]
- Independently mobile and able to participate in a group-based exercise programme with minimal supervision.

Exclusion criteria [11]

Participants were excluded from using the service if they were unable to participate in the group-based programme due to:

- Insufficient level of English
- Significant cognitive impairment
- Moderate to severe learning difficulty
- Significant mental health difficulties which would impair ability to engage in a group-based intervention
- Interpersonal presentation that would cause significant disruption in a group
- Unwilling/unable to commit to a six-week, group-based rehabilitation programme
- Complex / specific / inflammatory back pain
- Previously attended a physiotherapy back pain group with no or little benefit
- Previously attended a chronic pain management programme.

Referral route

All participants accessed the programme through their site's existing pathways into physiotherapy and were referred into the service following a physiotherapist consultation using the Keele STarT Back Screening Tool.

ESCAPE-pain for backs facilitators

Training

In order to deliver the pilot, all facilitators attended a one-day training session delivered by the HIN. Five training dates were offered between January and December 2019 to support sites through staff turnover and rotations. In total, 42 facilitators (36 physiotherapists and six therapy assistants) were trained to deliver the programme. The training covered:

- An overview of ESCAPE-pain
- The fundamentals of non-specific LBP
- NICE guidelines for LBP
- Understanding the psychology of pain
- An overview of self-management principles, motivational interviewing, health behaviour change and group facilitation
- The ESCAPE-pain for backs structure (core components of the programme and 12 educational sessions)
- How to set up and deliver ESCAPE-pain (optimising referrals, uptake and retention and how to run each session of the programme)
- Data collection and reporting

[10] Nine-item risk stratification tool to assist decision making in the management of people with LBP https://startback.hfac.keele.ac.uk/

[11] Referring clinicians were advised to apply clinical judgement regarding the exclusion criteria and refer participants identified as high-risk into the programme if they felt they were appropriate, willing to attend and would reasonably benefit from participation.

- Sustaining physical activity and other health behaviours.

Outcome measures

Clinical data

The following clinical outcomes were collected from participants pre-and-post-programme.

- Musculoskeletal Health Questionnaire (MSK-HQ) – *14 questions assessing patient-reported (back pain) symptoms and quality of life*
- Days Physically Active – *number of days with ≥ 30 minutes of physical activity in previous week*
- Timed Up and Go (TUG) – *functional test measuring the number of seconds taken to get up from sitting position and walk three metres to a marker on the floor, then turn and walk back (total of six meters)*
- 30-Second Chair Stand Test (CST) – *functional test measuring the number of sit to stands completed in 30 seconds.*

Table 1 - Clinical outcomes collection schedule

Clinical outcome measure	Pre- programme	Post-programme
MSK – HQ	X	X
30-Second Chair Stand Test (CST) ^	X	X
Days Physically Active	X	X
Timed Up and Go (TUG) ^	X	X

^ The CST replaced TUG after early cohort data showed inconsistencies in TUG reporting due to differences in facilitator instruction pre-and-post-programme. The CST was chosen as a more reliable functional measure.

Demographic and attendance data

Data pertaining to age, gender, ethnicity, post code and employment status were collected from each participant at baseline. Failure to attend and retention rates were documented to understand adherence to the model.

Qualitative data: participant feedback

Participants were invited to provide additional feedback and consented to being contacted by HIN staff about their programme experience by providing their name and telephone number. The optional consent forms were distributed during participants' first session.

Participants were invited to complete an NHS Friends and Family Test during their last session, indicating how likely they were to recommend the service with an option to leave written comments in a free text box.

Data management and analysis

HIN staff provided support to sites and assisted with data collection and entry. Quantitative and qualitative data were anonymised and entered electronically into password-protected Excel spreadsheets. Hard copies of outcomes and patients' identifiable data were kept at their respective sites. Statistical analysis was carried out by the HIN Informatics team using the SciPy library in Python 3.7.

Findings

Demographics

There were 286 participants who accessed the pilot between February and December 2019. The majority were female (67%) with a mean age of 54 years. Participant distribution by ethnicity was:

51 % White *(British / Irish / Other White background)*
21 % Black or Black British *(African / Caribbean / Other Black background)*
14 % Asian or Asian British *(Indian/ Pakistani/ Bangladeshi / Chinese / Any other Asian background)*
9 % Mixed or Multiple Ethnic Groups *(White and Black Caribbean/ White and Black African/ White and Asian/ Other Mixed Background)*
5 % Other *(Anything else / I would rather not say)*

Index of Multiple Deprivation (IMD)

The NPEU IMD tool was used to input participant postcodes and identify corresponding IMD quintile groups to understand the relative level of deprivation. Participants' distribution across IMD quintile groups is shown in table 2 (table 2).

Table 2 - Participant distribution by Index of Multiple Deprivation (IMD) Quintile group

Quintile group (Least to most deprived)	IMD Score range	Participant distribution
1	≤ 8.49	7 %
2	8.5 - 13.79	20 %
3	13.8 - 21.35	20 %
4	21.36 - 34.17	33 %
5	≥ 34.18	20 %
		n = 250

Employment status

There were 267 participants who disclosed their employment status (distribution below); 36 % of participants (n = 143) indicated that they had to reduce their working hours due to their back pain.

34 % Full-time employment
16 % Part-time employment
28 % Retired
22% Unemployed

Retention rate

On average, participants attended 74% of the programme (8.9 / 12 sessions).

Patient satisfaction

Participants nearing or at the end of the programme were invited to complete the NHS Friends and Family Test. Of the 125 responses received, 99% of participants said they would recommend the service to friends and family. A summary of the qualitative data is included later in this report.

Clinical outcomes

Clinical effectiveness

Participants benefited from the programme, with statistically significant improvements across all measures. (Table 3)

Table 3 - Effectiveness of the ESCAPE-pain for backs programme

Measure	n	Pre-mean	Post - mean	Mean change (95% CI)	% Improved
MSK- HQ	209	25.6	34.8	9.3 (8.1 to 10.4)	85
Days Physically Active	201	2.5	3.6	1.1 (0.8 to 1.4)	61
30-Second Chair Stand Test (CST)	104	9.1	12.9	3.8 (3.2 to 4.4)	92
Timed Up and Go (TUG) ^	52	11.0	9.7	-1.4 (-2.2 to -0.6)	64

The Minimal Clinically Important Difference (MCID) for MSK-HQ has been calculated as 5.5[12]; ^Number of participants with complete datasets (i.e. outcomes completed pre/post-ESCAPE-pain for backs); CI = 95% confidence interval; smaller sample size for functional measures are seen because TUG was removed and replaced with CST.

[12] Versus Arthritis. Musculoskeletal Health Questionnaire (MSK-HQ) [Internet]. Available from: https://www.versusarthritis.org/media/8235/msk-hq-faqs.pdf

Qualitative data: participant feedback from NHS Friends and Family Test

Ninety-nine per cent of participants who completed the NHS Friends and Family Test said they would recommend the programme, and over 100 participants provided written feedback to support their recommendation.

The feedback was overwhelmingly positive. One hundred and ten comments were analysed and over 180 benefit statements were categorised into the following themes: psychological/psychosocial benefits, positive experience of facilitator and/or site, increased knowledge and understanding, physical benefits and improvements in pain. There was a small group of non-benefit statements that were also captured, which included some feedback around flare-ups of pain and suggestions for programme improvement.

> **(The programme) has increased my focus on what I can do rather than being anxious about what I can't do or am reluctant to risk doing.**

The psychological/psychosocial benefits were the most common theme, with many participants referring to how the programme positively contributed to their overall wellbeing and outlook on life, lessened fears around exercise and made them feel more confident and motivated to exercise.

"It has helped me not to be worried about exercising and causing an injury or making things worse. Also, its been good for my mental health to be more active. I'm more confident to add more exercise in my lifestyle now."

"The mix of education and physical activity has been very helpful and has increased my focus on what I can do rather than being anxious about what I can't do or am reluctant to risk doing."

Overwhelmingly, participants cited their positive experience of the facilitators, the sites and how beneficial they found exercising and sharing experiences with their peers. Some participants started WhatsApp groups to keep in touch and continue supporting each other. Many facilitators fed back that they were given small gifts and thank you notes from participants as a way of expressing their gratitude and positive experience with the programme.

"I have found the exercises extremely helpful, and the staff extremely helpful and friendly; they were always at hand to help with any worries we had. They have instilled the confidence to deal with future problems."

"The department is extremely calm, helpful and friendly. The physios care immensely about each individual. You are not just a number! Extremely strong advice and assistance given with diagnosis and care. I am impressed with the knowledge of all of the physios and their willingness to involve you in the whole process and their passion!"

"These positive spirits kept us motivated and wanting to be here and being able to have fun at the same time."

"Motivating to exercise with other people who have similar experiences."

Participants frequently commented on how their knowledge and/or understanding of their condition increased, often citing how informative the session topics were and how they felt better able to manage their pain in the future because they now understand the importance of exercise and pacing.

"I have received the tools and knowledge to understand that it is not just rest that I need for my pains but also activity and exercise."

"All the basics of managing my back pain was gone through in depth, what will help me with my pain in the future and when to pace all the exercise I do."

There were numerous positive statements made about the exercise circuit and increased motivation to be more physically active. Participants often cited improvements in strength and movement and talked about getting back to activities they had previously given up on due to their back pain.

"I feel stronger."

"Because I can do more with my days."

"It helped me get exercising again!"

"When I started I could only walk for 10 minutes before the pain started. I can now walk a lot further and I do not need to stop."

Of the statements relating to pain, participants spoke of overall improvements in the way that their backs felt, often citing that they had less pain, discomfort and stiffness and felt they were doing a lot better.

"I can do more movement than before, without that bad pain."

"The course was very helpful in all aspects reducing pain and discomfort."

Of the non-benefit statements captured, most were related to programme suggestions, for example, increasing the number and length of sessions and changing the time of day the sessions were offered. A few participants commented that their pain had not improved as much as they had hoped, and some suggested adding more variety to the exercises offered.

Qualitative data: participant feedback from phone interviews

A sample of participants were interviewed by phone as an opportunity to assess sustained behaviour change and to potentially reach participants that did not complete the programme or provide feedback by way of the NHS Friends and Family Test.

Eleven participants were phoned, resulting in nine telephone interviews.[13] A discussion guide was used to facilitate the interviews (see Appendix C), where a wealth feedback was captured and subsequently categorised around the following themes: pre-programme expectations and overall experience, previous treatment and care, experience of the education component of the programme, experience of the group exercise component of the programme, overall impact of the course, behaviour change and overall satisfaction/likelihood to recommend the programme.

Overwhelmingly, participants enjoyed the opportunity to feed back about their positive experiences with the programme, describing the value and benefit they received from attending.

"I found it one of the most helpful things I have ever done."

"I came to ESCAPE-pain because the physio I was seeing 1:1 felt I would benefit from some ongoing support. Overall, I found the course gave me confidence and I had lost a lot of confidence because of my back pain. I was terrified of my back pain coming back. The course gave me confidence, it gave me exercises to do and strategies to use to cope."

Participants described their previous experiences accessing treatment and care for their back pain. Some had accessed physiotherapy for the first time, while others had attended group or 1:1 therapy in the past. When comparing ESCAPE-pain for backs with previous care, participants talked about feeling more supported on an individual level and spoke positively of the strategies they acquired to self-manage their pain in the future.

"This one was much more individual – we would be looked after and helped. Exercises were corrected and, therefore, I was sure that what I was doing was right, whereas before I never really knew if I was doing it correctly."

"Previously when I've had physio they've used manual techniques – manipulation, tens, ultrasound. It's great at the time but it doesn't last."

Overall, participants enjoyed the education component of the sessions and placed great value on the group discussions, specifically sharing experiences and perspectives with their peers. Many found the information informative and useful, particularly in dispelling myths around exercise and pain. One participant commented that they would have benefited from more time allocated to group discussion, feeling that the education sessions could have been slowed down, increasing the opportunity for more dialogue.

"Yes, some of the information was quite new to me."

"I found it valuable to hear what others were saying and fascinating that this was a problem that affected people of all ages and gender. I had a great deal of empathy for the others in the group because I understood what they were going through."

"Could have been encouraged more to talk amongst ourselves and open up the discussion – we did meet beforehand, this element could have been more of a facilitated discussion."

[13] Participants were randomly selected from a contact database and represented four sites. Two people did not proceed with the phone interviews due to time restraints / scheduling difficulties.

Participants felt strongly that the group exercise component was helpful and increased their sense of empowerment and independence. They found the group environment supportive and encouraging and felt motivated and reassured by their peers and facilitators.

"You actually do the exercises there and then, and the physio shows you what to do - that bit was good. Talked about broader range of exercises."

"Yes I did. I'm quite competitive and the group helps to spur you on."

"When you're on your own you give up easily. In the group you think, 'I'll just keep going and do one more minute.'"

"The exercises taught me discipline. I like it, it felt satisfying. It was an all-over work out. I also like that it wasn't daunting, and I could do the exercises."

"Yes! [Being] surrounded by other people with back pain is extremely helpful, didn't want to stop and asked to carry on."

When discussing the overall impact that the programme has had on their lives, participants often spoke of their increased sense of control over their back pain and how they felt better able to manage flare-ups.
Weight loss, increased strength and positive changes in mindset, motivation and approach to physical activity were also noted. However, one participant spoke of finding it difficult to stay motivated without the support of the facilitator and group.

"I managed to lose a bit of weight which has helped."

"I am much more active and a lot stronger now."

"No return of major backpain – minor recurrences but know what to do, understandings improved. Get on with life rather than be scared. Dominated life before, not anymore."

Participants talked about approaches and strategies that have helped them stay motivated and sustain healthy behaviours. Frequently mentioned was the importance of establishing healthy routines by adding regular exercise, reduced reliance on medications to manage pain and the overall change in mindset and attitude towards their back pain.

"Doing more exercises now – walking more – get off the bus early. It's easy to build it in to your everyday routine."

"I have changed my attitude to exercise. I am doing something every day now. Key learning from the course was that this is not a flash in the pan, it needs to be habit. In one session the physio said, 'We have 24 hours in a day, 30 minutes of activity is not really expecting a lot of your body.' This really helped me to see how I could fit it in if I chose to."

"I no longer rely on painkillers, and I am using them far less."

"I have a routine now, where at 5pm, I do as many of the exercises as I can remember. I also walk a lot more, a couple of miles a day, and I go to the weekly pilates class."

"My attitude has changed completely since the course. I was awaiting knee surgery but have decided to do ESCAPE-pain for knees instead, to build strength."

All participants interviewed said they would recommend the programme, and many had already done so.

Conclusion

Conclusion

The evaluation showed that ESCAPE-pain for backs delivered effective treatment in line with NICE guidelines that significantly improved participant outcomes in overall MSK health, function and mental wellbeing for people with LBP. Participants were enthusiastic about the programme and reported feeling more positive about their lives and their condition. They had learnt self-management strategies, such as being more physically active and pacing, which helped alleviate their pain and symptoms. Participants valued the relationship and rapport they were able to develop with the facilitator and the group and felt the group environment was a great way to connect and share experiences.

All six outpatient physiotherapy departments noted the improvements in participant outcomes, found ESCAPE-pain for backs beneficial for participants in the self-management of LBP and have since adopted the programme into regular practice.

Limitations

- Referrals into the programme were made via physiotherapy consultations; however, not all referring and administrative staff had a thorough understanding of the programme, which could have negatively impacted participant expectations, experience and access.
- Most classes were delivered by junior physiotherapists who typically follow a rotation pathway and transfer to another post every four months. While additional training was provided by the HIN throughout the pilot, there were gaps where untrained facilitators were delivering the service, introducing concerns around delivery fidelity.
- Ensuring availability of departmental in-service training and supplying more information on programme availability and participant suitability across teams could be beneficial in improving processes and sufficiently setting participants' expectations.
- Increasing follow-up telephone calls to gain a more informed picture of why participants did not attend (DNAs) would be invaluable to gain a more comprehensive understanding of participant acceptability of the programme.

Recommendations

Physiotherapy outpatient departments

- The value of ESCAPE-pain for backs should be promoted across the healthcare system to facilitate widespread implementation.
- Systems must be fully integrated, emphasising cross-team communication and understanding of the intervention. Importance must be placed on attending training and collecting quality/complete outcomes data and feedback from participants, to ensure fidelity to the programme and inform future improvements.

Leisure and community settings

- ESCAPE-pain for backs should be piloted in leisure and community settings.

Appendices

Appendix A: Resources developed to support pilot implementation

Appendix B: Steering group call standing agenda and schedule

Appendix C: Participant interview discussion guide

Appendix D: St George's University Hospital NHS Foundation Trust's facilitator feedback

Appendix A: Resources developed to support programme implementation

The following resources were created to support facilitators in implementing the ESCAPE-pain for backs programme. Resources were accessed via links to a shared drive, which was given to facilitators after they completed training.

Facilitator training
ESCAPE-pain for backs facilitator manual

To facilitate the classes
PowerPoint of education session content
Example circuit exercises
More information on educational sessions

ESCAPE-pain resources for participants
Participant booklet with pictures of exercises
Frequently Asked Questions – to set expectations for programme
Welcome letter – template
Exercise sheet – template
Employer letter template

Marketing resources
ESCAPE-pain for backs A4 tri-fold leaflet template
ESCAPE-pain for backs A3 marketing poster template

Outcome measures
ESCAPE-pain for backs pre-programme outcomes pack
ESCAPE-pain for backs post-programme outcomes pack
Data inputting spreadsheet – template
Interim data reports for individual sites

Appendix B: Steering group calls, agenda and schedule

Steering group calls were set up at the start of the pilot and reoccurring calendar invites were sent to all facilitators. The importance of attendance was regularly communicated.

Dates of steering group calls: 19/3/19, 16/4/19, 21/5/19, 16/6/19, 21/7/19, 18/8/19, 15/10/19, 17/12/19

Standing agenda included:

- Introductions and site updates (successes/ barriers/ etc.)
- Key updates from the HIN (addressing training and support needs, etc.)
- Latest data updates / findings
- AOB

Appendix C: Participant interview discussion guide

Theme	Guide question
Expectations	How did you think the ESCAPE-pain programme would help?
Previous care	How was it different to other types of therapy or treatment that you may have had?
Experience of education component	Did you find the group discussions helpful?
Experience of education component	Did you find the group exercise environment helpful?
Impact	What impact has the programme had on your life? How have you been getting on since completing the ESCAPE-pain programme?
Behaviour change	Has the ESCAPE-pain programme changed your behaviour? Are you more active now?
Satisfaction	Would you recommend this programme to others?

Appendix D: Facilitator feedback from St George's University Hospital NHS Foundation Trust

The HIN were invited to co-present the ESCAPE-pain for backs pilot at SGUH's MSK department-wide symposium in October 2019. In preparation for the symposium, facilitators from each of the three sites were asked to provide feedback via email based on three questions. Their feedback is summarised below.

1. What has gone well with the pilot?

- Twice a week seems to be working and popular among patients
- Good exercise circuit that patients like
- Good length of programme to start to see changes in function and mindset
- Positive atmosphere in the class
- Patients enjoy the class experience and social aspect
- Having two facilitators helps during the exercise component, gives patients a chance to discuss individual matters/problems with a physio
- Adaptation of the exercises and allowing choice kept patients interested and challenged
- Having two lead therapists on each day worked best as patients developed different relationships with each therapist

2. What has gone less well/ what barriers to implementation have they experienced?

- Lots of paperwork to complete on first and last session
- Not having the same physio throughout the course (jeopardises rapport)
- Pilot has a similar dropout rate to previous backs classes
- Patients can lose interest in the exercise component (if exercises aren't challenging)
- Some of the educational topics feel too heavy to discuss in a group and may be better addressed in the 1:1 prior to course attendance
- Getting patients to set goals can be challenging and require a lot of prompting
- Without data it is difficult to understand if twice per week commitment impacts uptake
- Would be useful to better understand the reasons why patients drop out.

3. What do participants think of the programme (from a facilitator perspective)?

- Very positive atmosphere within the group by the end of the sessions
- Overall, patients that finish the class are very complimentary and report good changes in function and motivation to keep exercising
- Most patients are happy to accept the class is not there to 'fix' or rid them of pain but to give them more skills to help manage it
- Those who stayed reported that they enjoyed the class and were motivated to continue exercising
- Received 12 boxes of chocolates from one patient - she said she'd never be back to physio and wanted to give a box of chocolates to every physio whose seen her over the many years at QMH
- Patients love to keep together and swap numbers and try and commit to similar day and time to ensure they all motivate each other and stick to the exercise commitment
- Our reception staff fed back several times that the patients come out so happy and positive – they wonder what we are doing in the class!