

Scaling-up ESCAPE-pain: An evaluation of an AHSN Network national programme

Summary report

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Prepared by: Andrew Walker

1 Background

There are approximately 8.75 million people in the UK living with osteoarthritis (OA) and this is projected to increase to 17 million by 2030 [1,2]. OA is a major cause of disability with large a socio-economic burden[3]. Despite NICE guidance [4] and proven interventions (such ESCAPE-pain), the management of OA remains sub-optimal because the evidence-base is not being implemented into practice [5,6]. [ESCAPE-pain](#) promotes self-management to improve quality of life and function[7–9]. The programme is delivered over six weeks via two weekly group sessions that last 45-60 minutes (with 15-20 minutes of structured education and 30-45 minutes of individualised exercise). ESCAPE-pain was shown to be clinical and cost-effective through a large cluster randomised controlled trial and economic evaluation [7,8,10].

In 2018, ESCAPE-pain was selected as a priority for national scale-up by all 15 Academic Health Science Networks (AHSNs). This is a summary reportⁱ of the evaluation of the two-year AHSN Network funded national scale-up programme, which was coordinated by the Health Innovation Network (south London's AHSN). It was an internal mixed methods evaluation undertaken by the Health Innovation Network using an embedded evaluator model, which builds on earlier work exploring the spread of ESCAPE-pain [11] and an evaluation commissioned by Versus Arthritis [12]. The report outlines the factors influencing the national scale-up of ESCAPE-pain with the aim of building knowledge about implementing interventions at scale. Specifically, it discusses:

- The scale of spread (or outcomes) achieved for ESCAPE-pain through the AHSN national programme
- The AHSN Network's approach to coordinating the national programme for ESCAPE-pain
- The key factors (i.e. barriers and facilitators) influencing the implementation and scale-up of ESCAPE-pain
- AHSNs' strategies for implementing and scaling-up ESCAPE-pain
- Sustaining ESCAPE-pain beyond the AHSN national programme

2 Key findings

2.1 The scale of spread: outcomes

Following the AHSN Network national programme, ESCAPE-pain is now being delivered in 260 sites across the British Islesⁱⁱ with 16,876 people with hip and knee OA completing the programme across 256 sites (Figure 1). This is a 4-fold increase in the number of sites and 3-fold increase in the number of participants compared to start of the national programme in April 2018. The growth in sites during 2018-2020 has been accompanied by a substantial expansion in geographical spread beyond London and South East England (Figure 2). The number of sites in Scotland, Wales and Northern Ireland remains low, which were outside of the AHSN national programme.

ⁱ A full report of the AHSN national programme for ESCAPE-pain is available

ⁱⁱ There are sites across the UK, Republic of Ireland and Channel Islands

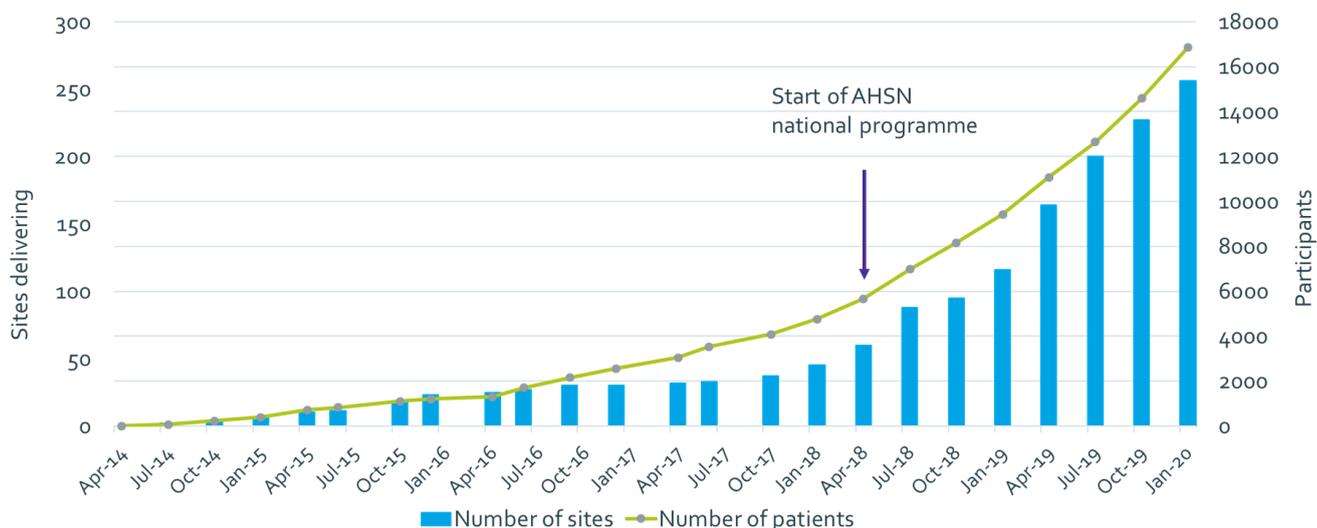


Figure 1 Number of sites delivering ESCAPE-pain and number of participants completing ESCAPE-pain

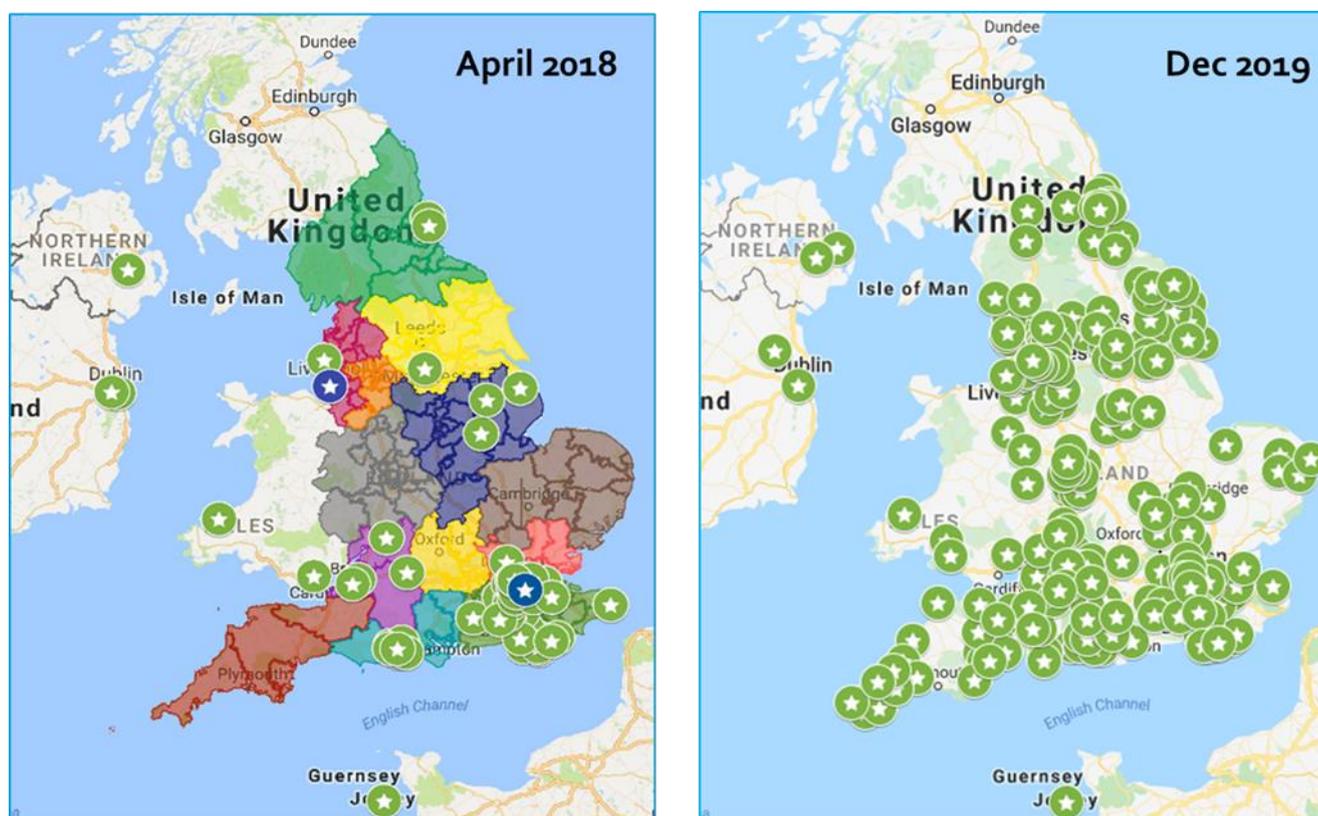


Figure 2 Geographical distribution of ESCAPE-pain sites April 2018 (left) and December 2019 (right). The coloured regions (left) show individual AHSN boundaries

This spread has been accompanied by an expansion in the models of delivery for ESCAPE-pain across an increasing range of settings (NHS and non-clinical community), providers (NHS, community leisure, local authority) and practitioners (physiotherapists, therapy assistants and fitness professionals) (Table 1). In year 1 on national programme, the most common model of commissioning and delivery continued to be a physiotherapist working within a physiotherapy outpatients service funded through a CCG musculoskeletal (MSK) contract (97/170 or 57% of sites). However, by December 2019 the balance had

shifted towards ESCAPE-pain being delivered in more non-clinical, community settings (139/260 or 53.5% of sites) by clinical staff and fitness instructors. Of the 1123 trained ESCAPE-pain facilitators, 693 are clinical staff (mainly physiotherapists) and 430 are fitness instructors. Critically, monitoring of clinical outcomes demonstrates that ESCAPE-pain continues to be clinically effective in 'real world' settings (i.e. outside of a research study).

Table 1 Range of settings, providers and practitioners that have delivered ESCAPE-pain

Setting	Provider	Practitioner
Physiotherapy dept.	NHS (public health provider)	Physiotherapist
Leisure / fitness centre	NHS (public health provider)	Therapy assistant
Leisure / fitness centre	Leisure/ fitness provider	Physiotherapist and/or fitness instructor
Workplace	NHS Occupational Health	Physiotherapist
Community centre	Third Sector	Physiotherapist or fitness instructor
Community centre	Local authority / town council	Physiotherapist + fitness instructor

2.2 AHSN Network's approach to coordinating the national programme for ESCAPE-pain

The ESCAPE-pain national programme was coordinated by a core team lead by a National Programme Manager and Clinical and Programme Directors for the MSK theme at the HIN. In addition, each AHSN allocated project management resource to support the implementation of ESCAPE-pain, which was determined locally.

The initial focus of the core team was to develop a cohesive national programme across the AHSNs. In the year leading up to the start of the national programme, the AHSNs for North East and North Cumbria (NENC) and North West Coast (Innovation Agency) had received programme funding from Versus Arthritis to scale-up ESCAPE-pain in their local regions. Therefore, NENC and Innovation Agency had direct experience of implementing ESCAPE-pain. However, the majority of AHSNs had limited understanding of ESCAPE-pain. Therefore, a key priority for the core team was to support AHSN colleagues to develop a clearer understand of:

- Purpose of the national programme for ESCAPE-pain
- Wider context of OA and its management (e.g. scale and nature of the challenge, evidence on current management, national clinical guidelines for OA)
- ESCAPE-pain as an intervention (e.g. its core components and evidence underpinning its clinical and cost effectiveness)
- Knowledge about approaches to scaling-up ESCAPE-pain by the core team at HIN (and more recently NENC and Innovation Agency), such as key barriers/facilitators, models of delivery, resources and tools

Whilst the HIN, NENC and the Innovation Agency had knowledge to share with other AHSNs on existing experiences of spreading ESCAPE-pain; the core team also wanted to capture and share the emerging knowledge from other AHSNs through the national programme (e.g. local contextual issues, strategies for local spread, new models of delivery). This resulted in a range of approaches being used to increase peer support and allow learning to be shared between AHSNs about scaling-up ESCAPE-pain. These approaches comprised:

- Webinars

- Face-to-face learning network meetings
- Online collaborative platform (FutureNHS by Kahootz) – for storing and sharing resources and facilitating online discussion
- Developing and sharing resources (from the core team and other AHSNs)
- Inductions – face-to-face or via phone with AHSN colleagues leading on ESCAPE-pain within their region
- End of Y1 review and planning sessions
- Ad hoc advice and support (via phone, email or face-to-face) – throughout the national programme there has been on-going and regular ad hoc advice and support provided by the HIN to AHSN colleagues working on ESCAPE-pain.

2.2.1 *Webinars and learning network meetings: Knowledge exchange forums*

A key approach used by the core team to support the national programme was to convene virtual and face-to-face meetings with AHSN colleagues working on the spread of ESCAPE-pain via a series of webinars and learning network meetings. In the two years of the national programme, there were 9 webinars, 6 face-to-face learning network meetings, and a national ESCAPE-pain conference. Ten of these 16 knowledge exchange forums were during the first year of the national programme. The purpose of these events was to provide a forum for regular discussion amongst those working on ESCAPE-pain across the AHSN Network, in order to:

- Support them to make sense of the national programme, ESCAPE-pain, and its implementation
- Learn from each other about meeting the challenge of spreading ESCAPE-pain (i.e. shared barriers/facilitators, and strategies)
- Provide an opportunity for those working on ESCAPE-pain across each AHSN to meet colleagues, have (in)formal discussions about their work on ESCAPE-pain, and strengthen professional relationships
- Different (non-AHSN) perspectives on scaling up ESCAPE-pain by inviting external speakers (e.g. strategic stakeholders in NHS RightCare, Versus Arthritis, Public Health England and service managers/senior clinicians from providers)
- Update on changes to processes, additional support and new resources from the core team and others (e.g. Versus Arthritis)

2.2.2 *Materials and resources to support spread of ESCAPE-pain*

At the outset of the national programme, AHSN colleagues recognised that the core team at the HIN had a wealth of knowledge and materials/resources that could be used to support them with implementation (i.e. there was no need to start with a blank piece of paper). AHSN colleagues were also conscious that they did not know what information they needed to make the case locally to level support to implement ESCAPE-pain. Discussions about knowledge and resources about ESCAPE-pain led AHSN colleagues to explore the best mechanism for sharing materials/resources and the idea of an online collaborative space was raised. This was considered preferable to emailing out resources and the associated issues of version control and storing and managing these resources effectively. This led the national programme to use FutureNHS, an online collaborative platform (supported by Kahootz), to store, manage and share resources between AHSN colleagues.

2.2.3 *Monitoring national scale-up*

Work to monitor the scale-up of ESCAPE-pain predates the AHSN Network national programme and has continued to evolve during the national programme. Being able to demonstrate the effectiveness of ESCAPE-pain in real world settings via ongoing data collection from sites has been critical in influencing

senior decisions-makers (such as NHS England) to support scale-up. Through the data the AHSN Network has been able to demonstrate ESCAPE-pain's continued clinical effectiveness in 'real world' settings and the scale of uptake (e.g. through the number of sites delivering and participants per site completing ESCAPE-pain).

Monitoring was developed and refined over the course of the first year of the national programme, co-ordinated predominantly by the core team liaising with local sites and the national metrics team in Kent Surrey Sussex (KSS) AHSN. Problems with processes were addressed and changes made to respond to the evolution of the national programme. This approach ensured rigor and reporting independence. However, it was perceived as being too target focused and did not take account of relationships and other softer intelligence.

As the programme progressed, AHSNs developed greater ownership of ESCAPE-pain work locally, with greater knowledge of local sites and ESCAPE-pain related activity, and direct relationships with sites. By Q2 of year 1, AHSNs started to request greater involvement in the national metrics reporting process partly to ensure that data were accurately reported (i.e. cross-referencing local information on the number of sites and participants). Also, AHSNs wanted to be closely involved in managing the relationship with their local stakeholders; therefore, data became a useful mechanism to support engagement.

At the end of the first year and into the second year of the programme, AHSNs were more closely involved in the national reporting of metrics. Colleagues across the AHSNs and local sites understood the process (e.g. templates, timelines and reporting lines), which has improved the efficiency and accuracy of monitoring. The national programme also appears to have led to an increased emphasis on data collection (due to the requirement for performance monitoring for NHS England) and the core team receives data from most sites. During the national programme, the proportion of sites returning data each quarter were:

- Year 1 - Q1=77%, Q2=83%, Q3=94% and Q4=92%
- Year 2ⁱⁱⁱ - Q1=89%, Q2=96%, Q3=92%

2.3 AHSNs' approaches to implementing and scaling-up ESCAPE-pain

2.3.1 *Key factors influencing implementation and scale-up*

Locally, AHSNs encountered a range of factors that influenced their ability to implement ESCAPE-pain. The key factors that facilitated the implementation of ESCAPE-pain were:

- The strength and quality of evidence about ESCAPE-pain – it was important that AHSN could demonstrate the programme was both clinically and cost effective.
- The quality and packaging of information about ESCAPE-pain and how to implement it – a suite of resources and materials about ESCAPE-pain were tailored to different audiences (e.g. providers, commissioners, leisure sector). This supported AHSNs to make a more compelling case to local stakeholders by providing relevant key information (e.g. clinical benefits, financial costings/savings, models of delivery).
- Local champions – individuals with credibility and influence within organisations and the local system able to galvanise commitment and resources to implement ESCAPE-pain. Champions might be within provider or commissioning organisations and were often in roles that combined both strategic and operational responsibilities (e.g. a senior clinician in a service management role) and were motivated to drive improvement through evidence-based care.
- Easily trial-able and scalable – ESCAPE-pain can easily integrate into a range of settings and can be delivered by a range of professionals with little additional training. Its implementation has limited

ⁱⁱⁱ Data for the whole of Y2 of the national programme were not available at the time of producing the report

disruptive impact on local practices, services and pathways; thereby, it was low risk and required low resources to trial.

The factors most consistently encountered by AHSNs that impede the local implementation and scale-up of ESCAPE-pain were:

- Current (predominant) commissioning models that are activity-based and prioritise in-year cost savings within CCG budgets do not readily support the implementation of a new intervention (such as ESCAPE-pain), which require greater upfront investment compared to incumbent (typically non-evidenced) interventions and realise benefits in the long-term and across health and social care systems. This creates a challenging environment for providers to make ESCAPE-pain work within the constraints of the funding model. A particular concern is where CCGs have commissioned a commercial MSK provider whose service model did not make providing multi-session interventions cost-effective.
- Attitudes towards the evidence and evidence-based practice (particularly amongst managers and senior clinicians) directly impacts on the uptake of ESCAPE-pain. Existing group-based programmes are unlikely to have the same level of evidence or return on investment that ESCAPE-pain offers. However, where these are in place local clinicians' appetite for change could be low resulting in an unwillingness to replace their own programme with ESCAPE-pain.
- For non-NHS, community providers (e.g. leisure centres) a key challenge is lack of adequate referral pathways into their services. Whilst NHS MSK services are overwhelmed with referrals and typically have lengthy waiting times, non-NHS providers can struggle to recruit participants. This is compounded by poor links between NHS and non-NHS providers.

The majority of the AHSNs have encountered some of the barriers above and have been able to work around them by focusing on 'working with the willing'. A small number of AHSNs have encountered a 'perform storm' of barriers (i.e. a culmination of too many barriers). As a result, there are very few routes left available to them, and are likely to continue to struggle to get traction in their regions despite their best efforts.

2.3.2 *Strategies for implementation and scale-up*

What we know from the literature on implementation is that there is no one "right way" to spread an intervention (one size does not fit all) [13]. Implementation strategies need to be chosen and tailored to accommodate the characteristics of the intervention, providers, the team resourced to support implementation, and the wider system (or environment) [14].

Key strategies^{iv} used by AHSNs to implement ESCAPE-pain successfully were:

- Developing stakeholder inter-relationships – Identifying and supporting local champions and early adopters, building local partnerships and consensus for ESCAPE-pain (i.e. identifying and agreeing the need and fostering a commitment and urgency to implement), and working with partners from across the system (e.g. providers and commissioners from the NHS, local authority, and leisure and community sector)
- Using financial measures – Funding and contracting for ESCAPE-pain, for example embedded within tenders, payment for delivering the programme by the Sport England programme, and providing free training.
- Training and education – Rolling out a mandatory 1-day training course for all facilitators on how to deliver and implement the programme, developing a suite of tailored and packaged resources about the evidence, delivery and implementation of ESCAPE-pain.
- Providing interactive assistance – Local AHSNs and the national team providing on-going technical

^{iv} Based on ERIC categorisation of strategies [15,16]

assistance to partners to support implementation. This included providing information and support around decision-making to adopt (e.g. business case templates, attending key meetings), resources and advice on implementation and delivery (e.g. implementation toolkit, site visits), and helping to problem-solve any issues impeding implementation.

- Using evaluation and iterative strategies – a key approach used by AHSN has been to test and refine different ways of implementing ESCAPE-pain, to identify and share key barriers and facilitators and learn about what works across a variety of settings and delivery models (e.g. exercise on referrals schemes, NHS-leisure provider partnerships).

Getting the offer and resource right for supporting the local implementation of ESCAPE has been key to enabling AHSNs to determine and deploy appropriate strategies. The extent and type of resource dedicated to ESCAPE-pain varies across AHSNs. For some, ESCAPE-pain is one element within a project manager's wider portfolio; whereas, other AHSNs have more than 1 FTE project manager dedicated to ESCAPE-pain. The additional resource provided into local systems by AHSNs through the national programme (e.g. free training) and the Sport England programme (e.g. payment for delivery) reduced financial barriers to trialling ESCAPE-pain.

AHSNs have also chosen to use local clinical expertise (e.g. typically a local senior physiotherapist) in different ways:

- West of England has seconded a local senior physiotherapist who had implemented and was delivering ESCAPE-pain to project manage the AHSN's work on ESCAPE-pain (thereby combining clinical and project management resource together).
- Buying-in expertise from local senior physiotherapists on a part-time basis via formal contractual arrangements, to support project managers.
- Other AHSNs have chosen to utilise local clinical expertise informally (i.e. people in sites that are currently delivering or overseeing ESCAPE-pain). If there is a need for clinical input the AHSN either draws on this informal local resource or contacts the core team at the HIN

Over the first year of the national programme AHSNs became clearer and more confident about their 'offer' to the system on ESCAPE-pain and the key role they play in promoting potential models of delivery, building the case for implementation, supporting the process of implementation (e.g. through AHSN expertise, advice, support, training, financial resource).

The breadth of potential settings and delivery models for ESCAPE-pain presented AHSNs with opportunities and challenges. ESCAPE-pain's flexibility offers a wider range of opportunities to explore (e.g. NHS, community leisure, workplace, primary care); however, it made it difficult for some AHSNs to know where to focus efforts for the greatest impact (or return on investment from AHSNs efforts).

AHSNs have had to **determine the scope of focus** to their work on ESCAPE-pain, which has influenced the subsequent strategies that have been used. Some AHSNs taken a broader approach, casing their net widely by engaging with multiple sectors, across a wide geography, at both a strategic and practice setting level. Whereas, others have chosen to focus their effort on targeting specific 'parts' of the system:

- Geographies/localities - focusing on certain areas of their region
- Sectors - focusing on only NHS or only non-clinical community sites
- Providers - focusing on providers (cross sector) rather than CCGs/STPs/local authorities.

Several AHSNs focused efforts on engaging at a strategic level (e.g. STPs, CCGs) to create a system wide approach to ESCAPE-pain i.e. identifying strategic forums with influential stakeholders and key decision-makers to take a 'top down' approach. These AHSNs have been successful in developing strong relationships at a strategic level with STPs and CCGs, which have been fruitful. However, many found that engagement with CCGs has not led to any tangible outcomes and all implementation activity has been

provider driven. The varying success of commissioners as a mechanism to deliver new sites is echoed in the core team's experience prior to the national programme and highlights the need to **engage directly with providers, as well as at a system level.**

For ESCAPE-pain, AHSNs' reasons for determining their focus have varied due to:

- Limited staff resource within the AHSN to focus on ESCAPE-pain, which necessitates focusing on one sector and few localities because of the time it takes to develop contacts and build relationships (e.g. East Midlands AHSN has focus on NHS settings due to capacity).
- Viable opportunities within a specific location or region ready to build on or exploit (e.g. presence of Sport England sites leading to a focus non-NHS providers)
- (Un)willingness within a certain locality, provider or commissioner to engage with ESCAPE-pain. For example:
 - A large, single provider with a contract across an entire county that was disengaged
 - Local commissioning arrangement meant providers could not make ESCAPE-pain work within the constraints of the contract
 - Commissioners were inaccessible, disengaged or disputed the value of ESCAPE-pain

A key focus of AHSNs was the continued **testing and refining new models of delivery** for ESCAPE-pain. The AHSN Network has built on and expanded models developed by the core team at the HIN to de-medicalise the management of OA and take ESCAPE-pain outside of traditional secondary care clinical setting and create new partnerships (Appendix 2 and 3). However, AHSNs can experience significant challenges in developing pathways and partnerships that integrate NHS and non-NHS organisations within the same local systems.

2.4 Sustaining ESCAPE-pain beyond the national programme

Whilst the AHSN national programme has delivered a substantial increase in the number of ESCAPE-pain sites across England, it is not possible to provide an analysis of the impacts of the national programme on the long-time sustainability of ESCAPE-pain. However, as of December 2019 77.8% of sites continue to deliver ESCAPE-pain post-implementation (i.e. 260 deliver ESCAPE-pain out of a total of 334 sites known to have implemented the programme since the HIN began data monitoring in 2014).

The majority of AHSNs (11/15) are planning to continue to support ESCAPE-pain locally; albeit with a reduce level of resource (e.g. 0.2-0.4 WTE) and for most AHSN the focus will be on supporting existing sites. The reasons for AHSNs choosing to continue supporting ESCAPE-pain vary:

- The programme has been well received locally with providing seeing its value; therefore, there is appetite to continue this work to extend the reach and impact of ESCAPE-pain.
- A long lead-in time to build interest and momentum for ESCAPE-pain locally meant that sites are only now starting to come online. Therefore, there is a recognition that the value for money delivered by ESCAPE-pain was not yet realised.
- Linked to the point above, some AHSNs want to achieve more even coverage across their region, building on existing strong local provision
- AHSNs want to manage the transition from national programme support to increase the likelihood of long-term sustainability. This is particularly the case for sites that received financial support/incentives to deliver the programme e.g. working with Sport England sites to develop sustainable financial model once programme funding is withdrawn

A small number of AHSN have decided to cease work on ESCAPE-pain in April 2020. Some AHSN report good geographical coverage across the region and well-established sites where ESCAPE-pain is embedded in local pathways and service and require no on-going support. Whereas, other AHSNs never got traction

with ESCAPE-pain within their region (e.g. they experienced a 'perfect storm' of barriers), hence further investment of resources would be unlikely to yield further sites.

3 Conclusions

The approach to coordinating the AHSN national programme for ESCAPE-pain has been underpinned by developing a cohesive partnership between AHSNs via peer support and knowledge sharing. The core team at the HIN used a range of approaches that allowed it to share existing knowledge about spreading ESCAPE-pain and capture and share what emerged from the AHSN Network during the national programme (e.g. local contextual issues, strategies for local spread). These approaches comprised:

- Webinars
- Face-to-face learning network meetings
- Online collaborative platform (FutureNHS by Kahootz) – for storing and sharing resources and facilitating online discussion
- Developing and sharing resources (from the core team and other AHSNs)
- Inductions – face-to-face or via phone with AHSN colleagues leading on ESCAPE-pain within their region
- End of Y1 review and planning sessions
- Ad hoc advice and support (via phone, email or face-to-face) – throughout the national programme there has been on-going and regular ad hoc advice and support provided by the core team to AHSN colleagues working on ESCAPE-pain.

Locally, AHSNs encountered a range of factors that influenced their ability to implement ESCAPE-pain. Those factors that appear to be particularly critical relate to:

- Current commissioning arrangements that disincentivise providers from implementing evidence-based interventions like ESCAPE-pain because they do not deliver in-year reductions in activity levels or in-year cost-savings.
- Attitudes towards evidence and evidence-based practice (particularly amongst managers and senior clinicians) directly impacts on the uptake of ESCAPE-pain. Existing group-based programmes are unlikely to have the same level of evidence or return on investment that ESCAPE-pain offers. However, where these are in place local clinicians can be unwilling to replace their own programme with ESCAPE-pain.
- For non-NHS, community providers (e.g. leisure centres) a key challenge is lack of adequate referral pathways into their services. Whilst NHS MSK services are overwhelmed with referrals and typically have lengthy waiting time, non-NHS providers can struggle to recruit participants. This is compounded by poor links between NHS and non-NHS providers.

There is no one "right way" to spread ESCAPE-pain (one size does not fit all) and AHSNs have used a range of strategies in conjunction to support the implementation and spread of ESCAPE-pain within their regions. These approaches included:

- Developing stakeholder inter-relationships
- Using financial measures
- Training and education
- Providing interactive assistance
- Using evaluation and iterative strategies

AHSNs' choice of strategies has been determined by a range of factors, such as the characteristics of providers (e.g. NHS, non-NHS community), the resources allocated within the AHSN to support work on ESCAPE-pain, and the wider system (e.g. (dis)engagement by commissioner and key strategic decision-makers). Determining and deploying appropriate strategies has required AHSNs to:

- Clarify their offer and level of resource available to support the local implementation of ESCAPE
- Determine the scope of focus to their work on ESCAPE-pain (i.e. targeting specific part of the system versus casing the net widely)
- Recognise the need for multifaceted approach that engages directly with providers, as well as at operating at a system level

The majority of the AHSNs have encountered some of the barriers above and have been able to develop strategies to work around them. A small number of AHSNs have encountered a 'perfect storm' of barriers (i.e. a culmination of too many barriers). As a result, there appears to be no viable strategies available to them and have struggled to get traction in their regions despite best efforts.

In summary:

- Implementing ESCAPE-pain at scale through the national AHSN programme has been a collective effort
 - Achieved via strong, strategic leadership from the national network of AHSNs and supported by large public sector bodies (NHS England, PHE) and a large third sector organisation (Versus Arthritis)
 - It has been a planned and managed process (with centralised coordination by the ESCAPE-pain core team at the HIN), but has also been non-linear and iterative
 - The process has required dedicated, sustained resources
- Demand for the programme, and capacity have increased as a result of discussion and collaboration across organisations, and evidence-sharing
 - Published evidence on clinical and cost effectiveness has been combined with professional tacit knowledge and networks across the system (i.e. providers and commissioners) to build consensus that there is a 'problem' with the management of OA and ESCAPE-pain offers a viable solution
 - Local champions and early adopters provide critically important local networks and credibility, which demonstrate ESCAPE-pain local relevance and effectiveness
 - Engaging with commissioners has been challenging (but possible in some instances)
- Throughout implementation, care has been taken to ensure fidelity to the programme, while enabling local adaptation
 - A key role of AHSNs is to work with local system to articulate what ESCAPE-pain is (active ingredients) and how to implement it
 - This knowledge has been packaged through resources and training, which forms a key strategy supporting spread by building capacity within the system
 - Spread is underpinned by testing and refining models of delivery within different settings (NHS and non-NHS), with different practitioners (clinical and non-clinical), and by creating new partnerships
 - Monitoring and quality assurance processes have been developed, demonstrating the national programme for ESCAPE-pain is achieving reach *and* maintaining quality successfully
- Monitoring, evaluation and knowledge exchange have been fundamental, and have generated learning about how to implement ESCAPE-pain across different practice settings and commissioning arrangements.
- Overall, sustainability is high, with 77.8% of sites continuing to deliver ESCAPE-pain post-implementation.

4 Recommendations

1. MSK commissioning arrangements are locally negotiated and, in some areas, can impede providers from implementing the programme. National MSK commissioning guidance that supports the adoption of NICE guidance and latest evidence would be optimal – giving a framework to commissioners to help them purchase evidence-based care. Providers need flexibility and support to introduce changes that improve care.
2. Local providers/commissioners should be encouraged to consider the evidence base for alternative group-based programmes and to explore whether adapting these to the ESCAPE-pain model would add value or a better return on investment (N.B. NICE guidance is not prescriptive and does not reflect latest evidence reviews).
3. ESCAPE-pain delivers personalised care that delivered long-term system-wide benefits, which fits well with the objectives of Integrated Care Systems. There are examples of CCGs commissioning leisure and community organisations to deliver ESCAPE-pain (as an alternative to NHS physiotherapy providers). This could be showcased as an example of effective outcome-focused commissioning that also supports the spread and sustainability of interventions (like ESCAPE-pain) that deliver long-term, system-wide benefits.
4. Using ESCAPE-pain as an example, Integrated Care Systems could facilitate and encourage health professionals within the NHS to work more actively with leisure community providers through exercise-on-prescription or social prescribing or cross sector partnerships.
5. It is critical for national scale-up initiatives to be supported to develop strategies to sustain interventions post-implementation, in order to ensure patients and the systems continue to realise benefits and maximise return on investment. Consideration should be given to the role that existing system levers within NHS England (e.g. RightCare, Elective Care Transformation, incentive schemes etc.) can play in long term sustainability.

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References

1. Arthritis Research UK. Osteoarthritis in General Practice [Internet]. 2013. Available from: <http://www.arthritisresearchuk.org/policy-and-public-affairs/reports-and-resources/reports.aspx>
2. Arthritis Care UK. OA Nation. 2012.
3. March LM, Bachmeier CJ. Economics of osteoarthritis: a global perspective. *Baillières Clin Rheumatol*. 1997;11:817–34.
4. NICE. Osteoarthritis: Care and management in adults CG 177 [Internet]. NICE; 2014. Available from: <http://www.nice.org.uk/guidance/cg177>
5. Department of Health. CMO annual report: Volume One, 2011 'On the state of the public's health' [Internet]. 2011 [cited 2015 Jan 19]. Available from: <http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/health/2012/11/cmo-annual-report/>
6. Arthritis Research UK. Musculoskeletal health - a public health approach [Internet]. 2014. Available from: <http://www.arthritisresearchuk.org/policy-and-public-affairs/public-health.aspx>
7. Hurley MV, Walsh NE, Mitchell HL, Pimm TJ, Patel A, Williamson E, et al. Clinical effectiveness of a rehabilitation program integrating exercise, self-management, and active coping strategies for chronic knee pain: a cluster randomized trial. *Arthritis Rheum*. 2007;57:1211–9.
8. Hurley MV, Walsh NE, Mitchell H, Nicholas J, Patel A. Long-term outcomes and costs of an integrated rehabilitation program for chronic knee pain: a pragmatic, cluster randomized, controlled trial. *Arthritis Care Res*. 2012;64:238–47.
9. Jessep SA, Walsh NE, Ratcliffe J, Hurley MV. Long-term clinical benefits and costs of an integrated rehabilitation programme compared with outpatient physiotherapy for chronic knee pain. *Physiotherapy*. 2009;95:94–102.
10. Hurley MV, Walsh NE, Mitchell HL, Pimm TJ, Williamson E, Jones RH, et al. Economic evaluation of a rehabilitation program integrating exercise, self-management, and active coping strategies for chronic knee pain. *Arthritis Rheum*. 2007;57:1220–9.
11. Walker A. Understanding the spread and sustainability of a complex intervention: an in-depth qualitative analysis [Internet]. St George's, University of London; 2018. Available from: https://sgul-primo.hosted.exlibrisgroup.com/permalink/f/4gdaoc/44SGUL_ALMA_DS2119735370004026
12. Versus Arthritis. ESCAPE-pain: The story of scale-up [Internet]. 2019 [cited 2020 Feb 27]. Available from: <https://www.versusarthritis.org/media/14672/escape-pain-the-story-of-scale-up-2019.pdf>
13. Ovretveit J. Widespread focused improvement: lessons from international health for spreading specific improvements to health services in high-income countries. *Int J Qual Health Care J Int Soc Qual Health Care*. 2011;23:239–46.
14. Simmons R, Fajans P, Ghiron L. Scaling up health service delivery: from pilot innovations to policies and programmes [Internet]. World Health Organisation; 2007 [cited 2018 Jan 22]. Available from: http://www.who.int/immunization/hpv/deliver/scalingup_health_service_delivery_who_2007.pdf
15. Waltz TJ, Powell BJ, Matthieu MM, Damschroder LJ, Chinman MJ, Smith JL, et al. Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from

the Expert Recommendations for Implementing Change (ERIC) study. *Implement Sci.* 2015;10:109.

16. Powell BJ, Waltz TJ, Chinman MJ, Damschroder LJ, Smith JL, Matthieu MM, et al. A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implement Sci.* 2015;10:21.