Breast pain

This case study explores the development and implementation of pathways that redirect patients presenting with breast pain only, away from urgent suspected cancer (USC) pathways to dedicated breast pain (mastalgia) clinics. It focusses on the breast pain pathways at sites within three different Cancer Alliances (CAs):

- University Hospitals of Derby and Burton NHS Foundation Trust (UHDB) and Chesterfield Royal Hospital NHS Foundation Trust (CRHFT) (referred to throughout as the Derbyshire pilot within East Midlands CA (EM);
- Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust (DBHT) within South Yorkshire and Bassetlaw CA (SYB); and,
- East Lancashire Hospitals NHS Trust (ELHT) within the Lancashire and South Cumbria CA (LSC) area.

A total of 17 interviews were conducted. Individuals who took part in the interviews included: Breast Consultants and Surgeons, Senior Project and Transformation Managers, Clinical Leads, Clinical Directors (Deputy Director of Nursing for Cancer; Deputy Medical Director; Integrated Care Provider Clinical Director), Integrated Care Board (ICB) Cancer Lead, Advanced Nurse and Clinical Practitioners, GPs and Physician Associates. Documents supplied by the sites and used to inform this case study include breast pain pathway standard operating procedures, presentation materials and audit and evaluation reports.

Summary:

This case study focuses on breast pain pathways in three Alliance areas that redirect patients who present in primary care with breast pain only, and no other red flag symptoms, away from the breast USC pathway to a dedicated breast pain clinic. The aims of each pathway are similar: to reduce pressure on the USC pathway; and improve patient experience by ensuring they receive appropriate care and reducing anxiety.

EM were one of the first CAs to support the development and implementation of a breast pain pathway. EM's model incorporates four key components:

- building the understanding that breast pain alone is not a symptom of cancer among clinicians and patients;
- developing community settings for the clinics;
- delivering examinations by experienced breast clinicians;
- and carrying out family history risk assessments based on NICE Clinical Guidance (CG) 164. After a successful pilot, they supported other CAs, including LSC and SYB, to implement the pathway in their Cancer Alliances.

Key features that enabled the successful implementation and delivery of breast pain pathways include the support provided by the EM team, the enthusiasm and capability of the staff involved; and getting

the right people on board, such as Cancer Alliance and system leads, commissioners, finance, operational and clinical team. Primary care engagement has been particularly important for ensuring the pathway works for GPs and that appropriate patients are referred to the pathway.

Challenges in implementation and delivery included: gaining buy-in to the pathway from colleagues/senior management; varying referral rates across the three sites; and issues with family history risk assessments (overcome through the use of digital solutions and amendments to tools and processes).

Since their respective launches, EM pathways have seen over 1,500 patients, the LSC pathway has seen over 200 patients and the SYB pathway has seen 115 patients. The majority of these patients have a normal clinical assessment and are discharged back to GPs with advice.

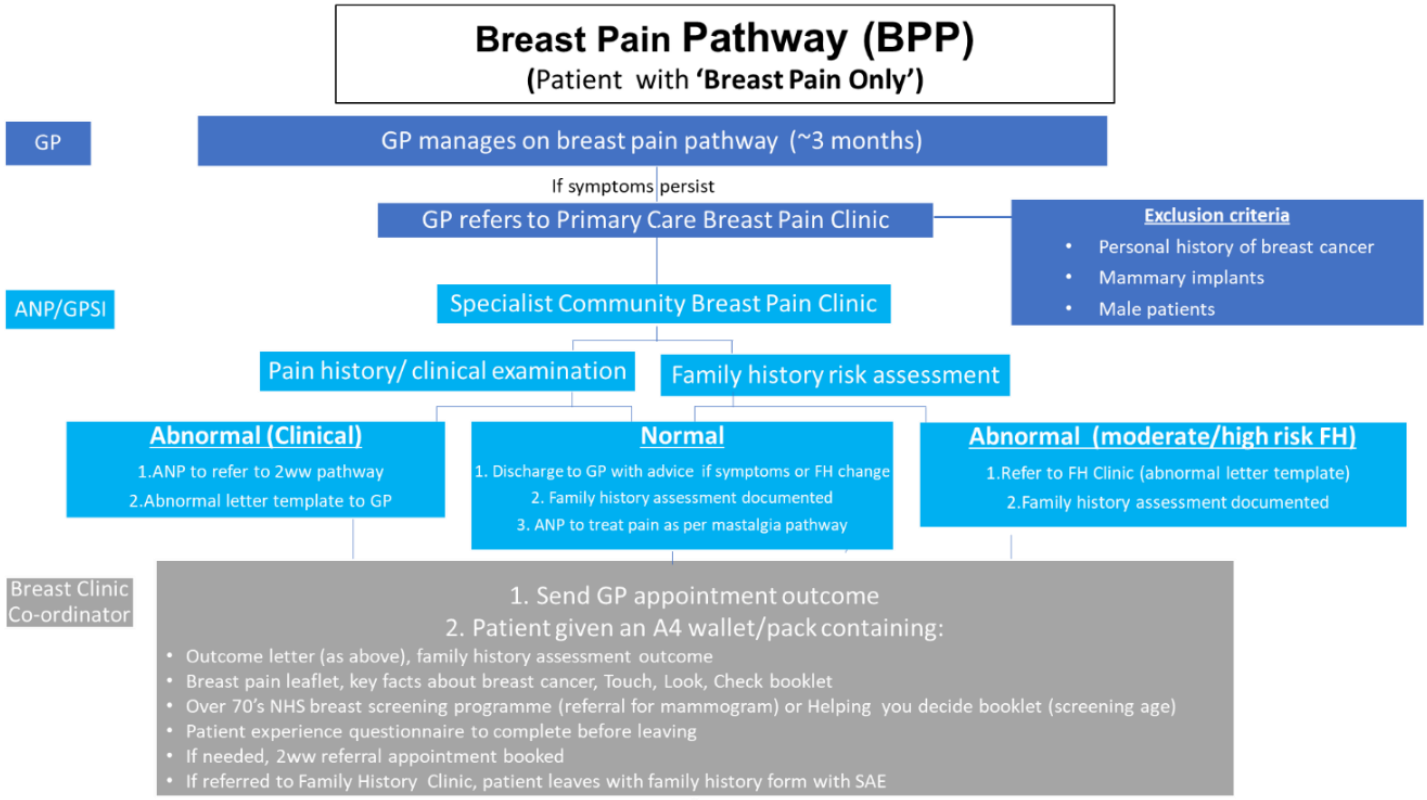
Outcomes of the pathways at EM and LSC include reduced unnecessary imaging and cost-savings associated with this. In LSC patients referred to the USC pathway are also waiting less time for appointments and EM estimated cost savings of £235,000 per year for the Derbyshire pilot, based on patients attending a breast pain only clinic instead of the breast USC pathway clinic.

All three sites have received positive feedback from patients about their referral to community breast pain clinics, relating to the increased time with clinicians, reassurance and advice regarding breast pain and being informed of their individual risk assessment.

1 The breast pain pathway model

The pathway follows a similar model (initially devised in EM) across all three sites and is detailed in **Error! Reference source not found.**.

Figure 1: The Breast Pain Pathway model.



Source: FD Case Study – East Midlands Mastalgia/Breast Pain Pathway (14 June 2023) presentation[1]

The model incorporates four key components:

1. Given that breast pain alone is not a sign of breast cancer, patients are only referred to the pathway if they present with breast pain only, with no red flag or alarm symptoms, such as thickening of breast tissue, a lump or nipple changes, reported or identified by referrers. Patients are referred if symptoms persist or recur after initial management in primary care (usually for up to three months).

2. The breast pain clinics are based in community or primary care settings, to reduce anxiety for patients and reduce pressure on secondary care.

3. An experienced breast clinician (an advanced nurse practitioner (ANP) or advanced clinical practitioner (ACP), breast physician associate or GP with special interest in breast) conducts an examination and confirms no clinical abnormality or other symptoms in the patient – this provides reassurance to both the patient and GP and provides appropriate safety-netting. If a patient presents with a clinical abnormality, they are referred back to the breast USC Pathway.

[1] Pathway at other two sites also represented by this diagram, with small number of local adaptations described below.

4. A family history risk assessment is completed as part of the pathway to ensure that all risk factors have been identified and considered as part of the diagnosis. All three centres use the Family History Risk Assessment Software (FaHRAS) for the family history risk assessment. This software is based on NICE CG164 guidance.

Exclusion criteria for the pathway are: a previous history of breast cancer (as the patient is at an increased risk of breast cancer); breast implants (as imaging is more likely to be required to exclude implant rupture); male patients; and patients aged under 16.

A key part of delivery of the breast pain pathway is the completion of family history questionnaires validated for use in primary care. In EM and SYB, the questionnaire is sent out with appointment letters so that patients can complete them prior to attending the clinic. On attending the clinic, the information from the questionnaire is added to the online FaHRAS system by staff which provides a risk level for the patient. The FaHRAS tool can be added to electronic patient records.

Following assessment, patients are referred onwards in the following ways:

- Patients with normal results are discharged to their GPs with guidance to seek advice if their symptoms or family history changes (for example, if a relative is newly diagnosed with breast cancer). The FaHRAS outcome is documented.

- Patients with clinically abnormal results are referred onwards to the symptomatic breast USC pathway with letters sent to patients' GP.

- Patients with moderate or high risks of cancer identified during the FaHRAS assessment can be referred onto a family history clinic for further investigation. The FaHRAS outcome is documented.

Some local adaptations have been made in EM, LSC and SYB. Following referral, triage is completed in different ways by these sites:

1. All sites have introduced a triage system for patients who are referred to the breast pain pathway directly from the GP to assess if they are appropriate for the service. If they are not, they are redirected to the symptomatic breast USC pathway.

2. In LSC, ELHT have an enhanced clinical triage where clinicians review all referrals to all breast pathways and redirect appropriate patients from the breast USC pathway to the breast pain pathway.

3. In EM, the Derbyshire pilot redirect appropriate patients from the breast USC pathway to the breast pain pathway, after consultation with the primary care referrer.

At both ELHT and DBTH, the breast USC pathway administrative team book patients into the clinics and issue appointment letters or texts. At DBTH, the breast pain team are waiting on further recruitment to provide administrative support for this process. In the Derbyshire pilot, primary care book patients directly into breast pain clinics through an online appointment booking system. All sites still aim to see patients within two weeks of their referral.

At both Derbyshire pilot and DBTH there is a fast-track option for referrals to the breast USC pathway. Patients at both sites can also be referred directly to specialist Familial Cancer Services if a risk of breast

cancer above that of the general population is identified during their family history risk assessment. At ELHT, patients can also be referred to a review clinic where it is felt the patient's symptoms would benefit from further surveillance.

At LSC, where triage is conducted by a team covering all breast related pathways, enhanced clinical triage time has been programmed daily for discussions between consultants and ACPs. This team are responsible for communicating with GPs about any redirects to different pathways (for example, away from breast USC pathways onto the breast pain pathway) they identify as necessary.

2 Background

Cancer services and charities have highlighted the high rates of referrals of patients with breast pain alone (not in itself a symptom of breast cancer) to breast USC pathways. This has been attributed primarily to varying levels of understanding about this symptom among GPs and limitations of current referral pathways.

In EM, a meta-analysis conducted by UHDB staff, of papers on breast pain published since 2000, indicated a total incidence rate of cancer of four per thousand (lower than within the national screening programme). Subsequently, breast care leads in EM recognised the need to reduce the numbers of people with breast pain being referred inappropriately to breast USC pathways. They also acknowledged that GPs lacked any alternative referral routes for patients with breast pain only.

The EM breast pain pathway model was piloted across different sites in Derbyshire in 2021 with the aims of reducing pressures on breast USC pathways (increasing capacity for patients with higher risk symptoms for breast cancer) and reducing patient anxiety (sometimes caused by their own perceptions of the risk of cancer). The EM team have since gone on to support the implementation of the pathway using the same principles and model across the EM area and other CAs including LSC and SYB (areas which had also identified the need to address issues with inappropriate breast pain referrals).

In LSC, during Covid-19, ELHT had set up a phone clinic for breast pain patients prior to this pathway which was completed remotely. Although it was considered a success, breast leads at ELHT felt it would be improved by seeing the patients in person. They liaised with EM to learn about their model and then developed and launched their own breast pain pathway at ELHT in December 2022. In SYB, breast leads from DBTH had similarly reviewed the work the EM team had done in setting up the EM breast pain pathway model in Derbyshire and launched their own breast pain pathway in October 2022.

3 Implementation

Implementation of the breast pain pathway at the three participating Alliances is described below. A summary table presenting the locations of pathway clinics and key stakeholders involved in design and implementation can be found in **Table *1***.

- **The Derbyshire pilot, EM:** EM organised a working group which included a GP, consultant breast surgeons, and an ANP to devise the breast pain pathway. The group considered core issues such as the patient cohort, appropriate settings, staffing and other safety net measures, forming four main components of the model. The model was also informed by local experiences and wider evidence about breast pain management. For example, NICE guidance CG164 advises family history risk assessments take place in primary care; however, EM decided against this approach due to the complexity of the assessment required and time constraints within primary care.

EM piloted the initial model in 2020 within the Mid-Nottinghamshire Place-Based Partnership (MN PBP), with a small cohort of patients. Following this, a group of managers and clinicians from Joined Up Care Derbyshire (JUCD) (across both primary and secondary care) set up the Derbyshire Breast Pain Service pilot from June 2021 until May 2022. The pilot was run at two community sites: Florence Nightingale Community Hospital in Derby (UHDB) and Ashgate Medical Practice in Chesterfield (CRHFT).

The Derbyshire pilot formed the basis for development of breast pain pathway models within other Alliances. For example, the team from EM supported SYB and LSC to develop and implement their pathways: attending fortnightly meetings; sharing paperwork templates; supporting the development of internal processes; problem solving; supplying job descriptions; and sitting on project groups.

- **Implementation at East Lancashire Hospitals, LSC**: a steering group made up of regional breast clinical leads, the chair of the breast clinical reference group (CRG), other clinical or operational stakeholders and GPs considered how different breast pain pathway models might be adapted for their region. This was informed by discussions with other CAs including EM and Greater Manchester (GM). The group also reviewed data on the different models.

  Based on the findings from the Derbyshire pilot and learnings from other CAs, the steering group decided to implement the model. It was selected because it best aligned with CA priorities such as increasing the use of community settings and de-medicalising breast pain. The Pennine locality in which ELHT is situated was the first to identify and recruit the workforce required to deliver the breast pain pathway. The model would then be rolled out across the region to the three other localities in LSC. St Peter's Medical Centre in Burnley was the location selected to pilot the model because it was used as an outpatient centre by the ophthalmology department, is based in the community (i.e. a shopping centre), and therefore easily accessibility to patients.

- **Implementation at Doncaster and Bassetlaw Teaching Hospitals, SYB:** breast consultants and senior cancer leads at DBTH reviewed data from the Derbyshire pilot to understand the effectiveness of implementing such a pathway. A project group was established which, with the support of the EM team, set up their own pilot. This was initially trialled in Doncaster on a small scale with support from Bassetlaw colleagues. A location at the Pain Management Unit at Mexborough Montagu Hospital was selected because it is a community hospital focused on diagnostics, with few suitable alternatives.

Table 1: Summary of breast pain clinic locations and key stakeholders involved in the design and implementation of the breast pain pathways

Cancer Alliance & site	Location of clinic(s)	Key stakeholders
EM – Derbyshire pilot	Florence Nightingale Community Hospital in Derby Ashgate Medical Practice in Chesterfield	Secondary and primary care clinicians and managers, a GP, consultant, breast surgeons, and an ANP

LSC - East Lancashire Hospitals	St Peter's Medical Centre situated in a shopping centre in Burnley	Regional breast clinical leads, chair of the breast clinical reference group (CRG), other clinical or operational stakeholders and GPs, EM team
SYB - Doncaster and Bassetlaw Teaching Hospitals	Pain Management Unit at Mexborough Montagu Hospital in Doncaster	Breast consultants, senior cancer leads, primary care, EM team

Across all sites, primary care colleagues were engaged during the early stages of implementation, either through individual discussions, forum meetings, or via participation in steering groups. Messaging focused on information about the pathway and breast pain management in general, emphasising the safety net elements (access to breast USC pathway colleagues if required) and the lack of additional burden on primary care. GP leads were crucial for promoting this within their networks and reinforcing messaging.

Awareness raising on the correct clinical response to breast pain alone and promotion of the pathway were carried out using protected learning time (PLT), videos and primary care-focused information packs. Multiple communication channels including weekly newsletters and WhatsApp groups have also been used to disseminate information. Follow-up letters to GPs when patients have been through the pathway have also contributed to improving awareness of how it works.

4 Resources

Each site has taken different approaches to resourcing, particularly relating to the core requirement of the experienced breast care clinicians to conduct patient assessments:

- In the Derbyshire pilot – three ANPs from UHDB and one clinic coordinator from CRHFT delivered the service. ANPs already working in breast services were recruited to run clinics with their time initially backfilled by other clinicians. Additional ANPs have now been recruited and are undergoing training in breast USC clinics to backfill the ANP resource required to deliver the breast pain pathway.

- Subsequently at other sites across the EM, a mix of clinicians including ANPs, consultants and GPs with special interest in breast, along with clinic coordinators, have set up similar community-based breast pain clinic services.

- In SYB – the pathway is led by one ANP with experience in breast care and a GP with a special interest in breast care, supported by an administrator. Originally two part-time Band 2 administrative staff were recruited but this has since transitioned to a full-time Band 3 role. The GP has previous obstetrics and gynaecology experience and was needed to bring knowledge about contraception, hormone replacement therapy, hormones, and the menopause. To complement this, the ANP has experience with breasts and lymphoedema, and was fully trained to examine patients.

- In LSC – clinics are staffed by one ACP and a physician associate with administrative support. They had challenges recruiting a GP so used time from physician associates working within breast services instead. The intention is for physician associates to run clinics independently in the future and for ACP time to then be redirected back to other breast services such as one-stop cancer diagnostic clinics.

Other resources used to implement these pathways include IT infrastructure and software. SYB invested in the same data analysis software as the EM team but needed IT support to set-up the dashboard and download data from their Clinical and Management Information System (CaMIS) patient administration system. All sites procured the FaHRAS software required for providing risk scores to patients. LSC allocated some of the CA funding to provide dedicated laptops for use in community clinics, alongside other resources to support the transportation and collection of capes and gowns for use by patients who attend the clinic.

Capacity to run clinics with slightly longer appointment times is also required. Each patient booked into a breast pain clinic has a 20-minute appointment with a clinician. This offers patients more time with a clinician than a primary care or breast USC pathway clinic appointment and allows for a thorough assessment.

5 Progress to date

A summary of the number of clinics, launch dates and number of patients that each pathway has seen can be found in **Table *2***.

Table 2: Summary of the number of patients seen by each pathway.

Cancer Alliance & site	Number of clinics	Launch date	Number of patients seen to date
EM – Derbyshire pilot	2	June 2021	Around 1,500
SYB - Doncaster and Bassetlaw Teaching Hospitals	1	October 2022	115 patients
LSC - East Lancashire Hospitals	2	December 2022	Over 200 patients

Since the launch, EM pathways have seen around 1,500 patients – all patients who have been redirected away from the breast USC pathway. As well as implementing the four key components of their model, the other EM sites which implemented the pathway were asked to collect a core dataset to support an EM audit and evaluation of the pathway (which is being funded by the East Midlands Academic Health Services Network (AHSN)). This has now been extended to support a national audit of community-based breast pain pathways using the EM model, being implemented in 10 other CAs, with the support of the EM team. The EM team are now developing resources that can be shared and adapted locally to aid implementation.

In LSC there have been more referrals than expected, with capacity increased to two parallel clinics. They have seen over 200 patients since their launch. Lancashire Teaching Hospitals NHS Foundation Trust (LTHT) is set to follow ELHT by going live in Q2 2022/2023. Two trusts (Blackpool and University Hospitals of Morecambe Bay) are in the process of finalising their workforce model before proceeding with implementation but the CA and trust leads are committed to ensuring equity of access for this kind of pathway across the region.

In SYB the pathway has received a lower number of referrals than anticipated, having seen 115 patients, and it is currently too early in their implementation to identify any impact on the breast USC pathway. However, they are confident that with further engagement with primary care, referrals will increase. There are also plans to open a second clinic at Doncaster and a clinic in Bassetlaw – funding for this has already been agreed in principle with the CA.

While funding in SYB was approved for two clinics, and GPs were initially able to book direct appointments for their patients at the breast pain clinics, the booking process was altered due to low referral rates and issues with capacity and recruitment. Only one clinic has been implemented and an ANP at the DBTH Referral Assessment Service (RAS) now conducts an initial triage of patients, with separate referral forms introduced for the breast pain and breast USC pathways. If accepted for referral, administrative staff from the USC pathway team will either book appointments at the breast pain clinic or redirect to a USC pathway fast-track clinic. The breast pain pathway does not yet have a dedicated administrative resource but is planning to recruit for this.

6 Outcomes

Across the sites, most patients are discharged back to their GP with advice. This is as expected due to the cohort of patients being referred. Data collected during the Derbyshire pilot (as of May 2022) indicated that 97% of patients had a normal clinical assessment. Two patients were promptly diagnosed with cancer following direct referral to the breast USC pathway from the breast pain clinic following assessment. Approximately 11% of patients were identified as having a risk of breast cancer higher than that of the general population risk (11%, 110 women in every 1,000)[2], and referred into family history services.

All three sites collect patient feedback, and this was reported to be positive, with improvements in patient experience viewed as a key benefit of the pathway.

In the Derbyshire pilot, each patient was asked to complete an anonymous survey after attending the breast pain clinic. All 489 patients who attended the clinic completed the survey. Nearly all (99%, n=484) patients who completed the survey (as of June 2023) found the pain advice they received helpful, and they were reassured by it. Almost as many (95%, n=465) found the risk assessment helpful. Almost all (99%, n=483) of patients would recommend the service to family and friends if they had breast pain.

In SYB patient benefits have included discussions regarding other health issues. Staff attributed this to the safe and comfortable space the clinic provides, allowing patients to feel able to discuss their wider health and care needs. Discharge letters are bringing these issues to the attention of their GP.

[2] Data taken from NICE Guideline CG164 https://www.nice.org.uk/guidance/cg164/ifp/chapter/how-breast-cancer-risk-is-described#general-population-risk

In LSC patients are waiting less time for appointments than when previously referred to the breast USC pathway, with appointments provided on average seven days after referral (rather than the previous average of 10 days). They have used an algorithm to identify which patients (of different demographics) might otherwise have been sent for further tests (for example, mammograms, biopsies or ultrasounds). LSC estimate that of the 145 patients they saw between December 2022 and March 2023, 94 patients have been prevented from having an unnecessary ultrasound and 92 patients over 40 years old have been prevented from having unnecessary mammograms.

In EM they have conducted an economic analysis which estimated cost savings for Derbyshire pilot of £235,000 per year, based on approximately 12 patients per week being seen by a breast pain only clinic instead of the breast USC pathway clinic. In common with LSC, they have estimated that each weekly half day clinic that sees 12 patients results in 806 fewer imaging scans (416 fewer ultrasounds and 390 fewer mammograms) per year.

An audit of breast USC pathway referrals in SYB identified that some breast pain patients were previously missed and referred to the breast USC pathway. Given the different levels of demand to those forecast, changes have been made to the service (such as the introduction of the RAS and new referral forms) to increase referrals and demonstrate that it is financially viable.

A wider benefit of having a shared model with key components rolled-out across the country is that sites are collectively accumulating enough data to demonstrate the outcomes more robustly, where single sites alone may not have the referral numbers to show if it is safe and effective. By having multiple CAs using the model there is also a peer network to share learning – developing a community of breast pain clinic clinicians. It also shows the model is robust and reproducible across different sites and Cancer Alliances.

7 Lessons learnt

Advice and resources from EM have been key in getting the breast pain pathways set up in the other two sites. The EM team are keen that those seeking to learn from or implement their model seek this advice and incorporate the four core components into their designs; they welcome any interested CAs to visit a Derbyshire clinic prior to implementing their own breast pain pathway in their localities. However, they feel that the model also allows for some local adaptability and flexibility, such as staffing, roles and responsibilities, which the variations seen across the three sites demonstrate. EM have been able to share their learning on what works and any potential pitfalls; and data from the EM pilots has been very useful for building business cases elsewhere, so that implementation can be accelerated.

"I think it's just building on our experience. We can help people with a lot of information about how we did it because we learned from the Mid-Notts pilot in Derbyshire, we did it much quicker, and then people afterwards have done it much quicker than us." **(EM)**

All sites found that raising GP awareness and primary care involvement is key. Involving them early to support with pathway design and provide a GP perspective on pathway processes was considered to have encouraged referrals in EM and LSC. Pathways staffed by a GP or physician associate (as in LSC) have the benefit of building on and maintaining existing links with primary care. More widely, involving the right people from across the different partners at the start builds consensus and ownership of the new model. Buy-in has been helped by evidence of the benefits for all stakeholders, such as the reduction in demand for investigations in secondary care, and provision of suitable referral options for primary care. Participants reported a shared motivation for change.

"Sometimes secondary care think they can do it themselves, but then they can't find the place in primary care to do it, or the GPs don't refer. So, you have to have primary and secondary care. And you have to have clinicians. You have to have managers…people [who] can action things. But then you also you need the staffing. You know, the nurses, you need them represented, project managers, so you need to have the right people in the room, when you're going to implement this in the different areas." **(EM)**

However, some participants recommended building time into planning and implementation timelines for responding to challenges relating to securing buy-in from these different partners (beyond often impassioned medical teams) and other internal processes. In SYB the project was championed by a consultant breast surgeon and trust cancer lead with limited additional support; but they persevered, protecting staff from challenges in order to maintain morale and motivation. There was also some initial confusion about responsibility for sourcing and establishing a community services setting, which was not part of the acute trust estates. The chosen location (a community hospital unit that is part of the trust) was a necessary compromise that has worked well. In LSC, business as usual procedures (such as appointment booking) caused slight delays to implementation; perseverance and adaptation was again necessary in order to ensure they could implement the pathway successfully.

The 20-minute, extended appointment time (in comparison with those available in primary care or at breast USC pathway clinics) ensures quality of care and enables a thorough assessment that is important for providing the level of reassurance patients often need (particularly those with significant concerns about their breast pain symptoms and risk of cancer).

"From the point of view of the individual patient…they get longer with somebody…probably a more thorough history, and the examination. But then, most importantly, they get a much more thorough explanation of the problem, and they go away feeling like they really understand it, and also, because of that, they feel much more confident they don't have cancer…it's not the [imaging] that would have made them feel confident, it's actually somebody confidently assuring them that what they are dealing with is a variant of normal." **(SYB)**

The experience levels of clinicians running clinics at all three sites have been crucial for success because they are able to make these informed discharge decisions that instil confidence in patients. EM also highlight that having female clinicians is beneficial, as they are better able to give advice to women on a range of topics during clinics for example on types of bras or experiences of screening. Patient feedback has indicated that some patients were reassured by a female clinician doing the examination. Other staffing aspects highlighted as important include the coordinator role in EM (as they deal with referrals, appointments, FaHRAS questionnaire input, data and act as a chaperone in clinic), and in LSC the dedication and commitment of the implementation team has been seen as particularly beneficial:

"We had a [really focused] implementation team…they are dedicated and pragmatic and allowed us to [use] a system approach, I don't think we would have implemented at such pace [without that]. Everyone was signed up knowing it was the right thing to do." **(LSC)**

Staffing and capacity at different stages of implementation can also require contingency planning and a pragmatic approach. SYB faced challenges in agreeing the funding, banding and responsibilities for administrative support with trust colleagues. While this was resolved clinicians were responsible for administrative tasks; a source of frustration for some. LSC faced difficulties recruiting a GP to lead the pathway, and challenges with freeing-up other clinician time for the pathway due to capacity. Another

initial challenge was identifying how physician associates could work effectively across the new role and with primary care.

"It's where we could slot [Physician Associates] in, based on the data-driven approach…how many clinics or patients would we need to see per week for it to work and for us to cope with demand? That was a challenge to get there but the [ELHT] team, were really pragmatic around their approach in allowing us to develop that model." **(LSC)**

While the different sites all faced different but related issues with family history risk assessments, each site found that adopting digital solutions or amending processes has been key. EM found that completing a NICE CG164 assessment was more complex and time consuming than expected, which is why the FaHRAS tool used to triage patients according to their risk was introduced. SYB encountered difficulties persuading patients to complete the paper questionnaire prior to appointments, while LSC internal processes, which mean patients receive information about their appointments via text, made sending the paper questionnaire out with appointment times a challenge. Requesting that patients bring details of their family history with them when texting them about their appointment has provided an effective solution for this.

8 Actions for other Alliances

For Alliances wishing to implement similar initiatives, a summary of some key actions are as follows:

Designing the pathway

- **Involve primary care and other stakeholders from the outset, building in time for engagement during planning**. Sites achieved this by:
    - Setting up steering and working groups. Key stakeholders to consider include: Cancer Alliance and system leads; commissioners; financial and operational managers; GPs and primary care managers; ANPs; consultants, breast surgeons; senior cancer leads; regional breast clinical leads and breast clinical reference group (CRG) chairs.
    - Establishing direct communication channels with stakeholders, particularly primary care, to raise awareness of the pathway. Channels successfully used by sites include: weekly newsletters; information videos; primary care-specific information packs; WhatsApp groups and discharge letters that provide GPs with feedback about referrals.
    - Using these channels to communicate what the clinic is and is not. This approach is useful with GPs and secondary care colleagues to ensure there is understanding that although the clinic is delivered in a community setting, it is provided by secondary care.
- **Work with the EM Derbyshire team and other Alliances that have implemented their own versions of the breast pain pathway.** The EM model has been implemented by several Alliances s and their work has provided shared learning for sites to build on and a pool of resources new pathways can use to get started. Alliances interested in setting up their own breast pain pathway can contact the EM team to receive support with design and implementation.

Design a two-prong triage system to make sure appropriate patients are referred to the breast pain clinic. This should include: a review of patients referred directly to the clinic from primary care, ensuring patients are appropriate and fit the pathway criteria; and triaging patients, referred to the breast USC pathway or other related pathways, to to the breast pain pathway if appropriate.

- **Work with community service colleagues to identify an appropriate community setting for the clinic during initial discussions.** Key factors that should be considered when deciding on the location of the clinic include: the pathway's aims of de-medicalising breast pain and providing a more relaxed setting for patients; how easy it is for patients to access the clinic, and whether similar services, such as pain management, are being delivered at the same place.

Staffing

- **Recruit skilled and experienced female breast clinicians to deliver the pathway**. The EM model allows for some flexibility in staff mix. A successful staff model includes both female ANP or ACPs (that have breast experience or have worked on the breast USC pathway) and GPs or physician associates with breast experience (who can provide input into the clinic and understanding of how primary care works).

- **Ensure the pathway has dedicated administrative support in place prior to delivery.** An agreement between management and those delivering the pathway on the banding, working hours and responsibilities of administration staff is necessary for delivery. Key tasks administrative staff should be responsible for include, booking patients into the clinic; pre-populating the FaHRAS software with patient details before appointments; checking patients into the clinic and taking them to the clinicians; and, printing and sending referral letters and patient feedback forms.

Resources and pathway mechanisms

- **Support GPs to make referrals and ensure the referral process into the breast pain pathway is straightforward**. Sites have tried to achieve this by:

    - Using an electronic referral system to make it easier for GPs to complete referrals and automatically capture referral data for monitoring purposes.

    - Separating the referral form for the breast pain pathway and the breast USC pathway (to avoid confusion).

    - Educating GPs about the pathway, the criteria for referrals and the correct referral process. This has been done through GP education events, forums or meetings, individual discussions, information packs, videos and newsletters.

- **Invest in ways to support family history risk assessment completion.** Sites have done this by:

    - Using FaHRAS software to calculate risk level for patients and integrate this data with patient records more easily.

    - Sending Family History Risk Assessments to patients alongside appointment letters so they can be completed prior to attending the clinic.
    - Dedicating staff time to go through the assessment with patients when they arrive at the clinic.
    - Reminding patients to bring details of their family history to their appointments via text.

- **Set up direct referral routes from the breast pain clinic to the breast USC and other related pathways** (e.g. Familial Cancer Services). This helps to ensure clinical safety and provides reassurance to clinicians that patients with red flag symptoms who attend the breast pain clinic will not experience delays in receiving assessment or a diagnosis if they have concerning symptoms.