Breast Screening Modernisation Programme 2022-2025

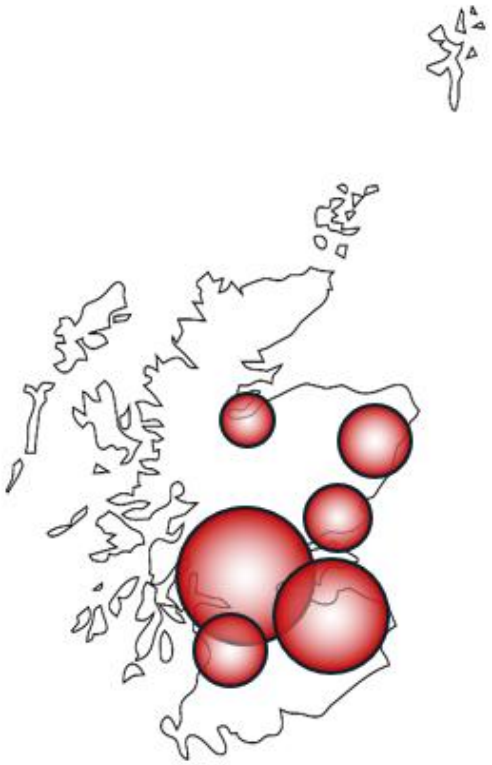
Final Report

November 2025

Scottish Government
Riaghaltas na h-Alba

Breast Screening Modernisation Programme 2022-2025

Final Report



Authors Marzi Davies, Retired Consultant Radiologist
Edmund Rooney, Programme Manager
Kyle Stuart, Project Manager
Michelle Martins, Project Support Officer

Date April 2025

Version 2.0 FINAL

For the attention of Scottish Government Screening Policy Team

Table of Contents

Endorsements

Dr Marzi Davies, Retired Consultant Radiologist & Chair of the Modernisation Board

As Chairperson of the Breast Screening Modernisation Board and retired Clinical Director and Consultant Radiologist, I am proud and honoured to present this comprehensive, robust and credible report. From the outset, and following the 2021 Review, it was clear that there were a number of areas within the Scottish Breast Screening Programme in need of modernisation and development. This report is the culmination of three years hard work and commitment on the part of the Breast Screening Modernisation Board, Screening Oversight & Assurance Scotland, the programme team and the staff of the Scottish Breast Screening Programme. It represents a comprehensive review of the key processes within the programme in the post Covid landscape. It makes well informed and evidence-based recommendations, and outlines projects for delivery of these recommendations, which will allow Breast Screening in Scotland to adapt and grow to meet the challenges of the next five to ten years. I commend this report to you.

Gareth Brown, Scottish Director of Screening & SRO of the Breast Screening Modernisation Programme

As Director of Screening within Screening Oversight and Assurance Scotland, I fully endorse this report and the conclusions of the Breast Screening Modernisation programme. It is clear that the Breast Screening programme – while still delivering high quality screening for the vast majority of participants in Scotland – needs to change and evolve. The Breast Screening Modernisation Team has worked with colleagues within the programme and beyond to chart a course for the next decade that will ensure that Breast Screening in Scotland is high quality, safe and sustainable. It is important that the recommendations of the Modernisation Programme are taken forward and supported if we are to achieve this goal, and Screening Oversight and Assurance Scotland will do all that it can to make this happen.

Joint statement by the Clinical Directors of the Scottish Breast Screening Service –
Gerald Lip (North-East), [Name redacted] (West), Lucy Hill (South-East), Nicola Spence (North), Sarah Savaridas (East), [Name redacted] (South-West)

We have all actively supported the work of the Breast Screening Modernisation Board for the last 3 years. This final report is the culmination of that work. We feel that the issues have been accurately identified and well-articulated, and realistic solutions have been recommended. We are optimistic about the benefits for our screening population if implementation of the

recommendations is agreed. We fully endorse the report and ask Scottish Government to approve it.

Chair's Foreword

The need to update the Scottish Breast Screening Programme (SBSP) was well researched and articulated in the 2021 Major Review of the Scottish Breast Screening Programme[1]. This Review was supported and then endorsed by Scottish Government, which accepted the 17 recommendations.

This all occurred against the background of the pandemic. Covid had a profound and far-reaching impact on all health services but screening programmes, which were temporarily paused during the first lockdown, were particularly affected.

Breast Screening was hit hard by a 5-month total shutdown, and the recovery from the incurred slippage has been a long, hard journey for the whole service.

As with all adverse events, some good as well as bad came out of this. New ways of working were necessary and became part of normal practice. Meetings could be held online, saving hours of travelling. Hybrid working in some roles became possible. Culture changed around selfcare, and the uptake for screening went up significantly as the population took a greater interest in their own health outcomes.

As a result, a rethink was required around the review recommendations and SG agreed with the Scottish Director of Screening, Gareth Brown, that a Modernisation Programme was required to revisit the Review and look afresh at the Service post pandemic. It has been my privilege to Chair this Modernisation Programme.

Much had changed and already been modernised through the work of the Service tackling the recovery processes. This meant that from the outset there was significant overlap between the work of the Modernisation Board and business as usual (BAU).

However, despite the Service's best efforts, the truth is that the Scottish Breast Screening Programme post pandemic was, and is, in a challenging position: key roles at senior level have been difficult to recruit to; chronic staff shortages generally mean that those within the service are under real pressure; and ageing infrastructure and equipment failures are leading to unacceptable amounts of downtime, cancellation of appointments and potential reputational damage.

The result of these issues is that, although we continue to meet KC62 standards as is adopted practice, time frames are slipping, with slippage edging towards a four year-round in some circumstances, despite Herculean efforts to pull this back. There is no firm evidence that demonstrates a significantly reduced mortality from breast cancer at this interval.

More generally, although there has been targeted investment in specific technical advances such as digital mammography, the baseline funding which supports the nationally commissioned Breast Screening centres has not been reviewed since the establishment of the programme more than 25 years ago and has only received the

[1] Scottish Breast Screening Programme: major review - gov.scot (www.gov.scot)

modest annual inflation-related uplift. As such, the current allocations are an artefact of history rather than a reflection of the current realities of delivering the programme.

For all these reasons, the six individual host boards and six assessment centres have been firefighting problems locally, leading to significant divergence in the way they provide Breast Screening. It is a fair assessment to say that a truly “National” Breast Screening Service currently exists only in name.

So, the importance of this Modernisation Programme cannot be overstated.

This report has been prepared to summarise the work of the Modernisation Programme over the last three years. The 2021 Review, and other areas of modernisation within the service have been explored as far as capacity allowed, and the result is that the programme is able to present to Scottish Government a clear set of deliverables to update and truly modernise the Breast Screening service. It represents a comprehensive review of the key processes within the programme post Covid, makes well informed and evidence-based recommendations, and outlines projects for delivery, which will allow Breast Screening in Scotland to adapt and grow.

The detail of these deliverables can be found in the following sections of the report and its appendices. Each of the workstreams can be viewed and undertaken as standalone projects which will help some of the key stress points within the system. However, the key to all of these is the overarching new management model: this is the fundamental change needed to modernise Breast Screening in Scotland and will underpin and enable all aspirations to ensure deliverables can be achieved in good order.

The message from the Modernisation Board is unanimous and clear. Investment and change in this service is required to ensure a safe, sustainable and robust service continues to exist in the years to come and so is able effectively to deliver reduced mortality from breast cancer within the eligible population.

Development and Philosophy of the Programme

Development of the Modernisation Board

The Modernisation Board was established in June 2022 and was set up to be a broad based and inclusive Board. Members were recruited from across the Breast Screening community covering a wide range of experience, skills and interests. Those asked to join the Board had to be able to provide insight into all aspects of the service and be willing to challenge the status quo to ensure the programme explored all options to modernise the service. We recognised that we needed to have input from the whole Breast Screening community and to incorporate the diversity of views and geography within the service and its stakeholders. The inaugural board took place on 20th June 2022.

A Terms of Reference (see **Appendix A.1**) was drafted to set out the purpose, role and governance around the Modernisation Board. By approving the scope of individual projects, aligning the programme to wider strategic priorities, and continually reviewing the programme's priorities across the three years, the Modernisation Board was in a good place to ensure the programme delivered the agreed outcomes and benefits.

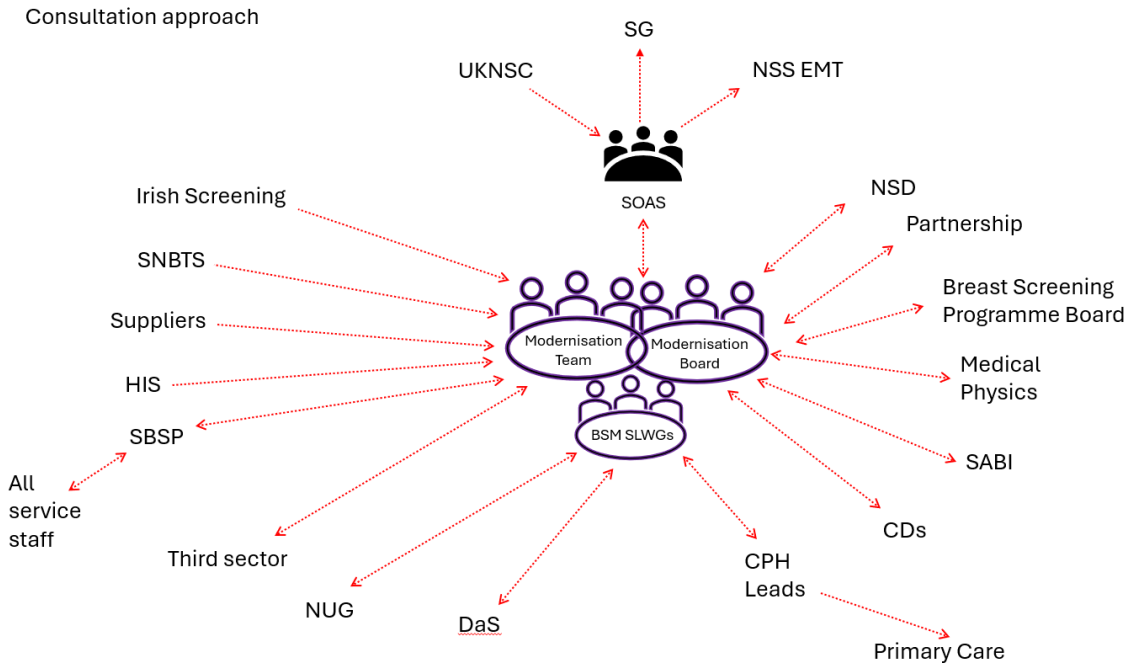
The Board was created not as a representative body but as a flexible group which sought new members/skills as the discussions required. At each meeting, Board members were encouraged to suggest new members to inform the work. Membership, which grew as the programme developed, initially included Clinical Directors, breast surgeons, service management, NSS National Services Division (NSD), Screening Oversight & Assurance Scotland (SOAS) – known then as NSO – and Public Health Scotland (PHS). The Board would continue to have a core membership, with additional members being added during periods where their expertise was required. A list of members past and present can be found in **Appendix A.2**.

The Modernisation Board was also able to engage with the Third Sector across the lifetime of the programme (predominantly Breast Cancer Now and Cancer Research UK), which was helpful and informative. Efforts were made to identify participant networks and engage with these groups; however, the programme was unsuccessful in this endeavour. The programme team are grateful for the support and guidance offered by the third sector during this time.

Members were made aware of what was expected of them during the programme. They were asked to provide their time, take on responsibility to lead and/or contribute to projects and where possible engage with all aspects of the programme. In return, the programme team were aware of the need to maximise the use of the time members gave us and actively to listen to their needs to allow service evolution.

We consulted widely across all stakeholder groups and were very encouraged by the degree of engagement we found. The Terms of Reference clearly outlined the distinction between BAU activity and the Modernisation Programme. The Breast Screening Programme Board retained oversight of BAU activity, with regular

communication between the Senior Programme Manager for Breast Screening and the Modernisation Programme team ensuring clear boundaries in activity. In reality, and as we would have hoped, the aspirations, projects, and developments for Breast Screening Modernisation were closely aligned with BAU, and as projects got underway, there was significant overlap with BAU initiatives. Strong and effective communication links were established from the outset, and this enabled projects to be discussed at the programme Board but then to cross into BAU as required. A summary of the consultation and engagement approach is provided below.



As a result of these strong communication links, the Board found that it performed a supporting role over the period of the programme in some developments within business as usual. We are proud to have become an enabling forum within screening to encourage wider discussion and innovation beyond the scope of the programme.

The SBSP has been performing to a high standard since its inception, so, while acknowledging the need and drivers for change, the ethos of the Modernisation Board was one of evolution, not revolution. The Board wanted to maximise the benefits of evolving the service using what currently exists, rather than radical change in the operational delivery of the service. This ethos continued across the lifetime of the programme, as the workplans evolved, culminating in the development of the management structure target operating model, which is seen as the key change to underpin the Scottish Breast Screening Programme of the future.

The Modernisation Board was not a formal decision-making board but was based on developing a consensus about priorities, workstreams, and solutions. Challenges were encouraged, and this worked well with issues discussed and resolved at the face-to-face meetings. It was striking throughout the three years of the programme how strong the consensus remained about what was required and how it could be achieved.

A summary of activity at each of the eight board meetings is given below:

Meeting 1:
- Introductions & expectations
- Modernisation Board ethos
- Fears, successes & what screening could look like from scratch

Meeting 2:
- Terms of Reference & membership sign off
- Current issues presentations
- Programme visioning activities

Meeting 3:
- Validation of initial project dossier and programme vision
- Project prioritisation exercise

Meeting 4:
- Project updates
- SABI updates
- Programme management documentation review

Meeting 5:
- Project updates
- EQFIA & Programme definition sign off
- Challenging ideas and horizon scanning activities

Meeting 6:
- General project & BAU updates
- Breast Cancer Now: Cost of Breast Screening report

Meeting 7:
- Project updates
- Workforce plan presentation
- End of programme planning

Meeting 8:
- Final progress updates
- Final report review
- Lessons learned

Development of Programme Vision and Outcomes

Discussion of the programme's vison began at the onset of the Modernisation Programme. A final vision and set of outcomes were agreed by November 2022 and ratified by the confirmation of the programme definition document in early 2024.

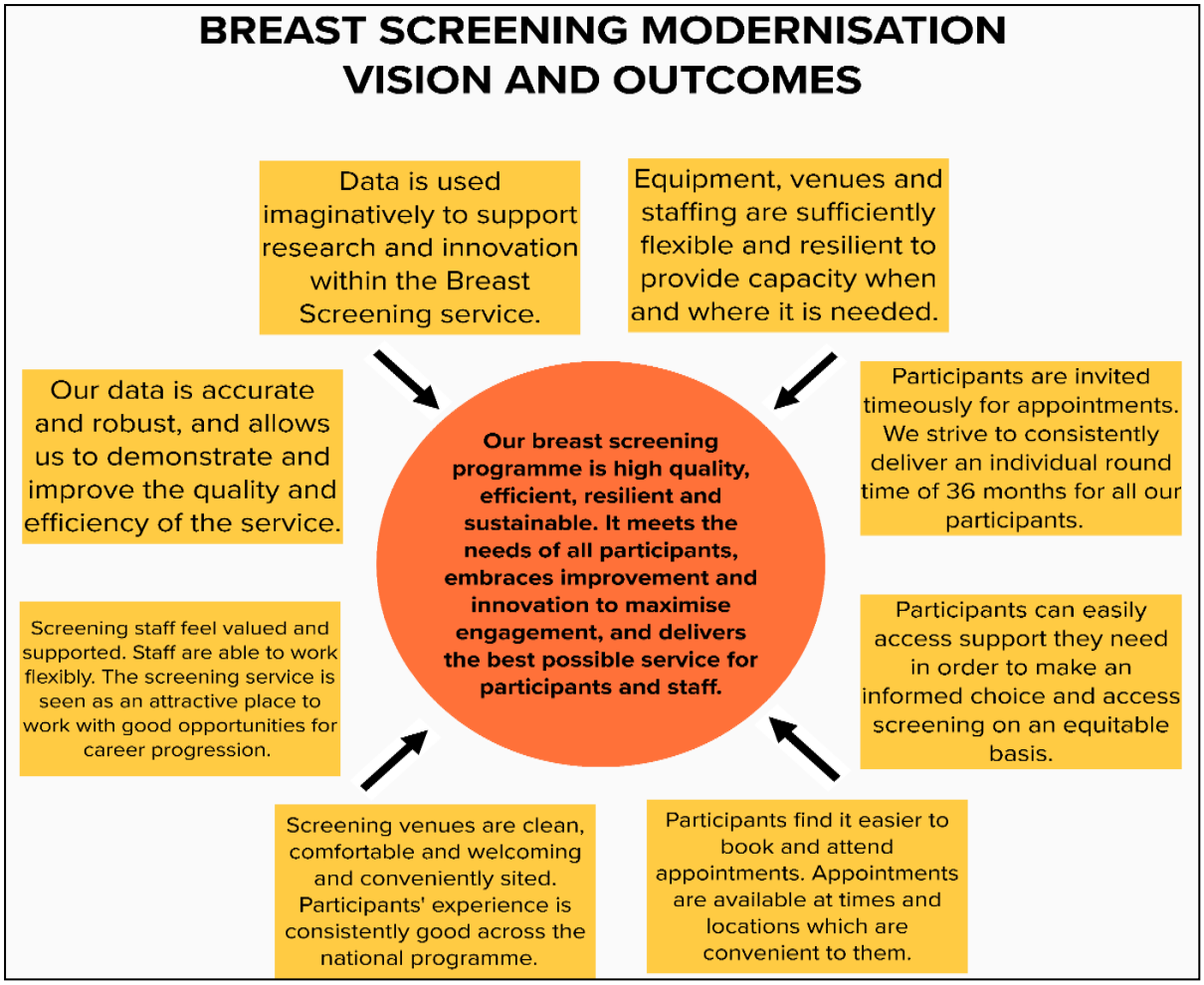
Development of the vision originated from visioning exercises undertaken across the early meetings of the Board. This activity included 'a postcard from the future' where the Board were asked to position themselves as a participant, staff member or board member in 2032 involved in Breast Screening. They were to briefly highlight how screening had changed in a positive way in the direction in which the Board hopes to head. Blue sky thinking was encouraged, and no idea was considered too outlandish for this exercise.

Results were pooled and consolidated with other exercises to decide the scope and deliverables of the programme. These combined outputs were used to write a clear vision statement and identify a series of tangible outcomes for the Breast Screening Modernisation Programme.

The **Breast Screening Modernisation Vision** is that "Our breast screening programme is high quality, efficient, resilient and sustainable. It meets the needs of all participants, embraces improvement and innovation to maximise engagement, and delivers the best possible service for participants and staff".

The **Breast Screening Modernisation Outcomes** are as follows:

- Equipment, venues and staffing are sufficiently flexible and resilient to provide capacity when and where it is needed.
- Participants are invited timeously for appointments. We strive to consistently deliver an individual round time of 36 months for all our participants.
- Participants can easily access support they need in order to make an informed choice and access screening on an equitable basis.
- Participants find it easier to book and attend appointments. Appointments are available at times and locations which are convenient to them.
- Screening venues are clean, comfortable and welcoming and conveniently sited. Participants' experience is consistently good across the national programme.
- Screening staff feel valued and supported. Staff are able to work flexibly. The screening service is seen as an attractive place to work with good opportunities for career progression.
- Our data is accurate and robust, and allows us to demonstrate and improve the quality and efficiency of the service.
- Data is used imaginatively to support research and innovation within the Breast Screening Service.



Programme Priorities, Projects and Performance

Priorities for the Modernisation Programme

Clear themes emerged from these exercises, and potential projects were grouped within these. Four key themes identified by the Board were:

- **Access** – projects to remove barriers for participants, widen choice and make it easier to book and attend appointments.
- **Data** – projects to streamline and standardise reports and improve access to data for quality and process improvement.
- **Equipment** – projects to standardise procurement and make best use of capacity.
- **Workforce** – work to understand the current workforce state and challenges, improve retention and provide greater flexibility.

In October 2023, while reviewing progress within the programme, the Board came to the clear realisation that to ensure success across the four core themes, an additional layer of management across the service nationally was needed. A fifth and

final core piece of work was therefore initiated, lasting for the remaining duration of the programme:

- **Management model** – work to scope a new national management model for the Scottish Breast Screening Service.

The Programme also considered the delivery of a small set of projects which did not fall directly under any of the core themes but still contributed to the Programme vision and outcomes. Over the course of the programme, elements of these ideas have been incorporated into the core projects rather than delivered independently by the programme. These included:

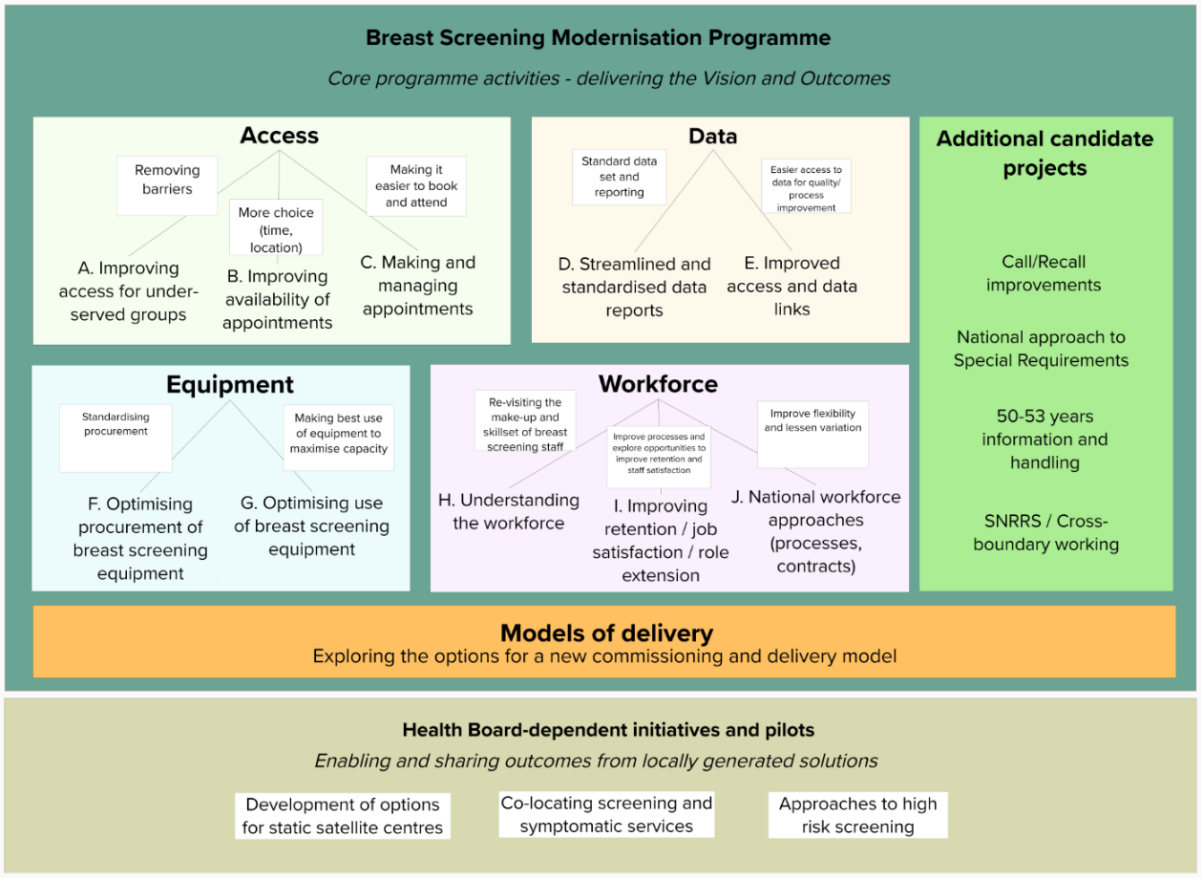
- Call/Recall improvements – considered by the Call/Recall workstream
- National approach to special requirements – included within Data workstream
- 50-53 information and handling (additional letters to participants to make them aware of their first appointment which will take place between age 50 and 53)
- SNRRS / Cross boundary working – Workforce and Management Model workstreams

Additionally, some projects were considered more suitable for development outwith the programme by host boards, or requiring a separate programme of their own owing to their size and complexity. These included:

- Static Sites in the central belt (host boards)
- Co-location of screening and symptomatic services (host boards)
- High risk/targeted screening (own programme).

It was clear that the number of potential projects identified outstripped the resource available to deliver and support change, both within the Modernisation Programme and across the wider Breast Screening Service. The Modernisation Board therefore undertook a prioritisation exercise, from which a high-level programme plan was developed, and the highest priority projects were started. This plan was reviewed in 2023, with the management model being reprioritised alongside the ongoing core projects.

A breakdown of the planned activities and workstreams within the Breast Screening Modernisation Programme is provided below.



Core Projects and their outcomes

The following sections capture the outputs from each of the workstreams prioritised by the Modernisation Board since 2022, up to the completion of the programme.

The order in which these are presented reflects the suggested order of implementation, with the earlier changes enabling or facilitating the later ones.

Management Model

Background

It became clear as we worked through the Modernisation priorities that the original concept of six separate centres run by six host health boards had become cumbersome, complicated and obstructive. Every process, change or improvement had to be agreed and/or approved via multiple chains of command – the senior management teams for the six host boards, NSD as commissioners and the 14 individual Health Board CPH leads. With each change the centres were diverging in how screening was delivered: we had a “National” Breast Screening programme in name only.

As already indicated, the challenges for SBSP are real. Staffing, recruitment, equipment, premises, mobile van provision and data integrity are all under real pressure leading to downtime, cancelled appointments, increasing slippage and longer waiting times. Each host board has been fire-fighting these issues as they

arise and responding with local solutions, meaning that these do not necessarily take account of the impact of these on the wider service. Increasing costs are not all addressed via the SLA arrangements, with some boards able to supply additional funding, and others introducing methods to control costs. Financial arrangements are increasingly opaque, and budgets are historical. It is acknowledged within NSD that re-baselining is badly needed to address this, and that current SLAs are no longer effective with respect to accountability to NSD. Reputational damage to the service is a reality.

Very quickly a clear consensus was reached within the Modernisation Board that fundamental change to the management structure was required, and in October 2023 the programme team was asked to look at options for a new model.

Restructuring the management arrangement away from the current, nationally commissioned six centres was seen as the key to modernising how Breast Screening is delivered equitably. This immediately became the top priority project for the Board, as the way forward for a safe, responsive and effective service and as the fundamental change needed to enable the implementation of all other workstreams within the Modernisation Programme.

Development of a new management model

A Short-Life Working Group (SLWG) was established in January 2024 to progress an approach and explore options. To assist with this task, a wider Reference Group with representation from across the Breast Screening service and (later) national partnership was also set up[2]. The team also met with BreastCheck Ireland, NHS Assure and SNBTS to understand alternative management models.

Two in-person workshops were held with the Reference Group in June and September 2024. These established a consensus on the issues and the need for change, explored potential models, agreed a set of guiding principles for the change, and began work on a draft Target Operating Model for a new national approach. This draft Target Operating Model was then refined by the Short Life Working Group and presented to the Modernisation Board in March 2025 for ratification.

The drivers for change highlighted by the work included:

- A lack of strategic/clinical leadership at national level, meaning that boards have considerably diverged in how they deliver Breast Screening
- Marked variations in screening round times and waits for assessment, which mean that the centres cannot provide an equitable service for all participants
- Issues with the recruitment and retention of staff, leading to loss of resilience and over-reliance on key individuals
- An increased need for mutual aid but current system creates barriers to enabling this

[2] As national staff-side were not involved until later in the process, it was challenging to catch up and build an effective partnership. It is important to acknowledge that while some points were agreed upon, others were not.

- A lack of transparency over budgets/finance between centres
- Challenges for the procurement and use of equipment nationally in the absence of a capital replacement plan and funding pressures

Summary of the model

Appendix B.1 below summarises the final Target Operating Model and an associated high level Business Case. This document:

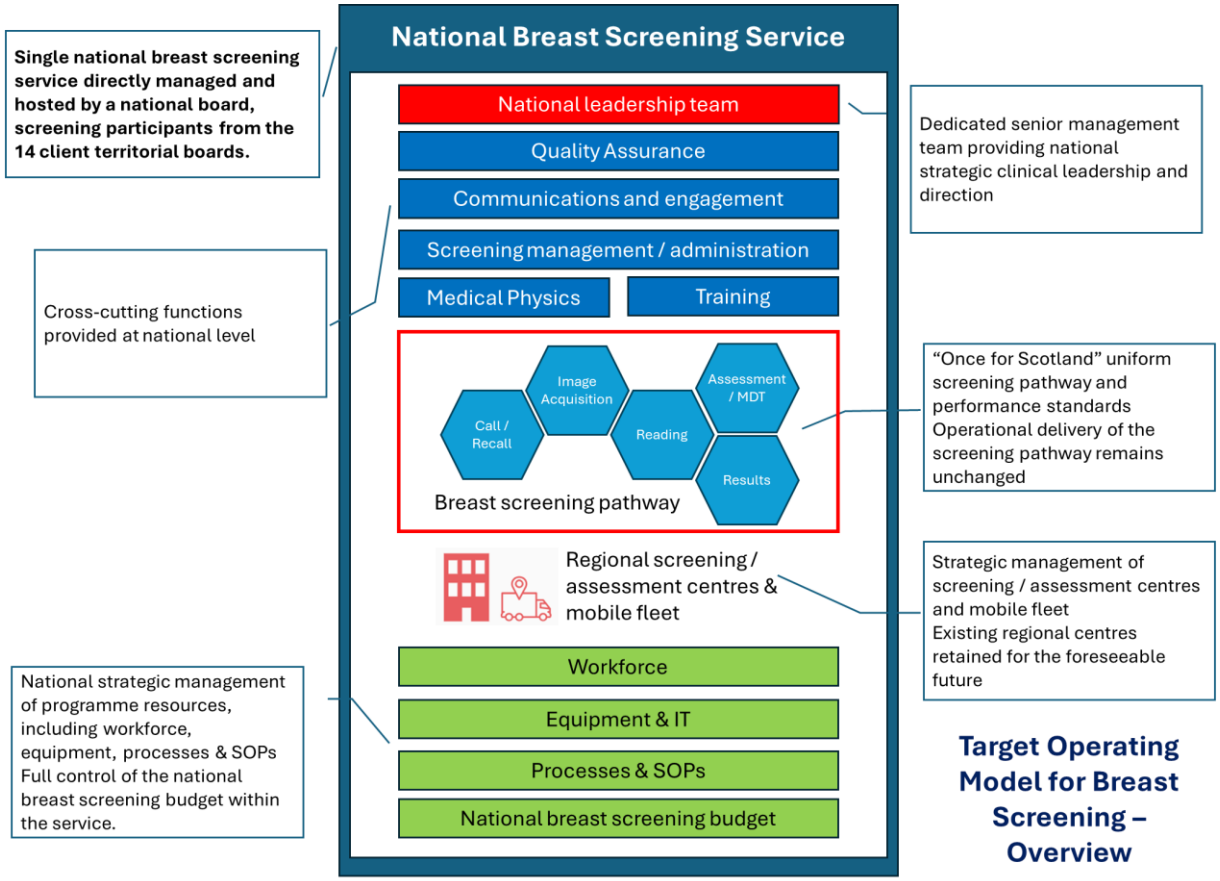
- sets out the case for change, highlighting the consensus on the pressures being faced by the service, the unsuitability of the current model, and the strategic fit with the overall Vision and Outcomes championed by the Modernisation Programme
- presents a suitable Target Operating Model for a sustainable service, capturing the functions required to be delivered at national level, and the organisational structures, governance, staffing, infrastructure and processes to support them
- sets out what the new management model might look like, as well as the key roles and reporting structures required
- develops a proposed route for implementation and transition, along with indicative one-off and recurring costs
- and highlights the benefits that a new management model would bring.

Appendix B.2 below sets out a suggested Communications and Engagement plan covering the development of the model and any future implementation.

The new Target Operating Model for Breast Screening

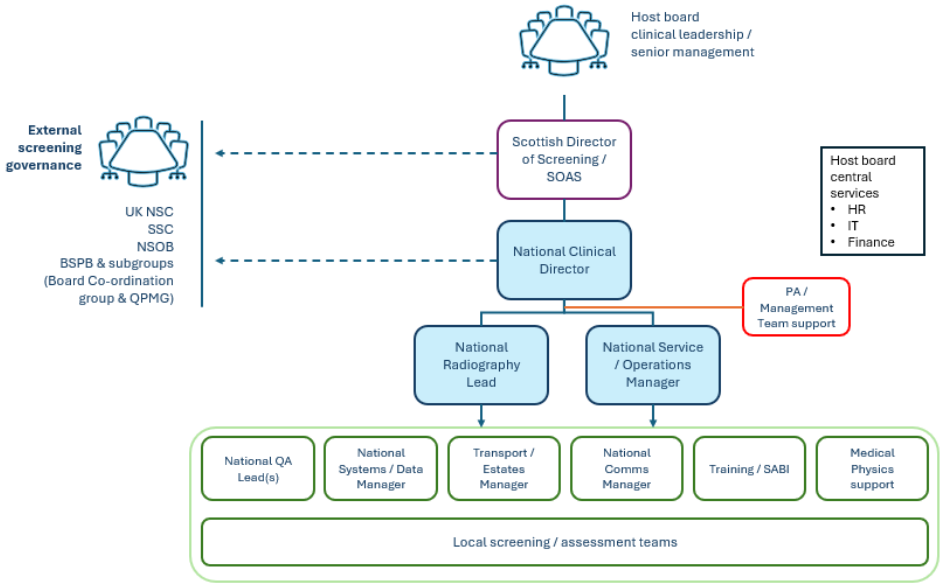
The Modernisation Programme strongly recommends the creation of a single national service, directly managed and not commissioned, with a dedicated national senior management team under a single national Board similar to the model adopted by SNBTS. This would be the key change which would underpin and enable many of the other changes required to modernise Breast Screening.

An overview of the scope and content of the new Target Operating Model for Breast Screening is given below (see **Appendix B.1** for further detail).



The service, led by a new senior management team under a National Clinical Director, would be supported by and report to a robust clinical leadership structure within the host organisation, ideally with a direct line to the host organisation's executive board to ensure a strong voice for screening alongside other essential services. The role of the Scottish Director of Screening/Screening Oversight & Assurance Scotland would evolve to include overall accountability for the new national service. A potential organisational structure and reporting lines for the new service and senior management team is outlined below, and a suggested sample Job Description for the National Clinical Director role is attached as **Appendix B.3**.

Note that these suggested structures are not intended to be prescriptive but are presented as a guide to how the new service might work based on the experience within the team and other screening services, and the similar transition undergone by SNBTS.



Benefits

The key benefits of the proposed national approach highlighted in the Business Case would include:

- Improved sustainability and resilience for the service, reducing the risk of failure
- More equitable service provision and waiting times for participants
- Dedicated national strategic and clinical leadership and support
- Enables strategic planning and decision-making across the service
- Greater understanding, control and transparency over the Breast Screening budget
- Improved attractiveness of senior posts, helping to address issues of recruitment and retention in senior roles
- Enables pooling/sharing of skills and expertise nationally
- Enables national approach to procurement and maintenance of imaging equipment on a national basis
- Streamlined accountability and communication within the service
- Potential for making savings and economies of scale in the future
- Easier implementation of upgrades and service improvements within a single organisation
- Coherent national approach to emerging technologies and opportunities including wider changes in the national screening landscape (e.g. advent of lung cancer screening)

Implementation

Implementation of the new model would be dependent on approval and funding by Scottish Government. The Business Case sets out a provisional timetable over a minimum of three years, beginning with the appointment of a programme team,

detailed implementation planning, wider communications and engagement with host boards and staff, and initial appointments to the senior management team in the first year. Senior roles in the new organisation would need to be appointed as early as possible to help to define and progress the change programme, as well as providing strong leadership and direction for the service throughout the transition.

Workforce

The Breast Screening workforce has struggled to keep up with the demand of the screening workload for a number of years. Staff shortages, an ageing workforce and the longer term effect of the pandemic on service recovery have left the service teetering on the edge of collapse. It was clear from the 2021 Major Review, but also from the testimony of staff themselves, that support was required.

The Workforce workstream began in January 2023, identifying its scope and priorities. The Modernisation Board were clear this project was likely to last the duration of the programme and was vital to ensuring service sustainability into the future. The work was chaired by [Name redacted], Clinical Director of the West of Scotland Breast Screening Centre.

Understanding the workforce

The first phase of the project focussed on developing a better understanding of the workforce. Two surveys, one for staff and one for each senior management team, were developed and sent out across the service to gather information about issues such as the key challenges for the workforce, workforce satisfaction, likelihood of leaving and suggestions for improvement. Statistics were also gathered from the centres to determine staffing numbers (headcount, WTE and SLA-funded WTE per centre) as well as the key recruitment and retention challenges in each area.

The outcomes of the survey were analysed and presented back to the service and the Modernisation Board. They demonstrated the stark reality for the Breast Screening workforce and highlighted the need for a National Workforce Plan for the Scottish Breast Screening Programme.

National Workforce Plan 2024-2029

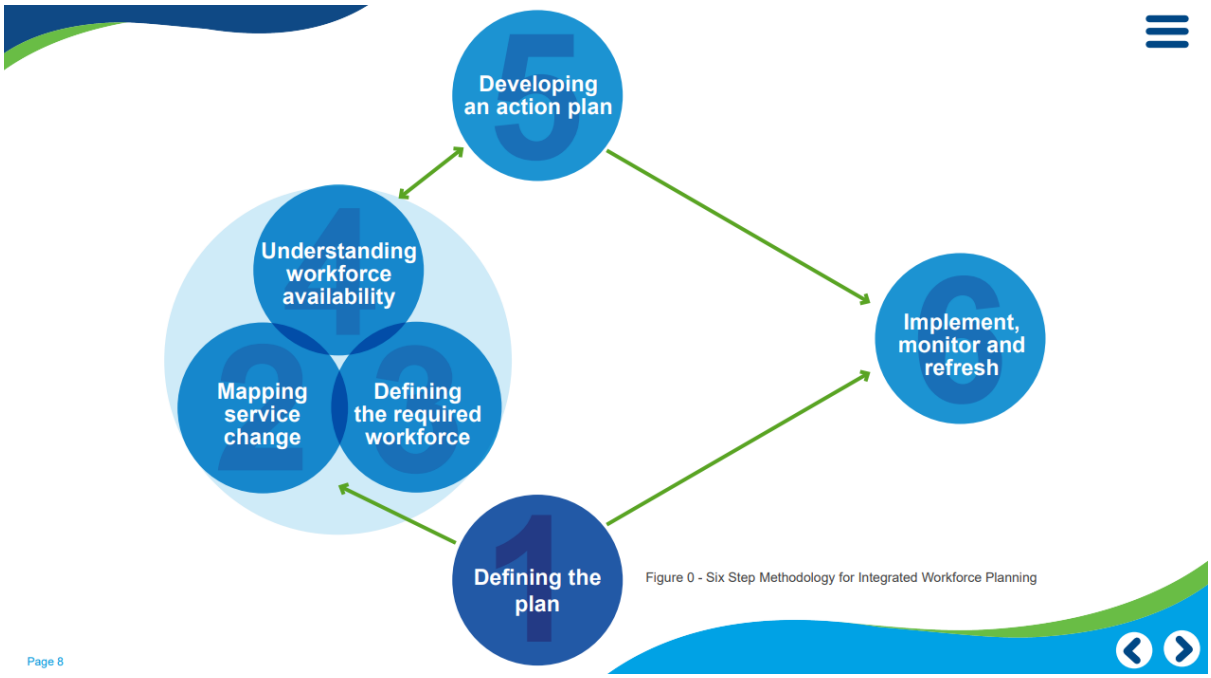
The need for an overarching national workforce plan for Breast Screening was highlighted as one of the recommendations from the 2021 Major Review. To date, there has not been a fully national workforce plan devised for the service, screening being out of scope when the Diagnostic Imaging Workforce Plan for NHS Scotland[3] was developed in 2022/2023.

A copy of the National Workforce Plan is attached as **Appendix C.1** below.

The plan should be seen as a companion to the Diagnostic Imaging Plan, and was developed following the same Six Step Methodology for Integrated Workforce

[3] Diagnostic Imaging Workforce Plan for NHS Scotland; May 2023

Planning[4] (also previously used for the National Workforce Strategy for Health and Social Care in Scotland). The approach is based on the five 'pillars' of the workforce journey – Plan, Attract, Train, Employ and Nurture.



Current state of the workforce

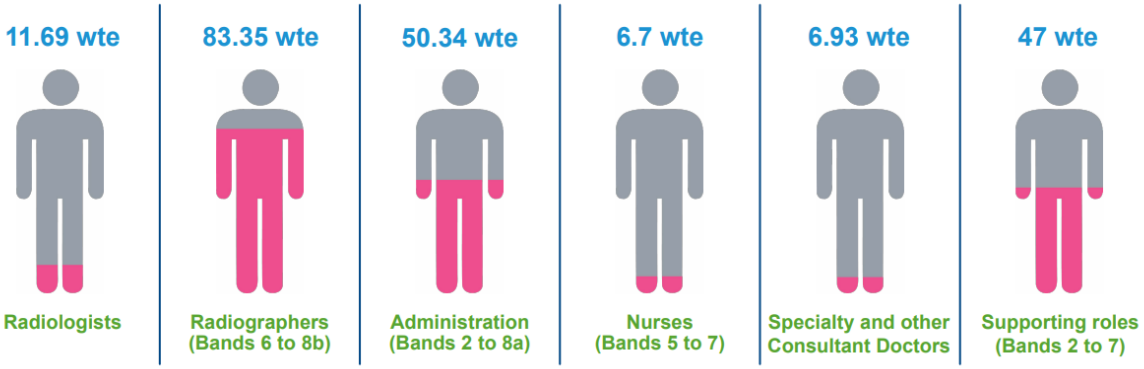
Using the information gathered during the initial surveys, the plan documented how the current workforce are utilised across the screening pathway, setting out the steps along the screening pathway and the roles within the service that may be involved at each step:

Host boards, as the employers of the staff in their centres (in line with commissioning agreements with NSD), determine the exact staffing resource they require in their

[4] Six Steps Methodology to Integrated Workforce Planning® | Skills for Health

own centre and across the screening pathway. This has resulted in variation across the centres in terms of staff utilisation. While this is not necessarily a negative thing, as co-located services can benefit from sharing staff with the symptomatic service, it does limit the cohesion between commissioned staffing agreements and accurate staffing profiles.

As of October 2024, there were 306 staff working for the Breast Screening Programme across all six centres. This equates to 206 WTE, just over 10 WTE less than accounted for in the individual SLAs between NSD and the six host boards, which provide total funding equivalent to 216.3 WTE staff. The discrepancy is representative of chronic staff shortages and hidden vacancies within the service (e.g. retirals and long-term absence without backfill or proleptic appointment in place). A breakdown of the staffing profiles and actual WTE within these profiles for the entire service is given below:



Key challenges for workforce planning

On the basis of the staff and centre management surveys, the Workforce Planning SLWG identified the most critical challenges for staffing across the Breast Screening service. These included issues with the supply and training of qualified staff, the ageing screening workforce, chronic staff shortages, a lack of opportunity for CPD, variations in staffing profiles across services, and difficulties in attracting staff to senior positions with the service. Many of these challenges were also highlighted as part of the work on the new Management Model. See **Appendix C.1** below for full details.

Impact of future developments

The Workforce Planning SLWG was conscious that there were a number of potential future developments within Breast Screening which could have an impact on staffing requirements within the next five years. While it was not possible to quantify the impact of any of these changes at this stage, it was clear that the Workforce Plan would need to be reviewed to take account of them should any of them be implemented. The developments in question included:

- Changes to the scope of extended practice for Assistant Practitioners
- Use of hybrid working in management and administrative roles
- Centralised national Call/Recall

- Centralised national image reading
- Electrification of the Breast Screening fleet
- Future use of Artificial Intelligence (AI) to support image reading

See **Appendix C.1** below for further details.

Workforce optimisation exercise and modelling

We feel it is essential that the workforce plan is based on optimal staffing levels, with proper allowance made for breaks, annual leave, learning/CPD, research and audit activities. Optimal staffing levels were investigated by five optimisation subgroups which each explored an individual part of the Breast Screening pathway. Between them the subgroups agreed a scalable staffing profile for a notional centre based on an eligible population of 50,000 across one full screening round of three years. Based on this profile, the plan recommends an optimal staffing level of 22.74 WTE for a centre of this size. While this is only indicative, the estimated cost at current salary levels to employ 22.74 WTE starts at £1.4 million.

These figures were then scaled up to accommodate the forecast national eligible population for varying levels of uptake (from 100% down to 70%). See the table below. From these figures it is evident that a large increase from the current 216.3 WTE staff is required across the lifetime of the plan to meet optimal staffing levels. The national eligible population is forecast to reduce slightly over the lifetime of the plan, which will reduce the requirement for staff as the years proceed. However, even allowing for this reduction, when compared with the current staffing complement of 216.3 WTE, an increase in staff will be required across the service for the entire lifetime of the plan to optimally deliver the service.

Uptake %						
Eligible Population		100	90	80	75	70
794,288	2024	361.2	325.1	289.0	270.9	252.9
793,258	2025	360.8	324.7	288.6	270.6	252.5
791,371	2026	359.9	323.9	287.9	269.9	251.9
786,319	2027	357.6	321.9	286.1	268.2	250.3
781,490	2028	355.4	319.9	284.3	266.6	248.8
777,613	2029	353.7	318.3	282.9	265.2	247.6
774,482	2030	352.2	317.0	281.8	264.2	246.6

Staffing will have to remain flexible within the centres, particularly those which are co-located or regularly share staff with the symptomatic service. However, the results give an indication of the number of staff nationally required to comfortably meet screening demand, while giving staff the capacity to take regular breaks, benefit from learning and continued professional development, and partake in research and audit activities, which are often not available to them on current staffing levels.

Recommendations

In response to the findings, the workforce plan has developed 28 recommendations to be taken forward by the service, covering the five 'pillars' of Plan, Attract, Train, Employ and Nurture. Some of these recommendations align with the wider Diagnostic Imaging Plan for NHS Scotland, some with the steps required to deliver the new management model discussed above, while some are independent of both and can be taken forward immediately. Full details of the recommendations are given in **Appendix C.1** below.

Data

Data was identified by the Board as a key theme to be addressed during the lifetime of the Modernisation work. A Data SLWG was established in June 2023, chaired by Dr Gerald Lip, Clinical Director of the North-East Scotland Breast Screening Centre.

As screening data is used by numerous stakeholders across the health service, it is crucial that data is quality assured and accessible to the right people and addresses the data requirements of all stakeholders. To address this, in addition to Breast Screening staff, all relevant stakeholder groups were also involved in this work, including Public Health Scotland, Primary Care, NSD, SOAS and the six Breast Screening host boards.

The scale and complexity of data within the SBSP presents a challenging landscape but also offers real opportunities for harmonising and streamlining processes to avoid duplication of outputs or activity. The work was undertaken in close collaboration with the service via the SBSS National User Group (NUG) and NSS Digital and Security (DaS) strategic activity. In particular, the group aligned with the project team delivering the Screening Intelligence Platform (ScIP) to ensure there was no crossover or duplication and enhance collaboration.

The Data SLWG focussed on two main priority areas in need of review:

- Streamlining & standardising data reporting
- Data Strategy: Improve data integrity, access and data linkage across the service, including work to better capture inequalities data.

The group also looked at data visualisation tools to allow stakeholders to visualise breast screening data in a meaningful way. The use of Tableau was explored with DaS, and requirements were scoped; however, due to technical constraints and the challenges of accessing live data this solution was not progressed.

Streamlined and standardised reporting

The Scottish Breast Screening Service currently generates a vast number of reports, for internal and external use. Report generation is time consuming, demands a great deal of manual intervention, and requires a combination of technical, clinical and legacy system knowledge to make sense of and utilise the information available.

The SLWG undertook a comprehensive audit across all the reports generated by SBSS and BOXI. Each centre was provided with a report auditing template to complete. Due to severe capacity restraints within the service across the lifetime of the Data workstream, there were challenges in getting completed returns of this audit. On the back of the responses received, a development day was held – attended by all six centre managers – to discuss report rationalisation, identify duplicates, and flag reports for retention, archiving or further investigation by the NUG.

A paper summarising the outputs of this activity will be taken to the NUG in May 2025, seeking commitment to continue work to streamline the remaining reports. It also asks the group to provide governance, training and QA support for the longer-term development, maintenance and usage of reports within Breast Screening. See **Appendix D.1** for details.

Identifying Inequalities: Scottish Breast Screening Programme

The SLWG also identified that there were particular challenges around the collection of Inequalities data which have made it difficult to monitor and address inequalities in Breast Screening.

An additional piece of work was undertaken to review available inequalities data for breast screening and understand the use of data on clients' special requirements across the service.

A report entitled "Identifying Inequalities: Scottish Breast Screening Programme" was developed which made recommendations to improve health inequalities data and inform interventions to address any inequalities. See **Appendix D.2** for details

The recommendations made in the paper are incorporated into the overarching Data Strategy.

Data Strategy

The Data SLWG also identified the need for a longer-term vision and strategy for the capture and use of data in Breast Screening.

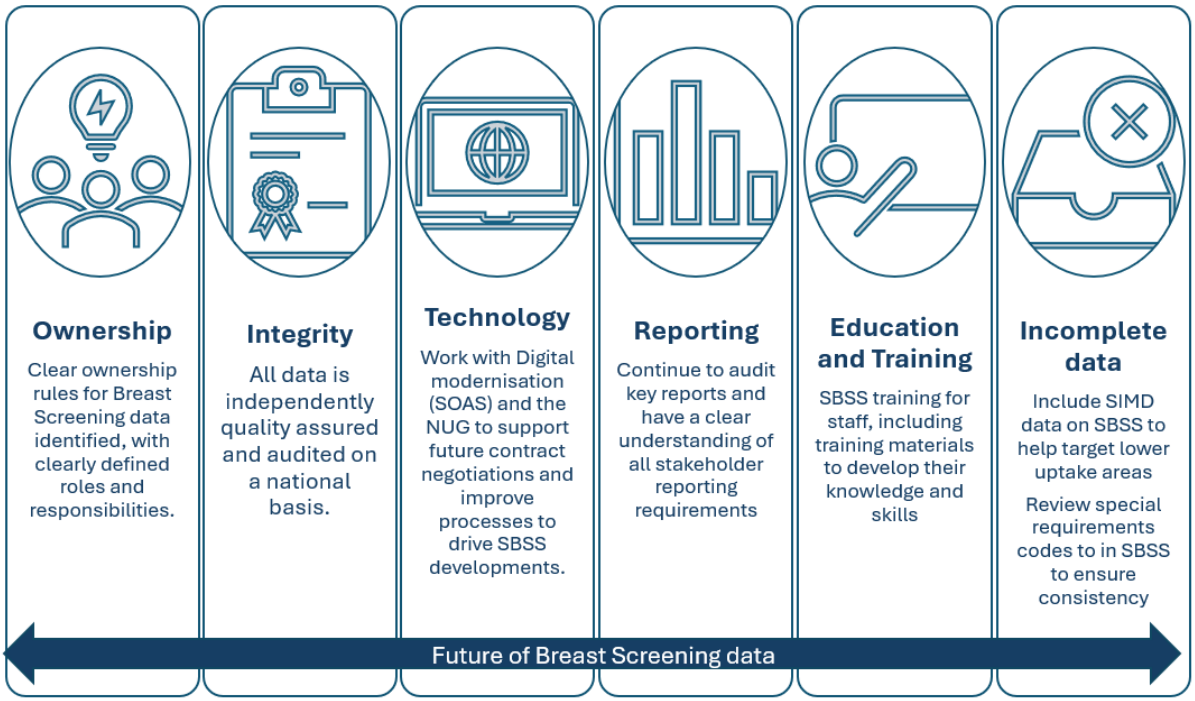
Aligned to the Modernisation Programme's vision, the strategy sets out to identify the steps to make better use of data to improve the efficiency and effectiveness of the programme and improve the benefits for participants.

To develop the strategy, the SLWG:

- identified the key challenges facing the service regarding ownership, integrity, technology, reporting, education and training and completeness of data
- set out what the future might look like via a clear vision and agreed outcomes

  developed a focused action plan to concentrate future effort and resource with a set of short-term, medium-term, and long-term actions

The current challenges and desired future state are summarised below.



See **Appendix D.3** for the full Data Strategy.

Call / Recall

A review of the Call/Recall system was recommended by the 2021 Review. The current practice is for participants to be called for screening according to the GP practice where they are registered. Over the years this has led to several issues for screening, and a high-level options appraisal conducted for the review concluded that some combination of postcode and date of last screen / next due date should be considered in its place. This had been an exploratory appraisal only and the proposed changes were never scoped or costed.

The Modernisation Board considered the recommendation and agreed (in November 2022) to establish a SLWG to examine the issue, focussing specifically on the current challenges with the Call/Recall system and any potential improvements. The work was chaired by Marion Inglis, Business Manager for the West of Scotland Breast Screening Centre, and Sarah Philip, Breast Services Manager for the North East Scotland Breast Screening Centre.

It was noted that a number of improvements had already been made to SBSS since the publication of the Review which had helped to address some of the concerns in the original analysis.

Challenges and recommendations

Initial discussions highlighted several issues with the current system and scheduling process including a lack of support for individual participant round length management, the increasing impact of GP moves and practice mergers, and the need for extensive manual processes and workarounds to compensate for these deficiencies.

Key recommendations identified by the SLWG and the Modernisation Board included:

- Improving flexibility of scheduling within SBSS (e.g. by location across multiple GP practices) to improve adherence to the target 36-month interval between screens, ease some of the pressures on the system and staff and reduce the need for manual workarounds.
- Improvements to the management of special requirements (e.g., recording, detecting and planning around them, national SOPs for consistency).
- Access to better population data and forecasting tools to help with capacity planning and siting of vans.
- Identifying opportunities for clients to manage changes to their appointments, allowing time for admin staff to perform duties other than answering phones or outbound calling.
- In the longer term, scoping and developing options for a potential move from practice-based calling towards Call/Recall based on individual screening round times.

Progress and outcomes

Given the pressures on the system and the limited capacity within the service to support change, the group focussed on developing proposals to improve the flexibility of scheduling within SBSS to improve the management of screening intervals and ease staff pressures.

A scoping session was held with key stakeholders to define the required changes. An SBAR outlining a set of improvements to the booking process and functionality within SBSS – principally a form of location-based calling – was reviewed by NSD Senior Management Group in December 2022 and approved by both the Breast Screening Programme Board (January 2023) and the Breast Screening NUG (February 2023). The changes were then prioritised by the NUG and submitted to the supplier for costing and development.

An initial date was scheduled for development to take place in 2024, but work did not proceed owing to limited resource and the need for the supplier to prioritise changes required by other national developments.

Current position

Since that time and given the lack of progress with the initial changes proposed, the SLWG has reconsidered the position, and a decision has been made (proposed by the Breast Screening NUG and supported by the Modernisation Board at its meeting in October 2024) to re-examine the feasibility of moving to postcode-based calling. This had initially been considered a major challenge, but conversations with the IT supplier (Atos), the programme team and centre managers had reassured the SLWG that it would be possible and worth exploring further given the potential benefits.

A proposal is now being progressed by the service via the Breast Screening Programme Board, highlighting the changes required and the key risks and benefits

(see **Appendix E.1** for further details). The main risk identified was that the change could impact the service for the next two screening rounds (up to six years) as the new processes were embedded and any issues with postcodes matching to locations were resolved. Intervention from the service and additional reports might be required to ensure that women were not offered additional screening appointments as a result. The benefits focus on reduction in the severe burdens that GP practice mergers are imposing on the service currently, an improvement in adherence to the 36-month target interval (once the changes were fully bedded in), and better support for participants to be screened at locations convenient to them.

It is recommended that a dedicated project and testing team is allocated for this initiative as the complexity and demands of the work would mean that it could not be absorbed within the workloads of existing teams.

Equipment

Ownership of Breast Screening equipment sits in historical and complex arrangements between the six host Boards and NSD, with replacement increasingly proving to be a challenge for the Breast Screening service.

The equipment workstream was established to address the following longstanding issues:

- **Host Board[5] owned equipment** - Ownership of screening equipment, mammography, ultrasound but also IT infrastructure, viewing stations and computers within the centres sits with the Host Boards in which they are located. The replacement and some of the maintenance for this equipment is the responsibility of the host board. Capital funding for equipment is top sliced from all boards and provided to the host boards to run the screening service. With financial pressures on all health boards, the reality is there are competing needs for capital in which screening is often not seen as a priority.
- **NSD owned equipment** – Ownership of the mobile unit fleet and onboard mammography equipment belongs to NSD. They are responsible for the procurement, installation and maintenance of the fleet and equipment across the entire service. Ageing equipment, alongside unreliable mobiles, means it has become more difficult to operate the mobile service, with increasing outages leading to reduced capacity and increased screening intervals. Downtime on one mammogram machine or single mobile equates to 50 lost client appointments per day.
- **Fallow equipment -** There is a recognition that a significant number of mammography machines sited within health facilities, across the country, lie fallow for periods of time across a given week. These machines are typically used by the local symptomatic services. It is generally accepted that these machines could provide extra capacity for the screening service. This would need some minor adjustments, medical physics oversight and access to

[5] 5

SBSS, but the potential exists to use this fallow time to support additional capacity for screening. This spare capacity could reasonably be used to cover peaks and troughs in demand, slippage within the programme or as part time static satellite screening sites.

- **Consumables -** There is no centralised procurement system for the consumables required by the service. This includes items like needles and surgical equipment for assessment clinics. Without centralised procurement, each centre is exposed to different costs for these items given quantities utilised across their NHS Board, meaning some centres are paying more than others for the same things.

Exploratory conversations with National Procurement and NSD took place to determine first steps in addressing these issues. It became apparent that the issues facing the Breast Screening service are widespread across Scotland, with demand for capital replacement across the NHS exceeding the available funding.

The advice provided by National Procurement was to integrate capital replacement requirements for the screening service with wider needs across NHS Scotland. All Health Boards and NSS have now developed five-year capital replacement plans which form a “Whole System Infrastructure Plan”. For those Health Boards who are commissioned to provide a breast screening service, the centre equipment will be included within the board’s plan. However, each health board has competing demands and breast screening equipment may not be identified as requiring replacement within the next five-year plan.

Medical Physics

One of the strengths for Breast Screening equipment is the Scottish Breast Screening Medical Physics team. This small expert team within NSS is commissioned to provide a service to the SBSP and are responsible for QA, commissioning and testing of all Breast Screening modalities, with the mammography units currently covered by a fully comprehensive maintenance contract. The Physics team also undertakes important research in the field of screening technology and equipment. This service functions at a high level but is under increasing pressure with testing, checks and upgrades to failing equipment. Discussions with the Medical Physics team particularly highlighted the downtime associated with the ageing mobile fleet and the downstream impact on capacity that this produces.

Equipment conversations and developments to whole system plans are ongoing with timely replacement plans critical to minimise current issues with the mobile fleet and mammographic units.

Discussions with representatives from modality suppliers were also held. Suppliers are well aware of the financial pressures and are exploring new and different finance options around procurement to help spread the capital costs for the NHS e.g.

personalised managed services for equipment. Further discussions regarding these options could be fruitful.

The new management model for the SBSP would facilitate a more co-ordinated and coherent capital replacement programme. However, capital funding arrangements would require to be reviewed in order to allow the service to set priorities against a budget rather than relying on NHS Boards. As a next step it would be helpful to extract information from NHS Board plans to develop an interim whole system infrastructure plan specifically for breast screening modalities to oversee full replacement and resource requirements.

Additional candidate projects

The Modernisation Board also identified a set of potential projects which did not fall directly under any one theme, but which nevertheless contributed to achieving the Programme Vision and Outcomes or addressed specific recommendations from the Review. Others were identified as being principally the responsibility of Host Boards to progress. These ideas for candidate projects included:

- Use of static 'satellite' centres to supplement and support mobile provision
- Improving engagement with Primary Care on the promotion and support for Breast Screening
- High risk / family history screening
- Over-70 age group self-referrals
- Co-location of symptomatic and screening services
- Risk stratification / targeted screening
- Call/Recall improvements
- Developing a national approach to how participants with special requirements are accommodated
- Improving information and handling for participants as they become eligible for screening
- Improving opportunities for cross-boundary working

The Modernisation Board was unable to progress some of these directly owing to capacity constraints, or because it was judged that the issues were best handled by the local host NHS Boards.

Static sites

The South East Scotland Breast Screening Centre (SESBSC) proposed to the review team in 2019/20 that screening could be delivered in static satellite centres throughout the region and that many of the issues faced with the use of the mobile units could be overcome. The move to more static locations could also meet many of the recommendations of the review and break down some of the barriers to screening. It is thought that static sites could be of considerable benefit to the staff, the service and the eligible screening population. See **Appendix F.1** for further details.

Following discussions with colleagues in NHS Fife some scoping took place with a view to setting up the pilot satellite site within Queen Margaret Hospital in Fife. Further discussions and a site visit took place within the hospital and a suitable space was identified. Since then, a business case has been developed and has subsequently been approved by both NHS Lothian and NSS National Services Division.

It is possible that the use of a mixture of static and mobile screening units will provide a choice of venue and flexibility to meet the demands of the modern cohort of the eligible population. It has also been shown within the business case that the introduction of static sites can reduce the carbon footprint of the service and bring revenue savings, both of which are benefits to the wider NHS and environment.

While the continuation of this work and implementation of the business case will be supported by the business as usual screening service, the Modernisation Board formally endorses this direction of travel and believes an increase in static sites across the central belt will drastically improve the sustainability and resilience of the service.

Primary Care engagement

The Modernisation Board asked the programme team to explore how engagement with primary care services has evolved across Scotland and whether this meets the current needs of Primary Care Teams.

Initially, a small group of GPs was surveyed to get a picture of their current engagement with Breast Screening services and how this reflected their needs. As more interest in the conversations developed, two informal networking and knowledge sharing sessions were arranged across 2023-2024, bringing together wider representatives from across Breast Screening and wider primary care.

It became clear that while there is a level of engagement between the two sectors, more specific engagement could be undertaken to support professionals and participants. Further information can be found in **Appendix G.1**; however key findings and associated recommendations from the exercise include:

- There are excellent screening educational resources available to NHS staff in Scotland
  There is a need for these to be widely disseminated, better promoted, and activity encouraged and audited.
- There is significant variation in screening promotional activity across Scotland, with much being lost because of changing practice within primary care during Covid. There are excellent local initiatives and a willingness to share these via the Equity in Screening Network but no organisation is truly coordinating or sharing these at present.
  There is a need for clear sharing protocols, which could be done via the CPH Leads Board Coordination group.
- There is a genuine need for coordination and oversight, but CPH Leads are over-stretched.

CPH Leads need a forum to articulate what they need for this role. There seemed to be some support for CPH Leads Board Coordination group to do this, potentially through a standing agenda item for their meeting.

- Role of Equity in Screening Network, reviewing data and good practice. More information from this group to the Screening community would be helpful and should be included in their outputs, with consideration of a standing update item for CPH leads.
- Sharing good practice/network opportunities
  There is enthusiasm for the suggestion of an annual meeting between CPH Leads and interested parties in Primary Care. This could be developed as a successor to the current SLWG. Primary care will be invited to attend equity network learning events online.
- Data needs for Primary Care were discussed.
  The data received by primary care from screening needs reviewed and updated so that the information coming out reflects the needs of primary care and their patients. A focused SLWG should be considered to support primary care data needs and engagement if a move to postcode-based calling takes place.

High risk / family history screening

Consideration of the incorporation of high risk and family history screening within the mainstream Breast Screening programme was identified as one of the recommendations from the 2021 Major Review.

Unlike in the English programme, this client group is not included in SBSP but is provided for on a dispersed basis within the symptomatic breast clinic network in individual health boards. The frequency of screening and definitions are determined by UKNSC, but the delivery of the service varies greatly between and within Health Boards. How clients are identified, called, reported and assessed are all controlled by the local symptomatic service. As a result, the current provision is not subject to the same formal quality assurance standards and programmes as the age-based population screening undertaken between 50-71 yrs by SBSP.

A change to this delivery was considered as part of the Modernisation Programme, with a presentation from Fiona Rowan to the Modernisation Board highlighting some of the benefits of including this in the national screening programme. The Board acknowledged that were we introducing a Breast Screening programme *de novo*, it would include high risk and family history clients. However, while it was generally agreed that it would be beneficial to include high risk and family history screening within the mainstream Breast Screening Programme, this would require a policy decision from Scottish Government supported by major investment to deliver the required changes to IT infrastructure, processes, pathways and communications, which were not within the scope of the Modernisation Programme.

Over 70 age group self-referrals

At the time of the 2021 Major Review, self-referrals for this age group had been suspended as capacity was still constrained following the Covid pandemic. The Review had recommended that the programme should continue to support self-referrals until the outcome of the AgeX Trial in 2026, but that while capactity continued to be constrained following the Covid pause it was not yet appropriate to reinstate this option. The Board supported this recommendation and agreed early on that this issue was more appropriately dealt with under BAU.

Background: Over 70's age group self-referrals

Mortality reduction – the ultimate goal of screening – lessens with increasing age, and from the outset of the programme there has been an upper age limit of 71 years for routine screening. Clients above this age have been able to remain part of the screening cohort by self-referring for mammography every three years.

There are some issues arising from this policy:

- This group comprises approximately 7-8% of the overall workload and as such, represents a significant additional unfunded workload. This cohort tends to be disproportionately from higher socio-economic backgrounds which works against stated aims of equity in screening.
- During Covid recovery, because of lost capacity and high slippage, the decision was made to suspend self-referral for screening by clients over 71. This was seen a necessary step to recovery for the target population but was unpopular in the media and amongst clients.

Some of these issues will be addressed by the age extension trial, AgeX, currently running in the UK and due to report early results in 2026. This study is likely to influence future decisions about upper and lower age limits for Breast Screening in the UK and hence for SBSP. Until such time that this study reports, self-referral remains unchanged as part of SBSP and was fully re-instated in a phased manner from 2021.

Co-location of Screening and Symptomatic Breast Services

The potential co-location of Breast Screening with symptomatic breast services, preferably in stand-alone premises, has been an aspiration for SBSP for some time.

It offers many advantages, particularly with respect to funding and convenience for any shared staff, and for clients and patients. It has widespread support amongst clinical staff, surgeons and radiologists, and with wider staff groups. Co-located centres have been implemented in many health boards in England with great success, and are widely considered to be the ideal model. Within the SBSP it has been possible for this to be partially implemented in the smaller units (Highland, Tayside and Grampian, and more recently in Ayrshire and Arran), but there has been no appetite to make the change in the two largest Health Boards owing to historical models and legacy symptomatic services in central Scotland.

However, it remains an aspiration for the future SBSP and has been considered in other workstreams rather than in a separate project. We anticipate that exploring this change will become the responsibility of the proposed national service but recognise that to make this a reality in the central belt, it needs to be owned and sponsored by individual health boards.

In practice, this aspiration may be facilitated by some of the Modernisation Board recommendations particularly the new management model. It would require the local symptomatic breast teams to articulate the need and to drive the change if it is felt to be beneficial. Close collaboration with SBSP would be needed, and transition and upfront costs would need to be agreed.

Risk stratification/targeted screening

The Board discussed risk stratification and targeted screening as one of the recommendations from the 2021 Major Review. Currently only breast density sits within this bracket as an independent risk factor. The UK NSC plans to undertake an evidence review around risk stratification based on breast density over the course of the next twelve months. It will be some time before a formal recommendation will be made.

The Modernisation Board gave significant thought to this recommendation, but it was not prioritised as one of the main workstreams because of the cost and complexity of the undertaking that would be required. To take forward, Scottish Government would need to commission this as a separate scoping exercise.

2021 Major Review of Screening – Recommendations

As part of programme closure, the programme team reviewed the 17 recommendations from the 2021 Major Review of the Scottish Breast Screening Programme to assess their relevance to the Modernisation Programme, their current status and the extent to which they have been addressed within the Breast Screening Modernisation Programme and/or Business as Usual (BAU).

As discussed above a number of the recommendations had already been addressed or were no longer relevant given the passage of time between the completion of the Major Review and the start of the Modernisation Programme. Others were picked up by the Breast Screening Programme itself as part of BAU changes and improvements.

The below presents a summary of the outcome for each of the recommendations.

- **Category / Outcome**
  Recommendations addressed or partially addressed by the Modernisation Programme

2021 Major Review Recommendations

1. Develop a new approach to call-recall

7. Improve the understanding and perceived value of Breast Screening

8. Increase the convenience of appointments

9. Improve the acceptability of Breast Screening

10. Increase the user-friendliness of screening venues

11. Development of an overarching workplan for the Scottish Breast Screening Service

14. Development of a single, co-ordinated capital replacement programme for mammographic x-ray units

15. Streamlining of reporting

17. Improve data availability, and data reporting across the Scottish Breast Screening Programme.

- **Category / Outcome**
  Recommendations being progressed as part of BAU or by Host Boards

  2021 Major Review Recommendations

  2. Developments to Scottish Breast Screening System

  3. Static satellite screening centre provision

  5. Managing invitations for women currently on treatment or follow-up for breast cancer

- **Category / Outcome**
  Recommendations already completed as part of BAU

  2021 Major Review Recommendations

  4. Over 70 self-referrals

  13(b). Use of digital breast tomosynthesis (DBT) in the assessment setting

- **Category / Outcome**
  Recommendations which were superseded, out of scope for the programme, or external dependencies

  2021 Major Review Recommendations

  6. Family History/High Risk screening

  12. Scotland's Digital Strategy for Screening

  13(a). Scotland's Digital Strategy for Screening

  16. Development of a Quality Management System

A full analysis of the status and outcomes for each recommendation is shown in **Appendix H.1**.

Aspirations for the future

A number of topics which have been raised over the life of the Board sit in a group of projects which are desirable but were not possible during the life-time of the Programme. Many of these are client-based and focus on improved access, communications and education. Some of them could be implemented through BAU – a process which would be facilitated and simplified under the new management model.

We would like to highlight these as potential workstreams for the future:

- 50-53 years: Should there be communication with participants from 50 onwards, raising awareness of their eligibility and advising about potential dates for screening in their locality?
- Better telephony and texting facilities: one source of reputational damage for the service is slow response time to telephone calls. Could a national contact centre prove to be cheaper and a more efficient way to deal with enquiries?
- Online access to change appointments: This facility is popular in some primary care settings with systems already developed, linkage with SBSS or its successor needed.
- Cross boundary appointments: This should be possible under the new management model.
- HIS standards: We identified that there would be significant benefit from collaborating with HIS on updating the Breast Screening QA standards. This is part of a rolling action across all Scottish screening programmes,
- Informed choice: it is difficult to properly assess the level of knowledge and understanding in target population. Regular audits of both participants and non–attenders would inform and focus promotional activity. Accessible educational materials to improve education and debate around Breast Screening: communicating the availability of these could be improved.

Future & next steps

With the submission of this Final Report to Scottish Government, the work of the Breast Screening Modernisation Board is complete, and the Board and associated Programme Team will be stood down.

The report and appendices will now be considered by Scottish Government, and their approval and dedicated funding will be required to progress the ideas further. It is the view of the Modernisation Board and the team that the survival of the Breast Screening Service now depends on implementation of these measures.

A real driver to deliver the Modernisation Programme and define these proposal has come from the motivation of our stakeholders to enact sustainable change and their enthusiastic engagement with the work of the Modernisation Board. This motivation and energy should not be lost, as with any delay in the implementation of these proposals, there is an increased risk of a loss of momentum and engagement within the service. The closure of the Modernisation Board will also leave a significant gap in the opportunities for innovative and future-focused thinking within the service.

In the eyes of the Modernisation Programme, the key step to be taken would now be to commit to the new Management Model and move towards a single national breast screening service. This would be a key enabler to many of the other recommendations within this report, including implementation of the recommendations of the National Workforce Plan, under a single national leadership team.

Chair's closing remarks

This report is the culmination of three years hard work and commitment on the part of the Modernisation Board, SOAS, the Programme Team and the staff of the Scottish Breast Screening Programme (SBSP).

Scottish Government support for a Modernisation Board for the Scottish Breast Screening programme was visionary. Following their acceptance of the recommendations of the 2021 SBSP review, the impact of the pandemic, the shutdown and the recovery, it was clear that the Breast Screening service was genuinely in need of some reform.

I was grateful for their acceptance that this would be a three-year programme of work as a minimum and for the huge support that was provided via NSS in the form of the programme team and the senior screening team at NSS.

Breast Screening in Scotland is at a crucial point in its existence. Diversification of practice at Board level has led to varied and inconsistent delivery for our target population. Waiting times and slippage remain higher than is acceptable. Staffing and recruitment continue to be challenging, with vacancies reducing capacity throughout the country, and equipment and facilities outages having a similar impact. Through all these challenges, the leadership within the programme faces an increasingly difficult task keeping the service running as they and the clients would wish.

Breast Screening also sits in a marginal position within health service provision. It plays strongly to the public health agenda and is enormously popular with the public. However, it is expensive and in straitened national financial circumstances, it needs to be performing to, and above, the QA standards in order to continue to deliver the mortality benefits that justify its costs. This will require investment and support, without which the programme is at risk of further deterioration.

The recommendations made in this report represent an opportunity for us to sustain and rejuvenate what is undoubtedly a cherished and well-respected public health programme.

From the start, there has been a consistent and sustained consensus within the Board and the wider Breast Screening Community about what needs to change and why. Priorities were agreed early on and the Board and members of staff within the Service have given their time unstintingly to complete the workstreams for the Board.

We have done the very hard work to show what we think the service needs. This has delivered realistic and achievable projects for a sustainable, safe, effective and resilient screening programme. It is up to Scottish Government to decide if they happen.

Marzi Davies
Chair, Breast Screening Modernisation Programme
April 2025

Acknowledgments

The Breast Screening Modernisation Programme Chair and the Programme Team wish to express their enormous gratitude to all those who have supported and participated in the activity of the Modernisation Programme.

In particular we would like to thank the following:

- The Scottish Government Screening Policy Team for their commitment to Breast Screening and for having the foresight and vision to give us the opportunity to develop this report.
- All the members of the Modernisation Board, its Short-Life Working Groups and the Management Model Reference Group, who have given their time, energy and ideas over the course of the programme.
- The Clinical Directors, Superintendent Radiographers and Breast Screening Centre managers from the six centres in Scotland, who have found time to support the work of the Programme alongside the day-to-day running of a Breast Screening Service still recovering from the impact of Covid-19.
- Those who chaired the Short-Life Working Groups and associated projects: [Name redacted] (Workforce), Gerald Lip (Data), Marion Inglis and Sarah Philip (Call/Recall), and Julie Carmichael (Static sites).
- Colleagues within Primary Care and the wider Breast Screening community who took part in discussions on improvements in engagement, in particular Dr Lorna Porteous and [Name redacted].
- David Dall (NHS Tayside), Susan Walker and Louise Mitchell (National Partnership) for their invaluable input and guidance on HR and Partnership considerations.
- Fiona Murphy (Breast Check Ireland) and [Name redacted] (Scottish National Blood Transfusion Service) for their advice and guidance during the development of our new Management Model.
- Gareth Brown, Scottish Director of Screening and Tasmin Sommerfield, National Clinical Advisor and Deputy Director of Screening, Screening Oversight & Assurance Scotland for their support and guidance throughout.

On a personal note as Chair, I would like to extend my grateful thanks to the Breast Screening Modernisation Team: Gareth Brown, Tasmin Sommerfield, Alison Fraser, Edmund Rooney, Kyle Stuart and Michelle Martins. I have worked with many exceptional teams over the course of my professional career, and this is one of the very best. Knowledgeable, skilled, professional and imaginative, they have guided and supported this enormous project with humour and dedication above and beyond the needs of their assigned roles. It has been an honour and a privilege to work with them all.

Glossary and abbreviations

The following special terms and abbreviations are used in this report.

Term or abbreviation and descriptions:

BAU - Business as usual – the everyday operational activity within a service

BSM - Breast Screening Modernisation

CPD - Continuing Professional Development

KC62 - NHS Breast Screening Programmes Central Return Data Set – a national report, demonstrating adherence to national standards and service KPIs

NSD - National Services Division, NHS National Services Scotland

NSO - National Screening Oversight (predecessor to Screening Oversight & Assurance Scotland)

NSS - NHS National Services Scotland

NUG - National User Group

PHS - Public Health Scotland

SBSP - Scottish Breast Screening Programme

SBSS - Scottish Breast Screening System (national IT system used to plan, schedule, appoint and manage screening participants across a three year screening round)

SESBSC - South-East Scotland Breast Screening Centre

SG – Scottish Government

SIMD - Scottish Index of Multiple Deprivation

SLA - Service Level Agreement

Slippage - Term to describe when there are general delays to offering appointments to participants within the expected standards (i.e. 36 month screening rounds)

SLWG - Short Life Working Group

SNBTS - Scottish National Blood Transfusion Service (NHS National Services Scotland)

SOAS - Screening Oversight & Assurance Scotland (function hosted within NHS NSS under the Scottish Director of Screening to oversee and seek assurance on the delivery of the six national screening programmes in Scotland)

UKNSC - UK National Screening Committee (body which advises the four UK nations on recommended screening requirements for their eligible populations)

WTE - Whole-time equivalent

Appendices

Appendix A: Breast Screening Modernisation Board

A.1 Breast Screening Modernisation Board Terms of Reference

A.2 Board Membership 2022-2025

A.3 SLWG Memberships 2022 - 2025

Appendix B: Management Model

B.1 Management Model Business Case and Target Operating Model

B.2 Management Model development Communications and Engagement Plan

B.3 Draft Sample National Clinical Director Job Description (Illustrative)

Appendix C: Workforce Plan

C.1 National Workforce Plan for Scottish Breast Screening Service 2024-2029

Appendix D: Data

D.1 Paper to SBSS National User Group (NUG)

D.2 Identifying inequalities – Scottish Breast Screening programme

D.3 Breast Screening Data Strategy

Appendix E: Call/Recall Access

E.1 SBAR Practice Calling Breast Screening Programme Board 18Dec2025

Appendix F: Static Sites

F.1 SESBSC Satellite Static Sites summary 2025

Appendix G: Primary Care

G.1 Primary Care Re-engagement Summary

Appendix H: Other

H.1 2021 Major Review of Breast Screening - Recommendations

This publication is available at **www.gov.scot**

Any enquiries regarding this publication should be sent to us at

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-80643-412-1 (web only)

Published by The Scottish Government, November 2025

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1666086 (11/25)

w w w . g o v . s c o t