

Breast Screening

Standards

June 2019

We are committed to equality and diversity. These standards are intended to support improvements in healthcare for everyone, regardless of their age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation, socio-economic status or any other status. Suggested aspects to consider and recommended practice throughout the standards should be interpreted as being inclusive of everyone living in Scotland. We have assessed these standards for likely impact on the nine equality protected characteristics as stated in the Equality Act 2010. A copy of the impact assessment is available upon request from Healthcare Improvement Scotland's Equality and Diversity Advisor.

© **Healthcare Improvement Scotland 2019**

First published December 2018. Revised June 2019.

This document is licensed under the Creative Commons Attribution-Noncommercial-NoDerivatives 4.0 International Licence. This allows for the copy and redistribution of this document as long as Healthcare Improvement Scotland is fully acknowledged and given credit. The material must not be remixed, transformed or built upon in any way. To view a copy of this licence, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/>

www.healthcareimprovementscotland.org

Contents

Introduction	4
Summary of standards	7
Breast screening standards	8
Standard 1: Leadership and governance	8
Standard 2: Information and support	12
Standard 3: Call-recall	14
Standard 4: Screening process	16
Standard 5: Recall for assessment	18
Standard 6: Surgical referral	21
Standard 7: Detection rates	23
References	26
Appendix 1: Development of the breast screening standards	28
Appendix 2: Membership of the breast screening standards development group	30
Appendix 3: Glossary	31

Introduction

Breast screening

Breast screening aims to reduce the number of deaths from breast cancer through early detection and treatment. Within NHSScotland, the Scottish Breast Screening Programme (SBSP)¹ is a population-based screening service which can detect, at an early stage, breast cancer in women.

The Scottish Breast Screening Programme

The SBSP invites eligible women aged between 50 and 70 years to attend a screening appointment every 3 years. Along with their invitation, women receive information about the benefits and disadvantages of breast screening to encourage them to make an informed choice whether or not to undergo breast screening.

Women who have had a bilateral mastectomy do not require breast screening. Women who have previously chosen to opt out of being called for breast screening can opt back in by contacting their local breast screening centre. Women 71 years of age and over are able to self-refer for screening.

Organisations involved in the Scottish Breast Screening Programme

Territorial NHS boards – each of the 14 territorial boards has responsibility for planning, delivery and governance of the SBSP to eligible women resident within their board area.

The SBSP is provided through host board screening centres in Aberdeen, Inverness, Irvine, Glasgow, Dundee and Edinburgh. Each host board has a static base and mobile trailers to provide the screening service to the population served by the 14 territorial boards. The SBSP uses a national IT system to manage the call and recall of women for breast screening.

National Services Division (NSD) – NSD has a multifaceted role within the SBSP to:

- commission elements of the screening programmes
- support national coordination
- support quality assurance, and
- support implementation and delivery.

Organisations, including the Scottish Government, NHS National Services Scotland and Healthcare Improvement Scotland, are also involved in supporting the SBSP.

While territorial boards work in partnership with a range of organisations, each has responsibility and accountability for the delivery of a high quality, safe and effective breast screening service to its resident eligible population.

Healthcare Improvement Scotland has developed these national standards to support organisations and health professionals to provide a high quality breast screening service.

Policy context

The UK National Screening Committee (UK NSC) sets screening policy for breast screening throughout the four nations. The Scottish Screening Committee has strategic oversight of screening services in Scotland and considers the implementation of all UK NSC recommendations in the context of specific Scottish circumstances.

The Scottish Government's Detect Cancer Early programme aims to improve outcomes from cancer through early diagnosis and treatment. Part of the programme supports data collection to monitor progress and to raise awareness of national cancer screening programmes.²

In 2016, the *Clinical Standards for Breast Screening* published in 2002 were identified by Healthcare Improvement Scotland for revision.

These revised standards should be read alongside relevant legislation and are intended to complement existing guidelines and standards, including Public Health England's Breast Screening Programme consolidated standards³⁻⁸. The Public Health England standards provide a defined set of measures that screening providers must meet to make sure local services are safe and effective, and where relevant we have incorporated the respective performance measures within Healthcare Improvement Scotland's breast screening standards.^{3,9}

Quality of care approach and framework

The breast screening standards are a key component in supporting the SBSP approach to quality assurance. Monitoring and improving performance against these standards, at a local and national level, aims to improve the quality of the SBSP.

External quality assurance of screening programmes will be delivered using Healthcare Improvement Scotland's quality of care approach and the quality framework.³ This approach specifies how Healthcare Improvement Scotland will design and deliver external quality assurance activity to support improvement in healthcare.

Healthcare Improvement Scotland's approach emphasises the importance of regular open and honest programme self-evaluation using the quality framework as a basis, and combined with other relevant data and intelligence, including performance against these standards.

Scope of the standards

These standards apply to all services involved in the delivery of breast screening within NHSScotland and cover the following areas:⁴

- leadership and governance
- information and support
- call-recall
- screening process
- recall for assessment

- surgical referral, and
- detection rates.

Format of the standards

All our standards follow the same format. Each standard includes:

- a statement of the level of performance to be achieved
- a rationale providing reasons why the standard is considered important
- a list of criteria describing the required structures, processes and outcomes
- what to expect if you are a person experiencing care
- what is expected if you are a member of staff, and
- what the standards mean for organisations, including examples of evidence of achievement.

Within the standards, all criteria are considered ‘essential’ or ‘required’ in order to demonstrate the standard has been met. NHS boards are responsible for implementing the breast screening standards to assess quality and support improvement in breast screening services. The detailed implementation of these standards is for local determination.

More information about the development of the standards is set out in Appendix 1.

Terminology

Wherever possible, we have incorporated generic terminology which can be applied across all health settings.

The term ‘woman’ refers to all individuals with a female Community Health Index (CHI) number. This includes transwomen who change the gender of their CHI number to female, transmen⁵ and women not registered with a GP.

‘Eligible women’ refers to women from 50 to 70 years who are routinely invited for breast screening every 3 years; from the day of their 50th birthday until the day before their 71st birthday (70 years + 364 days).

There are a number of terms specific to the breast screening service which are defined in the glossary in Appendix 3.

Summary of standards

- Standard 1:** Scotland has a high quality and effectively-led breast screening service with robust governance arrangements.
- Standard 2:** All eligible women receive information and support about breast screening to enable informed choice and decision-making.
- Standard 3:** All eligible women are invited for breast screening once every 3 years.
- Standard 4:** Breast screening is safe, effective and person-centred.
- Standard 5:** The recall process for further assessment is safe, effective and person-centred.
- Standard 6:** Women are offered timely referral to the surgical team for further treatment, where required.
- Standard 7:** The number of breast cancers detected is monitored to improve outcomes.

Breast screening standards

Standard 1: Leadership and governance

Standard statement

Scotland has a high quality and effectively-led breast screening service with robust governance arrangements.

Rationale

Population-based breast screening for eligible women can reduce the number of deaths from breast cancer through early detection and treatment.

Each territorial board in Scotland has responsibility for planning, delivery and governance of breast screening for eligible women resident in their respective area⁶ with a screening coordinator responsible for overseeing service delivery, quality and effectiveness.⁷

There are six breast screening centres, hosted within six territorial boards, that provide operational management for the breast screening service covering all territorial boards. The centres are led by a clinical director or lead clinician.⁷ A number of medical or clinical specialties are involved in the delivery and assurance of breast screening, for example radiographers, clinical nurse specialists, surgeons, radiologists and pathologists. Staff are provided with training appropriate to their role and responsibilities, including access to continued professional development.

Effective governance arrangements, including adverse events management, data monitoring and a strong approach to access and uptake, are critical for the delivery and assurance of breast screening.⁷ Research highlights that access and uptake of population-based screening programmes is lower in some protected characteristics groups.⁸ All territorial boards should continue to review their approaches to engaging with groups identified as least likely to attend for screening to ensure that all eligible women have equity of opportunity to access breast screening.

Criteria

- 1.1** NHS boards have systems and processes in place to demonstrate:
- the implementation and monitoring of breast screening national guidance and standards^{6, 9, 10}
 - a multidisciplinary approach to breast screening, including assessment and referral for treatment
 - implementation of policies and processes to ensure equity of opportunity for all eligible women to access breast screening
 - the adoption of consistent documentation and data collection to support benchmarking against quality outcomes and audit, and

- ongoing quality monitoring, assurance and improvement, including offering women the opportunity to provide feedback on their experience.
- 1.2** NHS boards demonstrate a commitment to addressing health inequalities¹¹ in breast screening through:
- identifying and engaging with women who may experience barriers in attending for breast screening
 - implementing strategies to maximise uptake with women who experience barriers, across the breast screening pathway, and within the principles of informed choice, and
 - active membership of the Screening Inequalities Network.
- 1.3** NHS boards have agreed care pathways to:
- provide timely and person-centred access to breast screening, recall for screening, and referral for further assessment, and
 - ensure timely communication and transfer of information between public health departments, primary care, secondary care and breast screening centres.
- 1.4** NHS boards have a public health lead acting as the breast screening coordinator.
- 1.5** NHS boards have a clearly written and structured adverse events process in place in line with local and national policy, which includes:
- accountability and responsibility arrangements for reporting any adverse events
 - a standard and consistent approach to reporting
 - a documented escalation process for adverse events, and
 - mechanisms and arrangements for implementing learning from adverse events.
- 1.6** NHS boards ensure that staff delivering any aspect of breast screening have:
- a person-centred, sensitive and compassionate approach
 - undertaken training and continued professional development (CPD) appropriate to their roles and responsibilities
 - maintained competency through CPD and participation in audit and quality assurance
 - an understanding of governance arrangements, including reporting mechanisms for adverse events, and
 - access to national professional guidance, standards and training for breast screening.

- 1.7** NHS boards can access a robust national IT system which enables data collection, supports governance procedures and meets service requirements.
- 1.8** Each breast screening centre has a designated lead clinician.
- 1.9** Each breast screening centre participates in:
- multidisciplinary internal reviews
 - 3-yearly peer reviews, and
 - external quality assurance processes.

What does the standard mean for women participating in breast screening?

- Women:
 - are supported to provide feedback on their experience
 - can be confident that their local breast screening service has effective leadership and robust governance arrangements, and is committed to quality improvement, and
 - can be confident that NHS staff will work together to provide compassionate, high quality and timely care, and that their information will be shared appropriately.

What does the standard mean for staff?

- Staff:
 - have clear guidance on how to report and escalate adverse events
 - can demonstrate knowledge, skills and competencies relevant to their role and responsibilities, and are supported to attend appropriate training and CPD activities
 - have an understanding of, and can access, care pathways, standards and guidance
 - are aware of their role within the multidisciplinary team, and
 - have access to a national IT system when recording and reviewing data.

What does the standard mean for NHS boards?

- NHS boards:
 - have robust governance arrangements in place demonstrating roles, responsibilities and lines of accountability, including adverse event management
 - ensure coordinated, person-centred pathways for access and uptake of breast screening are developed and implemented
 - have safeguard processes in place for the purpose of monitoring breast screening
 - ensure barriers to access and uptake are understood and action plans are in place to minimise barriers
 - record and monitor data and undertake quality improvement and assurance processes to ensure performance against standards and outcomes, and
 - ensure that staff are provided with suitable and regular training and CPD.

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Documentation describing lines of accountability, roles and responsibilities, and escalation of adverse event reporting.
- Multidisciplinary working, including involvement of professionals, care pathways, and local and national standard operating procedures.
- Documentation demonstrating evidence of staff and team performance, for example audit activity.
- Demonstration of engagement with hard to reach and seldom heard groups, including action plans to increase uptake among protected characteristics groups.⁸
- Review of equality impact assessments and audit of engagement with hard to reach and seldom heard groups, with action plans to address health inequalities in breast screening.
- Demonstration of a timely and person-centred approach for women to access breast screening, recall for screening and referral for further assessment.
- Action plans demonstrating implementation of the breast screening standards.
- Improvement work including action plans, data collection and review of data (for example feedback from service users) and national benchmarking.

Standard 2: Information and support

Standard statement

All eligible women receive information and support about breast screening to enable informed choice and decision-making.

Rationale

The provision of high quality, accurate and reliable information is essential to support women to make an informed and considered choice whether or not to undergo breast screening. Information should be in an accessible format and include details of both the benefits and disadvantages of breast screening. Women are supported throughout the breast screening process.

Criteria

- 2.1** NHS boards ensure women are provided with national breast screening information, in a format and language appropriate to their needs which covers:
- why they have been offered breast screening
 - the benefits and disadvantages of breast screening to enable informed choice
 - what happens at a breast screening appointment
 - what test results mean
 - what happens at assessment, and
 - who to contact for support or further information.
- 2.2** NHS boards ensure women are provided with information on how to:
- self-refer
 - formally opt out of being invited to attend for breast screening, and
 - notify the breast screening service if they have previously formally opted out of breast screening but wish to opt back in.
- 2.3** NHS boards ensure that women:
- are fully involved in all decision-making relating to care and treatment, and
 - are given an opportunity, at an appropriate time to them, to discuss any aspect of decision-making relating to care and treatment.

2.4 Women diagnosed with breast cancer:¹²

- have their diagnosis communicated in the presence of a clinical nurse specialist, and
- are referred to a breast cancer multidisciplinary team, as local as possible, for care planning and treatment.

What does the standard mean for women participating in breast screening?

- Women:
 - receive information, which provides an overview of the breast screening process, including the benefits and disadvantages, to enable them to make an informed and considered choice about whether or not to undergo breast screening
 - are fully informed and involved in all aspects of the breast screening process, and
 - are given an opportunity at their screening appointment to discuss any aspect of the breast screening process and how the results will be communicated to them, and raise any questions or concerns.

What does the standard mean for staff?

- Staff offer a responsive and person-centred service with appropriate information for all women participating in breast screening.

What does the standard mean for NHS boards?

- NHS boards have systems and processes in place to ensure the availability of:
 - appropriate and timely information and support resources, and
 - a responsive and person-centred breast screening service.

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Evidence of information provided in alternative formats and languages.
- Evidence of support provided to women to make an informed and considered choice whether or not to undergo breast screening.
- Protocols for enabling women to access support services.
- Documentation relating to decision-making and informed choice for breast screening.
- Evidence of staff being supported to provide a responsive and person-centred service and information for women.

Standard 3: Call-recall

Standard statement

All eligible women are invited for breast screening once every 3 years.

Rationale

The aim of an effective call-recall system is to maximise the number of eligible women invited for breast screening.⁹ Women become eligible on their 50th birthday. All eligible women aged 50 to 70 years of age (70 years + 364 days) are invited for breast screening every 3 years.⁹ Eligible women are currently identified through Community Health Index (CHI) registration and invited to attend screening before their 53rd birthday.¹³

All eligible women are invited for routine breast screening as part of the programme unless they meet the exclusion criteria.⁹

The UK NSC has set performance thresholds for breast screening invitation, and uptake and recall rates to reduce breast cancer mortality and ensure breast screening takes place in a timely manner.⁹

Criteria

- 3.1** All eligible women will be routinely invited for breast screening:
- before their 53rd birthday, and
 - every 3 years until the day before their 71st birthday.
- 3.2** NHS boards ensure that all eligible women are invited for screening at 36-month intervals following their first invitation, in line with the NHS Breast Screening Programme consolidated standards:⁹
- acceptable: ≥90%, and
 - achievable: 100%.
- 3.3** NHS boards ensure that the uptake rate for breast screening is in line with the NHS Breast Screening Programme consolidated standards:⁹
- acceptable: ≥70%, and
 - achievable: ≥80%.
- 3.4** NHS boards maximise uptake by:
- ensuring that the eligible population are supported to make an informed choice about whether or not to participate in breast screening
 - regularly undertaking a needs analysis to understand barriers to uptake and by ensuring that action plans are in place, and
 - having processes and protocols in place to identify, engage and support women from groups with lower than anticipated uptake.

What does the standard mean for women participating in breast screening?

- Women are:
 - invited to attend for breast screening before their 53rd birthday and every 3 years thereafter until their 71st birthday, and
 - provided with opportunities to attend for breast screening regardless of personal circumstances or where they live.

What does the standard mean for staff?

- Staff demonstrate an awareness, relevant to their role and responsibilities, of:
 - the call-recall system and pathways, and
 - the eligibility criteria for the SBSP.

What does the standard mean for NHS boards?

- NHS boards:
 - have an effective call-recall system in place with standard operating procedures
 - have safeguard arrangements in place, including action plans
 - monitor uptake and routine recall rates for breast screening, and
 - maximise uptake.

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Monitoring reports detailing uptake and acceptable screening rates within the agreed defined reporting period, for example first invitation before 53rd birthday and every 3 years thereafter.
- Protocols for inviting eligible women for breast screening.
- Audit of uptake rates of women from groups with lower than anticipated uptake and action plans to address barriers.
- Equality impact assessments and data from audits identifying barriers to accessing screening, and action plans to address these.
- Protocols for maximising uptake with reference to their local population, for example socio-economic deprivation.
- Reporting against agreed programme safeguard processes.
- Action plans to address slippage within the SBSP.

Standard 4: Screening process

Standard statement

Breast screening is safe, high quality and person-centred.

Rationale

The UK NSC has identified performance thresholds for image quality to maximise cancer detection.⁹ To minimise harm from breast screening and to avoid additional radiation exposure and anxiety for women, radiation doses and repeat examinations will be kept to a minimum and in line with legislation and regulations.^{9, 14, 15}

To further minimise anxiety and for early cancer detection, women who have participated in breast screening will receive accurate results within agreed time frames.

To contribute to a safe, high quality and person-centred screening service, staff:

- undertake continued training and development relevant to their role and responsibilities, in line with national guidance and professional competency frameworks,⁶ and
- maintain screening equipment, in line with national legislation and regulations.^{14, 15}

Criteria

- 4.1** All screening equipment, including mobile units, is maintained, tested and used in line with national legislation and regulations.^{14, 15}
- 4.2** The dose of radiation and the image quality are kept within approved levels and are optimised in line with national guidance, regulations and the NHS Breast Screening Programme consolidated standards.^{9, 14, 15}
- 4.3** NHS boards ensure that they achieve a repeat examination rate in line with the NHS Breast Screening Programme consolidated standards:⁹
 - acceptable: <3%, and
 - achievable: <2%.
- 4.4** NHS boards ensure that image reporting is undertaken in line with national guidance.^{6, 9, 16}
- 4.5** NHS boards ensure that women are sent confirmation of their routine screening results from the screening service within 2 weeks of an adequate screen in line with the NHS Breast Screening Programme consolidated standards:⁹
 - acceptable: ≥95%, and
 - achievable: 100%.

What does the standard mean for women participating in breast screening?

- Women:
 - can be assured that they will experience a safe, high quality and person-centred breast screening service, and
 - will be sent their routine screening results within 2 weeks of an adequate screen.

What does the standard mean for staff?

- Staff:
 - can demonstrate knowledge and skills in undertaking screening in line with professional competency frameworks
 - have an understanding of, and work within, national standards relating to equipment maintenance, radiation dose levels and image quality standards and in line with their role and responsibilities, and
 - are supported to attend regular training, CPD and assessment.

What does the standard mean for NHS boards?

- NHS boards ensure that:
 - processes are in place and are monitored for compliance with national standards and guidance, and
 - equipment for breast screening is safe and effective.

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Compliance with patient and staff safety radiation protection regulations through quality assurance visit reports and quality control records.^{14, 15}
- Commissioning and routine physics reports.
- Evidence of audit of equipment quality control data against national standards and action taken in the case of failures.
- Electrical safety and critical examination certificates.
- Regular equipment inspection reports from servicing agents.
- Clinical dose survey reports (at least every 3 years) relating outcomes to local and national diagnostic reference levels.
- Adverse event reporting, lessons learned logs and evidence of action taken.
- Data demonstrating achievement of technical recall and repeat targets for each site or each individual, and an action plan where non-compliance occurs.
- Action plans for improvement in the breast screening process.

Standard 5: Recall for assessment

Standard statement

The recall process for further assessment is safe, effective and person-centred.

Rationale

NHS boards ensure women whose mammograms show abnormalities which require further investigation are recalled. NHS boards will continue to strive to minimise the number of women who are recalled where no abnormalities are subsequently found. Additionally, the number of operative procedures used to support diagnosis is kept to a minimum.

Every effort should be made to obtain a definitive diagnosis at initial assessment to minimise distress and anxiety for women. Where women require further assessment, they will be recalled for further assessment to obtain a definitive diagnosis.⁹

Diagnosis, assessment and referral information is shared with the woman in a person-centred and compassionate manner, and in the presence of a clinical nurse specialist.¹²

The NHS Breast Screening Programme has set performance thresholds to monitor non-operative diagnosis and management of B3 lesions (using vacuum-assisted biopsy, for example), recall and assessment to minimise early recall and ensure timely availability of results.⁹

Criteria

- 5.1** All assessment equipment is maintained, tested and used in line with national legislation and regulations.^{12, 14, 15}
- 5.2** NHS boards ensure that recall for assessment is achieved in line with the NHS Breast Screening Programme consolidated standards' performance thresholds for:⁹
 - prevalent screening – acceptable: <10%; achievable: <7%, and
 - incident screening – acceptable: <7%; achievable: <5%.
- 5.3** NHS boards offer an assessment appointment within 3 weeks of the initial adequate screen in line with the NHS Breast Screening Programme consolidated standards:⁹
 - acceptable: >98%, and
 - achievable: 100%.
- 5.4** NHS boards ensure that 95% of women complete the assessment process (initial visit to receiving results) by attending for breast screening on no more than three separate visits, in line with the NHS Breast Screening Programme consolidated standards.⁹

- 5.5** NHS boards ensure that early recall following assessment is used in exceptional circumstances only and achieved in line with the NHS Breast Screening Programme consolidated standards' performance thresholds:⁹
- acceptable: <0.25%, and
 - achievable: <0.12%.
- 5.6** NHS boards ensure that the number of women with a non-operative diagnosis is achieved in line with the NHS Breast Screening Programme consolidated standards' performance threshold for:⁹
- invasive disease – acceptable: ≥90%; achievable: ≥95%
 - ductal carcinoma in situ (DCIS) – acceptable: ≥85%; achievable: ≥90%.
- 5.7** NHS boards ensure that the number of women with a diagnosis of invasive breast cancer, who have an axillary ultrasound procedure, is achieved in line with the NHS Breast Screening Programme consolidated standards' performance thresholds:⁹
- acceptable: >90%, and
 - achievable: 100%.
- 5.8** All women undergoing biopsy will have their cases discussed by a local multidisciplinary team.
- 5.9** The diagnosis and management of lesions with uncertain malignant potential (B3 lesions) is undertaken in line with current UK national guidance.¹⁷
- 5.10** NHS boards ensure that diagnosis, assessment and referral information is:
- shared with the woman in person in the presence of a clinical nurse specialist, and
 - communicated to the respective GP.
- 5.11** For women who do not attend their assessment appointment, breast screening centres will follow national guidance to:
- support a woman to attend a further appointment, and
 - notify the respective GP, where necessary.

What does the standard mean for women participating in breast screening?
<ul style="list-style-type: none"> • Women: <ul style="list-style-type: none"> - are provided with information explaining why they have been invited for further assessment - experience further assessment that is safe, appropriate and effective, and

<ul style="list-style-type: none"> - are supported in a person-centred and responsive manner through the recall for further assessment process.
<p>What does the standard mean for staff?</p>
<ul style="list-style-type: none"> • Staff: <ul style="list-style-type: none"> - can demonstrate knowledge and skills in undertaking further assessment relevant to their role and responsibilities and in line with professional competency frameworks, and - are provided with safe and effective equipment relevant to their role and responsibilities to deliver high quality assessment.
<p>What does the standard mean for NHS boards?</p>
<ul style="list-style-type: none"> • NHS boards ensure that: <ul style="list-style-type: none"> - processes are in place and monitored for compliance with national standards and guidance - recall for repeat screening for unsatisfactory mammograms and abnormal mammograms is monitored, and - equipment for assessment is safe and effective.
<p>Practical examples of evidence of achievement <i>(NOTE: this list is not exhaustive)</i></p>
<ul style="list-style-type: none"> • Compliance with patient and staff safety radiation protection regulations through quality assurance visit reports and quality control records.^{14, 15} • Commissioning and routine physics reports. • Evidence of audit of equipment quality control data against national standards and action taken in the case of failures. • Electrical safety and critical examination certificates. • Regular equipment inspection reports from servicing agents. • Adverse event reporting, lessons learned logs and evidence of action taken. • Data demonstrating achievement of technical recall and repeat targets for each site or each individual, and an action plan where required. • An approach to quality assurance, including demonstration of adherence to regulations and compliance. • Action plans for improvement in the recall for assessment process.

Standard 6: Surgical referral

Standard statement

Women are offered timely referral to the surgical team for further treatment, where required.

Rationale

Appropriate and timely referral to the surgical team for further treatment improves health and wellbeing outcomes. Assessment outcome and treatment options is discussed at multidisciplinary team meetings and in line with national guidance and treatment.¹⁷⁻¹⁹

All aspects of the assessment, including the outcome, referral and options for further treatment, are fully discussed with the woman and, where appropriate, their representative. Women are fully informed of the next steps of the referral process and given opportunities to ask questions or raise concerns.

Criteria

- 6.1** NHS boards ensure that 90% of women who have received their assessment results and who require surgical referral are seen by the surgical team within 2 weeks.
- 6.2** NHS boards ensure that the number of women with surgical benign biopsies is in line with the NHS Breast Screening Programme consolidated standards' performance thresholds:⁹
- prevalent screening – acceptable: <1.5/1000; achievable: <1.0/1000, and
 - incident screening – acceptable: < 1.0/1000; achievable: <0.75/1000.
- 6.3** Surgical treatment will be undertaken in line with national guidance.^{18, 20}

What does the standard mean for women participating in breast screening?

- Women will receive their results and referral within an agreed timescale, and can be confident that their referral to surgical treatment is safe and effective.

What does the standard mean for staff?

- Staff:
 - can demonstrate knowledge and skills in undertaking referral and provision of results in line with professional competency frameworks, and
 - have an understanding of, and work within, national guidance relevant to their role and responsibilities.

What does the standard mean for NHS boards?

- NHS boards ensure that:
 - pathways for surgical referral to monitor compliance with national standards and guidance are in place
 - escalation processes are in place where there is non-compliance with national guidance and standards
 - rates for surgical referral against agreed performance thresholds are monitored, and
 - processes and care pathways are in place to ensure timely referral and management.

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Data demonstrating achievement of key performance indicators and national standards.
- Implementation of action plans where key performance indicators and national standards are not being met.
- Evidence of audit of surgical practice.
- Examples of support or further information for women referred for surgery.
- NHS Breast Screening Programme and Association of Breast Surgery audit of screen detected breast cancers.
- Evidence of a quality assurance report for surgical referral.
- Action plans for improvement in the surgical referral process.

Standard 7: Detection rates

Standard statement

The number of breast cancers detected is monitored to improve outcomes.

Rationale

Breast screening aims to detect cancer early and is a 'test for breast cancers that are too small to see or feel'.¹³ Early detection can improve patient outcomes and reduce the level of treatment required.⁹

To improve patient clinical outcomes, the UK NSC monitors detection rates, including:^{9, 17}

- age standardised detection rates for invasive cancers (including small cancers <15mm diameter)
- non-invasive cancers, particularly ductal carcinoma in situ, and
- cancers detected between screening appointments (interval cancers).

Review of interval cancers is required to improve skills in detecting small breast cancers.¹⁷

Criteria

- 7.1** The rate of invasive breast cancers detected per 1,000 women attending for prevalent screening is within the following performance thresholds:
- acceptable: ≥ 2.7 , and
 - achievable: ≥ 3.6 .
- 7.2** The rate of invasive breast cancers detected per 1,000 women attending for incident screening is within the following performance thresholds:
- acceptable: ≥ 3.1 , and
 - achievable: ≥ 4.2 .
- 7.3** NHS boards ensure that the age standardised detection ratio (SDR) for invasive breast cancers is in line with the NHS Breast Screening Programme consolidated standards' performance thresholds:⁹
- acceptable: 1.00, and
 - achievable: 1.40.
- 7.4** NHS boards ensure that the age SDR for small invasive breast cancers (<15mm) is in line with the NHS Breast Screening Programme consolidated standards' performance thresholds:⁹
- acceptable: 1.00, and
 - achievable: 1.40.

- 7.5** NHS boards monitor the rate of ductal carcinoma in situ detected in line with the NHS Breast Screening Programme consolidated standards:⁹
- prevalent screening: ≥ 0.5 per 1,000 women, and
 - incident screening: ≥ 0.6 per 1,000 women.
- 7.6** NHS boards monitor the detection rates of interval cancers per 1,000 women screened in line with the NHS Breast Screening Programme consolidated standards:⁹
- $<0.65/1,000$ diagnosed <12 months of the previous screen
 - $<1.40/1,000$ diagnosed between 12 and <24 months of the previous screen, or
 - $<1.65/1,000$ diagnosed between 24 and <36 months of the previous screen.
- 7.7** NHS boards monitor and audit interval cancer rates for national benchmarking.
- 7.8** Interval cancer images and classifications are reviewed to:
- improve detection in small breast cancers for educational and service improvement purposes¹⁷
 - support duty of candour regulations and responsibilities,²¹ and
 - provide previous image review result information for women who request it.

What does the standard mean for women participating in breast screening?

- | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Women can be confident that NHS boards monitor detection rates to ensure that cancers, particularly those which are too small to see or feel, are detected at the earliest opportunity. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

What does the standard mean for staff?

- | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Staff: <ul style="list-style-type: none"> - understand the importance of monitoring and reviewing the number of breast cancers detected - are confident that there is robust monitoring and reviewing of breast cancer detection rates, and - undertake continued training relevant to their role and responsibilities in image reading to improve their skills in detecting small breast cancers. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

What does the standard mean for NHS boards?

- | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • NHS boards: <ul style="list-style-type: none"> - record, monitor and publish NHS board breast cancer detection rates as specified, and - support relevant staff to undertake continued training in image reading to improve their skills in detecting small breast cancers. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Practical examples of evidence of achievement *(NOTE: this list is not exhaustive)*

- Reports detailing cancer detection rates.
- Quality assurance reports demonstrating review of radiological images for service improvement and education.
- Action plans for improvement in breast cancer detection.

References

1. National Services Division. Breast Screening. 2018 [cited 2018 Oct 17]; Available from: <https://www.nsd.scot.nhs.uk/services/screening/breastscreening/index.html>.
2. Scottish Government. Detect Cancer Early. 2017 [cited 2017 Dec 05]; Available from: <http://www.gov.scot/Topics/Health/Services/Cancer/Detect-Cancer-Early>.
3. Healthcare Improvement Scotland. Quality of Care Approach. 2018 [cited 2018, 1 Oct]; Available from: http://www.healthcareimprovementscotland.org/our_work/governance_and_assurance/quality_of_care_approach.aspx.
4. Healthcare Improvement Scotland. Breast Screening Standards- Scoping document. 2016 [cited 2017 Oct 10]; Available from: http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/programme_resources/breast_screening_standards.aspx.
5. NHS Inform. Screening information for the transgender community. 2018 [cited Oct 15 2018]; Available from: <https://www.nhsinform.scot/healthy-living/screening/screening-information-for-the-transgender-community#breast-screening>.
6. Public Health England. Breast Screening: Professional Guidance. 2017 [cited 2017 Oct 24]; Available from: <https://www.gov.uk/government/collections/breast-screening-professional-guidance>.
7. Healthcare Improvement Scotland. Review of the Scottish Breast Screening Programme. 2016 [cited 2017 Oct 10]; Available from: http://www.healthcareimprovementscotland.org/our_work/governance_and_assurance/programme_resources/breast_screening_review.aspx.
8. NHS Screening Programmes. Accessing Screening Services: A Review of the Literature and Local Practice in the context of the Equality Delivery System. 2013 [cited 2017 Oct 24]; Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398818/EDS_Screening_Literature_Review.pdf.
9. Public Health England. NHS Breast Screening Programme: Consolidated Standards. 2017 [cited 2017 Oct 10]; Available from: <https://www.gov.uk/government/publications/breast-screening-consolidated-programme-standards>.
10. Healthcare Improvement Scotland. Management of Breast Cancer Services. 2008 [cited 2017 Oct 10]; Available from: http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/programme_resources/standards_for_cancer_services.aspx.
11. Scottish Government. Beating Cancer: Ambition and Action. 2016 [cited 2018 Oct 22]; Available from: <https://www.gov.scot/Resource/0049/00496709.pdf>.
12. Public Health England. NHS Breast Screening Programme Clinical Guidance for Breast Cancer Screening Assessment. 2016 [cited 2017 Oct 10]; Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/567600/Clinical_guidance_for_breast_cancer_screening_assessment_Nov_2016.pdf.

13. NHS Inform. Introduction to breast screening: Information leaflets. 2017 [cited 2017 Oct 24]; Available from: <https://www.nhsinform.scot/healthy-living/screening/breast-screening/introduction-to-breast-screening>.
14. UK Government. The Ionising Radiation (Medical Exposure) Regulations 2017. 2017 [cited 2018 Oct 22]; Available from: <http://www.legislation.gov.uk/uksi/2017/1322/contents/made>.
15. UK Government. The Ionising Radiations Regulations 2017. 2017 [cited 2018 Oct 22]; Available from: <http://www.legislation.gov.uk/uksi/2017/1075/contents/made>.
16. Public Health England. NHS Breast Screening Programme: Guidance for breast screening mammographers. 2017 [cited 2018 Oct 17]; Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/663896/Breast_screening_guidance_for_breast_screening_mammographers.pdf.
17. Public Health England. NHS Breast Screening Programme: Reporting, classification and monitoring of interval cancers and cancers following previous assessment. 2017 [cited 2017 Oct 10]; Available from: <https://www.gov.uk/government/publications/breast-screening-interval-cancers>.
18. Scottish Intercollegiate Guidelines Network. Treatment of primary breast cancer: a national clinical guideline. 2013 [cited 2018 Nov 07]; Available from: <https://www.sign.ac.uk/assets/sign134.pdf>.
19. NHS Scotland. Breast Cancer: Clinical Quality Performance Indicators. 2016 [cited 2017 Oct 10]; Available from: http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/cancer_qpis/quality_performance_indicators.aspx.
20. Association of Breast Surgery. Best Practice Guidelines for Surgeons in Breast Cancer Screening. 2018 [cited 2018 Nov 12]; Available from: <https://associationofbreastsurgery.org.uk/media/64276/final-screening-guidelines-2018.pdf>.
21. Scottish Government. Organisational Duty of Candour guidance. 2018 [cited 2018 Sept 07]; Available from: <https://www.gov.scot/Publications/2018/03/1321/0>.
22. ISD Scotland. Scottish Breast Screening Programme. 2017 [cited 2017 Oct 10]; Available from: <http://www.isdscotland.org/Health-Topics/Cancer/Breast-Screening/>.

Appendix 1: Development of the breast screening standards

The breast screening standards have been informed by current evidence and best practice recommendations, and developed by group consensus.

Development activities

To ensure each standard is underpinned with the views and expectations of healthcare staff, third sector representatives, individuals and the public in relation to breast screening, information has been gathered from a number of sources and activities, including:

- a scoping meeting in April 2016 with a subset of development group members
- a scope engagement exercise in May 2016
- literature review and equality impact assessment, and
- two standards development group meetings between June and September 2017.

A standards development group, chaired by Dr Emilia Crighton, Interim Director of Public Health, NHS Greater Glasgow and Clyde was convened in June 2017 to consider the evidence and to help identify key themes for standards development.

Membership of the standards development group is set out in Appendix 2.

Consultation

We engaged with service users and the general public, third sector organisations, NHS boards and staff, screening centres and professional bodies using a variety of approaches including:

- focus groups (with service users, members of the public and NHS staff), and
- an online survey.

A full consultation report is available on Healthcare Improvement Scotland's website (www.healthcareimprovementscotland.org).

Quality assurance

All standards development group members were responsible for advising on the professional aspects of the standards. Clinical members of the group were also responsible for advising on clinical aspects of the work. The chair was assigned lead responsibility for providing formal clinical assurance and sign-off on the technical and professional validity and acceptability of any reports or recommendations from the group.

All group members made a declaration of interest at the beginning stages of the project. They also reviewed and agreed to the group's Terms of Reference. More details are available on request from hcis.standardsandindicators@nhs.net.

Healthcare Improvement Scotland also reviewed the standards document as a final quality assurance check. This ensures that:

- the standards are developed according to agreed Healthcare Improvement Scotland methodologies
- the standards document addresses the areas to be covered within the agreed scope, and
- any risk of bias in the standards development process as a whole is minimised.

For more information about Healthcare Improvement Scotland's role, direction and priorities, please visit:

www.healthcareimprovementscotland.org/drivingimprovement.aspx.

Appendix 2: Membership of the breast screening standards development group

Name	Position	Organisation
Emilia Crichton (Chair)	Interim Director of Public Health	NHS Greater Glasgow and Clyde
Mary Allison	Director for Scotland (until December 2017)	Breast Cancer Now
Debbie Archibald	Breast Screening Services Manager	NHS Tayside
Matthew Barber	Consultant Breast Surgeon	NHS Lothian
Margo Biggs	Public Partner	Healthcare Improvement Scotland
Andy Evans	Professor of Breast Imaging	University of Dundee
Alison Fraser	Senior Programme Manager (Breast Screening)	National Specialist and Screening Services Directorate
Belinda Henshaw	Senior Programme Manager	Healthcare Improvement Scotland
Joseph Loane	Consultant Pathologist	NHS Lothian
Sarah Manson	Senior Policy Manager	National Screening Programmes, Scottish Government
Husam Marashi	Consultant Clinical Oncologist	NHS Greater Glasgow and Clyde
Mike McKirdy	Director of Global Health	Royal College of Physicians and Surgeons Glasgow
Shelley-Marie O'Hare	Lead Clinical Nurse Specialist (until May 2018)	NHS Lothian
John Quinn	Senior Information Analyst	Information Services Division
Katherine Schofield	Lead Mammography Physicist	NHS National Services Scotland
Louise Scott	General Practitioner	The Group Practice, Stornoway
Janice Tannock	Superintendent Radiographer	NHS Greater Glasgow and Clyde
Laura Wilkinson	Consultant Radiologist	NHS Greater Glasgow and Clyde

Healthcare Improvement Scotland would like to thank the following for their input during finalisation of the breast screening standards:

- **Julie Cavanagh** (Screening Coordinator, NHS Tayside)
- **Marzi Davies** (Clinical Director, West of Scotland Breast Screening Service, NHS Greater Glasgow and Clyde)
- **Sarah Dillon** (Policy Officer, Scottish Government)
- **Anne McCurrach** (Mammography Physicist, NHS National Services Scotland)
- **Ashleigh Simpson** (Policy Officer, Breast Cancer Now)

Appendix 3: Glossary

The majority of the descriptions in this glossary have been taken directly from ISD: Scottish Breast Screening Programme Statistics – Glossary of terms.²²

assessment	The process a woman undergoes following an abnormal mammogram in order to obtain a definitive diagnosis.
B3 lesions	Lesions categorised as B3 (of uncertain malignant potential) may be associated with co-existing adjacent malignancy and some are also associated with a longer term increased risk of developing cancer.
benign surgical biopsy	A surgical diagnostic biopsy where the outcome is normal or not malignant.
biopsy	The removal of a small piece of tissue from an organ or part of the body for laboratory examination. It is an important means of confirming or excluding a diagnosis of cancer from analysis of a fragment of the tissue sample.
community health index (CHI)	A register of all patients in NHSScotland to ensure that patients can be correctly identified, and that relevant information pertaining to a patient's health is available to providers of care.
diagnostic reference levels	Dose levels in medical radiodiagnostic or interventional radiology practices for typical examinations for groups of standard-sized individuals or standard phantoms for broadly defined types of equipment.
ductal carcinoma in situ (DCIS)	An early form of breast cancer, where the cancer cells are only found inside the milk ducts (in situ) and have not developed the ability to spread either outside the ducts into the breast tissue or to other parts of the body.
early recall	Recall for the next screening episode earlier than the usual interval (3 years). Early recall is normally 3 months, 6 months or 1 year. An early recall appointment is considered as non-routine.
incident screen	Any mammographic screen a woman has after her first screen. It can identify disease that has arisen since the previous screen.

informed choice	The considered decision a woman makes to choose whether or not to undergo breast screening through provision of unbiased and current evidence on both the benefits as well as the disadvantages of screening.
interval cancer	A cancer that is diagnosed between screening episodes.
invasive breast cancer	Breast cancer that can or has spread from its site of origin.
non-attendance	Eligible people who do not attend following an invitation for screening.
prevalent screen	A person's first mammographic screen.
recall	The part of the screening system whereby a person is recalled for a repeat screen or an assessment appointment. This includes routine recall and early recall.
repeat examination rate	The proportion of repeat examinations (due to technical recalls or technical repeats).
representative	This may include someone appointed to have power of attorney, a guardian, family member, friend, neighbour or an agreed person who can speak on the individual's behalf. A representative may be formal or not formal.
routine recall	Recall for the next screening episode at the normal interval (normally once every 3 years). The routine recall rate is the percentage of eligible women whose date of first offered appointment is within 36 months of their previous screen. Women being screened for the first time will not be included in screening round length statistics.
safeguard processes	Designed to ensure that, where something goes wrong, processes are in place to identify: what is going wrong; and what actions are necessary to ensure a safe outcome.
screening	Examination of people with no symptoms to detect unsuspected disease.
screening episode	A cycle of a person's screening events.
self-referral	The process whereby a woman refers herself for screening. Following their 71 st birthday, women will not receive an invitation for routine screening and can self-refer by contacting their local screening centre.

standardised detection ratio (SDR)	The observed numbers of invasive cancers detected divided by the number expected given the age distribution of the population.
uptake rate	The proportion of women invited to a breast screening appointment who attend.

You can read and download this document from our website.
We are happy to consider requests for other languages or formats.
Please contact our Equality and Diversity Advisor on 0141 225 6999
or email contactpublicinvolvement.his@nhs.net

Healthcare Improvement Scotland

Edinburgh Office
Gyle Square
1 South Gyle Crescent
Edinburgh
EH12 9EB

Glasgow Office
Delta House
50 West Nile Street
Glasgow
G1 2NP

0131 623 4300

0141 225 6999

www.healthcareimprovementscotland.org