National Overview ~ *November 2003*

Breast Screening

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Introduction and Acknowlegements

NHS Quality Improvement Scotland was established as a Special Health Board on 1 January 2003 as a result of bringing together the Clinical Resource and Audit Group (CRAG), Clinical Standards Board for Scotland (CSBS), Health Technology Board for Scotland (HTBS), Nursing and Midwifery Practice Development Unit (NMPDU) and the Scottish Health Advisory Service (SHAS).

The purpose of NHS Quality Improvement Scotland is to improve the quality of healthcare in Scotland by setting standards and monitoring performance, and by providing NHSScotland with advice, guidance and support on effective clinical practice and service improvements.

A part of this remit is to develop and run a national system of quality assurance (QA) of clinical services. For each service, NHS Quality Improvement Scotland establishes a project group to:

- develop and consult on the standards and self-assessment framework;
- oversee the process of external peer review; and
- report findings to the NHS Quality Improvement Scotland Board.

The Breast Screening Standards Project Group was established in June 2002 under the chairmanship of Dr Hilary Dobson, Medical Advisor for Quality Assurance in the Scottish Breast Screening Programme (SBSP). Membership of the Group is given in Appendix 1.

The *Clinical Standards for Breast Screening* were developed by this Group and published in December 2002 following extensive consultation. Copies of the standards are available on request from NHS Quality Improvement Scotland or on the website (www.nhshealthquality.org).

Peer review visits to all breast screening services in Scotland were conducted between February 2003 and April 2003 to assess performance against the standards. A local report on each service visit, including a detailed assessment of performance against each standard, has also been published and is available on the website or on request from NHS Quality Improvement Scotland.

This report presents a national overview of breast screening services in Scotland, reporting on performance across Scotland against the standards and including relevant examples of local initiatives.

NHS Quality Improvement Scotland gratefully acknowledges the work of the Breast Screening Standards Project Group for overseeing the project from its inception to the publication of this report. In addition, the contribution made by every member of the peer review teams was crucial to the success of the visit programme.

To those NHSScotland staff who contributed to the peer review visits, NHS Quality Improvement Scotland wishes to record its thanks. In particular, thanks are due to the designated Scottish Breast Screening Programme (SBSP) representatives and service directors who were responsible for preparing locally for peer review visits, and for the compilation of comprehensive self-assessment material prior to visits.

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Executive Summary

Introduction

Every 3 hours, breast cancer is diagnosed in a woman in Scotland. With over 3,000 new cases each year, and over 1,100 deaths, everything possible is being done to fight the disease.

Scotland has long been a leader in the field of breast cancer research, and was one of the first countries to be involved in major tamoxifen studies and trials on the early detection of breast cancer. Edinburgh was one of the two UK pilot sites for a study that went on to confirm the results of international trials - early detection of breast cancer using mammography can, and does, reduce the number of deaths from the disease. On the basis of this growing body of evidence, the UK was one of the first countries in the world to introduce a national breast screening programme. As part of this, the Scottish Breast Screening Programme (SBSP) was established in 1988, using the Edinburgh trial site as the anchor site for the new programme. By 1991, seven sites covering the whole of Scotland were opened, and the first round of screening for women aged 50-64 was completed on schedule in 1994.[1]

Breast Screening and Quality Assurance

Breast screening aims to separate those women who may have breast cancer from those who probably do not. The SBSP targets women without symptoms, inviting them every 3 years for a mammogram, and recalling them for further tests if their breast X-rays show anything different from normal. No screening test can be 100% accurate, and it is important to manage the risks of errors at any stage, be it clinical or non-clinical, of the screening process. For example, an invitation letter to the wrong address means that a woman will not know about her mammography appointment, and will not attend. A wrong result letter means that someone is recalled unnecessarily, or is not recalled when they need to be. An undetected cancer means it will be 3 years before that woman is screened again, and may result in the development of symptoms that require investigation in the interval. Accordingly, quality assurance (QA) and an emphasis on safe and effective care were built into the SBSP from the outset. While this requires dedicated resources - time, money and commitment - it is clear from this cycle of peer review visits that quality assurance and improvement of care are now integral parts of the culture for all those providing breast screening services.

The first round of breast screening QA visits took place in 1996. These were organised by those providing the service, and used standards developed for the UK-wide breast screening programme. The visits showed that while there was variation in practice, the service was well established, and was on the way to achieving the key performance indicators for cancer detection, particularly for small cancers. However,

1. The seven sites reduced to six in 2000, when the two West of Scotland sites based in Glasgow combined as one.

there was scope for improvement in attendance rates, particularly in inner city areas, and in preoperative diagnosis rates.

Three years later a second round of visits was carried out, and improvements in attendance and preoperative diagnosis rates were observed. However, signs of strain were also identified. The national shortage of radiologists and pathologists was beginning to impact on reporting times for mammographic and assessment test results. The buildings selected when the SBSP first started were also proving to be unsuitable, even though they offered a friendly, non-clinical environment. In particular, the West of Scotland Breast Screening Service had outgrown its two centres, and, as a result of these visits, relocated as one unit to a new city centre location.

In 2001, the Clinical Standards Board for Scotland (now part of NHS Quality Improvement Scotland) took on responsibility for the external quality assurance of Scottish screening programmes. This introduced an element of independent assessment, which included lay reviewers, while making full use of the expertise already developed. Indeed, the SBSP quality assurance model was a cornerstone for the standards, and process of review, developed by NHS Quality Improvement Scotland. The review of performance in the SBSP against the *Clinical Standards for Breast Screening* took place between February 2003 and April 2003, and an overview of the findings is presented in this report.

Summary of Findings

An in-depth analysis of performance in the SBSP against the breast screening standards is given in Chapter 2. A summary of the key findings is given below. These are presented by standard for ease of reference.

General (Standard 1)

This standard covers general matters relating to management, communication, audit and confidentiality. All review teams commented on the commitment, enthusiasm and professional approach of all the staff involved in providing breast screening services. This culture is underpinned by the clearly defined management arrangements that are in place across the SBSP.

As six centres provide screening for the 15 NHS Boards across Scotland, it is vital that each NHS Board is closely involved in the planning, provision and co-ordination of effective breast screening services for its population. Although each NHS Board has a designated breast screening co-ordinator, this function is not currently fulfilled by a public health specialist in two

of the NHS Boards. Several NHS Boards do not participate in a multidisciplinary co-ordinating group, and not all co-ordinating groups include lay representation.

The core information provided to women is nationally developed, and is in use in all breast screening services. It has been developed in consultation with service users, and has been fully evaluated. Women's satisfaction with information and communication is routinely surveyed through various means, and it was evident that their views are taken into account.

Of particular note was the commitment to systematic review and audit, which is in place in every breast screening service. This supports the quality assurance system that is the foundation of the SBSP, and ensures that any issues are identified and addressed timeously, as well as providing a local and national forum for sharing good practice.

Call-Recall and Safeguarding & The Screening Process (Standards 2 & 3)

These standards cover the arrangements in place to ensure that women are invited for screening once every 3 years, and that those who require further investigation, or who do not attend, are followed up. Monitoring of attendance rates and issuing of results are also covered, as is every element of the screening process, with, for example, criteria relating to equipment, radiation dose, and mammography reporting.

A national call-recall system is in place for breast screening. At the time of the review visits, there was no means of monitoring that a minimum of 90% of women are sent their first breast screening invitation before their 53rd birthday, or that they are sent subsequent invitations within 3 years of their previous mammogram. Since then, enhancements have been made to the SBSP IT system, enabling services to identify all women who have not been sent an invitation to screening before the age of 53. However, work is still underway to allow services to identify those women who do not receive their subsequent screening invitations within 3 years.

Very good attendance levels for breast screening are achieved, with most services meeting both the essential target of 70% and desirable target of 75% uptake. Problems with low uptake remain in inner city areas, and review teams learned of a number of innovative projects in place to continue to drive up attendance rates. These included evening appointments, use of mobile units in inner city areas, and targeting particular groups of women where barriers to attending had been

identified. Recognising that the impact on population mortality from breast cancer is influenced by the level of screening uptake, it is important that all services maintain, and improve, their attendance levels.

The arrangements in place for the quality assurance of equipment are well established in every service, and radiation dose falls within the national limits throughout Scotland. All healthcare professionals performing mammography have successfully completed an accredited training course, and clinical and academic updates are undertaken at regular intervals. Evidence demonstrates that double reading of mammographic films enhances cancer detection rates by the order of 10%, and the SBSP has operated a policy of double reading since its inception. The SBSP provides resources for the Scottish Mammography Education Centre, based at Queen Margaret University College, Edinburgh, which is recognised nationally as an accredited training centre.

All services have robust arrangements in place to ensure that women requiring further investigation, or who do not attend for screening, are followed up. However, most services were not able to demonstrate that results are sent out within 15 days of women's attendance for screening. The limiting factor in the majority of services is the availability of assessment appointments, in a system where all screening results, be they normal or recall for assessment, are sent out at the same time. Those services with higher attendance or recall rates may also experience added pressure.

The Assessment Process & Surgical Referral (Standards 4 & 5)

These standards are concerned with how many women are called to assessment, how quickly they receive their appointment, the actual assessment process, and outcomes.

Three out of the six services are meeting the target of less than 10% recall to assessment after women's first attendance for screening. All services achieved the target of less than 7% recall to assessment after women's second and subsequent attendance for screening. Services are actively addressing high recall rates. No service was able to demonstrate that it is meeting the target of offering an appointment for follow-up assessment within 15 working days of screening. Each screening service has its own particular challenge with regard to the achievement of this target, although staffing shortages, high attendance rates, and high recall rates may be contributing factors.

Assessment is carried out by a specialist multidisciplinary team at all six sites, and over 70% of women requiring surgery receive a preoperative tissue diagnosis - that is, a confirmed diagnosis before they have surgery. The review teams commended this achievement, as this ensures that women are provided with the information they need to make informed decisions about their treatment. The majority of services are meeting both the essential and desirable targets for the time to provision of assessment results. However, the impact that national pathology staffing shortages can have on waiting times should not be underestimated when planning services.

Once women are referred for surgery, it is important that the number of surgical biopsies for benign disease is minimised. Two out of the six services meet the essential target requiring that less than 3.6 women per 1,000 attending for their first screen have surgical benign biopsies. All six services achieve the essential target requiring that less than 2.0 women per 1,000 attending for their second, or subsequent, screen have surgical benign biopsies.

Cancer Yield (Standard 6)

The main aim of the screening programme is to detect breast cancer at an early stage, when it can be successfully treated. Without exception, the six SBSP services are achieving all the essential cancer detection criteria, including those for invasive, non-invasive, and small invasive cancers. In addition, there is only one desirable criterion which is not being met by all services.

Published evidence suggests that the detection of small (<15mm diameter) invasive cancers is an important surrogate marker in measuring the effectiveness of screening programmes. While the SBSP is meeting all essential targets for the detection of small invasive cancers, the recognition of the importance of continuing this level of performance, and indeed improving to achieve the desirable target (for prevalent screening) in all services, is to be encouraged.

Conclusions

The third round of breast screening QA visits demonstrates, beyond doubt, that three key components to ensuring that care is safe and effective are in place in the SBSP:

- comprehensive process management - guidelines and protocols covering every element of a service;
- adequate audit support - data collection, integrated IT systems, and well-defined reporting systems; and

- organised systems in place to address any gaps or weaknesses, and to share practice where the service is achieving, or exceeding, targets.

There has been a lot of investment in the SBSP, and those involved in providing breast screening offer a user-focused, responsive service that is based on current evidence-based guidance. Due to the commitment to audit and quality assurance, the SBSP is able to demonstrate that it is providing a very high standard of care. As a result of this care, the SBSP is actively contributing to reducing the number of deaths from breast cancer.

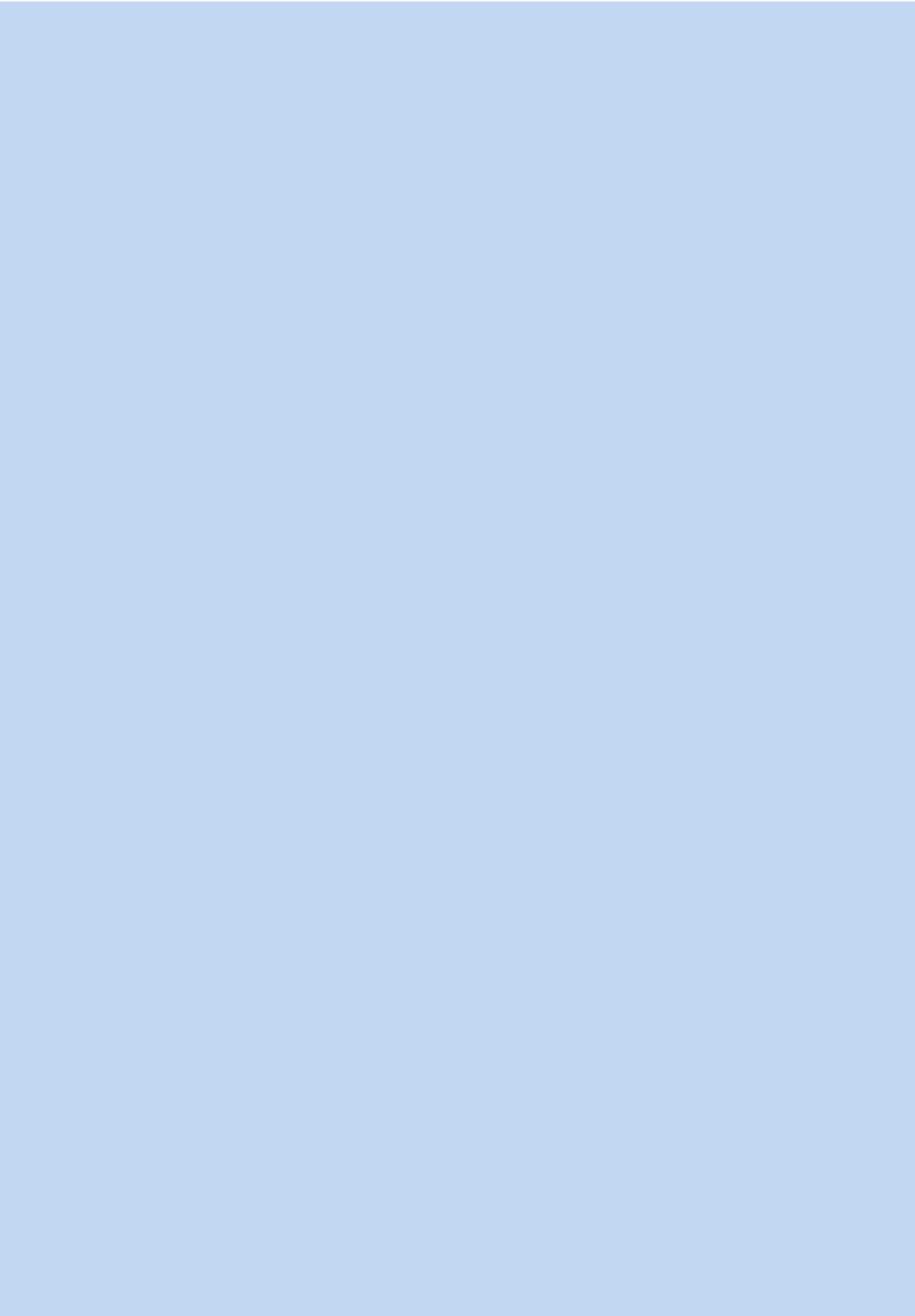
However, as with any service, there are challenges that face breast screening:

- Firstly, as six services provide breast screening in Scotland, a co-ordinated approach, including multidisciplinary planning and specialist public health input, is required across the 15 NHS Boards. This is not happening in all NHS Boards, and those that have not made, or are not able to make, this commitment run the risk of being unable to make the best use of this valuable resource.
- Secondly, the SBSP is not yet fully involving the public in shaping and informing the services provided.
- Thirdly, it is clear that more could be done to integrate breast screening services within their host NHS Trusts, particularly in relation to staff development and training. This is as much a challenge to the host NHS Trusts as it is to screening units.
- Finally, while women who have their cancer detected and treated as a result of breast screening are receiving a very high standard of care, the same standards are not routinely achieved in symptomatic breast services across Scotland, particularly in relation to waiting times for referral and subsequent treatment. The challenge lies in sharing and extending experience and expertise across breast services generally.

Key Recommendations

In light of the detailed findings of this report, the following recommendations are made:

- NHS Boards should ensure that there is designated specialist public health support of, and input to, the co-ordination of local provision of breast screening.
- NHS Trusts hosting breast screening services should ensure that these are well integrated with other Trust activities, particularly in relation to staff development.
- Women using screening services, and the public generally, should be involved in shaping and informing service developments. In particular, they should form a core part of the local multidisciplinary co-ordinating groups.
- Breast screening services should explore improved integration with the work of the Scottish Executive Health Department Scottish Cancer Group, and the regional Managed Clinical Networks for cancer.
- The SBSP should examine opportunities for service development that make the best use of skills, equipment and other resources. In particular, further opportunities to introduce role extension and skill mix should be explored.
- Every effort should be made to share best practice and expertise across the SBSP, and with those providing breast services outwith screening.



Chapter 1

Setting the Scene

- List of NHSScotland Breast Screening Services
- The NHS Quality Improvement Scotland Approach to Assessment
- Background to the Clinical Standards for Breast Screening
- Introduction to Breast Screening
- The NHS Quality Improvement Scotland Standards and Your Care
- Frequently Asked Questions
- Useful Contacts

1. Setting the Scene

1.1 List of NHSScotland Breast Screening Services

1 East of Scotland Breast Screening Service, Dundee

2 North East of Scotland Breast Screening Service, Aberdeen

3 North of Scotland Breast Screening Service, Inverness

4 South East of Scotland Breast Screening Service, Edinburgh

5 South West of Scotland Breast Screening Service, Irvine

6 West of Scotland Breast Screening Service, Glasgow

The following services were reviewed during February 2003 - April 2003. Local reports, containing findings of each individual peer review visit and assessment against the standards, are available on the website (www.nhshealthquality.org) or in print format from NHS Quality Improvement Scotland.

Breast Screening Service Visited Estimated Target Population (eligible women aged 50-64)[2] Host NHS Trust	NHS Board Areas Covered
1. East of Scotland 44,000 Tayside University Hospitals NHS Trust	Tayside Fife
2. North East of Scotland 47,500 Grampian Primary Care NHS Trust	Grampian Orkney Shetland
3. North of Scotland 25,000 Highland Acute Hospitals NHS Trust	Highland Grampian Western Isles
4. South East of Scotland 113,700 Lothian Primary Care NHS Trust	Lothian Borders Fife Forth Valley

2. Data source: SBSP breast screening services.

Breast Screening Service Visited	NHS Board Areas Covered
5. South West of Scotland 51,000 Ayrshire & Arran Acute Hospitals NHS Trust	Ayrshire & Arran Dumfries & Galloway
6. West of Scotland 184,000 Greater Glasgow Primary Care NHS Trust	Greater Glasgow Argyll & Clyde Forth Valley Lanarkshire

1.2 The NHS Quality Improvement Scotland Approach to Assessment

NHS Quality Improvement Scotland uses a methodology which draws upon other quality assurance models to enable it, in partnership with healthcare professionals and members of the public, to develop standards for clinical services and to assess performance across NHSScotland against these standards.

Further information and definitions of the terms used in the standards and in the assessment of performance are contained in Appendix 2.

Assessment Categories

Each review team assesses performance using the categories 'met', 'not met' and 'not met 'insufficient evidence', as detailed below:

- '**Met**' applies where the evidence demonstrates the standard and/or criterion is being attained.
- '**Not met**' applies where the evidence demonstrates the standard and/or criterion is not being attained.
- '**Not met (insufficient evidence)**' applies where no evidence is available for the review team, or where the evidence available is insufficient to allow an assessment to be made.

A final category '**not applicable**' is used where a standard and/or criterion does not apply to the breast screening service under review.

1.3 Background to the Clinical Standards for Breast Screening

The SBSP has a well-established quality assurance infrastructure, and is centrally commissioned by NHSScotland Screening Programmes, which forms part of the National Services Division (NSD) based in the Common Services Agency (CSA). In June 2001, CSBS (now part of NHS Quality Improvement Scotland) took over responsibility for the independent review of performance against standards for the SBSP.

The Breast Screening Standards Project Group developed six standards, covering organisational structures, processes and outcomes within the SBSP:

- General.
- Call-recall and Safeguarding.
- The Screening Process.
- The Assessment Process.
- Surgical Referral.
- Cancer Yield.

The standards draw on an extensive evidence base, and were finalised in consultation with many people across Scotland. They represent what are considered to be the key elements of care a woman receives on her journey through the screening process.

Women may be diagnosed with breast cancer through the SBSP, but may also self-refer to their GP with symptoms such as a lump in the breast or nipple change. The management of breast cancer detected through both these routes is addressed by the *Clinical Standards for Breast Cancer*, published in 2001 (available from the NHS Quality Improvement Scotland website). NHS Quality Improvement Scotland is conducting ongoing work into the integration of breast screening and breast cancer standards.

Quality assurance for the SBSP has continually evolved throughout the life of the programme. Every discipline of the SBSP has developed a set of quality assurance standards, and the *Clinical Standards for Breast Screening* seek to integrate these with the more generic standards relevant to a woman's journey through the breast screening programme.

The *Clinical Standards for Breast Screening* are underpinned by a number of key points:

- Screening is a test offered to symptom-free, apparently healthy people. It aims to distinguish those who are probably at risk of the disease being screened for, from those who are probably not. A screening programme offers a test to a defined population, known to be at risk from the disease, at a regular interval, the frequency of which depends on the natural progression of the disease. The aim is to offer treatment at an early stage when it is likely to be more effective and less invasive. Since people presenting for screening are healthy, the duty of care takes on an additional dimension.

- No screening test can be 100% accurate, therefore the provision of clear information to enable people undergoing screening to make informed choices is vital.

- Breast screening is a cyclical process, therefore there is a need for systems at all stages of the process to ensure continuity of care. Due to the nature of the programme, there are repeated opportunities for women to undergo the screening test and for the early detection of breast cancer. Although the SBSP is a well-established service with good attendance, it is recognised that there is an ongoing need to promote and increase confidence in the programme, and improve efficiency. The programme must aim to reach all eligible women, irrespective of their socioeconomic status, race or any special needs requirements.

- Relevant information and the opportunity to participate in the SBSP should be provided in a user-friendly manner so that potential participants are encouraged to attend for screening and recognise the benefits it offers. Information should be available at all stages of the process, and must be developed with public participation and by all groups of healthcare professionals involved in screening.

- Staff at all stages and levels in the programme should be trained not only within their own setting, but also with an emphasis on understanding the wider aspects of the screening programme and associated healthcare services.

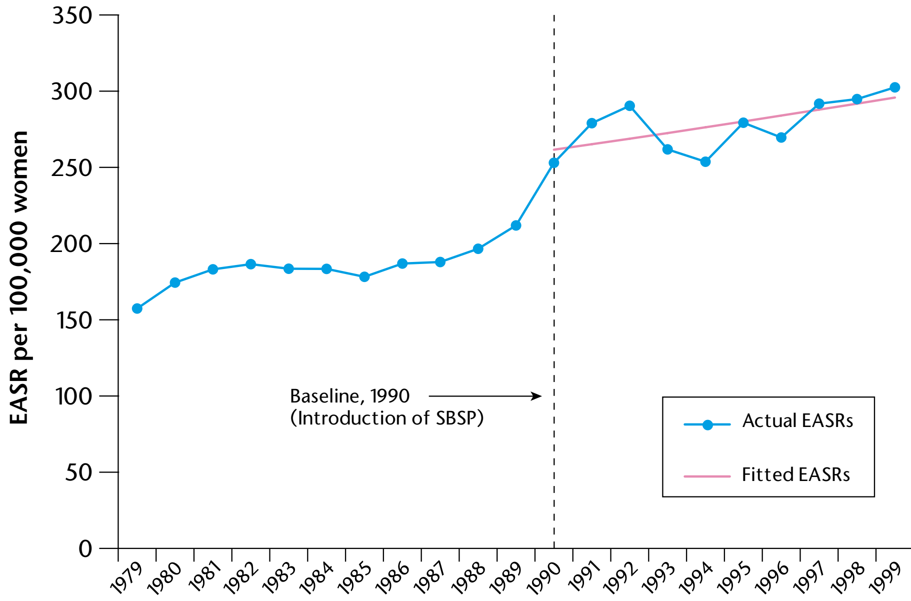
- Multidisciplinary teamworking across all components of the SBSP, co-ordinated and monitored by NHS Boards, is the basis for an effective and efficient programme.

The *Clinical Standards for Breast Screening* are based on UK-wide standards for the NHS Breast Screening Programme (NHSBSP). While some of the NHSBSP standards have been amended to reflect experience of the service, the SBSP has chosen to retain a selection of the original standards, as approved by its National Advisory Group. The *Clinical Standards for Breast Screening* therefore include several standards that are aimed at a higher level, or are more appropriate to the service in Scotland.

1.4 Introduction to Breast Screening

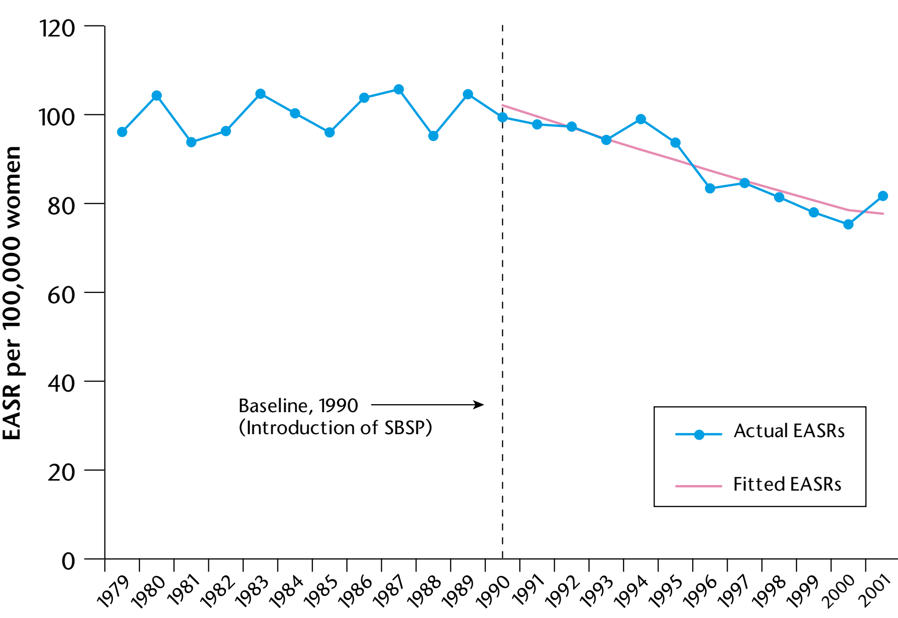
Breast cancer is the most common form of cancer among women, both in Scotland and worldwide. Around 3,000 cases are diagnosed each year in Scottish women, with more than 80% of these cases found in women aged over 50. Survival from breast cancer has improved significantly over the last 30 years, due to earlier diagnosis and improvements in treatment, and 75% of women are now still alive and well 5 years after diagnosis. Screening for breast cancer by mammography has been shown to reduce deaths from breast cancer by up to one-third among women aged 50-69 years.[3]

Figure 1
Breast Cancer Incidence [European Age Standardised Rates (EASRs)] Scotland, 1979-1999, Females Aged 50-64



3. International Agency for Research on Cancer (IARC), In press.

Figure 2
Mortality from Breast Cancer [European Age Standardised Rates (EASRs)]
Scotland, 1979-2001, Females Aged 55-69

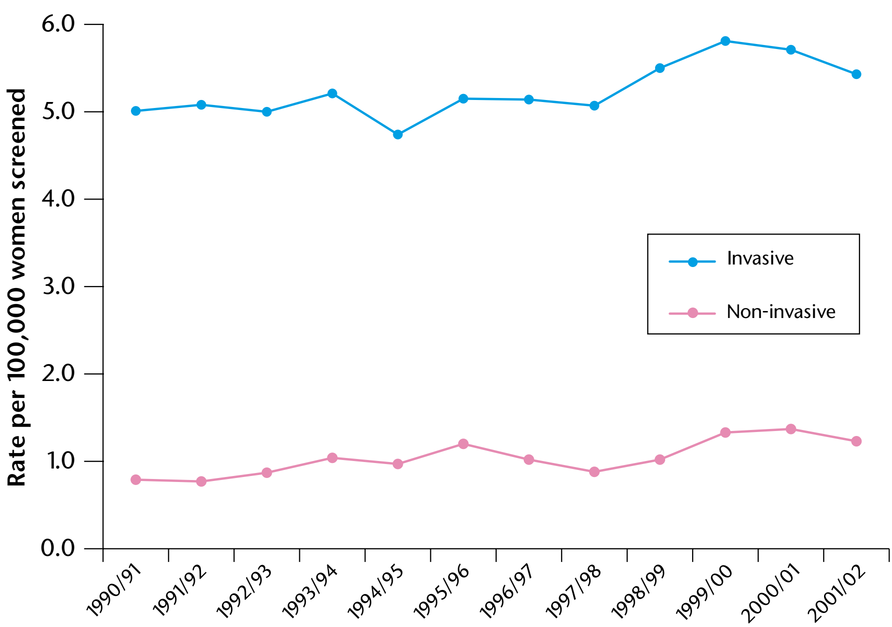


The SBSP currently invites all eligible women aged 50-64 years to attend a free breast screening appointment once every 3 years. Women over 64 years are also encouraged to self-refer to the screening programme. From 2003-2004, the SBSP is gradually extending the upper eligible age range of routine invitation to 70 years.

Screening appointments in Scotland take place in one of six regional screening centres or 13 associated mobile screening units that are used in rural and inner city areas. Throughout 2003, the SBSP will acquire a further four mobile units to cover the increased workload which will result from the implementation of age extension. At present, approximately 152,000 women across Scotland are invited for breast screening each year, and around 74% accept their invitation to attend.

The SBSP currently detects approximately 5.7 invasive breast cancers per 1,000 women screened in Scotland. The SBSP also detects around 1.3 non-invasive cancers per 1,000 women screened in Scotland; cancers that were rarely diagnosed prior to the introduction of breast screening, and that respond well to early treatment.

Figure 3
Invasive and Non-invasive Cancer Detection Rates per 1,000 Women Screened
Scottish Breast Screening Programme, 1990-1991 to 2001-2002, All Ages and Appointment Types



What is Mammography?

Mammography is a screening test which can allow early detection of breast cancer in a symptomless woman. The process of mammography involves a specialist radiographer and/or assistant practitioner taking X-rays of the breasts using specially designed equipment. The resulting X-rays are then assessed by two specialist radiologists or film readers for potential abnormalities in the breast tissue. Mammography can identify small abnormalities that cannot be detected by a physical examination. Detection of the disease at an early stage may subsequently contribute to improved treatment outcomes and a reduction in ill health.

Mammography screening is not in itself a diagnostic test, but instead allows the radiologist or film reader to identify whether a woman's mammogram is 'normal' or 'abnormal'. If a mammogram result is 'normal', the woman is returned to the routine recall system, and will be invited for another screening test 3 years later. Women whose mammogram result is identified as 'abnormal' need to undergo further investigation, known as assessment, to obtain a diagnosis.

What happens at Assessment?

Women attend for assessment at the breast screening centre, or, occasionally, at an outreach clinic in their local area. Assessment may involve clinical examination of the breasts, further X-rays, ultrasound, or removal of a small amount of tissue or cells from the breast by the processes known as core biopsy or fine needle aspiration (FNA). A woman will see several different healthcare professionals during the assessment visit, and is supported throughout by a breast care nurse. Depending on which tests are conducted, she will either receive her results at the end of the assessment clinic, or will be asked to return to the breast screening unit at a later date. This usually occurs within 1-2 weeks of the initial assessment appointment.

If the abnormality is confirmed to be malignant, it can be treated through a variety of means, including surgery, radiotherapy and drug therapy. The woman will be quickly referred to a surgeon at a central hospital, or possibly at her local hospital, and should discuss her results with a member of the surgical team within 5 working days.

Treatment outcomes for breast cancer have improved greatly in recent years. However, no screening test is 100% accurate, and it should be borne in mind that cancer may sometimes be present even if a woman's mammogram is normal. The advantage of a screening programme is that there are repeat opportunities to detect the disease.

Development of the Scottish Breast Screening Programme

The SBSP was launched in 1988, as part of the UK-wide NHSBSP. By 1991, the SBSP was fully operational, and the first round of screening was completed in 1994. The SBSP is commissioned by NSD from six host NHS Trusts across Scotland. NSD is directly responsible for central support for the programme, in the form of a medical physics service, a nationally managed mobile fleet, radiographic training, and co-ordinating the support and development of the SBSP IT system.

The host NHS Trusts are responsible for the management of the SBSP service for the NHS Board areas served. Each host NHS Trust appoints a medically qualified named individual as service director who has responsibility for the overall direction and management of the service locally, ensuring conformity with national policy. Whilst each breast screening service is a division of the SBSP, ultimate responsibility for its performance lies with the chief executive of the host NHS Trust.

Each host NHS Trust is required to provide interim and annual reports on performance to NSD. NSD reports annually to the Scottish Executive Health Department on the overall performance of the SBSP. The

performance of the SBSP is monitored using the minimum contract monitoring data set, which was introduced by the NHSBSP Evaluation Group and approved by the UK Departments of Health.

Many healthcare staff are involved in providing the screening service. They include: the specialists who perform mammography and interpret the mammograms; clinicians involved in investigations, diagnosis and treatment; people who maintain equipment; and those who manage and administer the service. NHS Boards have a nominated person responsible for overseeing the breast screening programme in their area (the screening co-ordinator), and multidisciplinary co-ordinating groups for each NHS Board provide direction and advice on local issues. NHS Quality Improvement Scotland is responsible for monitoring the quality of care provided by the SBSP, and this report represents the first time a detailed national overview of performance in the SBSP has been published.

1.5 The NHS Quality Improvement Scotland Standards and Your Care

Questions You Might Want to Ask

A number of the breast screening standards have been summarised below and are shown in blue. Each standard is followed by questions you might want to ask about your care. Your GP or your local screening service (detailed in Section 1.7) can provide you with this information on request.

An effective breast screening service is available and offered in NHS Boards.

- Where do I go for breast screening?
- Will a mobile unit be coming to my area?

All communication with the users of the breast screening service is clear and relevant.

- Will I get information about breast screening before my appointment?
- Can I be screened if I am disabled?
- What information is available to help me if I have a visual or hearing impairment?
- What information is available to help me if I do not speak/read English? How can I access a translator?
- I have breast implants. Can I still have a mammogram?
- How can I make a comment or complaint about the service?

Effective arrangements are in place to ensure that all eligible women are invited for screening once every 3 years.

- I've recently moved to Scotland. Can I have a mammogram?
- I wasn't able to attend my screening appointment. What should I do now?
- I am above the age of invitation. Can I still attend for screening?

Women who choose to be removed from the call-recall system can be reinstated at any time.

- Can I opt out of the screening programme?
- I've changed my mind about screening. Can I still have a mammogram?

Women are given an explanation of why and how mammography will be undertaken.

- How much radiation does a mammogram involve?
- How soon will I receive my results?
- How soon will I be seen if I need to come back for any follow-up tests?

At assessment, women are told about the type of test they are getting and why.

- What tests will I get and what are they for? How many will I need?
- Who will explain the process to me?
- When will I receive my results? Will I have the chance to speak to someone about my results?
- How soon will I be treated if I am diagnosed with breast cancer?

Communication skills training is available for all staff employed in the breast screening service.

- Will the screening staff listen to my concerns and give me time to ask questions?
- Will a specialist nurse be there to speak to me?

GPs are informed, without undue delay, about a woman's results or diagnosis.

- Who will tell my GP about the results of my mammogram or tests?
- How quickly will this happen?

Questions for GPs

Below are summarised some general questions that GPs or primary healthcare staff may wish to ask their local screening service.

- How will I know when women from my practice are due to be screened?
- Will I get the chance to confirm which women from my practice are eligible for breast screening?
- How will I be kept informed of women's results?
- Who is responsible for following up those women who don't attend their appointments?
- Who is responsible for referring women for surgical opinion?
- How can I help promote the breast screening service in my area?

BREAST SCREENING MYTHS

There are a lot of myths and misconceptions about breast screening. Those listed below are some of the most common:

MYTH	FACT
Compression of the breast during mammography can cause a breast cancer to spread.	During the mammogram, each breast is held between the support table and compression plate for a few seconds only. There is no evidence that this compression can cause a cancer to spread. Indeed, if a cancer is present, mammography screening is the best way of detecting it at an early stage.
Mammography can cause breast implants to burst.	Minimal compression is used on the breast implant during the breast X-ray procedure. It is highly unlikely that this compression could cause or worsen leaking of silicone/saline, or change the shape or texture of the breast.
The radiation in a mammogram is harmful to my health.	Unfortunately, any exposure to radiation carries some risk of harm, however small. However, the X-ray in a mammogram uses a low dose of radiation only, and the benefit of screening outweighs the risk of any harm from the X-ray.

1.6 Frequently Asked Questions

Q. What is breast screening?

A. Breast screening (mammography) is an X-ray examination of the breasts.

Breast screening may show breast cancers at an early stage, when they are too small for you or your GP to see or feel.

A mammogram takes a few minutes and involves only a low dose of radiation, so the risk to your health is very small.

Your whole visit to the breast screening unit or mobile van should take about half an hour.

Q. Why do I need breast screening?

A. Breast cancer is the most common form of cancer among women, and around one in 12 Scottish women will develop the disease in their lifetime. Breast cancer is more common in women over 50. Breast screening can help to find small changes in the breast before there are any other signs or symptoms. If changes are found at an early stage, there is a good chance of a successful recovery.

Q. Why are women under the age of 50 not invited for breast screening?

A. The SBSP currently invites all women aged between 50 and 64 for breast screening every 3 years.

Breast screening for women under 50 has not been proven to reduce the number of deaths from breast cancer in that age group. However, whatever age you are, if you are ever worried about any breast problem, please contact your GP who may refer you for a specialist opinion if necessary.

The invitation system is gradually being changed to include women up to 70 years old. At the moment, if you are 65 or over, you will not automatically be invited for screening, but you will be screened free every 3 years at your request.

Please contact your local breast screening service or your GP for advice.

Q. What exactly happens during the breast screening appointment?

A. When you arrive, feel free to ask any questions you have about breast screening.

When you have undressed and are ready and comfortable, a female radiographer or assistant practitioner will explain mammography to you and ask you a few questions. She will help you place your breasts, one at a time, in the correct position between the support table and compression plate, and take the X-rays.

Mammography takes a few minutes and your breasts are only compressed for a few seconds each. There is no evidence that this procedure harms the breast.

Q. When do I get my results?

A. When you have had the mammogram, the radiographer or assistant practitioner will tell you how, and approximately when, you will get your results. This will usually be via letter around 3 weeks after your screening appointment. Make sure you have received this information before you leave the unit.

Q. How reliable is breast screening?

A. Mammography screening is the most reliable way of detecting breast cancer at an early stage among women in the over 50 age group. Mammography is a skilled procedure, but, like other screening tests, it is not perfect. For example:

- some cancers are very difficult to see on the X-ray;
- the person reading the X-ray may not detect the cancer (this will happen occasionally, no matter how experienced the reader is); and
- sometimes women are called back for follow-up, and no abnormality is found after further checks.

1.7 Useful Contacts

Breast Screening Information - Scotland

1. Scottish Breast Screening Programme
National Services Division
Common Services Agency
Room C030
Trinity Park House
South Trinity Road
EDINBURGH
EH5 3SF

Tel: 0131 551 8136
www.show.scot.nhs.uk/nsd/screening/breast/breast.html

Local Screening Services

2. East of Scotland Breast Screening Service
Ninewells Hospital
DUNDEE
DD1 9SY

Tel: 01382 425646
www.ourbreastsite.org

3. North East of Scotland Breast Screening Service
Foresterhill
Foresterhill Road
ABERDEEN
AB25 2XF

Tel: 01224 550570

4. North of Scotland Breast Screening Service
Raigmore Hospital
INVERNESS
IV2 3UJ

Tel: 01463 713222

5. South East of Scotland Breast Screening Service
Ardmillan House
42 Ardmillan Terrace
EDINBURGH
EH11 2JL

Tel: 0131 537 7400

6. South West of Scotland Breast Screening Service
Ayrshire Central Hospital
IRVINE
KA12 8SS

Tel: 01294 323506
www.show.scot.nhs.uk/aaaht/PatVis/BSService

7. West of Scotland Breast Screening Service
Stock Exchange Court
77 Nelson Mandela Place
GLASGOW
G2 1QT

Tel: 0141 572 5800

Breast Screening Information - UK

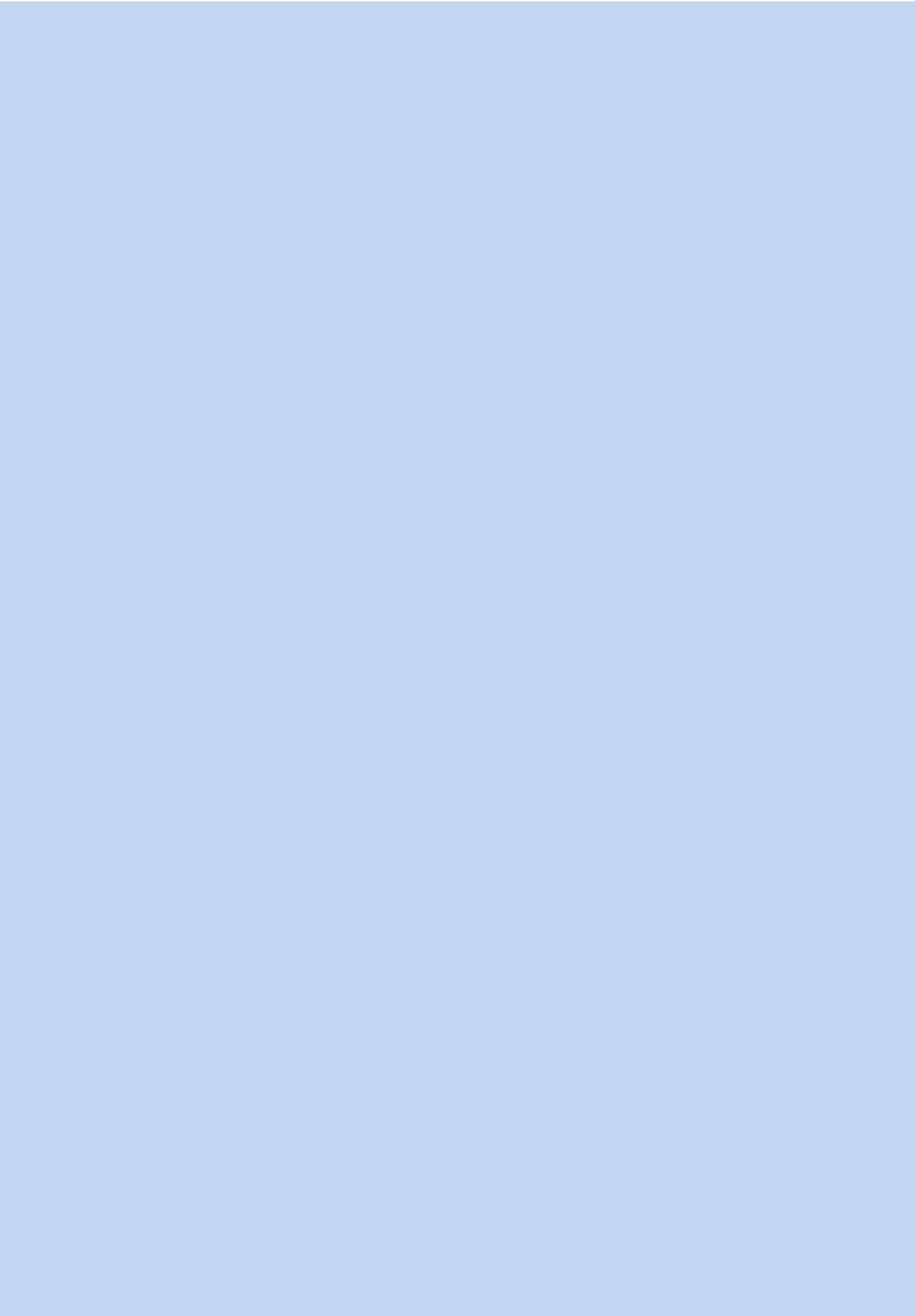
8. NHS Breast Screening Programme
The Manor House
260 Ecclesall Road South
SHEFFIELD
S11 9PS

Tel: 0114 271 1060
www.cancerscreening.nhs.uk/breastscreen

Breast Cancer Information

9. CancerBACUP
3 Bath Place
Rivington Street
LONDON
EC2A 3JR

Freephone Helpline: 0808 800 1234
www.cancerbacup.org.uk



Chapter 2

National Performance Against the Standards

2. National Performance Against the Standards

This section presents the findings across Scotland in terms of performance against groups of criteria from the breast screening standards. A number of examples of innovative local solutions and areas of good practice are highlighted in boxes throughout the text. These examples are not exhaustive - every review team noted examples of good practice during visits, and these were often in place in more than one service. Challenges are also listed, and there remains scope for change and improvements in relation to performance against the breast screening standards.

Feedback from those reviewed and those in review teams is sought after every visit, and nearly 60 people responded. Those involved in the review process reported that the opportunity to consider different ways of addressing shared issues, to highlight difficulties, and to obtain feedback has been particularly valuable. A number of suggestions received will also help NHS Quality Improvement Scotland to refine the process used for future reviews of the SBSP.

Giving the public and the service the chance to review aspects of the way in which breast screening is provided has been fundamental to the approach taken, and is a starting point for many activities, including:

- measuring good practice;
- sharing good practice;
- stimulating multidisciplinary working;
- involving those who use the service; and, perhaps most importantly,
- ensuring both that the provision of care is balanced by the monitoring of that care against key performance standards, and that the quality of care is continually improved.

During the review of the SBSP, the six breast screening services across Scotland were visited to assess performance against the standards. This national overview summarises the local reports produced for each service. Accordingly, the findings presented reflect the number of instances where the standard criteria were met, based on the denominator of the six local reports.

Information, Data Collection and Audit

The SBSP has a well-established system of data collection and audit, facilitated through links with the Information and Statistics Division (ISD) of the Common Services Agency. During the development of the SBSP, each professional discipline defined the data that were required to be collected for effective monitoring of the programme. ISD produces these programme data on an annual basis, and this information also feeds into UK-wide data, allowing comparisons at a regional, national and UK level.

A great deal of the data provided by the breast screening services in their self-assessment submissions were derived centrally from ISD, and presented to the review teams in a uniform format. However, it should be recognised that the process of self-assessment and review required a significant amount of data, which could not be collected via the SBSP IT system, to be submitted. These data therefore had to be produced manually at local level. Review teams acknowledged the commitment of the breast screening services to undertaking local audit and review, and highlighted the time spent by each service on these exercises. None of the services could consistently provide data for all the criteria in the breast screening standards. However, it was noted that there were only four criteria for which data could not be provided by any of the services.

A comprehensive quality assurance system has been in place since the establishment of the SBSP, and quality assurance activities are undertaken by each discipline involved in delivering breast screening in Scotland. This includes regular unidisciplinary meetings and review visits, and participation in numerous systems of performance audit. The quality assurance system is co-ordinated by NSD, and performance is monitored by NHS Quality Improvement Scotland.

National programme information for the SBSP is produced centrally, and includes leaflets on all aspects of the screening process. All women invited for screening across Scotland therefore receive uniform information containing the core elements, as identified by the SBSP and the public, to support informed choice.

2.1 Standard 1: General

Standard Statement 1(a)

An effective breast screening service is available and offered in NHS Boards.

Essential Criteria

1(a)1. There are clearly defined arrangements for managing the breast screening service and lines of accountability within the host NHS Trust.

This criterion was met by 5/6 breast screening services.

1(a)2. Each breast screening service provides an annual report on performance to the commissioner (NSD), in line with the national service specification.

This criterion was met by 5/6 breast screening services.

1(a)3. There is a designated consultant in public health medicine or specialist in public health acting as the breast screening co-ordinator for each NHS Board.

This criterion was met by 4/6 breast screening services.

1(a)4. The breast screening co-ordinator provides a report to the NHS Board at least 3-yearly.

This criterion was met by 4/6 breast screening services.

1(a)5. Every NHS Board takes part in a multidisciplinary co-ordinating group with lay representation that meets at least once per screening round.

This criterion was met by 3/6 breast screening services.

Strengths

- There was evidence of the integration of each breast screening service within its host NHS Trust's clinical governance structure, with clear lines of accountability.
- There is an obvious commitment across all breast screening services to producing an annual report, within a set format, which is provided to NSD as commissioner of the SBSP.

Challenges

- There is increasing recognition that the annual reports generated by the breast screening services provide an important source of information, and should be circulated more widely.
- The function of breast screening co-ordinator is not fulfilled by a designated consultant/specialist in public health medicine in every NHS Board.
- Whilst all breast screening services demonstrate a commitment to networking with the NHS Boards they serve, there is varying use of multidisciplinary co-ordinating groups, and differential input by the groups to the planning of services across each NHS Board. Varying levels of lay participation in the groups were also evident.

Recommendations

NHS Boards should:

- Appoint a consultant/specialist in public health medicine who has specific responsibility for breast screening, in order to ensure that those with responsibility for co-ordinating the programme at NHS Board level have sufficient qualifications, experience and authority.
- Participate in a multidisciplinary co-ordinating group, which has representation from the relevant breast screening service, NHS Board staff, primary care services and the public.
- Circulate more widely the annual report generated by each breast screening service, particularly to relevant stakeholders within the primary care setting, NHS Board staff, and the public.

Standard Statement 1(b)

There is a national service specification in place, developed by and including all those involved in providing and monitoring breast screening services in NHS Boards and Trusts.

Essential Criteria

1(b)1. Breast screening services have signed up to the national service specification, which includes information for women, call-recall, the mammographic procedure, the assessment process, diagnosis and referral practice, quality assurance and audit.

This criterion was met by all 6 breast screening services.

1(b)2. There is clear evidence of arrangements in place to ensure the national service specification is monitored and adhered to within each screening centre. Results of monitoring are circulated to Trusts, NHS Boards and the commissioner (NSD) via the National Co-ordinator for Screening Programmes.

This criterion was met by all 6 breast screening services.

Strengths

- A national agreement is in place in all breast screening services as to the components of the breast screening programme.
- There is clear commitment by each of the breast screening services to regular monitoring of adherence to the national service specification, the results of which are circulated to relevant staff.

Standard Statement 1(c)

All communication with the users of the breast screening service is clear, informative, relevant and timeous.

Essential Criteria

1(c)1. National programme information is provided to women in a form approved by the National Advisory Group.

This criterion was met by all 6 breast screening services.

1(c)2. There is evidence of public and service consultation in developing local information about breast screening.

This criterion was met by all 6 breast screening services.

1(c)3. All information is provided to women in a format which takes account of physical, cultural, educational and mental health needs.

This criterion was met by all 6 breast screening services.

1(c)4. Women are provided with the information required to enable informed choice.

This criterion was met by all 6 breast screening services.

1(c)5. There is evidence that the host NHS Trust provides relevant communications skills training for all staff employed in the breast screening service.

This criterion was met by all 6 breast screening services.

Desirable Criterion

1(c)6. The breast screening service routinely measures women's satisfaction with information and communication, eg through discussion groups, satisfaction surveys.

This criterion was met by all 6 breast screening services.

Strengths

- The SBSP National Advisory Group monitors the content of national information leaflets. There is uniformity of the core information included in these leaflets across the SBSP. Members of the public, and breast screening staff, are included in consultation on the development of such material.

- There is regular and widespread monitoring by the SBSP of the acceptability of information, including its content and presentation, for users of the service.
- Several breast screening services have developed local materials to supplement national SBSP information, aimed, in particular, at meeting the physical and cultural needs of women.

Challenges

- The SBSP must continue to strive to provide information that takes account of all the needs of its users, including those women with specific physical, cultural, educational and mental health needs.
- In some instances, staff in breast screening services encounter difficulty in accessing communications skills courses offered by their host NHS Trusts.

Recommendations

- The SBSP should continue to recognise the specific information needs of its users. In particular, the needs of the hearing and visually impaired should be taken into account when the service is developing new information materials.
- All staff should be encouraged to access training in communications skills, not only within the host NHS Trust, but also from beyond. The process of personal development planning should be used to support staff in requests for both protected time and resources, to enable them to participate in relevant communications skills training.

Examples of Local Initiatives

North of Scotland Breast Screening Service

Highland Acute Hospitals NHS Trust operates a buddying scheme, whereby women with special needs can be accompanied to their breast screening appointment by an individual from the Trust. Service staff will inform women of this facility if they feel it may be relevant, and the scheme may also be accessed through GPs in the Highland region. The review team commended the Service's active involvement with the buddying scheme, and encouraged broad dissemination of information about accessing these arrangements.

North East of Scotland Breast Screening Service

Grampian Primary Care NHS Trust has in place a 'Triple C System', via which service users are encouraged to provide compliments, comments or complaints about Grampian primary care services. Women attending for breast screening are provided with forms to note their views. Any comments on the Service received via this mechanism are addressed at staff and management meetings, and are noted in the annual consumer feedback provided to NSD.

Standard Statement 1(d)

Case review and audit are undertaken to facilitate continuing improvement.

Essential Criteria

1(d)1. Breast screening services ensure a systematic process of review of all cases identified (by whatever means) as interval cancers, so that such cases can be classified according to standard definitions. As a result, any areas in the programme that require improvement are identified and addressed.

This criterion was met by all 6 breast screening services.

1(d)2. There is evidence of ongoing service review through a programme of audit of clinical and non-clinical activity.

This criterion was met by all 6 breast screening services.

1(d)3. Systematic peer review of management of assessment is undertaken at annual radiology quality assurance visits. Cases chosen for review comply with national guidance.

This criterion was met by all 6 breast screening services.

1(d)4. Each discipline carries out annual quality assurance visits or activity in accordance with national guidance.

This criterion was met by all 6 breast screening services.

1(d)5. There is a system in place to ensure that quality assurance recommendations are addressed.

This criterion was met by all 6 breast screening services.

Strengths

- There is a clear, ongoing commitment from all six breast screening services to the national quality assurance process. Throughout the whole of the SBSP, there are mechanisms in place to ensure that any issues arising from unidisciplinary or multidisciplinary quality assurance activities are addressed.
- There is evidence of ongoing clinical and non-clinical audit activity across the SBSP. In several breast screening services, these audits have informed changes in clinical and administrative practice.

Standard Statement 1(e)

All parts of the screening service comply with current SBSP confidentiality and security guidelines.

Essential Criterion

1(e)1. All staff employed by the breast screening service are aware of current SBSP confidentiality and security guidelines.

This criterion was met by all 6 breast screening services.

Strength

- There is an established practice across the six breast screening services of ensuring that all new and existing staff are aware of the SBSP confidentiality guidelines.

Standard Statement 1(f)

The screening service works with primary care teams to facilitate the screening process.

Essential Criteria

1(f)1. There is a mechanism for ensuring that primary care teams are kept informed of each stage of a woman's progress, including results and non-attendance for screening or assessment.

This criterion was met by all 6 breast screening services.

1(f)2. Screening services work with primary care teams to encourage non-attenders to attend for screening or assessment.

This criterion was met by all 6 breast screening services.

1(f)3. Screening services work with primary care to ensure that primary care teams can provide women with relevant information and support throughout the screening process.

This criterion was met by all 6 breast screening services.

Strength

- Each breast screening service recognises the important role played by primary care teams in encouraging attendance and providing support to women throughout their screening experience. All six services ensure that primary care teams are kept informed at each stage of a woman's progress through the screening process.

Recommendations

- Breast screening services should continue to work with primary care teams at all stages of the breast screening process. Services should ensure that all primary care teams are equally involved, particularly those from outwith the host NHS Board area.
- Information about breast screening should be readily available to all those within the primary care setting, to best enable them to provide women with relevant information and support.

Example of a Local Initiative

South West of Scotland Breast Screening Service

The Service works with primary care teams to encourage women to attend for breast screening or assessment through a New Opportunities Fund (NOF) project targeted at areas of deprivation. The NOF project is based around enhancing current structures and strengthening links with primary care. As part of the project, the host NHS Trust's breast cancer programme facilitator visits practices in high deprivation areas to promote initiatives such as casenote tagging for non-attenders.

2.2 Standard 2: Call-Recall and Safeguarding

Standard Statement 2(a)

Effective call-recall arrangements are in place to ensure all eligible women are invited for screening once every 3 years.

Essential Criteria

2(a)1. A minimum of 90% of eligible women are sent their first invitation to screening before their 53rd birthday.

Data were not available to assess this criterion in any of the breast screening services.

2(a)2. A minimum of 90% of eligible women are sent an invitation to screening within 36 months of their previous screen.

Data were not available to assess this criterion in any of the breast screening services.

2(a)3. There are arrangements in place to invite known eligible women not registered with a GP (eg in long-stay institutions, prisons).

This criterion was met by all 6 breast screening services.

2(a)4. There are arrangements in place to identify non-attenders and offer them a further opportunity to attend within that screening round.

This criterion was met by all 6 breast screening services.

2(a)5. All staff involved in call-recall receive training in using the SBSP IT system before undertaking unsupervised work.

This criterion was met by all 6 breast screening services.

Desirable Criteria

2(a)6. All eligible women are sent their first invitation to screening before their 53rd birthday.

Data were not available to assess this criterion in any of the breast screening services.

2(a)7. All eligible women are sent an invitation to screening within 36 months of their previous screen.

Data were not available to assess this criterion in any of the breast screening services.

Strengths

- While invitation for breast screening is facilitated through the computerised call-recall system, the SBSP has also developed effective arrangements to invite known eligible women who are not registered with a GP.
- The SBSP has in place efficient procedures for identifying and following up women who do not attend for screening. These women are offered a further opportunity to attend, either in the form of a second appointment, or by providing them with details of how long they remain eligible for invitation, and how the service can be accessed in the future.

Challenge

- Monitoring arrangements need to be in place to ensure that all women are sent their first invitation to screening before the age of 53, and that women are recalled within 3 years for subsequent screens. A computer programme has recently been developed which runs a 'sweep' to identify women who have reached the age of 53, but who have not yet been invited for screening. However, services still cannot identify from the IT system whether women have been invited for screening within 3 years of their previous mammogram.

Recommendations

- The SBSP should ensure that services can directly derive the data required to monitor invitation to breast screening from the national IT system. The coverage achieved by the SBSP, evidenced by invitation to initial and subsequent screening appointments, is recognised as an important measure of the effectiveness of the programme.
- All breast screening services should ensure that procedures are in place to formally document and monitor the training undertaken by staff involved in administering the call-recall system.

Standard Statement 2(b)

The number of women attending for breast screening is maximised within the principles of informed choice.

Essential Criteria

2(b)1. A minimum of 70% of invited women attend for breast screening.

This criterion was met by 5/6 breast screening services.

2(b)2. There is evidence of local health promotion involvement in developing and providing breast screening information for women.

This criterion was met by 5/6 breast screening services.

2(b)3. There is evidence that women above the age of invitation for screening are encouraged to self-refer.

This criterion was met by all 6 breast screening services.

Desirable Criterion

2(b)4. A minimum of 75% of invited women attend for breast screening.

This criterion was met by 4/6 breast screening services.

Strengths

- The SBSP is achieving consistently good attendance rates, and a number of innovative projects are in place to maintain and improve these rates. Women over the age of routine invitation are also encouraged by screening staff and primary care teams to self-refer for breast screening.
- There is widespread use of local health promotion initiatives by all services in developing and providing breast screening information to women.

Challenge

- The target of 70% attendance for breast screening is not being achieved in all NHS Board areas, in particular those with higher levels of deprivation.

Recommendation

- Services that screen areas with high associated deprivation levels and lower uptakes should be encouraged to access resources and explore evidence-based mechanisms for promoting attendance for breast screening.

Examples of Local Initiatives

West of Scotland Breast Screening Service

The health promotion team from NHS Greater Glasgow has set up a project to train lay people from ethnic backgrounds to provide information about breast screening to their local communities. It is hoped that this culturally sensitive approach will help increase uptake for breast screening in ethnic communities.

South East of Scotland Breast Screening Service

From February 2002 to May 2002, the Service conducted a pilot project where appointment slots were offered outwith normal working hours. Following review of this trial, it was reported that there had been an increase in attendance rates during the 4-month period. In response to this outcome, a business case has now been prepared to support the provision of these extended appointment slots on a permanent basis.

Standard Statement 2(c)

Safeguarding procedures are in place, appropriate to the outcome of the screening episode.

Essential Criteria

2(c)1. Written safeguarding procedures, which cover all aspects of the screening process, are in place as per agreed national quality assurance guidelines.

This criterion was met by all 6 breast screening services.

2(c)2. There are written safeguarding procedures in place to ensure that all women with normal mammograms are returned to the routine recall system.

This criterion was met by all 6 breast screening services.

2(c)3. There are written safeguarding procedures in place to ensure that all women with technically unsatisfactory mammograms are recalled for a repeat screen.

This criterion was met by all 6 breast screening services.

2(c)4. There are written safeguarding procedures in place to ensure that all women with abnormal mammograms are recalled for assessment.

This criterion was met by all 6 breast screening services.

Strength

- Written safeguarding procedures are in place across all six breast screening services, to ensure the appropriate follow-up of women after screening.

Recommendation

- Breast screening services should carry out regular monitoring to ensure adherence to written safeguarding procedures. The results of the monitoring process should be available to inform development of the procedures across the SBSP.

Example of a Local Initiative

East of Scotland Breast Screening Service

National safeguarding mechanisms are used in conjunction with locally developed quality assurance check forms to monitor non-clinical activity, such as waiting times for screening results.

Standard Statement 2(d)

Women who choose to be removed from the call-recall system can be reinstated at any time.

Essential Criterion

2(d)1. A protocol is in place for women who choose to be removed from the call-recall system to allow them to be reinstated at any time, and is specified on a disclaimer form.

This criterion was met by all 6 breast screening services.

Strength

- The SBSP has an established policy which ensures that women may be reinstated to the call-recall system at any time. Each breast screening service uses a standard disclaimer form, stating this information, for women who choose to be removed from the call-recall system.

2.3 Standard 3: The Screening Process

Standard Statement 3(a)

Women are given an explanation of why and how mammography will be undertaken, both before and when they attend.

Essential Criteria

3(a)1. Women are given standardised written information explaining why and how mammography will be performed before they attend for screening.

This criterion was met by all 6 breast screening services.

3(a)2. Women are given a verbal explanation of how mammography will be performed when they attend for their screening appointment.

This criterion was met by all 6 breast screening services.

3(a)3. There is a system which enables staff to identify which type of appointment a woman has been invited for - screening, technical recall or assessment.

This criterion was met by all 6 breast screening services.

Strengths

- All women attending for breast screening in Scotland are provided with standardised information about the screening process, both before and during attendance for the mammographic appointment.
- Administrative staff dealing with enquiries can immediately identify from a woman's computer record the nature of her appointment, and whether she has had previous contact with the breast screening service.

Recommendation

- The SBSP should ensure that all relevant stakeholders are consulted on the core information to be included in national literature, which is currently under review.

Standard Statement 3(b)

All healthcare professionals performing mammography are suitably trained, using an accredited training programme delivered by a recognised training centre.

Essential Criteria

3(b)1. All new healthcare professionals performing mammography undertake an accredited training programme.

This criterion was met by all 6 breast screening services.

3(b)2. All existing healthcare professionals performing mammography undertake updates as per national guidelines.

This criterion was met by all 6 breast screening services.

3(b)3. All healthcare professionals performing mammography participate in performance audit as part of the regular quality assurance programme.

This criterion was met by all 6 breast screening services.

3(b)4. All healthcare professionals performing mammography adhere to the Ionising Radiation (Medical Exposure) Regulations 2000 (IRMER).

This criterion was met by all 6 breast screening services.

Strengths

- All new staff performing mammography within the SBSP have undertaken accredited training. All existing staff undertake accredited clinical and academic updates at least once every 3 years, through the Scottish Mammography Education Centre based at Queen Margaret University College, Edinburgh.
- There is widespread commitment to regular mammographic quality assurance activities, and, in particular, routine audit of personal performance.
- The SBSP has adopted the changes in procedure required by the Ionising Radiation (Medical Exposure) Regulations 2000 (IRMER), which are adhered to in each screening service.

Recommendation

- National guidance should be sought as to the frequency of radiographic updates.

Example of a Local Initiative

South East of Scotland Breast Screening Service

The review team commended the Service on its comprehensive system of mammography performance audit, which is carried out on a routine basis. This includes review of all films from repeat examinations by individual radiographers following completion of a screening episode, examination of all films from the mobile units for technical quality by the daily duty QA radiographers, and identification and audit of technically poor diagnostic films. The outcomes of the performance audits are discussed at unidisciplinary and multidisciplinary meetings, and any resulting agreements actioned.

Standard Statement 3(c)

Mammography is carried out using approved equipment operating to national quality assurance standards.

Essential Criteria

3(c)1. Written protocols are in place to ensure that mammography equipment operates to current national guidelines.

This criterion was met by all 6 breast screening services.

3(c)2. Standard film density conforms to SBSP guidance.

This criterion was met by all 6 breast screening services.

Strength

- There is widespread adherence to national quality standards, which ensures that the mammography equipment used by each breast screening service is operating optimally.

Recommendation

- There should be ongoing commitment to maintaining nationally agreed quality assurance standards, and to monitoring and revising these standards where applicable.

Standard Statement 3(d)

The dose of radiation is kept within approved limits according to national guidance.

Essential Criteria

3(d)1. The mean glandular dose per film to a standard breast using a grid is less than or equal to 2mGy.

This criterion was met by all 6 breast screening services.

3(d)2. Dose surveys are carried out in accordance with national guidance.

This criterion was met by all 6 breast screening services.

Strength

- Regular dose surveys performed by all services check that women attending for breast screening are only exposed to radiation doses that fall within agreed safety limits.

Standard Statement 3(e)

All mammographic films are double read by health professionals qualified to do so.

Essential Criteria

3(e)1. Evidence is available to confirm that double reading of all mammographic films is standard practice.

This criterion was met by all 6 breast screening services.

3(e)2. All consultant radiologists comply with the recommendations of the Royal College of Radiologists.

This criterion was met by 5/6 breast screening services.

3(e)3. All other film readers comply with national recommendations.

Where this criterion was applicable, it was met by 1/1 breast screening service.

Strengths

- In all of the breast screening services, mammographic films are reported by two qualified film readers. Three of the services also carry out arbitration for non-concordant cases (ie cases where the two film readers are in disagreement).
- The SBSP is responding proactively to the national difficulties in radiology recruitment through the training of non-radiological staff in mammographic film interpretation.
- The SBSP QA radiology group has developed guidelines for non-radiologist film readers, in line with those developed by the Royal College of Radiologists for consultant radiologist film readers.

Challenge

- As a result of national staffing shortages, which contribute to pressures in work areas outwith film reading, not all radiologists are able to read the annual number of mammographic cases recommended by the Royal College of Radiologists. Similarly, participation across Scotland in the Personal Performance in Mammographic Screening (PERFORMS) scheme or equivalent, as recommended by the Royal College of Radiologists, is variable.

Recommendations

- Radiologists, and other film readers in the SBSP, should strive to achieve the film reading target of 5,000 cases per annum, in keeping with the recommendations of the Royal College of Radiologists.
- The SBSP should agree, at national level, the guidelines for non-radiologist film readers.
- There should be continuing commitment by the SBSP to the double reading of mammographic films, particularly in light of national policy which dictates a single mammographic view only for incident screening.

Standard Statement 3(f)

The number of women undergoing repeat examinations for technical reasons is kept to a minimum.

Essential Criterion

3(f)1. Less than 3% of women attending for screening are recalled for technical reasons.

This criterion was met by all 6 breast screening services.

Desirable Criterion

3(f)2. Less than 2% of women attending for screening are recalled for technical reasons.

This criterion was met by 1/6 breast screening services.

Strength

- All six breast screening services are within the essential target for the percentage of women recalled for technical reasons.

Recommendations

- All breast screening services should endeavour to achieve the desirable target for the percentage of women screened who are recalled for technical reasons.
- To ensure a consistent approach in line with the rest of the UK, national guidance must be sought as to whether this standard should reflect all mammographic retakes (ie including repeat X-rays taken at a woman's appointment), or solely the rate of recall for technical reasons.

Standard Statement 3(g)

All women receive the result of their screening mammogram timeously and in a recommended format.

Essential Criteria

3(g)1. A minimum of 95% of women attending for screening are sent the result of their mammogram within 15 working days of their attendance for screening.

Where data were available to assess this criterion, it was met by 1/4 breast screening services.

3(g)2. Screening results are issued in the format recommended by the National Advisory Group.

This criterion was met by all 6 breast screening services.

Desirable Criterion

3(g)3. A minimum of 95% of women attending for screening are sent the result of their mammogram within 10 working days of their attendance for screening.

Where data were available to assess this criterion, it was met by 0/4 breast screening services.

Strength

- There is widespread use throughout Scotland of a nationally approved format for issuing screening results, supported by all six breast screening services.

Challenge

- Most services are struggling to deliver results within the essential target of 15 working days. Some services are not currently monitoring these data.

Recommendations

- All services should be encouraged to closely monitor waiting times for issuing results, and attempt to identify contributing pressures, be they related to staffing, high attendance levels, or recall rates.
- Services should develop a plan to work towards achieving not only the essential target of 15 working days, but also the desirable target of 10 working days.

Example of a Local Initiative

North East of Scotland Breast Screening Service

As it is not possible to directly collect data on the timing of screening result letters from the SBSP IT system, the Service monitors this information manually. Data are recorded on batch control sheets, where the date of screening and the date that results are posted are noted. These data are monitored on a daily basis and compiled in monthly monitoring reports. The review team highlighted the Service's comprehensive system of audit for the issuing of results letters.

2.4 Standard 4: The Assessment Process

Standard Statement 4(a)

The number of women recalled for assessment is minimised.

Essential Criteria

4(a)1. Less than 10% of women attending for prevalent screening (the first mammographic screen a woman has) are recalled for assessment.

This criterion was met by 3/6 breast screening services.

4(a)2. Less than 7% of women attending for incident screening (any subsequent screens a woman has) are recalled for assessment.

This criterion was met by all 6 breast screening services.

Desirable Criteria

4(a)3. Less than 7% of women attending for prevalent screening are recalled for assessment.

This criterion was not met by any of the breast screening services.

4(a)4. Less than 5% of women attending for incident screening are recalled for assessment.

This criterion was met by 3/6 breast screening services.

Strength

- All breast screening services meet the essential target for the percentage of women recalled for assessment following their second or subsequent screen.

Challenge

- The percentage of women recalled for assessment following their first screen is outwith the essential target for three of the breast screening services.

Recommendation

- It is recognised that a number of initiatives have been instigated to improve prevalent recall rates for assessment. Those services which have gradually reduced their prevalent recall rate to within the essential target should be encouraged to document their changes in practice, in order that other services may learn from their experience.

Standard Statement 4(b)

The interval between attendance for screening and assessment is minimised.

Essential Criteria

4(b)1. All women recalled for assessment are sent a letter of appointment within 15 working days of their attendance for screening.

Where data were available to assess this criterion, it was met by 0/5 breast screening services.

4(b)2. The time between sending the appointment letter and the offered appointment date for assessment is no more than 5 working days for all women.

This criterion was met by all 6 breast screening services.

4(b)3. There are arrangements in place to identify all women who do not attend for assessment and offer them a further opportunity to attend.

This criterion was met by all 6 breast screening services.

Desirable Criterion

4(b)4. All women recalled for assessment are offered an appointment date which falls within 15 working days of their attendance for screening.

Where data were available to assess this criterion, it was met by 0/5 breast screening services.

Strengths

- All services operate to a minimal waiting time policy, where the time between sending the appointment letter and the offered appointment date does not exceed 5 working days. Services also try to ensure that women do not receive their appointment letter at a weekend or during a public holiday, when the service is usually closed and personnel cannot be accessed.
- Each breast screening service has in place an established protocol for the identification of women who do not attend for assessment. In conjunction with primary care teams, these women are proactively followed up and offered a further opportunity to attend for assessment.

Challenge

- No breast screening service is currently meeting the essential target for the timing of assessment appointment letters, or the desirable target for the timing of assessment appointments.

Recommendation

- It is important that breast screening services continue to carry out regular monitoring of both waiting times for assessment appointments and posting of appointment letters. Through the audit cycle, services should identify the reasons contributing to delays in the assessment process, and attempt to address these where possible.

Standard Statement 4(c)

Women are given an explanation of why and how assessment will be undertaken, both before and when they attend.

Essential Criteria

4(c)1. Women are given standardised written information explaining why and how assessment will be performed and providing the opportunity to discuss any concerns before they attend for their appointment.

This criterion was met by 5/6 breast screening services.

4(c)2. Women are given a verbal explanation of how assessment will be performed when they attend for their appointment.

This criterion was met by all 6 breast screening services.

Strength

- In the majority of services, women recalled for assessment are provided with standardised information about the assessment process, both before and during their attendance.

Challenge

- It is important that *all* women across Scotland are provided with information regarding the assessment process before their appointment.

Recommendation

- All breast screening services should be encouraged to make use of written information, which can be provided to women before they attend for assessment. There is an opportunity to address this issue during the current redevelopment of the SBSP leaflets.

Standard Statement 4(d)

Assessment is carried out by a specialist multidisciplinary team.

Essential Criteria

4(d)1. Assessment is carried out by a specialist multidisciplinary team, qualified in: clinical examination; mammography; radiology; pathology/cytology; and breast care nursing.

This criterion was met by all 6 breast screening services.

4(d)2. There are written clinical protocols in place for the assessment process as per national guidelines.

This criterion was met by all 6 breast screening services.

4(d)3. A breast care nurse is present at the assessment clinic to provide information and support.

This criterion was met by all 6 breast screening services.

4(d)4. All histopathologists participate in the National Breast Screening Histopathology External Quality Assessment Scheme.

This criterion was met by 5/6 breast screening services.

Strengths

- Women recalled to the screening service are assessed by a multidisciplinary team, with specialist expertise in all aspects of diagnosis of breast abnormalities.
- In all breast screening services, national guidelines are used to inform the clinical protocols used for assessment.
- A breast care nurse is present at the assessment clinics conducted by all six breast screening services.
- There is a widespread commitment to the external system of quality assurance for histopathology.

Recommendations

- National guidelines for assessment have been developed using an evidence-based approach, and should form the basis for the development of local protocols. Where locally derived protocols are at variance with the national guidance, there should be a clear evidence-based approach and audit to support this variance.
- All histopathologists working with the SBSP should participate in the external quality assurance slide circulation programme.
- The SBSP should strive to maintain its multidisciplinary specialist approach to assessment. To this end, skill mix and role extension should be explored.

Examples of Local Initiatives

South West of Scotland Breast Screening Service

The Service has responded proactively to national staff shortages with a number of initiatives. These have included: employing a locum consultant radiologist to assist with film reading; employing a care assistant who supports the breast care nurse throughout the assessment process; and developing the skill mix of medical staff.

West of Scotland Breast Screening Service

The Service utilises a range of biopsy techniques, including mammotomy, upright stereotactic-guided biopsy and prone biopsy, and the review team noted as a strength the willingness of the Service to pilot and assess new technologies.

Standard Statement 4(e)

The number of women placed on early recall following assessment is minimised.

Essential Criterion

4(e)1. Less than 1% of all women attending for screening are placed on early recall following assessment.

This criterion was met by all 6 breast screening services.

Desirable Criterion

4(e)2. Less than or equal to 0.25% of all women attending for screening are placed on early recall following assessment.

This criterion was met by 2/6 breast screening services.

Strength

- All breast screening services are meeting the essential target for the percentage of women placed on early recall following assessment.

Recommendation

- All breast screening services should strive to improve their performance to the desirable target for the percentage of women placed on early recall following assessment.

Standard Statement 4(f)

The majority of women with breast cancer, both palpable and impalpable, receive a preoperative tissue diagnosis.

Essential Criterion

4(f)1. A minimum of 70% of women with breast cancer receive a preoperative tissue diagnosis.

This criterion was met by all 6 breast screening services.

Desirable Criterion

4(f)2. A minimum of 90% of women with breast cancer receive a preoperative tissue diagnosis.

This criterion was not met by any of the breast screening services.

Strength

- All breast screening services are achieving the essential target for the percentage of women with breast cancer who receive a histological diagnosis preoperatively. Several services are also narrowly outwith the desirable target. This is a result of using innovative techniques, particularly in the field of image-guided biopsy, and a developing expertise among service personnel.

Recommendation

- All services should endeavour to improve their performance in order to achieve the desirable target for preoperative tissue diagnosis.

Standard Statement 4(g)

Multidisciplinary meetings are held to discuss assessment results.

Essential Criterion

4(g)1. There is evidence of regular multidisciplinary meetings to discuss management of women who have undergone preoperative tissue diagnosis at assessment.

This criterion was met by 5/6 breast screening services.

Strength

- The majority of breast screening services are achieving multidisciplinary discussion in protected time prior to the delivery of women's results, despite the difficulties of arranging such meetings to suit all relevant personnel.

Recommendation

- All breast screening services should strive to hold multidisciplinary meetings to discuss management of women undergoing preoperative tissue diagnosis. These meetings are viewed as a priority in aiding the decision-making process.

Standard Statement 4(h)

All women receive results of assessment timeously and in a recommended format.

Essential Criteria

4(h)1. A minimum of 95% of women undergoing assessment receive their results verbally from an appropriately trained person within 10 working days.

Where data were available to assess this criterion, it was met by 3/3 breast screening services.

4(h)2. All women being returned to routine or early recall receive written confirmation of the outcome of the assessment process.

This criterion was met by all 6 breast screening services.

Desirable Criterion

4(h)3. A minimum of 95% of women undergoing assessment receive their results verbally from an appropriately trained person within 5 working days.

Where data were available to assess this criterion, it was met by 3/3 breast screening services.

Strength

- Where evidence was available, data showed that three breast screening services are meeting both the essential and desirable targets for the time to provision of assessment results.

Challenges

- Several of the breast screening services were unable to provide audit data to evidence these criteria, although the majority reported verbally that assessment results are provided within 10 working days.
- Services and their host NHS Trusts are presented with the challenge of recruiting, training and retaining pathologists, to help ensure that assessment results can be provided to women within recommended timescales.

Recommendation

- All breast screening services should establish a system of audit to ensure that timescales for the provision of assessment results are being met.

Example of a Local Initiative

North of Scotland Breast Screening Service

The Service has in place a comprehensive checklist for its assessment clinics. This checklist includes boxes for staff to record the investigations performed at assessment, the outcomes of assessment, which forms have been completed, and when data have been entered into the failsafe book or database. The checklist is used in tandem with an early recall database proforma, which facilitates the correct entry of information onto the IT system. This ensures that women being returned to routine or early recall receive written confirmation of their assessment outcomes.

2.5 Standard 5: Surgical Referral

Standard Statement 5(a)

The time-scale between receiving the results of the assessment process and discussing management with the breast surgical team is minimised.

Essential Criterion

5(a)1. After receiving their assessment results, a minimum of 90% of women referred discuss their results with the surgical team within 5 working days.

Where data were available to assess this criterion, it was met by 3/3 breast screening services.

Strength

- Where evidence was available, data showed that the majority of women who require surgical interventions meet the treating surgical team within 5 working days of receiving their assessment results.

Challenge

- Several of the breast screening services were unable to provide audit data to evidence this criterion, although these services confirmed that they have protocols in place to ensure the swift referral of women to the treating surgical team.

Recommendation

- All breast screening services should establish a system of audit to ensure that referral protocols are working effectively and being adhered to.

Example of a Local Initiative

East of Scotland Breast Screening Service

The Service has developed a local system of surgical referral for women who have come through the screening process. Three forms have been developed to facilitate an efficient referral procedure. One form is for referring women onto Perth Royal Infirmary, and provides details of arrangements which have to be made, a note of who is responsible for undertaking each task, and a corresponding sign-off box. The other two forms follow a similar format for arranging therapeutic referrals and diagnostic referrals to Ninewells Hospital, Dundee.

Standard Statement 5(b)

The number of operative procedures for benign disease is minimised.

Essential Criteria

5(b)1. Less than 3.6 women per 1,000 attending for prevalent screening have surgical benign biopsies.

This criterion was met by 2/6 breast screening services.

5(b)2. Less than 2.0 women per 1,000 attending for incident screening have surgical benign biopsies.

This criterion was met by all 6 breast screening services.

Desirable Criteria

5(b)3. Less than 1.8 women per 1,000 attending for prevalent screening have surgical benign biopsies.

This criterion was not met by any of the breast screening services.

5(b)4. Less than 1.0 women per 1,000 attending for incident screening have surgical benign biopsies.

This criterion was met by 5/6 breast screening services.

Strength

- The rate of surgical benign biopsy for women attending for their second or subsequent screen in the SBSP is low.

Challenge

- The rate of surgical benign biopsy for women attending for their first screen is outwith the essential target in the majority of services.

Recommendations

- Breast screening services outwith the essential target for prevalent screening should audit all cases being submitted for surgical benign biopsy, from both prevalent and incident screening attendance.
- The SBSP targets for benign biopsy rates should coincide with UK-wide targets, which are currently under review.

2.6 Standard 6: Cancer Yield

Standard Statement 6(a)

The number of cancers detected in women attending for screening is maximised.

Essential Criteria

6(a)1. A minimum of 2.7 invasive cancers are detected per 1,000 women attending for prevalent screening.

This criterion was met by all 6 breast screening services.

6(a)2. A minimum of 3.0 invasive cancers are detected per 1,000 women attending for incident screening.

This criterion was met by all 6 breast screening services.

6(a)3. The standardised detection ratio is at least 0.75 for women attending for both prevalent and incident screening.

This criterion was met by all 6 breast screening services.

6(a)4. A minimum of 0.4 non-invasive cancers are detected per 1,000 women attending for prevalent screening.

This criterion was met by all 6 breast screening services.

6(a)5. A minimum of 0.5 non-invasive cancers are detected per 1,000 women attending for incident screening.

This criterion was met by all 6 breast screening services.

Desirable Criteria

6(a)6. A minimum of 3.6 invasive cancers are detected per 1,000 women attending for prevalent screening.

This criterion was met by all 6 breast screening services.

6(a)7. A minimum of 4.0 invasive cancers are detected per 1,000 women attending for incident screening.

This criterion was met by all 6 breast screening services.

6(a)8. The standardised detection ratio is at least 1.0 for women attending for both prevalent and incident screening.

This criterion was met by all 6 breast screening services.

Strengths

- All six breast screening services are achieving both the essential and desirable targets for detection of invasive cancers. Targets are met for women attending for both their first and subsequent screens.
- All services reported achieving the desirable target with regard to the standardised detection ratio for women attending for both their first and subsequent screens.
- All six breast screening services are achieving the targets for detection of non-invasive cancers, for women attending for both their first and subsequent screens.

Standard Statement 6(b)

The number of small (<15mm) invasive cancers detected in the eligible population is maximised.

Essential Criteria

6(b)1. A minimum of 1.5 invasive cancers (<15mm diameter) are detected per 1,000 women attending for prevalent screening.

This criterion was met by all 6 breast screening services.

6(b)2. A minimum of 1.65 invasive cancers (<15mm diameter) are detected per 1,000 women attending for incident screening.

This criterion was met by all 6 breast screening services.

Desirable Criteria

6(b)3. A minimum of 2.0 invasive cancers (<15mm diameter) are detected per 1,000 women attending for prevalent screening.

This criterion was met by 4/6 breast screening services.

6(b)4. A minimum of 2.2 invasive cancers (<15mm diameter) are detected per 1,000 women attending for incident screening.

This criterion was met by all 6 breast screening services.

Strengths

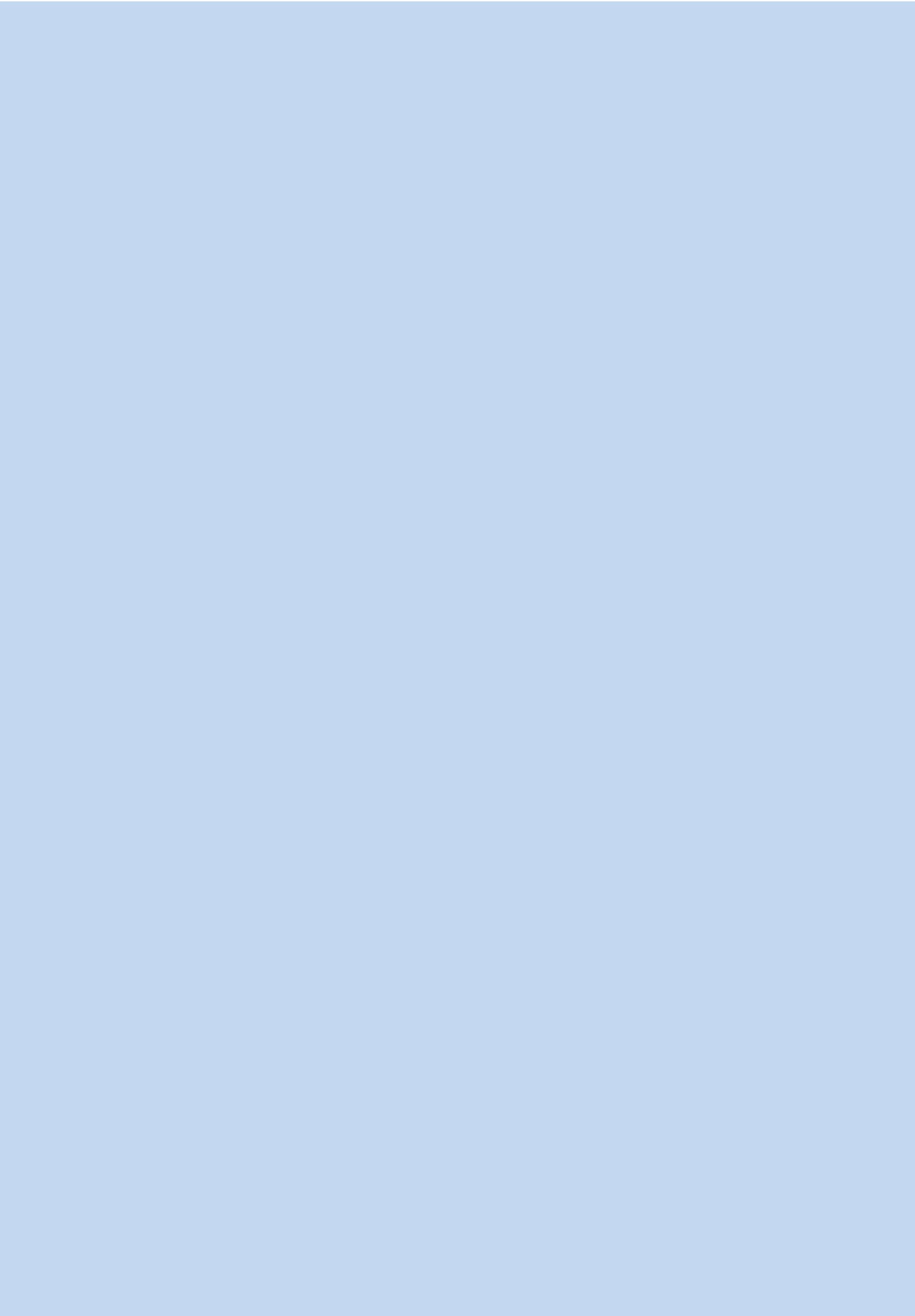
- The essential targets for the detection of small (<15mm diameter) invasive cancers are achieved in all screening services for women undergoing both their first and subsequent screens.
- The desirable target for the detection of small (<15mm diameter) invasive cancers is achieved in all screening services for women undergoing their second or subsequent screen.

Challenge

- The desirable target for the detection of small (<15mm diameter) invasive cancers for women undergoing their first screen is not being achieved by all screening services.

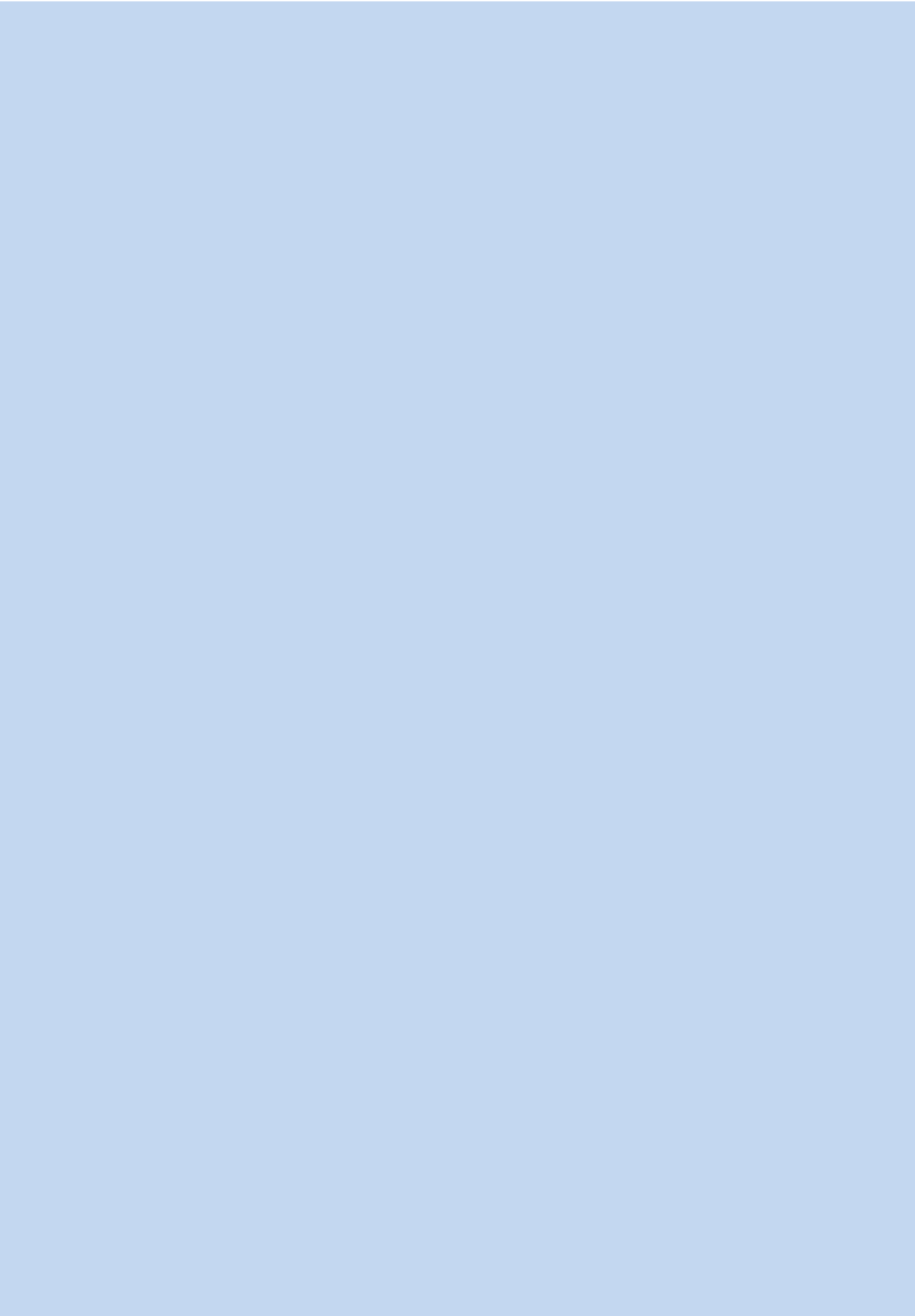
Recommendation

- All breast screening services should strive to maintain and improve their performance against targets for the detection of small invasive cancers.



Chapter 3

Conclusions



3. Conclusions

This national overview, and the accompanying local reports, set out the performance of the SBSP as a whole, and of each breast screening service, against the breast screening standards published in December 2002. A number of general themes have emerged, which apply across Scotland.

Firstly, the review teams were struck by the commitment, dedication and hard work of the staff involved in providing breast screening services across Scotland, frequently under considerable pressure. Wherever possible, it is clear that these services seek to be responsive to the needs of users, and a number of innovative service developments were seen. However, the screening services and staff are currently at capacity, and NSD and the host NHS Trusts need to take this into account when planning service delivery.

Secondly, members of the public have been involved at every stage of the NHS Quality Improvement Scotland breast screening project. This has provided a valuable perspective for the work of the Project Group in setting the standards, and on review visits. Likewise, the SBSP should strive to involve the public in all aspects of planning and delivering services, and explore improved integration with the work of local organisations, primary care and health promotion teams.

Thirdly, of particular note was the effective multidisciplinary teamworking in place across the SBSP. All services are committed to a multidisciplinary approach, in which members of each discipline are appropriately trained and working to national quality assurance guidelines. The SBSP quality assurance system also includes activities undertaken by each individual discipline involved in delivering breast screening in Scotland.

Each of the six centres that make up the SBSP is achieving the majority of the NHS Quality Improvement Scotland breast screening standards.

Key achievements include:

- innovative ways of improving attendance - taking the service to those in inner city areas, and opening 'out of hours';
- skills development and role extension to support the shortage of specialists trained in X-ray film interpretation; and
- pushing back the barriers and further developing ways to include women with special needs, ethnic minorities, and people who are 'out of the system' - including travelling people and those in long-stay institutions.

There are three key areas where the standards are not achieved:

- NHS Board involvement in breast screening, ie through multidisciplinary co-ordinating groups, specialist public health input to local co-ordination of breast screening, and reporting arrangements;
- meeting targets for issuing screening results and for waiting times to assessment; and
- involving the public fully.

This report, and the local reports on each breast screening service, together with the examples of good practice they contain, are designed to support and encourage the process of continual improvement in the SBSP. NHS Quality Improvement Scotland looks to each of the host NHS Trusts, guided by NSD, to ensure that where relevant, practice is reviewed in the light of this report's findings and recommendations. Any action taken must be in close collaboration with the staff responsible for providing the service. A considerable momentum for quality assurance in the SBSP has been built up since its inception, and it is important to use this enthusiasm to take forward work on strengthening and improving breast screening services.

Each NHS Board is responsible for the performance of its local NHS services and is accountable to the Scottish Executive Health Department, who will use the reports and local responses to monitor local and national performance. The public, both locally and nationally, also has an important role to play in ensuring that changes are made.

NHS Quality Improvement Scotland reserves the right to revisit a service where it considers there are serious issues that need further external monitoring and reporting. NHS Quality Improvement Scotland intends periodically to review and raise the breast screening standards in light of the latest evidence about 'best practice' and the performance of the SBSP, and to conduct further local and national reviews, in order to encourage continuing quality improvement.

In conclusion, the SBSP has demonstrated that it is possible to provide care that is both safe and effective - based on comprehensive process management and safeguarding mechanisms, efficient data collection, and systems in place to address any service issues that may arise. The principles and standards adopted and now integrated within the SBSP can, and should be, transferred to other services across the country.

Appendices

Appendix 1

Breast Screening Standards Project Group Members

Chair

Dr Hilary Dobson
Clinical Director, West of Scotland
Breast Screening Service

Project Group Members

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Service Manager, East of Scotland
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Screening Programmes, National
Services Division, Common
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Mr Alex Watt
Medical Physicist,
Scottish Healthcare Supplies,
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The NHS Quality Improvement Scotland Board member specifically working with the Breast Screening Standards Project Group was **Mr Gordon Jamieson**.

Support from NHS Quality Improvement Scotland was provided by:

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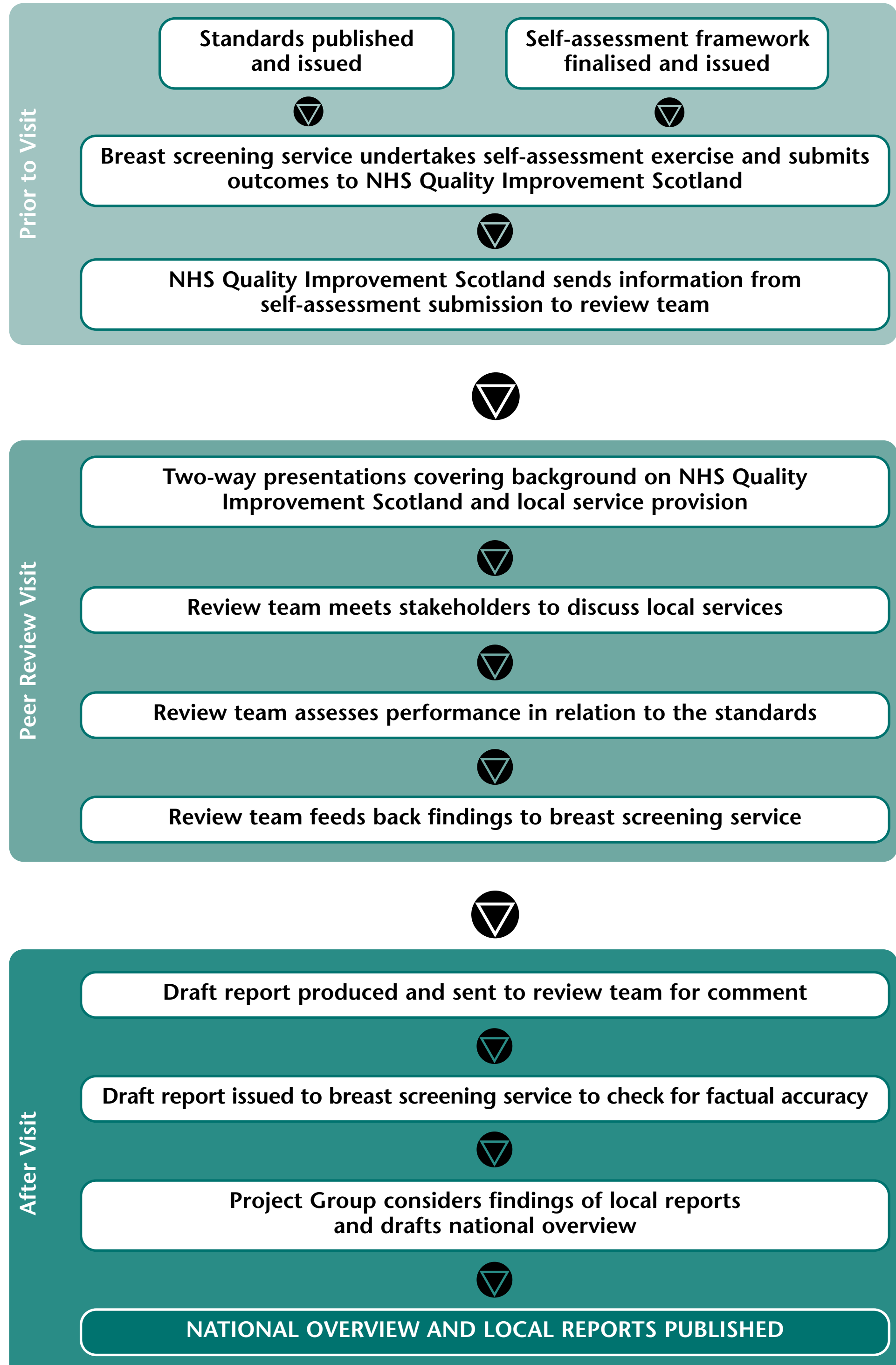
Appendix 2

The Quality Assurance Process: Approach Used in this Review



Standards

All standards set by NHS Quality Improvement Scotland comprise a standard statement and related criteria.

Standard Statement

Describes the agreed performance for the specific area, determined by those who are involved in the delivery/receipt of the service.

Criteria

State exactly what must be done for the standard to be reached.

Some criteria are **essential** as it is expected that they will be met wherever a service is provided. Others are **desirable/aspirational** in that they will promote continuous quality improvement as they are being met in some parts of the service and demonstrate levels of quality which other providers of a similar service should strive to achieve.

Self-Assessment

Each set of standards has an accompanying self-assessment framework. This framework gives guidance about the type of evidence required to demonstrate performance against the standards. It is completed and submitted to NHS Quality Improvement Scotland prior to a peer review visit, together with extensive additional documentation. The evidence obtained from this self-assessment exercise comprises the main source of written evidence considered by each peer review team.

Peer Review

Peer review is the process by which a multidisciplinary review team, including members of the public, carries out a service visit to validate the quantitative data submitted through the self-assessment. This is achieved by means of gathering qualitative information through discussions with staff.

During each review, the review team is guided by a team leader to ensure a multidisciplinary consensual assessment is reached. At the conclusion of the review, the review team provides feedback to the service, giving a broad overview of its assessment, which is based on the written self-assessment and on evidence obtained during the review visit.

To enhance the consistency of the process, an NHS Quality Improvement Scotland manager and project officer accompany each visit.

The schedule for a breast screening external peer review visit includes:

- initial meeting with key personnel responsible for the service under review;
- dialogue with clinicians, managers and administrators based on the written evidence;
- scrutiny of documentation;
- interviews with staff members;
- regular team briefings throughout the day to assess progress and to compile the local report; and
- feedback to the service representatives on conclusion of the visit.

The composition of each review team varies, and all review team members come from outwith the geographical areas they are reviewing. Although this presents challenges in achieving consistency of process, it promotes sharing of good practice and ensures that each review team assesses the performance of a service against the standards, not by comparing one service with another.

In order to determine whether a particular criterion is 'met' or 'not met', each review team requires to assess evidence on a variety of levels. For example, to demonstrate that a particular issue is addressed in a local protocol, evidence is sought during the peer review process as follows:

- description of the issue and how it should be managed in a local written protocol (submitted as part of the self-assessment);
- confirmation of awareness of the location and content of the protocol through staff interviews;
- evidence of a process in place for the protocol to be regularly updated; and
- collection of data through an integrated care pathway/audit sheet, leading to provision of collated audit data confirming compliance with the local protocol.

Until a legal interpretation of the Data Protection Act is made as to whether patient records can be accessed for purposes other than managing patient care, NHS Quality Improvement Scotland review teams are not scrutinising individual patient records. Therefore, in cases where it is stated that information is recorded in individual patient case notes, and the claim is corroborated in staff interviews during the visit, an assessment of 'met' will be made.

The responsibility of NHS Quality Improvement Scotland is to report whether the services provided by NHSScotland, both nationally and locally, meet agreed standards, but not to review individual cases or the work of individual healthcare professionals. In undertaking this responsibility, variations in practice (and potential quality) within a service will be encountered. Where such variation exists between parts of a service, this will be stated; clinical variations will also be reported, but will not identify service users or healthcare professionals.

Reports

A local written report is drafted at the time of each visit by NHS Quality Improvement Scotland. The draft report is then circulated to the review team for comment, and to the service concerned to allow a check for factual accuracy.

On conclusion of the peer review programme, the Project Group is reconvened to study the findings and examine trends in order to draw conclusions and make recommendations to NHS Quality Improvement Scotland.

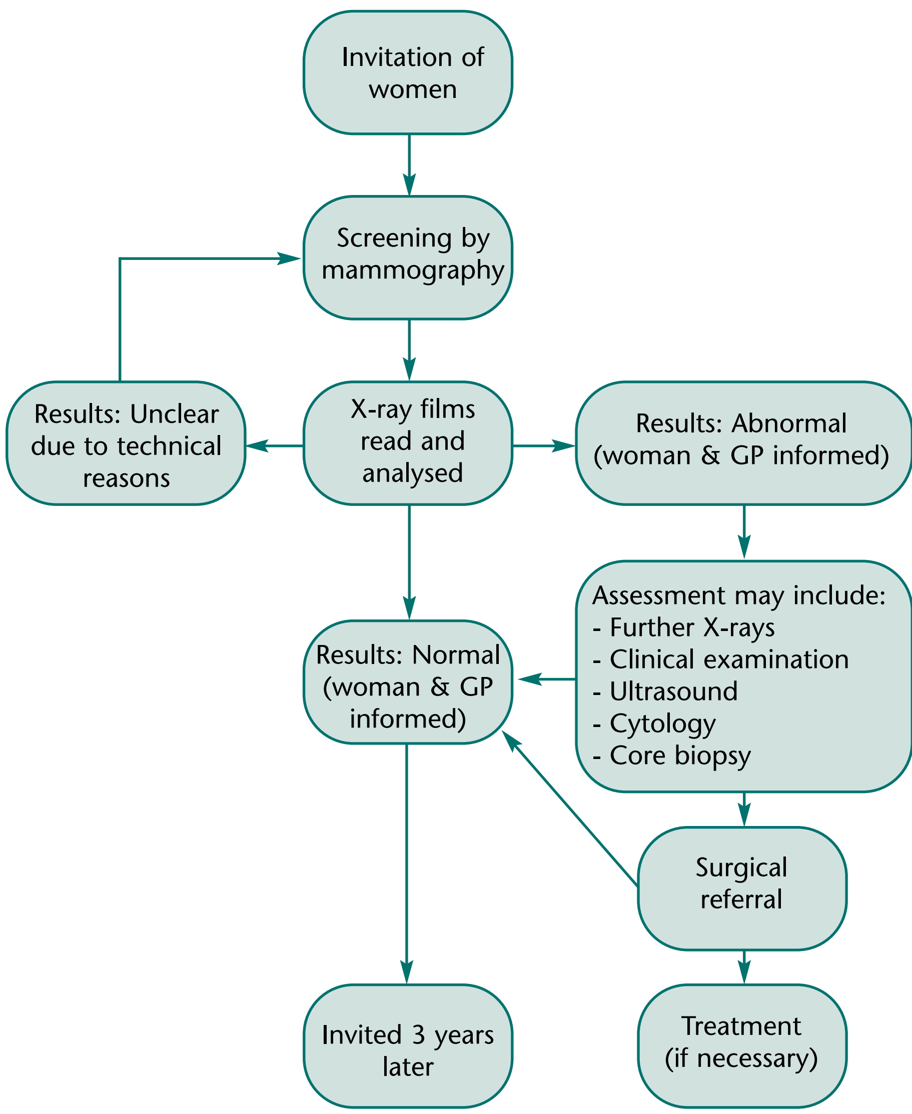
Appendix 3

Co-ordinating Breast Screening Services

Pathway of Care for Women Attending for Breast Screening in Scotland

Stage	What might happen	Where	Who might be involved
Initial Contact	• Invitation to attend for breast screening • Self-referral to breast screening service • Discussion with GP/practice nurse regarding opportunity to attend for breast screening • Information and advice from breast screening service	• Home - receive letter of invitation offering appointment slot • Breast screening centre • GP surgery	• Breast screening administrators • GP • Practice nurse • Radiographer
Screening	• Previous clinical history discussed • Screening mammogram taken • Mammographic films read • Results: - **Normal**: return to routine recall - **Unclear** due to technical reasons: recall for further X-rays - **Abnormal**: recall for assessment	• Breast screening centre • Mobile unit • Home - receive results letter	• Radiographer • Radiologist • Breast care nurse
Assessment	• Tests: - Further mammograms - Clinical examination - Sample of cells (FNA) - Pathology (eg core biopsy) - Ultrasound • Information and advice • Discussion of assessment results and agreement on course of action	• Breast screening centre • Outreach clinic	• Breast clinician • Radiographer • Radiologist • Pathologist • Breast care nurse • Breast surgeon
Surgical Referral	• Discussion with surgeon • Date for surgery confirmed	• Breast screening centre • Hospital clinic	• Breast surgeon • Breast care nurse • GP

Pathway of Care for Women Attending for Breast Screening in Scotland



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Appendix 4

Breast Screening Review Team Members

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Appendix 5

National Performance Against the Pritchard Standards

Performance Data in Relation to the Pritchard Standards for the Scottish Breast Screening Programme, 1999-2000 to 2001-2002

Breast Screening Service	Round	South East of Scotland	East of Scotland	West of Scotland
Attendance rate (percentage of women invited)	Overall	72.72	77.79	68.94
Early recall rate (percentage of women screened)	Overall	0.49	0.28	0.06
Invasive cancer detection rate (per 1,000 women screened)	Prevalent	5.73	5.30	6.55
	Incident	4.57	5.44	5.04
Non-invasive cancer detection rate (per 1,000 women screened)	Prevalent	1.41	1.69	1.79
	Incident	0.94	1.16	1.42
Small (<15mm diameter) invasive cancer detection rate (per 1,000 women screened)	Prevalent	2.65	1.91	3.41
	Incident	2.43	2.54	2.76

Source: Revised Pritchard Standards derived from the UK Statistical Return, KC62

Only routine appointments are included in the above figures. Self/GP referral and early recall appointments are not included. Women are invited to attend screening once every 3 years and NHS Boards are not necessarily screened evenly throughout the 3-year period. The above figures relate to women aged 50-64 years (the target group for the Scottish Breast Screening Programme). Round indicates whether it was the attendee's first mammographic screen (prevalent) or subsequent screen (incident).

For any queries about these data, please contact Ms Cheryl Heeley, Information and Statistics Division on Tel: 0131 551 8516 or E-mail: cheryl.heeley@isd.csa.scot.nhs.uk

North East of Scotland	South West of Scotland	North of Scotland	Scotland-wide	Essential Target	Desirable Target
83.17	75.25	80.47	73.54	>=70%	–
0.52	0.15	0.48	0.28	<1%	<=0.25%
7.03	4.88	4.68	6.00	>=2.7	>=3.6
4.91	5.04	5.14	4.96	>=3.0	>=4.0
2.34	1.69	1.62	1.73	>=0.4	–
1.60	0.63	1.20	1.20	>=0.5	–
3.99	2.49	1.98	2.97	>=1.5	>=2.0
2.78	2.65	2.82	2.65	>=1.65	>=2.2

Appendix 6

Glossary of Terms

abnormal mammogram	A mammogram which returns a positive result, ie where an abnormality is detected. A woman with an abnormal mammogram requires further investigation to obtain a diagnosis.
abnormality	A finding requiring further investigation/treatment.
accreditation	A process, based on a system of external peer review using written standards, designed to assess the quality of an activity, service or organisation.
acute sector	Hospital-based health services which are provided on an in-patient or out-patient basis.
AHPs	See allied health professions.
ALARP	A principle stating that all doses arising from diagnostic medical exposures must be kept as low as reasonably practicable, consistent with the intended purpose. This involves selecting equipment and methods that will optimise the exposure, and ensuring that a procedure exists for assessing the consequent dose.
allied health professions (AHPs)	Healthcare professionals directly involved in the provision of primary and secondary healthcare. Includes several groups such as radiographers, physiotherapists, occupational therapists, dietitians, etc. Formerly known as professions allied to medicine (PAMs).
appraisal	Examining people or the services they offer in order to judge their professional qualities, success or needs.
assessment	The process a woman undergoes following an abnormal mammogram, in order to obtain a definitive diagnosis. This usually takes the form of triple assessment.
audit (clinical)	Systematic review of the procedures used for: diagnosis, care, treatment, and rehabilitation, examining how associated resources are used, investigating the effect care has on the outcome and quality of life for the patient, and making changes if necessary.

BCN	See breast care nurse.
benign	Non-cancerous. Refers to tumours which grow slowly in one place and which, once removed by surgery, tend not to recur.
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.
breast cancer	A malignant tumour of the breast. Breast cancer is the commonest form of cancer in women, but the cause is not yet known.
breast care nurse (BCN)	A registered nurse with a qualification or specialist knowledge in breast care.
call-recall	The process used to invite people for a screening test.
cancer	The name given to a group of diseases that can occur in any organ of the body, and in blood, and which involve abnormal or uncontrolled growth of cells.
cancer grade	A measure of the degree of abnormality of cancer cells compared with normal cells. The grade of a cancer depends on how abnormal the cancer cells look under a microscope and how quickly the cancer is likely to grow and spread. Grading systems are different for each type of cancer.
cancer yield	A measure of the number of cancers detected in a specified population. Often expressed as a rate, eg 2.0 cancers per 1,000 women.
carer	A person who looks after family, partners or friends in need of help because they are ill, frail or have a disability. The care they provide is unpaid.
case review	Re-examination of the diagnosis and management of a person's condition at a defined point in time.
cells	The individual units from which tissues of the body are formed. All living organisms are composed of one or more cells.
chemotherapy	Treatment of a disease with medications that reach every cell in the body.

clinical effectiveness programme	Clinical effectiveness is the extent to which specific clinical interventions, when deployed, do what they are intended to do, ie maintain and improve health, securing the greatest possible health gain from the available resources. This is assessed through clinical effectiveness programmes.
clinical governance	A framework through which NHS organisations are accountable for both continuously improving the quality of their services, and safeguarding high standards of care, by creating an environment in which excellence in clinical care will flourish. Management of clinical risk at an organisational level is an important aspect of clinical governance. Clinical risk management recognises that risk can arise at many points in a patient's journey, and that aspects of how organisations are managed can systematically influence the degree of risk.
clinical service	Service provided by healthcare professionals.
Clinical Standards Board for Scotland (CSBS)	The Clinical Standards Board for Scotland was a statutory body, established as a Special Health Board in April 1999. Its role was to develop and run a system of quality control of clinical services designed to promote public confidence that the services provided by the NHS met nationally agreed standards, and to demonstrate that, within the resources available, the NHS was delivering the highest possible standards of care. On 1 January 2003, CSBS was merged, along with four other clinical effectiveness bodies, to form NHS Quality Improvement Scotland (NHS QIS). See NHS Quality Improvement Scotland.
clinician	A healthcare practitioner who specialises in seeing, diagnosing and/or treating patients.
College of Radiographers	The professional and advisory body overseeing the education and qualifications of radiographers.

Common Services Agency (CSA)	The agency of the Scottish Executive Health Department with responsibility for providing clinical support and advice for NHSScotland through a range of services. These include: health statistics, screening programmes, surveillance of communicable diseases, blood transfusion, family health service payments, and specialist legal services. Website address is: www.show.scot.nhs.uk/csa/
consultant in public health medicine (CPHM)	A senior doctor who specialises in the health of populations.
continuing professional development (CPD)	An ongoing commitment to learning in various forms, which maintains and enhances professional standards of work, and develops the ability to recognise good practice.
core biopsy	Removal (using a needle) of piece of breast tissue for diagnosis.
CPD	See continuing professional development.
CPHM	See consultant in public health medicine.
criterion(s)/ criteria(pl)	Provide the more detailed and practical information on how to achieve the standard, and relate to structure, process or outcome factors.
CSA	See Common Services Agency.
CSBS	See Clinical Standards Board for Scotland.
cytology/ cytopathology	The study of cells under the microscope.
data source	The source of evidence to demonstrate whether a standard or criterion is being met.
desirable (criterion/criteria)	Good practice that is being achieved in some parts of the service and demonstrates levels of quality to which other providers of a similar service should strive.
diagnosis	Identification of an illness or health problem by means of its signs and symptoms. This involves ruling out other illnesses and causal factors for the symptoms.
diagnostic	The process of determining the nature of a disorder by considering signs and symptoms.

disclaimer form	A form signed by a woman verifying that she has been invited to attend for screening but has chosen not to do so. This form verifies that the woman may be reinstated to the breast screening programme at any time.
dose survey	An assessment of the radiation dose for 50 mammographic examinations on every X-ray set.
early recall	Recall for the next screening episode at earlier than the usual interval.
eligible women	All women who are to be invited for breast screening. This currently includes all women aged 50-64 (50-70 from 2003-2004) who are registered with a GP, and those women not registered with a GP but whom the screening programme is made aware of, eg women in long-stay institutions. Some women are excluded from routine invitation, for example those who have had bilateral mastectomy or who have signed a disclaimer form to remove themselves from the SBSP call-recall system.
essential (criterion/criteria)	A criterion that should be met wherever a service is provided.
evaluation	The study of the performance of a service (or element of treatment and care) with the aim of identifying successful and problem areas of activity.
fine needle aspiration (FNA)	The withdrawal of fluid, containing cells, from the body by means of suction using a fine needle. The samples obtained are used to provide information on the cells of tumours or cysts.
FNA	See fine needle aspiration.
generic standards	Standards that apply to most, if not all, clinical services.
GP	General Practitioner.
guidelines	Systematically developed statements which help in deciding how to treat particular conditions.
HDL	See Health Department Letter.
Health Board	See NHS Boards.

Health Council	Each NHS Board area has a Health Council, an organisation whose aim is to promote public consultation and participation in health-related matters. Sometimes referred to as a Local Health Council.
Health Department Letter (HDL)	Health Department Letter (formerly known as Management Executive Letter - MEL), formal communications from the Scottish Executive Health Department to NHSScotland.
health promotion	Providing information in an accessible way in order to support people in making informed choices about activity which will affect their health.
healthcare professional	A person qualified in a health discipline.
histology/ histopathology	The study of the structure, composition and function of tissues under the microscope, and of their abnormalities (histopathology).
impalpable	Describing a structure in the body that cannot be detected by feeling with the hand.
incidence	The number of new cases of a disease within a defined group of people over a period of time.
incident screen	Any mammographic screen a woman has after her first screen. It can identify disease that has arisen since the previous screen.
insidious onset	Developing so gradually as to be well-established before becoming apparent.
interval cancer	A breast cancer that occurs in the interval following a screening test with a negative result and before the next routine screening episode.
invasive cancer	Cancer that can or has spread from its site of origin.
Island NHS Board	There are three Island NHS Boards (Orkney, Shetland and the Western Isles). They have always had a combined strategic and operational role. See NHS Board.
IT	Information Technology.
lay representation	The inclusion of a member(s) of the general public in a professional group.
LHCC	See Local Health Care Co-operative.

Local Health Care Co-operative (LHCC)	In Scotland, Local Health Care Co-operatives are voluntary groupings of GPs and other local healthcare professionals intended to strengthen and support the primary healthcare team in delivering local care.
malignant	Cancerous. Malignant tumours can invade and destroy surrounding tissue and have the capacity to spread.
mammogram	An X-ray film of the breast.
mammography	X-ray examination of the breast. Using low-energy X-rays, fine details of breast tissue can be visualised, particularly the presence of calcification or soft tissue masses, enabling the early diagnosis of breast cancer.
Management Executive Letter (MEL)	Formal communications from the Scottish Executive Health Department to NHSScotland, now known as Health Department Letters (HDLs).
mean glandular dose	The mean radiation dose received by the glandular tissues in the breast.
MEL	See Management Executive Letter.
metastatic cancer	Cancer that has spread from its original site to other parts of the body; most commonly bone, lung, liver, brain, lymph nodes.
mGy	Short for milli Gray, one thousandth of a Gray - the unit used to measure absorbed dose of radiation.
monitoring	The systematic process of collecting information on clinical and non-clinical performance. Monitoring may be intermittent or continuous. It may also be undertaken in relation to specific incidents of concern or to check key performance areas.
mortality (rate)	The number of deaths in a given population during a specified period of time.
multidisciplinary	A multidisciplinary team is a group of people from different disciplines (both healthcare and non-healthcare) who work together to provide care for patients with a particular condition. The composition of multidisciplinary teams will vary according to many factors. These include: the specific condition, the scale of the service being provided, and geographical/socio-economic factors in the local area.

multi-professional	Consisting of members of more than one profession.
NAG	See National Advisory Group.
National Advisory Group (NAG)	The national body which oversees the Scottish Breast Screening Programme (SBSP).
National Health Service Breast Screening Programme (NHSBSP)	The UK-wide programme of free population-based screening for breast cancer. Website address is: www.cancerscreening.nhs.uk/breastscreen/
national service specification	A basic outline of the Scottish Breast Screening Programme including aims and objectives, criteria for eligibility, service organisation, quality specification, professional standards, information and monitoring requirements.
National Services Division (NSD)	The division of the Scottish Common Services Agency with responsibility for ensuring the provision of national screening programmes and specialist services on behalf of NHSScotland. Website address is: www.show.scot.nhs.uk/nsd/
NHS	National Health Service.
NHS Board	NHS Boards are responsible for strategic planning, performance management and governance of each of Scotland's 15 local health systems. Most NHS Board areas contain one Acute and one Primary Care Trust, with operational and employment responsibilities, but since 2001 they have operated within a strategic framework drawn up by the NHS Board. By 2004 Trusts will have been abolished and replaced by operating divisions of the NHS Board (see also NHS Trust).
NHS priorities	The three national clinical priorities are mental health; coronary heart disease and stroke; and cancer.
NHS QIS	See NHS Quality Improvement Scotland.

NHS Quality Improvement Scotland (NHS QIS)	NHS Quality Improvement Scotland is a statutory body, established as a Special Health Board in January 2003. Its role is to focus on improving the quality of patient care and the health of patients. It will have a particular emphasis on the quality of care and the patient journey for vulnerable groups. NHS Quality Improvement Scotland has been created by the merger of five organisations: Clinical Standards Board for Scotland (CSBS); Health Technology Board for Scotland (HTBS); Scottish Health Advisory Service (SHAS); Nursing and Midwifery Practice Development Unit (NMPDU), and the Clinical Resources and Audit Group (CRAG). Website address: www.nhshealthquality.org/
NHS Trust	A Trust is an NHS organisation responsible for providing a group of healthcare services for the local population. An Acute hospital Trust provides hospital services. A Primary Care Trust provides primary care/community health services. Mental health services (both hospital and community based) are usually provided by Primary Care Trusts. Since 2001 Trusts have operated within an overall framework drawn up by their NHS Board. Subject to legislation, Trusts will be dissolved by April 2004, becoming operating divisions of the NHS Board. The NHS Board will be the single employer for the local system. In two areas - Borders and Dumfries & Galloway - since April 2003 there have been no Trusts or operating divisions with the NHS Board fulfilling a dual strategic and operational role (like the three Island Boards). The term 'Trust' is retained in NHS QIS publications during the period of Trust abolition. Where unification has occurred, the term 'Trust' should be taken to signify an operating division of the local NHS Board. See also NHS Board.
NHSBSP	See National Health Service Breast Screening Programme.
NHSScotland	The National Health Service in Scotland.

non-attenders	Eligible people who do not attend following an invitation for screening.
normal mammogram	A mammogram which returns a negative result, ie where no abnormality is detected.
NSD	See National Services Division.
outcome	The end result of care and treatment and/or rehabilitation. In other words, the change in health, functional ability, symptoms or situation of a person, which can be used to measure the effectiveness of care and treatment, and/or rehabilitation.
palpable	Describing a structure in the body that can be detected by feeling with the hand.
pathologist	A qualified medical practitioner trained in the study of disease processes.
pathology	The study of disease processes with the aim of understanding their nature and causes. This is achieved by observing samples of blood, urine, faeces, and diseased tissue obtained from the living patient or at autopsy, by the use of X-rays, and by many other techniques.
patient journey	The pathway through the health services taken by the patient (the person who is receiving treatment), and as viewed by the patient.
peer review	Review of a service by those with expertise and experience in that service, either as a provider, user or carer, but who are not involved in its provision in the area under review.
policy	An operational statement of intent in a given situation.
population-based screening	An investigation available to all eligible, apparently healthy, people to identify a disease or abnormality which may be treated, cured or prevented (before symptoms appear).
postgraduate qualification	A degree or qualification that is awarded after a period of further training.
preoperative tissue diagnosis	A diagnosis made by examining tissue of the breast obtained by a nonoperative procedure, the most common examples of which are fine needle aspiration (FNA) and core biopsy.

prevalent screen	The first mammographic screen a woman has.
primary care	The conventional first point of contact between a patient and the NHS. This is the component of care delivered to patients outside hospitals and is typically, though by no means exclusively, delivered through general practices. Primary care services are the most frequently used of all services provided by the NHS. Primary care encompasses a range of family health services provided by family doctors, dentists, pharmacists, optometrists and ophthalmic medical practitioners.
procedure	The steps taken to fulfil a policy.
protocol	A policy or strategy which defines appropriate action in specific circumstances. Protocols may be national, or agreed locally to take into account local requirements.
QA	See quality assurance.
quality assurance (QA)	Improving performance and preventing problems through planned and systematic activities including documentation, training and review.
radiographer	A person who is trained in the technique of taking X-ray pictures of parts of the body.
radiography	The technique of examining the body by directing X-rays through it to produce images on photographic films or fluorescent screens.
radiologist	A qualified medical practitioner trained in the technique of diagnosing disease by means of X-rays and other imaging methods.
radiology	The use of X-rays in the diagnosis, treatment and monitoring of disease.
radiotherapy	The use of radiation, usually X-rays or gamma rays, to kill tumour cells.
rationale	Scientific/objective reason for taking specific action.
recall	The system whereby a person is recalled for a repeat screen or an assessment appointment. This includes routine recall and early recall.
referral	The process whereby a patient is transferred from one professional to another, usually for specialist advice and/or treatment.

review	See peer review.
routine recall	Recall for the next screening episode at the normal interval.
Royal College of Pathologists (RCPath)	The professional and advisory body overseeing education and qualifications of pathologists. Website address: www.rcpath.org/
Royal College of Radiologists (RCR)	The professional and advisory body overseeing education and qualifications of radiologists. Website address: www.rcr.ac.uk/
SBSP	See Scottish Breast Screening Programme.
Scottish Breast Screening Programme (SBSP)	The programme of free population-based screening for breast cancer in Scotland. The SBSP is commissioned by the National Services Division, and is provided through six regional screening centres and 13 mobile screening units across Scotland. Website address is: www.show.scot.nhs.uk/nsd/screening/breast/
Scottish Executive Health Department (SEHD)	The Scottish Executive Health Department is responsible for health policy and the administration of NHSScotland. Website address: www.show.scot.nhs.uk/sehd/
Scottish Intercollegiate Guidelines Network (SIGN)	SIGN was established in 1993 by the Academy of Royal Colleges and Faculties in Scotland, to sponsor and support the development of evidence-based clinical guidelines for NHSScotland. Where a SIGN guideline exists for a specialty or service for which CSBS had set standards, or NHS QIS is taking forward standards, it will be referenced. For further information relating to SIGN guidelines or the methodology by which SIGN guidelines are developed, contact: SIGN Executive, Royal College of Physicians, 9 Queen Street, Edinburgh EH2 1JQ. Website address: www.sign.ac.uk/
screening	Examination of people with no symptoms, to detect unsuspected disease.
screening episode	A cycle of a person's screening events.
SDR	See standardised detection ratio.
SEHD	See Scottish Executive Health Department.

self-assessment	Assessment of performance against standards by individual/clinical team/Trust providing the service to which the standards are related.
self-referral	The process whereby a patient refers him/herself for advice, assessment and/or treatment.
sensitivity	The ability of a test to detect a disease. A test with a sensitivity of 90% will give a positive result in 9 out of 10 people who have the disease.
SIGN	See Scottish Intercollegiate Guidelines Network.
Special Health Board	The name is given to Health Boards with a national remit. These boards are focused on specific areas - eg NHS Education for Scotland, or NHS Quality Improvement Scotland. Special Health Boards match regional NHS Boards in terms of administrative grading.
specificity	The ability of a test to exclude people who do not have a disease. A test with a specificity of 90% will give a negative result (ie a correct result) in 9 out of 10 people who do not have the disease.
standard statement	An overall statement of performance. This may be the most basic acceptable ('essential' standard) or that which is best practice ('desirable' standard).
standardised detection ratio (SDR)	The observed number of invasive cancers detected divided by the number expected given the age distribution of the population.
statutory	Enacted by statute; depending on statute for its authority as a statutory provision. Required by law.
surgeon	A qualified medical practitioner who specialises in surgery.
surgery	The branch of medicine that treats injuries, deformities or disease by operation or manipulation.
symptom	A reported feeling or observable physical sign of a person's condition that indicates a physical or psychological abnormality.
technical recall	Recall for another mammographic screen within the same screening episode due to a technically unsatisfactory mammogram. There are a number of reasons why this can occur, such as equipment fault/failure, operator error or movement of the breast during X-ray.

technically unsatisfactory mammogram	A mammogram that requires to be repeated as the original film(s) are not of an adequate standard for diagnosis.
therapeutic	Pertaining to treatment or healing, ie therapy.
therapy	A word often used to mean treatment.
triple assessment	Investigations performed following an abnormal mammogram to ascertain whether the abnormality is malignant or benign. Triple assessment comprises (i) clinical (physical) examination, (ii) cytopathology (FNA and/or core biopsy), and (iii) radiology (either mammography or ultrasound). Pending the result of the investigations, further treatment or tests may be required.
tumour	A lump or mass of cells which can be either benign or malignant. Also known as a neoplasm.
ultrasound	An imaging test that bounces sound waves off tissues and converts the echoes into pictures.
uni-professional	Consisting of members of only one profession.
X-ray	An imaging technique that uses energy beams of penetrating electromagnetic energy. This is the most common imaging technique used in clinical practice everywhere in the world, with the image captured on photographic film.

Our Commitment

Our work will be undertaken in line with the following values:

- **patient and public focus**
  - ~ promoting a patient-focused NHS that is responsive to the views of the public
- **independence**
  - ~ reaching our own conclusions and communicating what we find
- **partnership**
  - ~ involving patients, carers and the public in all parts of our work
  - ~ working with and supporting NHS staff in improving quality
  - ~ collaborating with other organisations such as public bodies, voluntary organisations and manufacturers to avoid duplication of effort
- **evidence-based**
  - ~ basing conclusions and recommendations on the best evidence available
- **openness and transparency**
  - ~ promoting understanding of our work
  - ~ explaining the rationale for our recommendations and conclusions
  - ~ communicating in language and formats that are easily accessible
- **quality assurance**
  - ~ aiming to focus our work on areas where significant improvements can be made
  - ~ ensuring that our work is subject to internal and external quality assurance and evaluation
- **professionalism**
  - ~ promoting excellence individually and as teams and ensuring value for money in the use of public resources (human and financial)
- **sensitivity**
  - ~ recognising the needs, opinions and beliefs of individuals and organisations and respecting and encouraging diversity

This document can be viewed on the NHS Quality Improvement Scotland website. It is also available, on request, from NHS Quality Improvement Scotland in the following formats:

- Electronic
- Audio cassette
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