The Northern Ireland breast screening programme

Guide for health professionals
The HSC offers breast screening to reduce the number of women who die from breast cancer.

Breast cancer is the second most common form of cancer (after non-melanoma skin cancer) among women in Northern Ireland. Data from the Northern Ireland Cancer Registry show that 1 in 12 women will develop the disease before the age of 75.

The Northern Ireland Breast Screening Programme has been running since 1989. It provides breast screening every three years for all eligible women in Northern Ireland aged 50 and over.

The programme operates within the NHS national standards. It is monitored on a regular basis by the Quality Assurance Reference Centre (QARC), part of the Public Health Agency (PHA).
The screening process

All women aged between 50 and 70, who are registered with a GP, are invited to attend for screening mammography by their local breast screening unit. Their details are obtained from the NHAIS (National Health Applications and Infrastructure Service) IT system, which supports primary care. It is important therefore that the primary care records are accurate. Women who are over 70 will not automatically receive an invitation, but are encouraged to make their own appointment by contacting their local screening unit directly. Women who have had a total bilateral mastectomy are excluded from the eligible population.

Women are invited to attend for screening either at their local static breast screening unit, or on a mobile unit. The majority of screening in Northern Ireland is carried out in mobile units. Each woman receives a timed appointment (which they can change by contacting the unit if it is not convenient). If a woman does not attend that appointment (and has not contacted the unit) she is sent a second timed appointment. If she does not attend the second appointment (and has still not contacted the unit) she will be recorded as a 'did not attend' (DNA). However, she can contact her local screening unit at any time to arrange a new appointment. If no further contact is made she will be recalled again in 3 years’ time (provided she will be under 71 years of age). Women can arrange to be screened at any screening location, not just the one they were invited to. They just need to phone their local unit for advice.

All eligible women should be enabled to make an informed choice about breast screening. This includes lesbian, bisexual and transsexual women; women from black and minority ethnic groups; women from the Travelling community; women with mental health issues; women with learning difficulties, homeless women and women with physical and sensory disabilities. Some of these women will require support in order to make an informed choice and access the service.

Women with implants
Screening mammography can be less effective in women who have silicone breast implants as some breast tissue may be obscured by the implants. However, they are still advised to attend for breast screening.

If a woman has had a total bilateral mastectomy and breast reconstruction with implants, mammography is not needed. This is because all of the breast tissue will have been removed. If a woman has only had a total mastectomy on one side, then she should attend as the other breast can still be X-rayed.

Younger women
Screening mammography is less effective in younger women because the density of the breast tissue makes it more difficult to detect changes. Also, the incidence of breast cancer is lower in this age group.

Gender reassignment
Individuals who are undergoing female to male gender reassignment will be invited for breast screening so long as they are registered as a woman; unless they ask to be removed from the programme or have had a total bilateral mastectomy. However most of these individuals will have had their gender reassignment completed, and be registered as male, before they reach the age of 50. Individuals who are undergoing male to female gender reassignment may be screened as a self-referral.
The benefits, harms and limitations of breast screening

Benefits

Decreased mortality: The main benefit of breast screening is that it reduces breast cancer mortality by detecting breast cancers at an early stage. An independent review of breast screening concluded that it saves about 1 life from breast cancer for every 200 women screened every 3 years from the age of 50 to 70. This adds up to about 1,300 lives saved from breast cancer each year in the UK. The review concluded that the health service should continue to offer breast screening, but that women should be given clear and balanced information about the benefits and harms.

Breast conserving surgery: The cancers detected in screened women are smaller than those detected in women with symptoms. They are therefore more likely to be treated by lumpectomy rather than mastectomy, and less likely to require chemotherapy.

Harms

Overdiagnosis: The main harm of breast screening is overdiagnosis – it detects cancers that would never otherwise have become life-threatening. These are not false positive results or misdiagnosed cancers, but genuine cancers that would never have caused a woman any clinical problems in her lifetime if it had not been found by screening. It is not possible to tell whether any individual woman’s cancer has been overdiagnosed. However, we know overdiagnosis happens because in a population of women who have been screened, more breast cancers are diagnosed than if they had not been screened. This is important because women who are overdiagnosed will be offered surgical and other treatments that were not necessary.

The review estimated that breast screening detects about three cancers that would never have become life-threatening for every 200 women screened every three years from the age of 50-70. In other words about 20% of breast cancers diagnosed in this age group.

For every one woman whose life is saved by breast screening, three women are overdiagnosed. Figure 1 shows the best estimates of the benefits and harms for 200 women who have breast screening every three years for 20 years. The review acknowledged significant uncertainty around these estimates, especially around the extent of overdiagnosis, which could be much less or much more common than this.

Exposure to radiation: Mammography uses X-rays and thus exposes women to very low doses of ionising radiation that could cause breast cancers. This risk is very low.


Figure 1: Benefits and harms of breast screening
Limitations
Screening mammography is not a diagnostic test and further testing is required to establish the diagnosis. Screening tests sort a population of people into two groups – those who might have the disease being looked for (test result positive) and those who probably do not (test result negative). As with other screening programmes, in breast screening there are false positive and false negative test results.

False positive test result: Some women are recalled for assessment, because the breast screening mammogram looks abnormal, but further investigation shows they do not have breast cancer. Further investigation involves clinical examination and additional imaging. For some women, it may also involve a core biopsy. False positive results cause significant anxiety.

False negative test result: No screening test is completely accurate and breast screening does not detect all breast cancers. Some cancers do not show up on mammography and some cancers are not identified on screening, even by expert film readers. This can result in false reassurance.

The role of GP practices in breast screening

Promoting informed choice
Each eligible woman should be enabled to make an informed choice about breast screening. It is important that primary care teams are well informed about the Northern Ireland Breast Screening Programme and can discuss the benefits and harms of breast screening with their patients.

Primary care teams can promote informed choice by discussing breast screening with women and by displaying relevant information in the surgery, particularly around the time the women in their practice are being invited. It is recognised that people often rely on the advice of the primary care teams when making health decisions. Each practice is provided with an information pack before the eligible women in their practice are invited for screening. This includes information leaflets and posters, as well as information on uptake during the previous screening round.

Updating information
Primary care teams have an important role in ensuring that their computer records contain the accurate names and addresses of eligible women, as this is where the breast screening programme obtains the information it needs to send out invitations.

Providing information to breast screening units
The breast screening units try to ensure that inappropriate invitations are not issued, as these can cause unnecessary anxiety. It is therefore very helpful if the GP practice can inform the unit about women who have:

• had a bilateral mastectomy.

It is also useful for the unit to be informed about women who have:

• a physical or sensory disability, or limited mobility; or
• a learning disability.

This will allow the unit to make appropriate arrangements and book extra time for the appointment.

In addition, if the practice informs the breast screening unit about any women who require an interpreter or signer, this can be arranged.
Talking to women who do not attend (DNA)
Some practices identify women who DNA and talk to them opportunistically about breast screening. Some practices proactively contact women who DNA to discuss breast screening. All practices are provided with regular information on women who DNA while their practice population is being screened. These women can contact the local breast screening unit to arrange another appointment at any time.

Women with symptoms
A woman presenting to her GP with symptoms should not be referred for breast screening, but should be referred to hospital for an outpatient appointment at the symptomatic breast clinic.

What happens to 100 women each time they have breast screening?
On average, each time a woman attends breast screening she has about a 1% chance of being diagnosed with breast cancer, although this does vary slightly by age. About 4% of women will be recalled for further assessment (figure 2).

Figure 2: What happens to 100 women each time they have breast screening?

- 100 women have breast screening
- 96 women have a normal result
- 4 women need more tests
- 3 women have no cancer found
- 1 woman is diagnosed with cancer

These women will receive further invitations for breast screening every 3 years
Frequently asked questions

• Why has a woman over 50 not been invited for screening yet?
  All eligible women in each GP practice are invited to attend breast screening every three years. Because the programme is a rolling one, which invites women by GP practice, and not by date of birth, a woman may receive her first invitation in the year she is 50, 51 or 52 eg if a woman is 48 when her practice is screened she will not receive her first invitation until the practice is due for screening again in another three years, when she will be 51. All eligible women should receive their first invitation before they are 53.

• Why has a 49 year old woman been invited for screening?
  Women are invited by year of birth. If a woman will be 50 in the same calendar year that the practice is due for screening, then she will be invited even if she has not yet had her 50th birthday. This means that if a practice is due for screening in January there are likely to be more women invited who are 49. If a practice is due for screening in December, there will be fewer 49 year old women, as most women will have had their 50th birthday by then.

• Can a woman change her appointment?
  Yes. A woman simply needs to call her local screening office and they will do their best to arrange an appointment that is convenient. She can also contact another screening unit to arrange an appointment if they screen at a location that is more accessible.

• Will all the screening staff be women?
  At the initial screening appointment – yes. All the radiographers are women. However, if a woman is recalled for assessment, the radiologist who examines her may be a man, as may the surgeon, should surgery be necessary.

• How long will the screening appointment last?
  The mammogram will only take a few minutes and the whole screening appointment should be over within 30 minutes.

• Does breast screening hurt?
  Some women find mammography uncomfortable, and a few find it painful, as the breasts have to be compressed and held firmly in position to take a good X-ray. If pain is experienced it usually only lasts for a short time, although it may persist for longer in a small number of women.

• A woman is over 70, how can she get an appointment?
  Once women reach the upper age limit for routine invitations for breast screening, and have no breast symptoms, they are encouraged to make their own appointment every three years. They can do this by contacting their local breast screening unit.

• A woman has just moved into the area and doesn’t want to miss screening. What should she do?
  Women are always welcome to contact their local breast screening unit if they believe they are due for a mammogram.
Resources

Practice visit
If you would like someone to come and talk to practice staff about the breast screening programme please contact either your local breast screening unit (details below) or the Quality Assurance Reference Centre at screening.breast@hscni.net

Leaflets
The following leaflets are available:

- *The Northern Ireland breast screening: Helping you decide*
- *Breast awareness: Looking out for changes*
- *Breast screening: Why have I been called back?*
- *Breast screening: Satisfactory test results – what now?*
- *Looking after your breasts – over 70 – what now?*
- *Breast screening: For women with a higher risk of breast cancer*
- *The Northern Ireland breast screening programme: Guide for health professionals*

Posters
The following posters are available:

- *Breast Screening*
- *Breast Awareness: Looking out for changes*

Contact the health promotion department at your local Health and Social Care Trust for further copies of the leaflets or posters. These publications are also available to download from www.publichealth.hscni.net where you can get copies of the *Helping you decide* leaflet in other languages.

Websites

- Northern Ireland Cancer Screening Programmes www.cancerscreening.hscni.net
- NHS Cancer Screening Programmes www.cancerscreening.nhs.uk
- Public Health Agency www.publichealth.hscni.net
- Northern Ireland Cancer Registry www.qub.ac.uk/research-centres/nicr
- Cancer Research UK www.cancerhelp.org.uk
- Breast Cancer Care www.breastcancercare.org.uk

Breast Screening Units

Belfast Health and Social Care Trust
(also covering South Eastern HSC Trust)
The Screening Unit
12-22 Linenhall Street
Belfast BT2 8BS
Tel: 028 9033 3700

Northern Health and Social Care Trust
Northern Area Breast Screening and Assessment Unit
Level A, Antrim Area Hospital
45 Bush Road
Antrim BT41 2RL
Tel: 028 9442 4425

Southern Health and Social Care Trust
The Breast Screening Unit
Lurgan Hospital
100 Sloan Street
Lurgan BT66 8NX
Tel: 028 3834 7083

Western Health and Social Care Trust
The Breast Screening Unit
Ground Floor, The Nurses’ Home
Altanagelvin Area Hospital
Glenshane Road
Londonderry BT47 6SB
Tel: 028 7161 1443

Public Health Agency
12–22 Linenhall Street, Belfast, BT2 8BS
Tel: 028 9032 1313
www.publichealth.hscni.net  www.cancerscreening.hscni.net