Public Health Agency

Improving Your Health and Wellbeing

NORTHERN IRELAND BREAST SCREENING PROGRAMME

ANNUAL REPORT & STATISTICAL BULLETIN 2011-2012

Breast Screening

August 2013

QUALITY ASSURANCE REFERENCE CENTRE

Contents

Summary

This annual report and statistical bulletin describes key issues relating to the Northern Ireland Breast Screening Programme and its performance in 2011/12. It compares performance with previous years and with data from the English NHS Breast Screening Programme.

The Quality Assurance Reference Centre (QARC) monitors, and quality assures, the Northern Ireland Breast Screening Programme to ensure women have access to a high quality service that meets agreed national standards.

The aim of breast screening is to prevent deaths from breast cancer. In October 2012 the results of an independent review confirmed that breast screening reduces deaths from breast cancer, but at the cost of identifying some cancers that would not otherwise have come to attention in a woman's lifetime (overdiagnosis).

The review reported that for every 1 woman who has her life saved from breast cancer, about 3 women are diagnosed with a cancer that would never have become life-threatening.

It is important that women can make an informed choice about breast screening and are aware of its benefits and harms (see page 10 and **Appendix 1**).

In 2011/12 a total of 76,179 women aged 50-70 were invited and 55,819 were screened; giving an uptake of 73% (standard > 70%). Uptake is the percentage of women who attend each year, following an invitation. This means that just over a quarter of women who were invited did not take up the offer of screening mammography. The PHA, in partnership with other stakeholders, is implementing an action plan to help ensure all eligible women can make an informed choice about breast screening.

Most women who attend for breast screening mammography (96 out of every 100) will be identified as having normal mammograms. 98% of these women received their test results within 2 weeks (standard >90%). 3.9% of women who were screened were found to have an abnormality on their mammograms and were referred for further assessment. 94.9% of these women were offered an assessment clinic appointment within 3 weeks (standard > 90%). Units should now aim to achieve a figure of 100% of women being offered an appointment within

3 weeks. 88% of women attended their appointment within 3 weeks. This figure needs to be increased to 90% and each unit should aim to meet this figure. Younger women are more likely to be called back for assessment, but cancer is more likely to be found in older women.

Diagnosis before surgery is made by taking a biopsy at the assessment clinic. 95.9% of women with cancers detected by screening had the diagnosis confirmed before surgery (standard > 80%). The diagnostic accuracy of biopsies taken at assessment clinics is high. 98% of women only required one visit to the assessment clinic to obtain a diagnosis.

A total of 432 cancers were detected in 2011/12. Of these 347 were invasive cancers and 81 were ductal carcinoma in situ (DCIS) and 4 were micro-invasive. Of the 347 invasive cancers 189 (55%) were less than 15 mm in diameter (small invasive cancers).

A proportion of cases of DCIS will eventually become invasive. However, it is not yet possible to identify which ones will, and which won't, become invasive. All women diagnosed with this disease are therefore offered treatment.

4.0 per 1,000 women screened for the first time (aged under 53) were diagnosed with an invasive breast cancer (standard > 2.7). The comparative rate for England was 5.6. The figure for women attending subsequent screening tests was 5.8 per 1,000 (standard > 3.1). The English rate was 6.1.

The main aim of breast screening is to detect small invasive breast cancers at a time in their natural history when treatment is more likely to reduce the risk of death from the disease. 2.2 per 1,000 women screened for the first time (aged under 53) had a small invasive cancer identified (standard ≥1.5). The figure for women attending for subsequent screening tests was 3.4 per 1,000 (standard ≥1.7).

74.6% of women diagnosed with an invasive cancer had breast conserving surgery; 23.6% has a mastectomy and 1.7% had no surgery.

The proportion of women who had a surgical operation for what turned out to be benign disease was 1.2 per 1,000 for the prevalent (first) screen (standard < 3.6 per 1,000) and 0.6 per 1,000 for incident (subsequent) screens (standard < 2 per 1,000).

The screening round length is the interval between each offered invitation for screening mammography. The NHS Breast Screening Guidance states that, to ensure women are recalled for screening at appropriate intervals, the percentage of eligible women whose first offered appointment is within 36 months of their previous screen should be 90% or more. Measurement of screening round length provides an indicator of the efficiency with which a screening programme is managed. The long-term effectiveness of the programme is dependent on women in the target age group continuing to be screened at regular intervals.

69.9% of women in 2011/12 were offered an appointment for mammography screening within 36 months of their previous normal screen (standard > 90%). While the Southern and Western units were able to maintain their round lengths above the standard; the Northern and Eastern units were not. QARC worked closely with both of these units, and their round lengths were brought back up to the standard in 2012/13 and 2011/12 respectively. As figure 36 shows there have been problems maintaining the round length in the past. A wide range of factors can affect it including staffing issues and closing a unit for refurbishment. QARC is working with units to ensure that they have robust round length plans in place to minimise the likelihood of falling below the standard. However, it is recognised that the replacement of all mammography equipment throughout Northern Ireland with new digital equipment , in 2013 and 2014, will adversely impact on the round length.

Overall these are very good statistics and show that the Northern Ireland Breast Screening Programme is providing a good quality service in keeping with national standards.

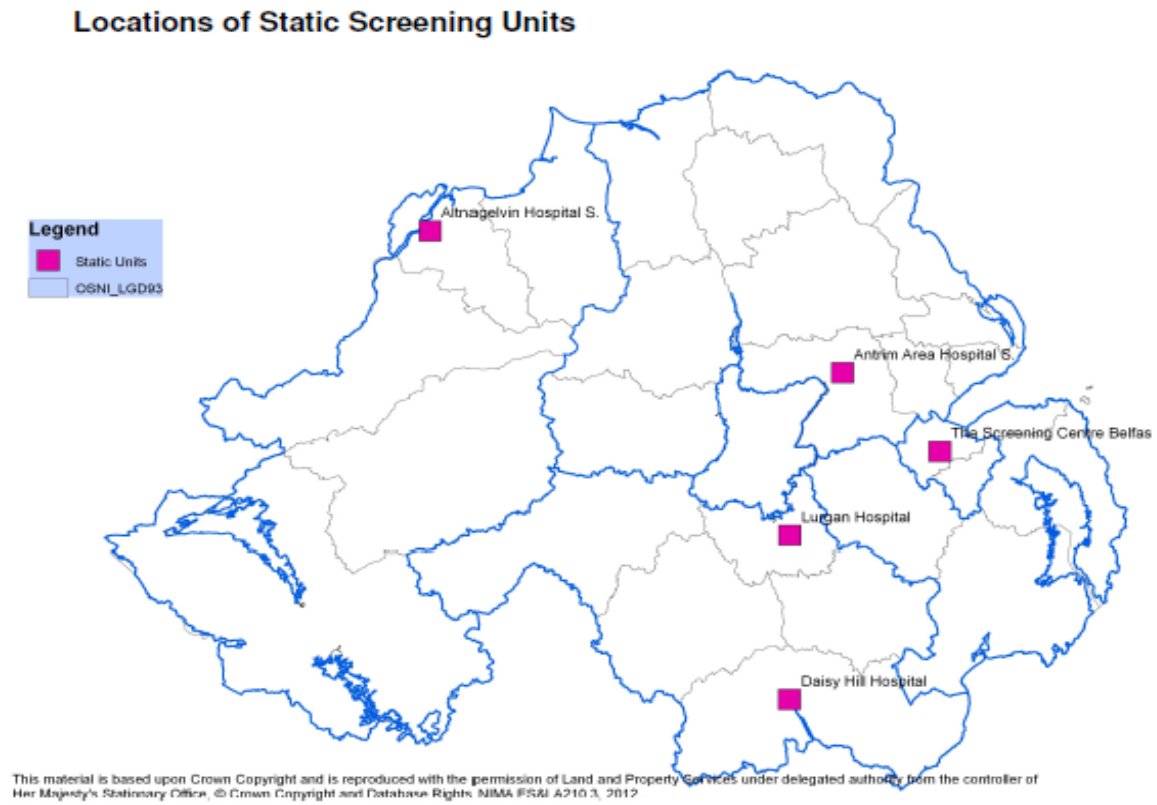
Introduction

Regular breast screening reduces the risk of death from breast cancer

The aim of breast screening is to prevent deaths from breast cancer. Regular mammography reduces mortality from breast cancer by 20% in the population of women **invited** for screening. The reduction in mortality will of course be higher for the population of women who actually **attend** for screening, but by how much is difficult to say. This is because women who do not attend are likely to have a different background risk of breast cancer.

In Northern Ireland eligible[1] women aged 50 – 70 are invited, by GP practice, for breast screening every 3 years. Due to this three yearly round of invites about a third of women will be invited for the first time before their 51st birthday (the year they turn 50) , a third before their 52nd birthday (the year they turn 51) and the rest before their 53 birthday (the year they turn 52). All eligible women should be invited for the first time before their 53rd birthday.

Figure 1: Locations of the Static Breast Screening Units



[1] Women who have had bilateral mastectomy are excluded from the eligible population.

As the women who are invited before their 51st birthday are invited in the year they turn 50, a number of them will be invited for breast screening for the first time when they are 49.

Women invited for the first time the year they turn 50 are invited for the last time the year they turn 68, Women invited for the first time the year they turn 51 are invited for the last time the year they turn 69 and women invited for the first time the year they turn 52 are invited for the last time the year they turn 70. Everyone receives a total of 7 invitations.

Women aged over 70 years are not automatically invited for screening, but are encouraged to continue attending every 3 years by contacting their local screening unit and requesting an appointment.

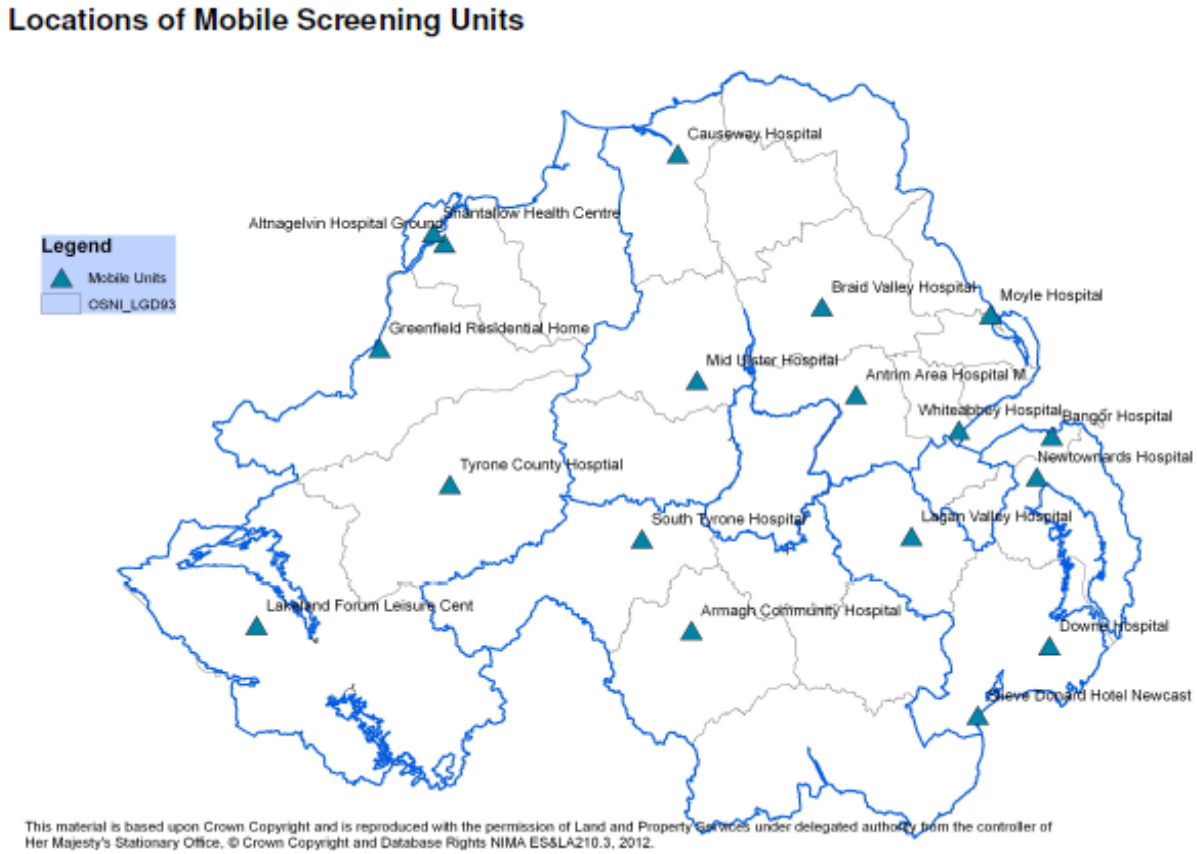
There are four breast screening units in Northern Ireland (figure 1).

These are the:

- Eastern Breast Screening Unit at 12-22 Linenhall Street, Belfast (covers the Belfast and South Eastern Trust areas);
- Northern Breast Screening Unit at Antrim Area Hospital (covers most of the Northern Trust area);
- Southern Breast Screening Unit based at Lurgan Hospital, with a second static unit at Daisy Hill Hospital, Newry (covers the Southern Trust area); and
- Western Breast Screening Unit at Altnagelvin Area Hospital (covers the Western Trust, and part of the Northern Trust area).

Each unit also provides access to screening on mobile breast screening trailers at a variety of locations throughout Northern Ireland (figure 2).

Figure 2: Locations of the Mobile Breast Screening Units



The Quality Assurance Reference Centre (QARC) is part of the Public Health Agency. It provides the quality assurance function for the three cancer screening programmes (breast, bowel and cervical).

The purpose of quality assurance in the breast screening programme is the:

- maintenance of minimum standards; and
- continuous improvement in the performance of all aspects of the screening programme

in order to ensure that women have access to a high quality service wherever they reside.

The Northern Ireland Breast Screening Programme operates to the same standards as the NHS Breast Screening Programme in England. These quality standards can be found at http://www.cancerscreening.nhs.uk/breastscreen/publications/publication-topics.html

Key Developments in 2011/12

An independent review confirmed that breast screening reduces deaths from breast cancer, but at the cost of identifying some cancers that would not otherwise have come to attention in a woman's lifetime (overdiagnosis)

An independent review of breast cancer screening began in October 2011 and the findings were published on 30 October 2012. It concluded that the UK breast screening programmes confer significant benefit, by extending lives, and should continue; and that there should be clear communication of the benefits and harms to women.

The review reported a 20% reduction in mortality in women invited for screening. This corresponds to one breast cancer death prevented for every 235 women invited for screening. It estimated that one death is prevented for every 180 women who attend for screening and about 1,300 breast cancer deaths are prevented each year by breast screening programmes in the UK.

Overdiagnosis is the main harm caused by screening. This is the identification of breast cancers that will never cause any harm to women during their lifetime. As it is not possible to tell in advance which cancers will be life threatening, and which won't, all are treated (overtreatment).

The report estimated that for every breast cancer death prevented through screening, about 3 women will have treatment for a cancer that would not have caused them problems.

The full report can be found at http://www.cancerresearchuk.org

Cancer Research UK has produced a graphic which helps to explain the findings of the independent review. It can be found at http://www.cancerresearchuk.org/cancer-info/spotcancerearly/screening/breastcancerscreening/breast-cancer-screening-infographic/BREAST-SCREENING-INFOGRAPHIC

Statistics

The Quality Assurance Reference Centre regularly monitors the performance of the Northern Ireland Breast Screening Programme

The Quality Assurance Reference Centre (QARC) is part of the Public Health Agency (PHA). It calculates the statistics for each of the four breast screening units using standard Körner returns:

KC62 – This is an annual return made by trusts on: outcome of initial screen, outcome of assessment (including cytology and histology), cancers diagnosed (by size and type) and overall outcome measures (uptake, referral rate, non-invasive cancers, benign biopsy rate, invasive cancer detection rate, referral for cytology/ biopsy, malignant: benign ratio for surgery, early recall rate); by 1st invitation, previous non-attenders, last screen within 5 years, last screen more than 5 years, early recall, self referrals, all women; by age.

KC62 data are obtained from the National Breast Screening System (NBSS). This is the IT system that supports the breast screening programme.

KC63 – This is an annual return made by trusts on: numbers of eligible women, invited and screened by age, numbers recalled, numbers self or GP referred, and time since most recent screen in 12 month blocks.

In December 2010 an electronic link was established between NBSS and the IT system that supports primary care (NHAIS/Exeter system). This link will allow us to establish better failsafe procedures to ensure that all women who should be invited for breast screening are invited. It will also provide data on the coverage of the programme. Coverage is defined as the proportion of women resident and eligible for screening who have had a screening mammogram at least once in the previous three years. KC63 data will not be available until December 2013 when 3 year's worth of data will be on the system (as the breast screening programme is a 3 yearly rolling programme).

Women with a date of first offered screening appointment between 01/04/2011 and 31/03/2012 were used to produce this report. Comparative figures for the previous 2 years (5 years for uptake) and from the English NHS Breast Screening Programme are also shown.

These data allow the Quality Assurance Reference Centre to evaluate the quality of the Northern Ireland Breast Screening Programme. Performance is compared to the minimum standards and targets set out in NHSBSP Publication No. 60 (Version 2) *Consolidated Guidance on Standards for the NHS Breast Screening Programme* , *April 2005*.[4]

The standards are summarised in **Appendix 2**. It should be noted that these quality assurance data provide information on the performance of the four breast screening units and the programme as a whole: they do not provide information on the performance of individual staff.

Minimum standards: These figures represent the levels of performance which are the minimum acceptable for any breast screening unit. Where the minimum standard is shown "greater than or equal to", any level of performance below that standard should be investigated by the Quality Assurance team. Where the minimum standard is shown as "less than or equal to", any level of performance above that standard should be investigated similarly.

Targets: These are the quantitative goals that are considered to be achievable individually by one third of units within the NHSBSP. All units should aim to achieve the targets. If the specified cancer detection rates etc are achieved, then the programme will be on target to replicate the mortality reduction achieved in trials.

The KC 62 data for women aged 50 – 64 are shown in **Appendix 3**. The KC 62 data for women aged 50 – 70 are shown in **Appendix 4**.

Before March 2009 women aged 50-64 were invited for breast screening. Since that date invitations have gone to women aged 50-70 (age extension).

English data are taken from the NHS Information Centre for Health and Social Care, *Breast Screening Programme, England 2011-12* Report.[5]

[4] Available at http://www.cancerscreening.nhs.uk/breastscreen/publications/nhsbsp60v2.pdf

[5] https://catalogue.ic.nhs.uk/publications/screening/breast/bres-scre-prog-eng-2011-12/bres-scre-prog-eng-2011-12-rep.pdf

Number of Women Screened

76,179 women were invited for breast screening in 2011/12 and 55,819 of these women attended for breast screening

A total of 76,179 women aged 50-70 were invited for breast screening in 2011/12. Of these 55,819 women attended for screening; giving an uptake rate of 73%. Figure 3 below illustrates how many women aged 50-70 were screened by each unit over a three year period. Note that before 2009/10 only women aged 50-64 were invited for breast screening.

The number of women aged 50-64 invited between 2000/01 and 2008/09 is shown in figure 4.

Figure 3: Number of women invited aged 50-70 who were screened each year from 2009/10 to 2011/12

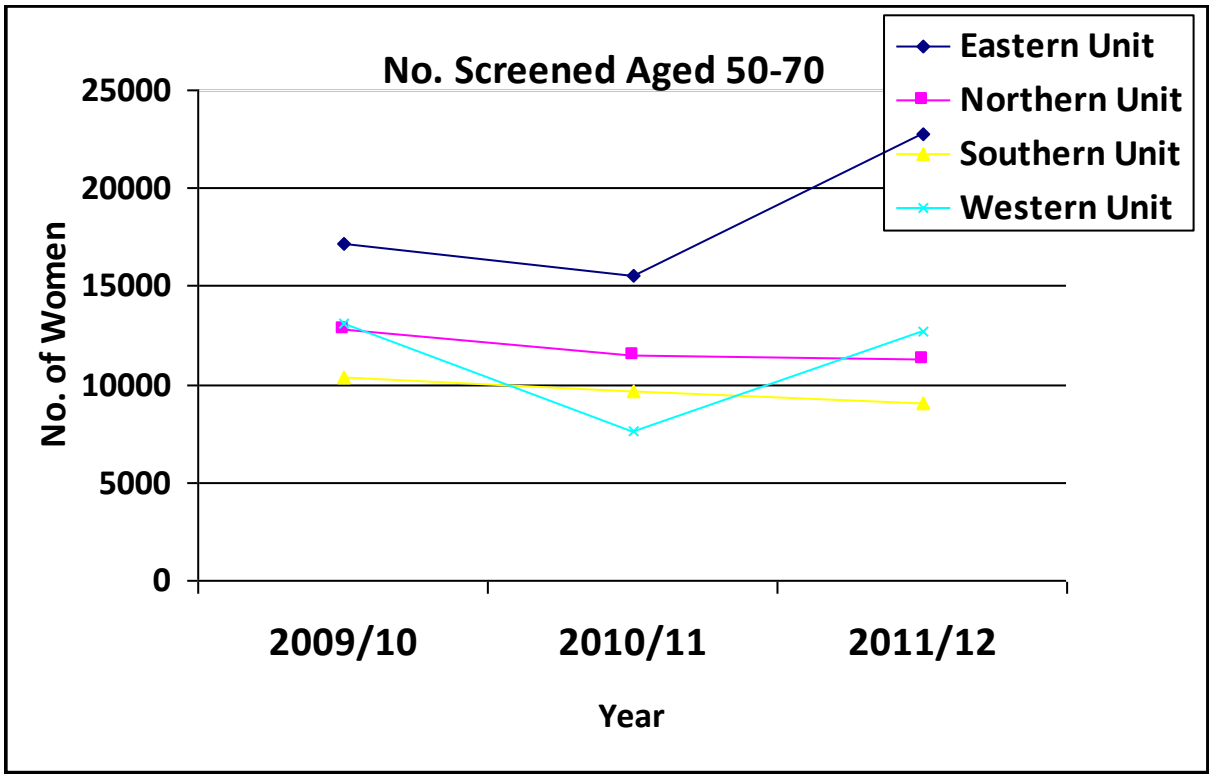
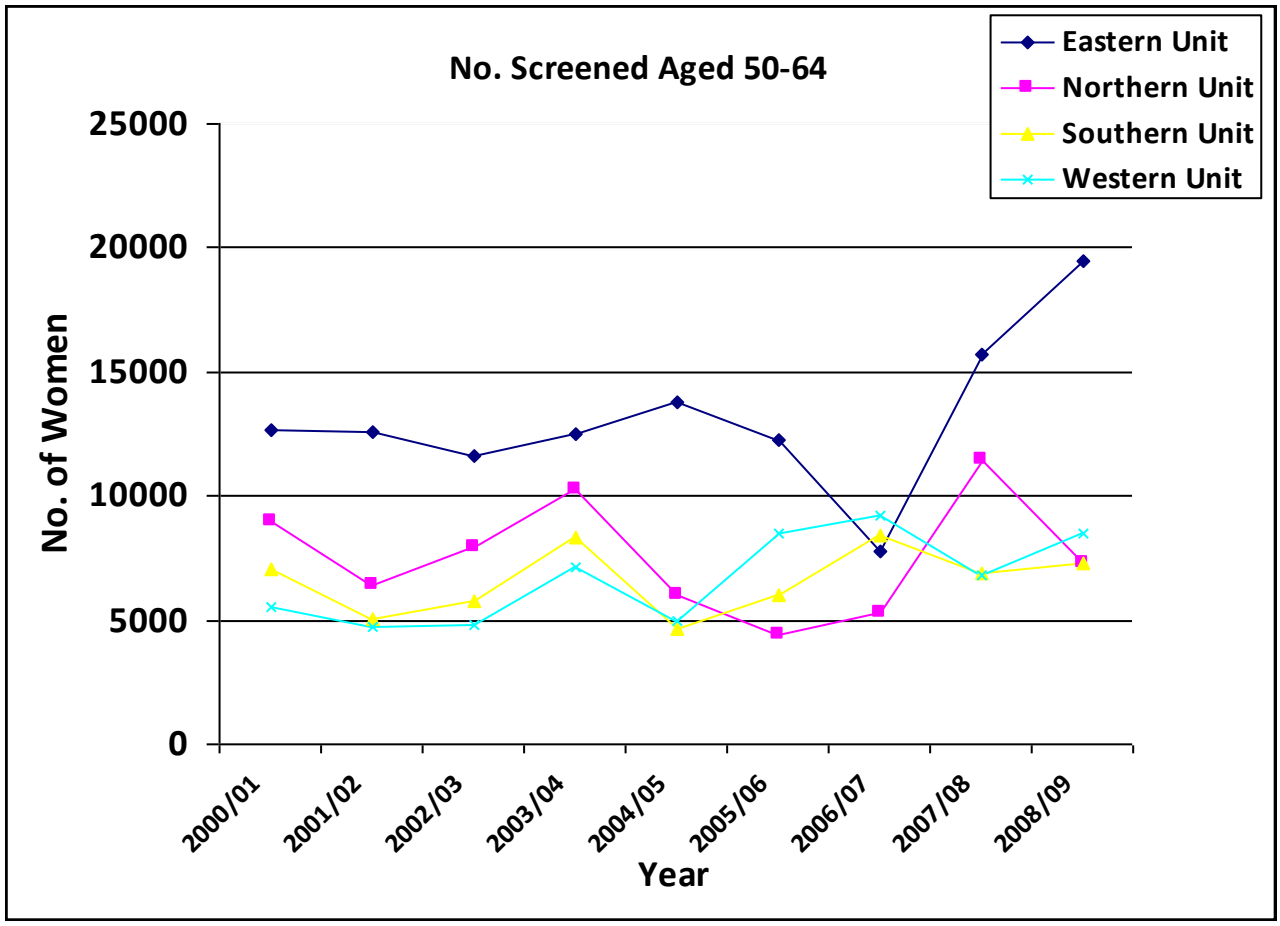


Figure 4: Number of women invited aged 50-64 who were screened each year from 2000/01 and 2008/09



The dip in numbers in the Eastern unit in 2006/07 was the result of staff in the unit providing assistance to the Northern unit. The subsequent peak in the Eastern unit was due to the unit working hard to get their round length back to standard prior to the introduction of “age extension” in March 2009 when we started to invite women aged 50-70.

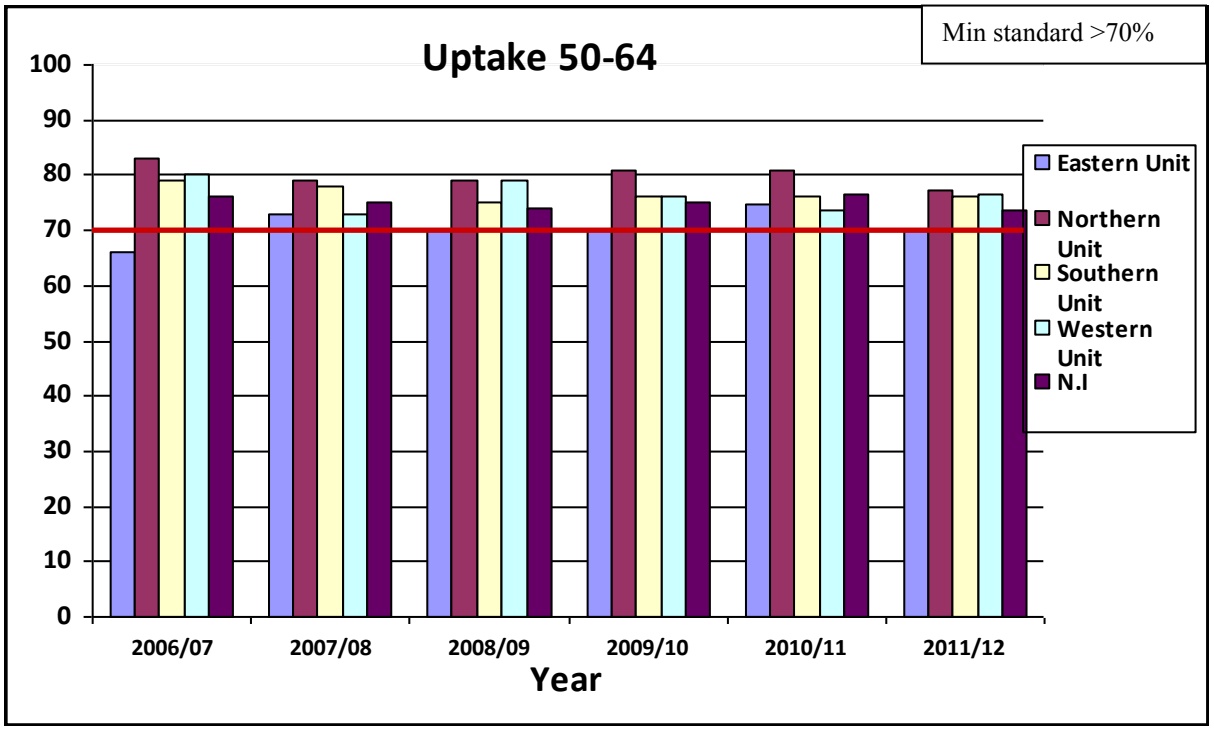
Uptake

Each year around quarter of women invited for breast screening do not take up the offer.

Most of these women live in Derry/Londonderry and the Greater Belfast areas.

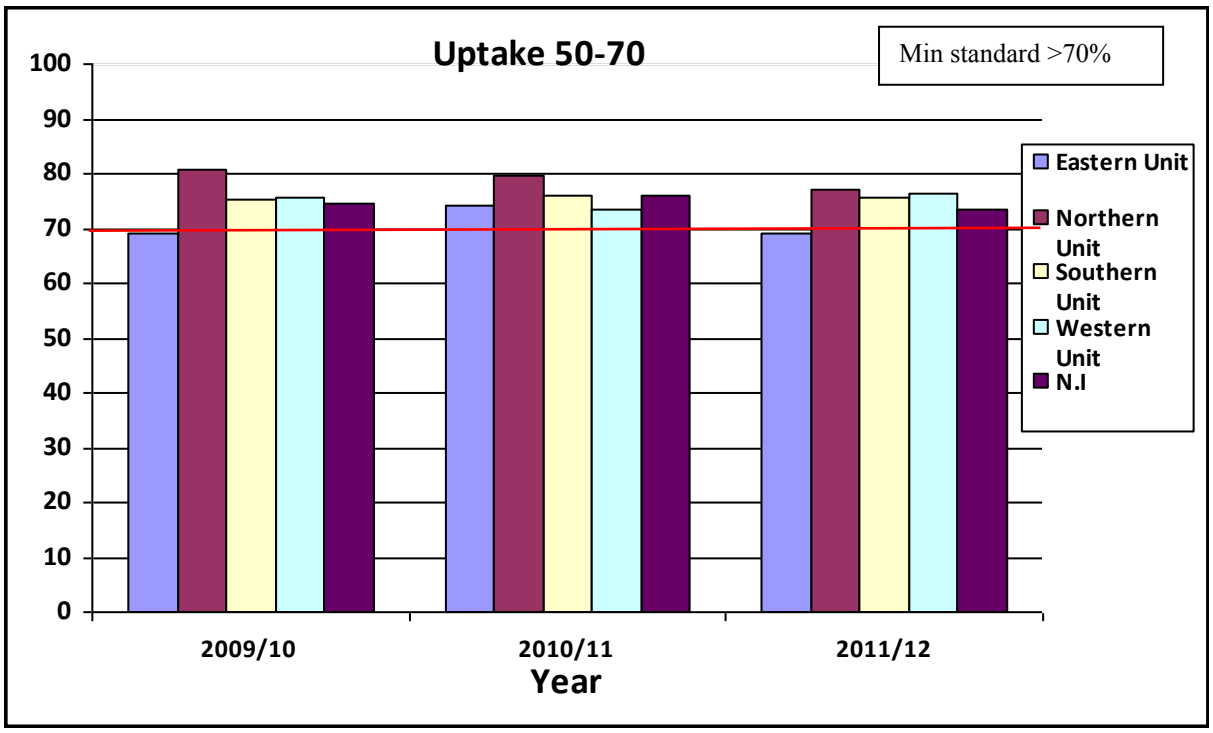
Uptake measures the percentage of women who attend for breast screening each year, following an invitation. Figure 5 shows the uptake rates over a 6 year period. In 2011/12 each of the 4 breast screening units achieved an uptake of over 70% for women aged 50 - 64, which is the national minimum standard. Overall the Northern unit has the highest uptake and the Eastern the lowest. The average figure for Northern Ireland in 2011/12 was 73.8%. This means that just over a quarter of all women who were invited did not accept the offer of breast screening (a total of 15496 women). However, local uptake compares well with the English figure 73.0%, for women aged 50-64, for the same period.

Figure 5: Uptake for women aged 50-64 by unit and for Northern Ireland 2006/07 – 2011/12



The uptake for women aged 50 – 70 between 2009/10 and 2011/12 is shown in figure 6. The overall uptake for this age range in Northern Ireland was 73.3% in 2011/12. The comparative figure for England was 73.6%.

Figure 6: Uptake for women aged 50-70 by unit and for Northern Ireland 2009/10 and 2011/12



Non-attendance can be due to organisational and communication issues, as well as individual factors. The PHA, in partnership with other stakeholders, is implementing an action plan to help ensure all eligible women can make an informed choice about attending for breast screening.

Medical Physics Standards

Each of the mammography x-ray machines meets the standards for image quality and radiation dose

Mammograms are taken using low dose x-rays. The Northern Ireland Breast Screening Programme has a number of performance standards relating to:

- the image quality (spatial resolution and low contrast detectability); and
- the radiation dose provided by the x-ray equipment.

These are shown in table 1 below. These parameters are measured during regular medical physics surveys of the mammography equipment.

Table 1: Mammography Equipment Performance Standards

Parameter		Standard
Spatial Resolution [line pairs per mm] *		≥ 12
Low Contrast Detectability (%)	6 mm detail	≤ 1.2
	0.5 mm detail	≤ 5
	0.25 mm detail	≤ 8
Mean Glandular dose to Standard Breast (mGy)		≤ 2.5

* Note: The Spatial Resolution standard does not apply to the digital mammography units in Antrim & Craigavon Area Hospitals.

The following charts indicate the performance of the units in the Northern Ireland Breast Screening Programme against the standards. All units meet the applicable standards.

Figure 7: Spatial Resolution of Mammography Images by Machine

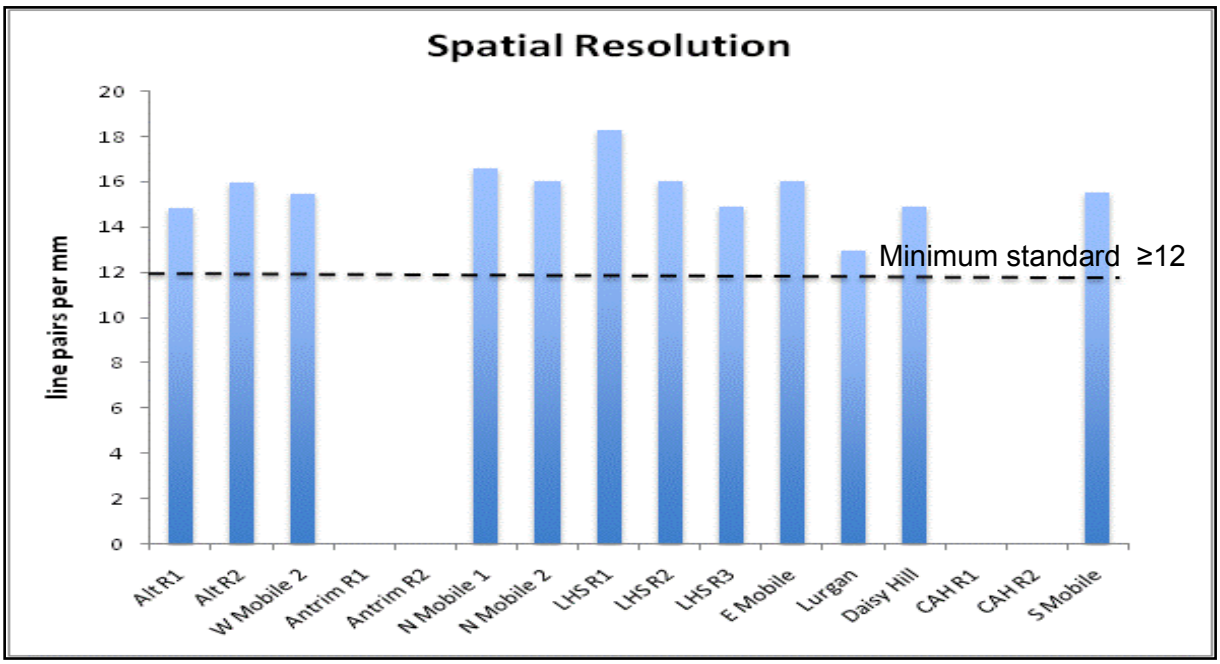


Figure 8: Low Contrast Detectability by Mammography Machine – 6 mm Details

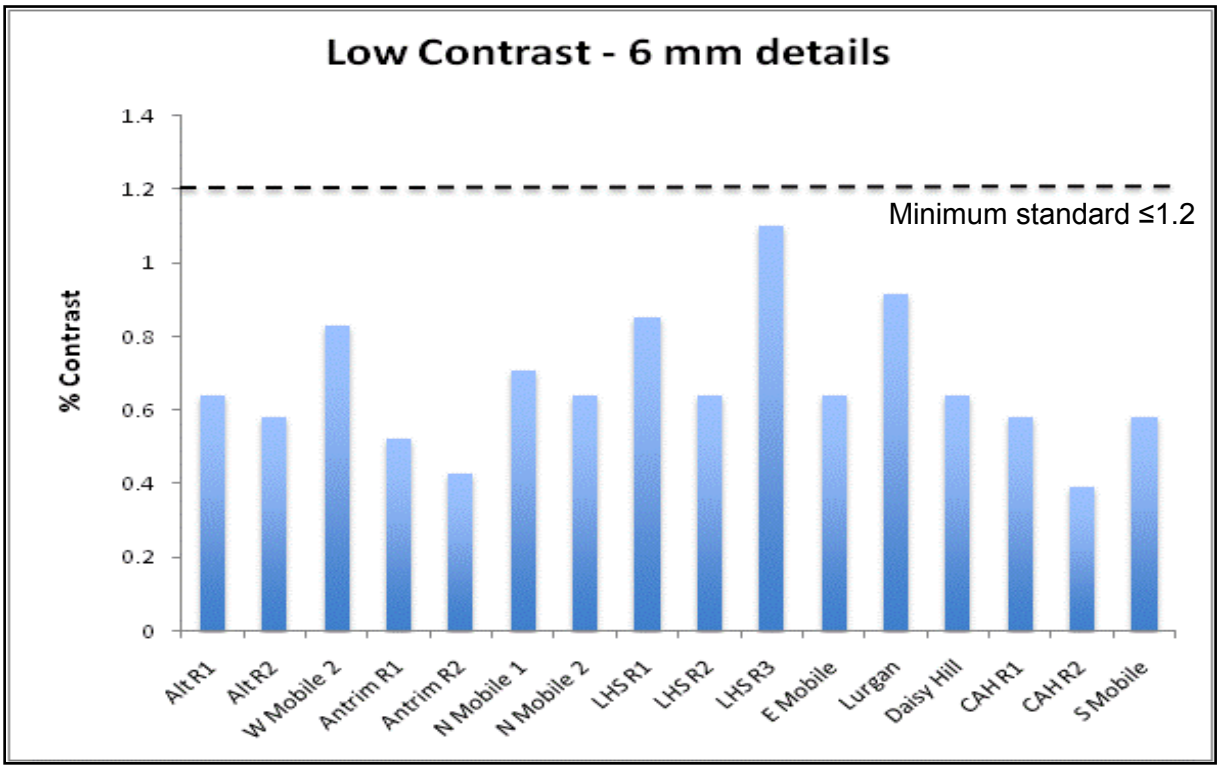


Figure 9: Low Contrast Detectability by Mammography Machine – 0.5 mm Details

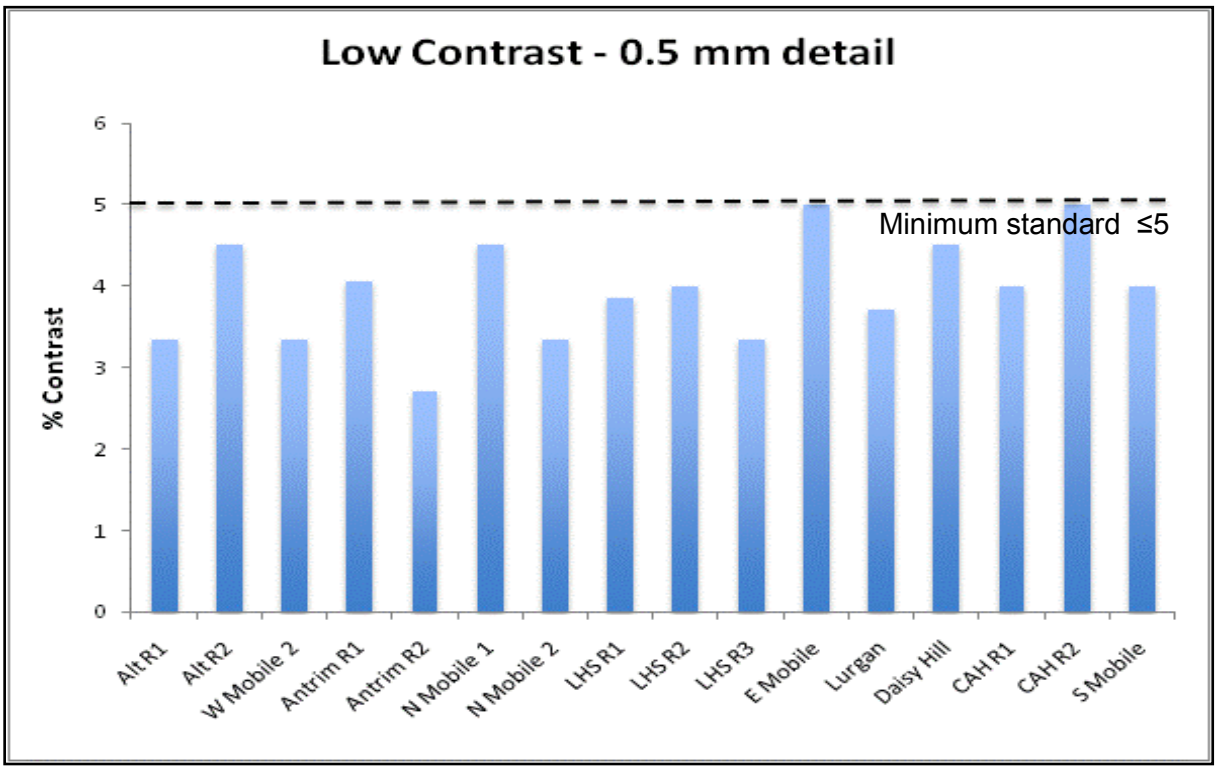


Figure 10: Low Contrast Detectability by Mammography Machine – 0.25 mm Details

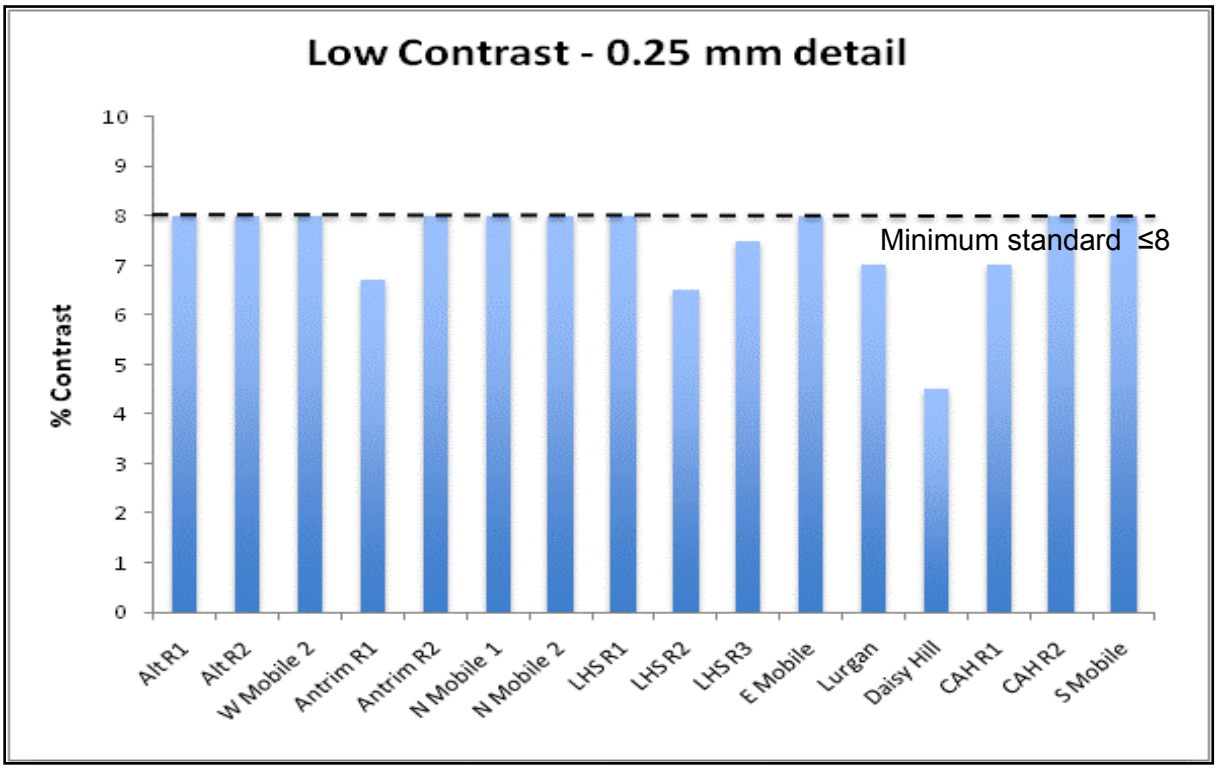
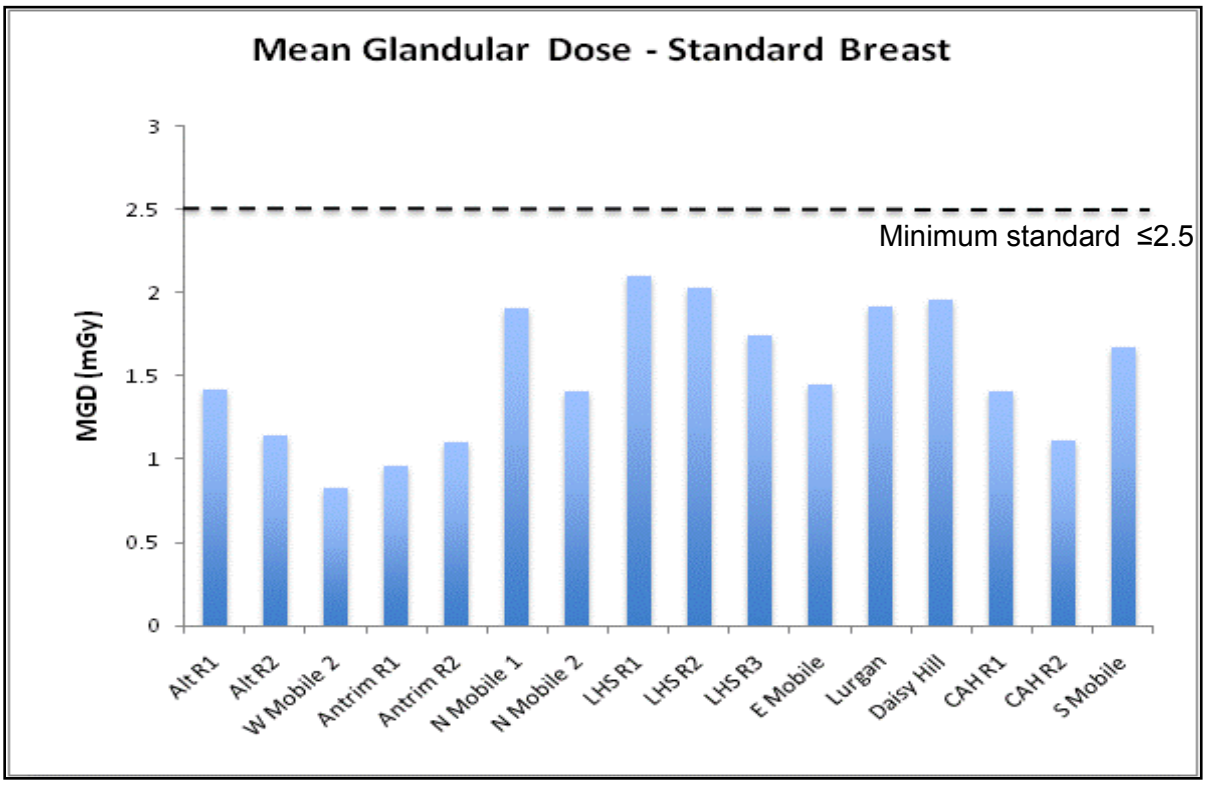


Figure 11: Mean Glandular Dose by Mammography Machine



Screen to Routine Recall

98.0% of women (who had a normal test result) received their results within 2 weeks

Most women who attend for breast screening mammography will be identified as having normal mammograms. Screen to routine recall measures the interval between the date a woman attended for screening (the date her mammograms were taken) and the date her episode is closed on the NBSS i.e. the date the result is entered (taken as a proxy for the date she is sent her results letter). The minimum standard is for ≥ 90% of women to receive their results within two weeks, with a target of 100%.

Figure 12 shows the overall results for Northern Ireland over a 6 year period. In 2011/12, 98.0% of women received their results within 2 weeks. Performance against this standard has improved considerably over the past few years.

Figure 12: Screen to routine recall for Northern Ireland by year from 2006/07 to 2011/12

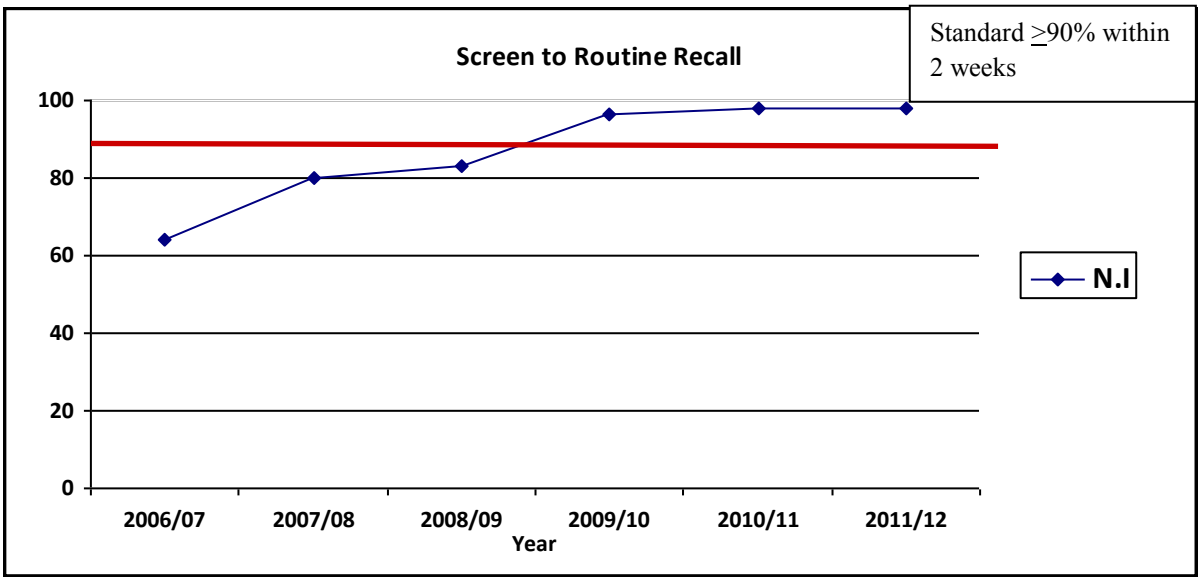
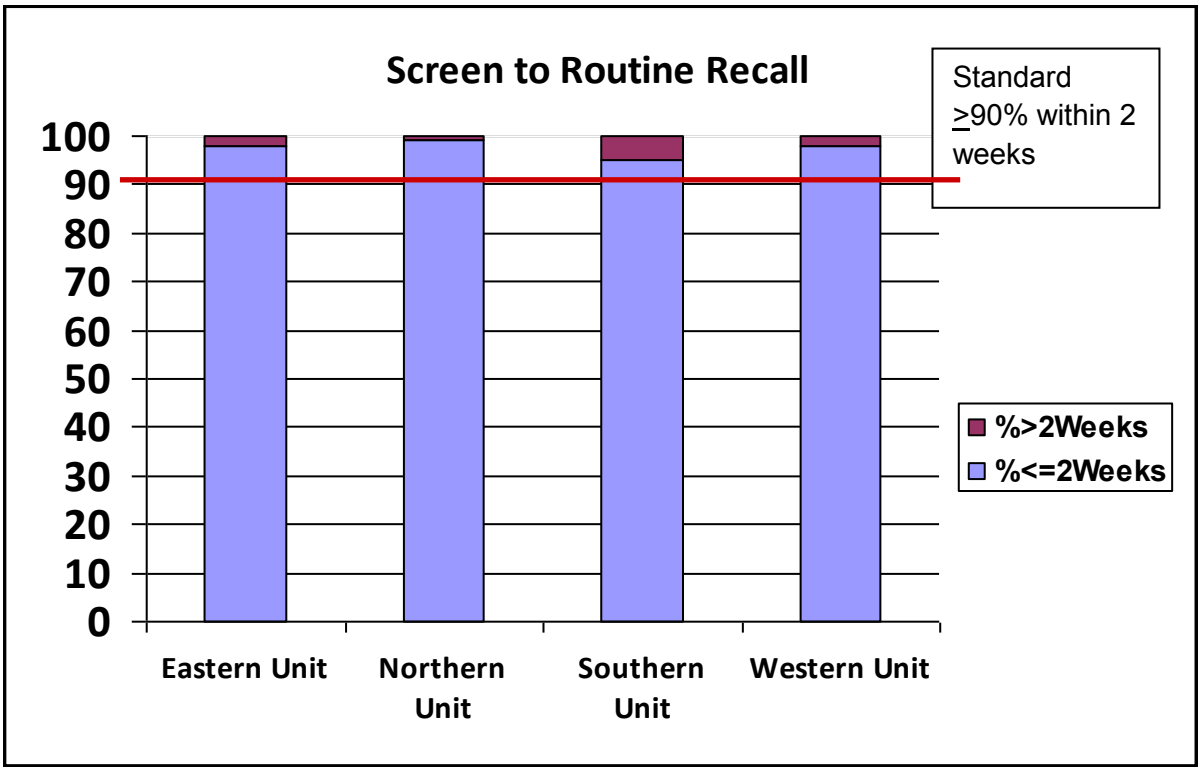


Figure 13 shows the performance of each unit in 2011/12. All units exceeded the standard.

Figure 13: Screen to routine recall by unit in 2011/12



Screen to Assessment

94.9% of women referred for assessment were offered an appointment within 3 weeks

About 4 women in every 100 women are asked to come back for more tests after screening. These women are invited to attend an assessment clinic. Out of these 4 women, 1 will be found to have cancer. The rest will not have cancer and will go back to having screening invitations every 3 years.

Screen to assessment measures the interval between a woman's screening mammogram and the date she is first offered an appointment for the assessment clinic (date of first offered appointment). The minimum standard is for ≥ 90% of women to be offered an appointment within 3 weeks of attendance for mammography, with a target of 100%. Units should now be aiming to achieve a figure of 100% for this standard. Figure 14 shows the overall results for Northern Ireland over a 6 year period. Performance has improved considerably over time and was 94.9% in 2011/12.

Figure 14: Screen to assessment for Northern Ireland by year from 2006/07 to 2011/12—date of first offered appointment

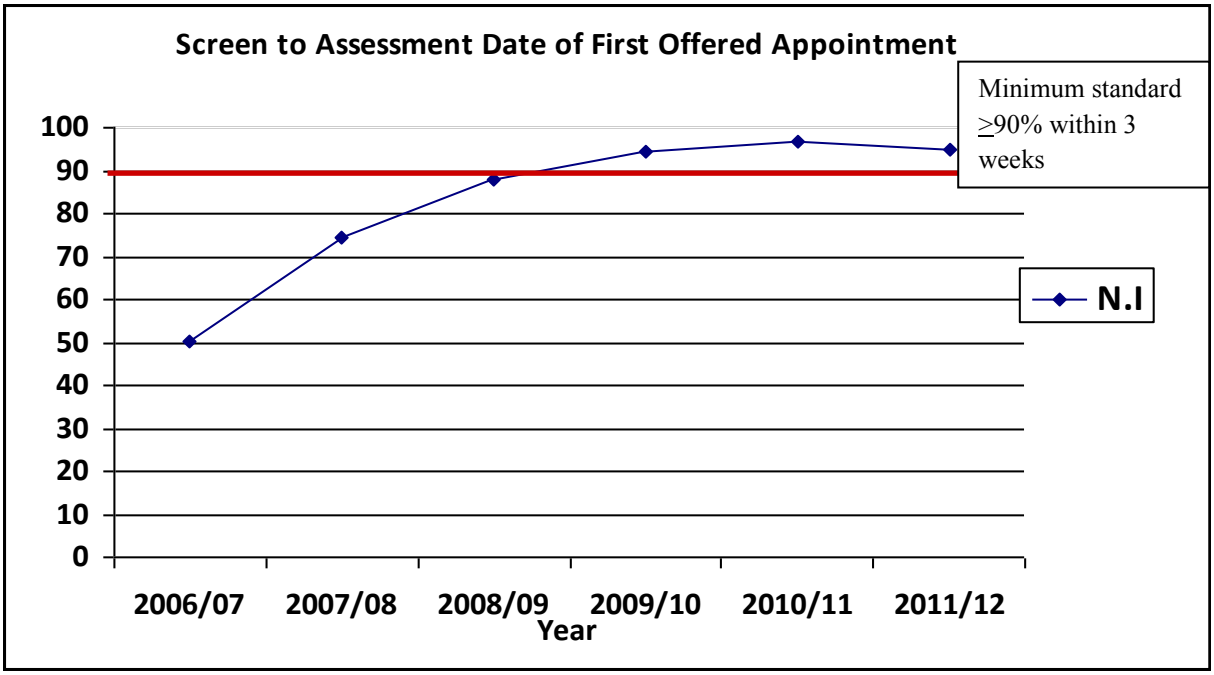
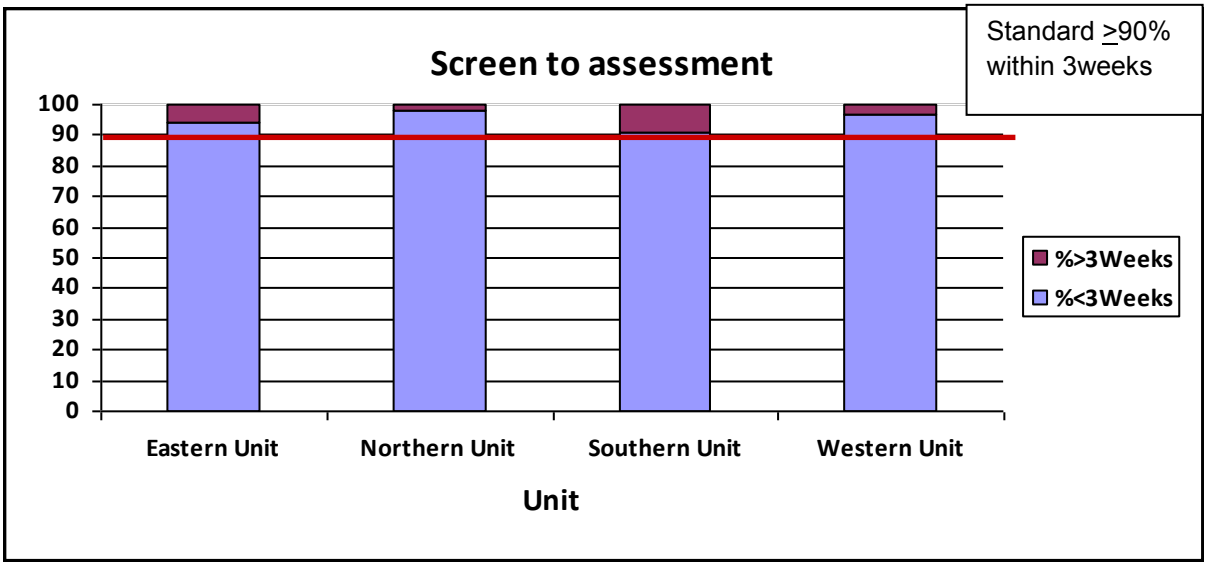


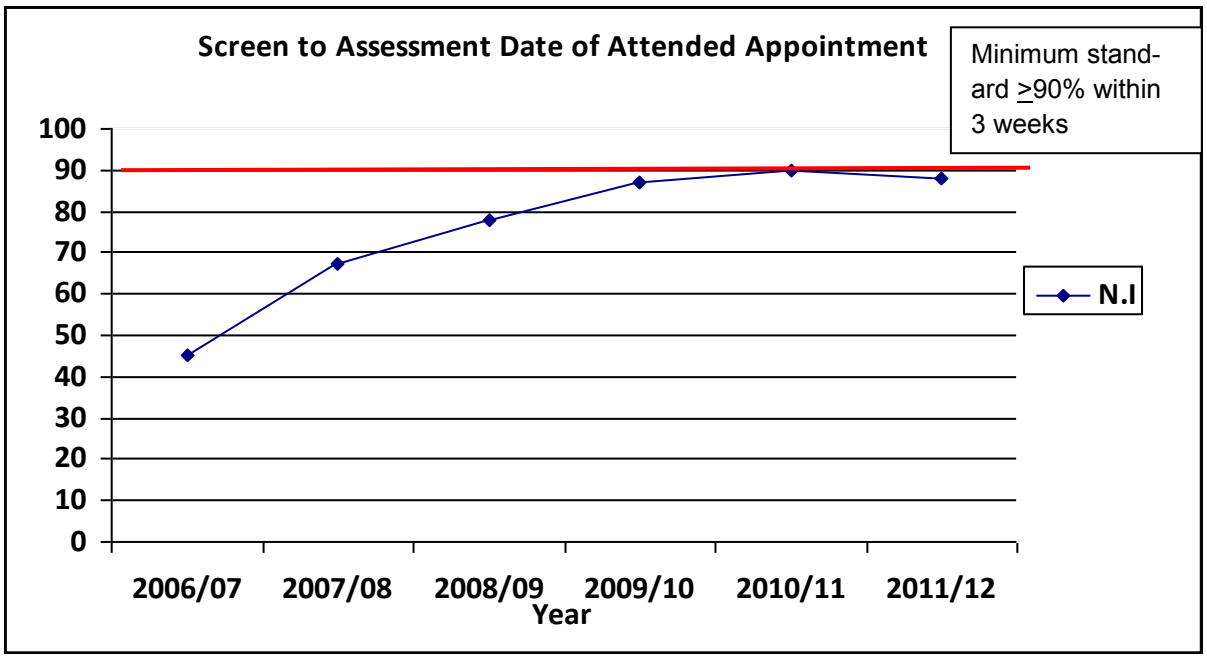
Figure 15 shows the performance by individual breast screening unit for 2011/12.

Figure 15: Screen to assessment (date of first offered appointment) by unit 2011/12



We also monitor the interval between a woman's screening mammogram and the date she attends her appointment (figure 16). This differs from the previous measurement, as some women may choose to change their appointment to a later time; some women may not turn up (DNA) and be offered another appointment date, or (rarely) because an assessment clinic was cancelled. Units should aim to achieve a figure of ≥90% for this standard. The figure achieved in 2011/12 was 88%. QARC is working with units to improve performance against this standard

Figure 16: Screen to assessment for Northern Ireland by year from 2006/07 to 2011/12—date attended appointment



Referred for Assessment

2,323 women were referred for assessment in 2011/12 – 3.9% of the women screened

The percentage of women who are recalled to an assessment clinic is normally higher in those women who are attending for their first screening mammogram (known as the prevalent screen) than in those attending for subsequent screening mammography (know as incident screens). Table 2 shows the performance by unit. The objective is to minimise the number of women referred for further tests. However, a recall rate that is too low can reduce the number of cancers detected.

Prevalent screen
The minimum standard for the percentage of women recalled for assessment in the prevalent (first) screen is < 10%, with a target of < 7%. The Northern Ireland figure for the prevalent screen was 7.4%, which meets the standard.

Incident screen
The minimum standard for the percentage of women recalled for assessment for incident (subsequent) screens is < 7%, with a target of < 5%. The Northern Ireland figure for incident screens was 2.5%, which meets the standard and the target.

Table 2: Percentage of women aged 50–70 recalled for assessment by unit in 2011/12

Area	Prevalent %	Incident %
Eastern	8.3	2.4
Northern	11.0	3.0
Southern	5.6	3.5
Western	3.3	1.8
Northern Ireland	7.4	2.5
	Standard < 10% Target < 7%	Standard < 7% Target < 5%

Table 3 below compares the data for Northern Ireland with each of the English regions (green indicates that the standard and the target have been met; orange indicates that the standard has been met)

Of the 81 breast screening units in England, 68 meet the minimum standard of < 10% for the prevalent screen in 2011/12.

Table 3: Percentage of Women Aged 50-70 Recalled to Assessment by Region.

NHS BREAST SCREENING PROGRAMME INCLUDING NORTHERN IRELAND: % RECALLED TO ASSESSMENT BY REGION PREVALENT SCREEN AGE 50 – 70 2011 - 2012 Standard <10% Target <7%	
North East	5.5
Yorkshire & Humber	6.2
East Midlands	6.3
West Midlands	6.9
East of England	7.2
Northern Ireland	**7.4**
England	**7.8**
South East Coast	8.3
London	8.3
South West	9.3
North West	9.4
South Central	9.9

NHS BREAST SCREENING PROGRAMME INCLUDING NORTHERN IRELAND: % RECALLED TO ASSESSMENT BY REGION INCIDENT SCREEN AGE 50 – 70 2011 - 2012 Standard <7% Target <5%	
West Midlands	2.5
North East	2.5
East of England	2.5
Northern Ireland	**2.5**
East Midlands	2.6
Yorkshire & Humber	2.8
England	**2.9**
South East Coast	3.1
London	3.1
South Central	3.1
North West	3.3
South West	3.5

Figures 17 and 18 show the trends over the 6 year period 2006/07 to 20011/12. The Northern unit tends to have the highest recall rates and the Western the lowest. The Northern unit is well aware of the comparatively high recall rate for the prevalent screen and is monitoring this. The potential impact on the cancer detection rate of any reduction needs to be carefully considered.

Figure 17: % referred to assessment for prevalent (first) screen by unit and for Northern Ireland, 2006/07 to 2011/12

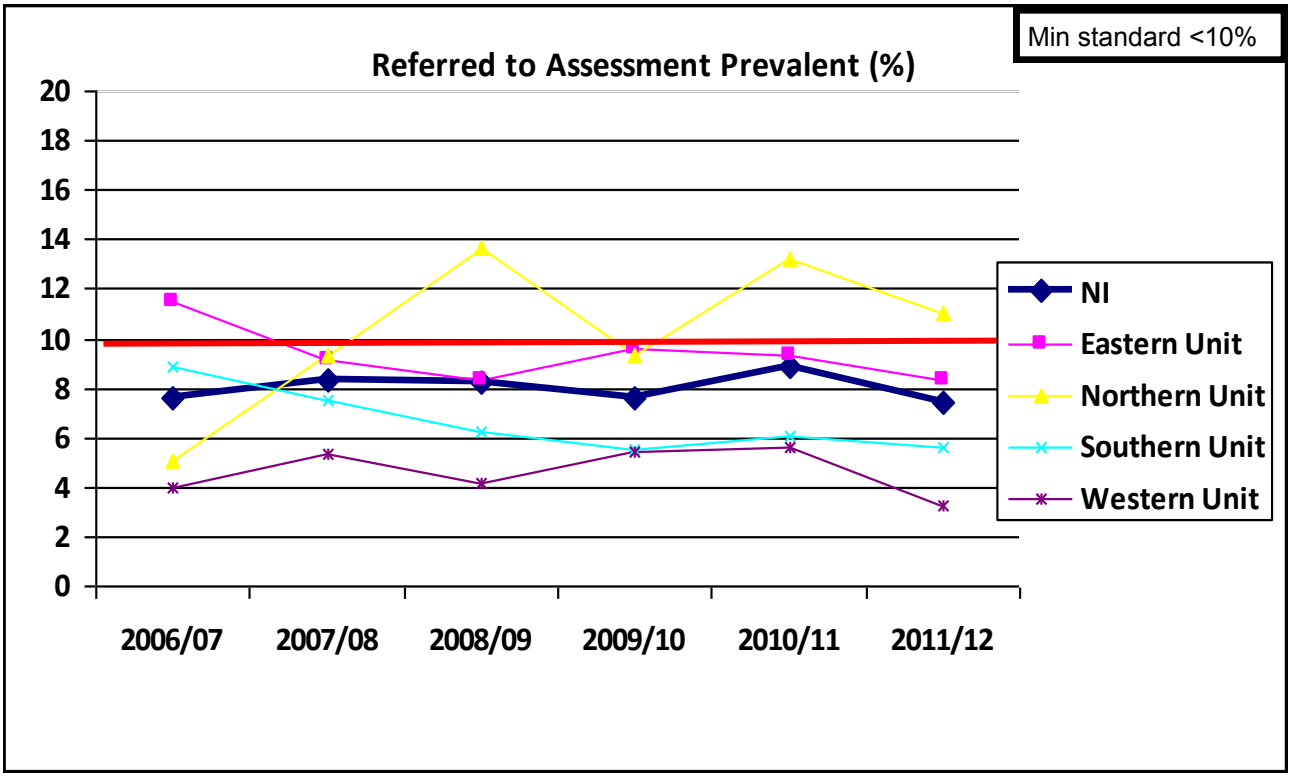
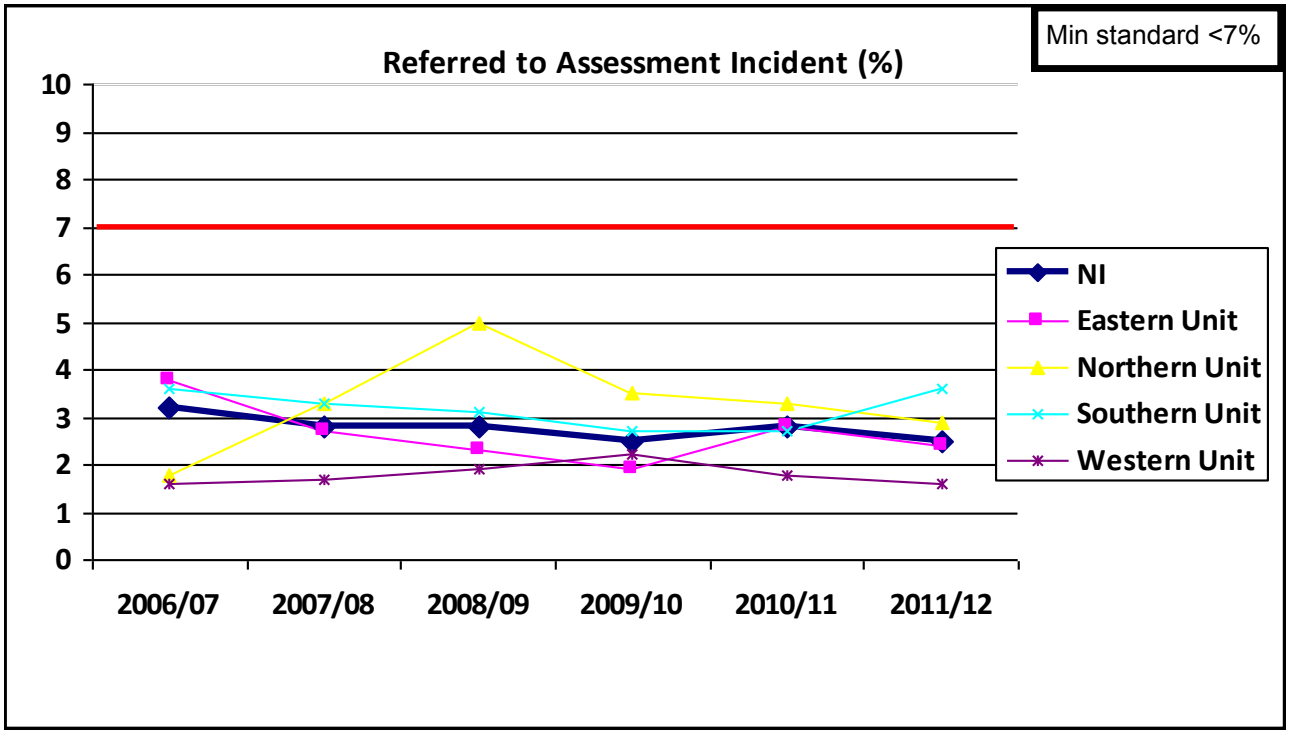


Figure 18: % referred to assessment for incident screen for women aged 50-70 by unit and for Northern Ireland, 2006/07 to 2011/12



By age band

Table 4 shows the percentage of women who are returned to routine recall after screening; and the corresponding percentage sent for further investigation at an assessment clinic, split by age bands.

Table 4: Percentage of women invited and screened aged 50–70 returned to routine recall & referred for assessment by age band

Age Group	No. Screened	Routine Recall (%)	Referred to Assessment (%)
<= 44	0	0 (0)	0 (0)
45 - 49*	1699	1557 (92)	142 (8)
50 - 52	10434	9693 (93)	741 (7)
53 - 54	6335	6151 (97)	184 (3)
55 - 59	13837	13462 (97)	375 (3)
60 - 64	13055	12665 (97)	390 (3)
65 - 69	11308	10950 (97)	358 (3)
70	850	814 (96)	36 (4)
71 - 74	3	3 (100)	0 (0)
>=75	0	0 (0)	0 (0)
Target Group (50-70)	55819	53735 (96)	2084 (4)
Total all ages	57521	55295 (96)	2226 (4)
Age group 50 - 64	43661	41971 (96)	1690 (4)

* As women can receive their first invite in the year they turn 50 some women are invited when they are 49.

Visits to the Assessment Clinic

98% of women only required one visit to the assessment clinic to achieve a definitive diagnosis

The number of assessment clinic visits required to achieve a definitive diagnosis should be kept to a minimum, with no more than 2 for interventional procedures, such as a core biopsy.

Table 5 shows how Northern Ireland compares with other parts of the UK. 98% of women in Northern Ireland, who needed a biopsy, only required a single visit to the assessment clinic. This is better than the UK average of 95%.

Table 5: The assessment visit with the earliest cytology / core biopsy for all cancers UK data for 2011/12

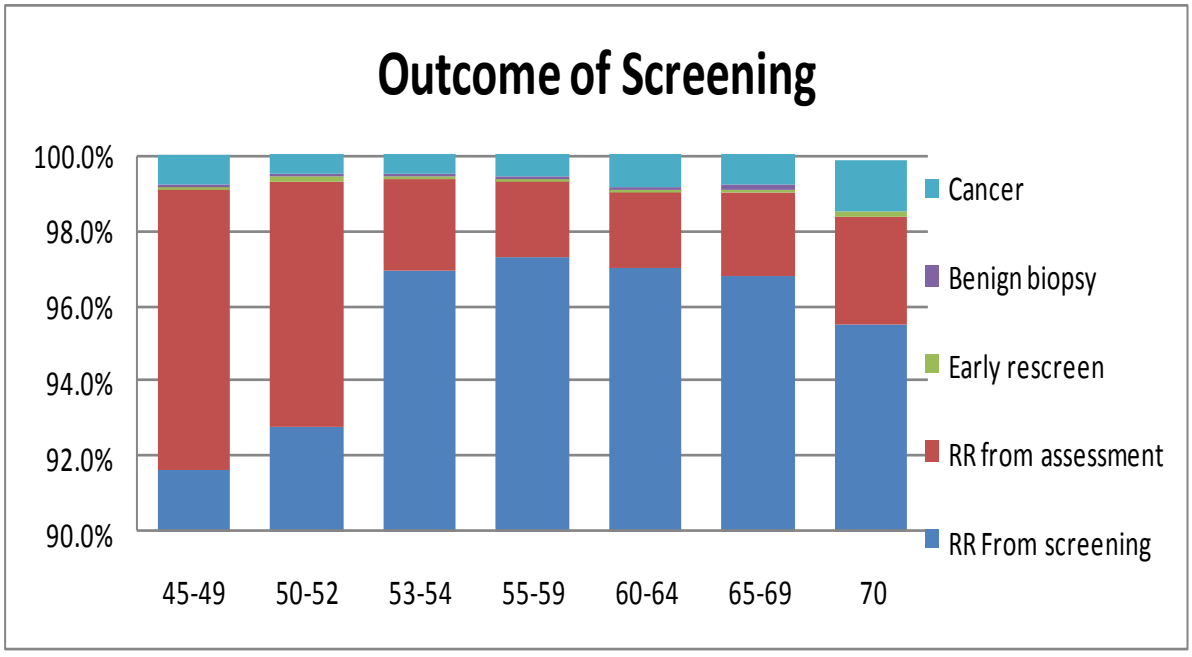
	1 (%)	2 (%)	3+ (%)	Total (%)	Repeat (2+) visit for core/cyt (%)
Eastern Unit	173 (99)	2 (1)	0 (0)	175 (100)	2 (1)
Northern Unit	81 (97)	2 (3)	0 (0)	83 (100)	2 (3)
Southern Unit	76 (100)	0 (0)	0 (0)	76 (100)	0 (0)
Western Unit	94 (96)	4 (4)	0 (0)	98 (100)	4 (4)
Northern Ireland	424 (98)	8 (2)	0 (0)	432 (100)	8 (2)
UK	16080 (95)	876 (5)	8 (0)	16964 (100)	884 (5)

Outcomes of Screening

Younger women are more likely to be called back for assessment, but cancer is more likely to be found in older women

Figure 19 shows the outcomes of screening by age bands. Younger women are more likely to be called back to an assessment clinic for further testing. The result of this further testing is, for most women, reassurance. These women are returned to routine recall and invited for routine screening again in 3 year's time ("RR from assessment" on the graph). Note that the y-axis of the graph starts at 90%; as more than 90% of all women screened have normal mammograms.

Figure 19: Outcome of Breast Screening by Age Band 2011/12



Early re-screen involves bringing a woman (who has attended an assessment clinic) back for repeat screening mammography sooner than the normal three yearly screening interval. This is a rare event and these cases are audited annually.

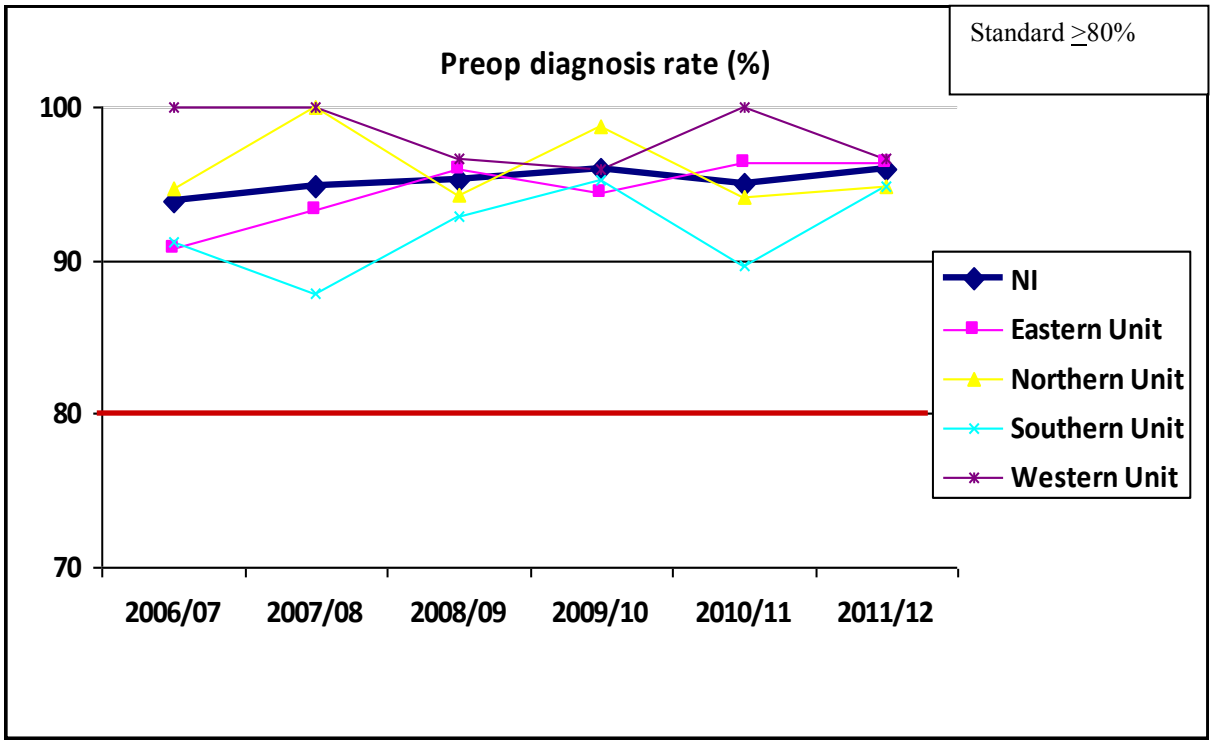
Preoperative Diagnosis Rate

95.9% of women with cancers detected by screening had the diagnosis confirmed before surgery

The pre-operative diagnosis rate measures the percentage of screen detected cancers where the diagnosis was established prior to surgery. Diagnosis before surgery is made by taking a biopsy at the assessment clinic (usually by core biopsy, but increasingly by vacuum assisted biopsy). Some women need to have a surgical biopsy (a biopsy taken during surgery) to establish the diagnosis. This can be because the diagnosis is difficult to establish. The minimum standard is ≥80% of cancers should be diagnosed before surgery, with a target of ≥90%.

Figure 20 shows each unit's performance over a 6 year period. The figure for women aged 50-70 in Northern Ireland was 95.9% in 2011/12. It has remained around 95% for a number of years.

Figure 20: Preoperative diagnosis rate by unit and for Northern Ireland from 2006/07 to 2011/12



Pathology

The diagnostic accuracy of biopsies taken at assessment clinics is high

The breast biopsies taken at the assessment clinic are examined and categorised by a pathologist as:

B1 or C 1 – Normal
B2 or C 2 – Benign disease
B3 or C 3 – Uncertain malignant potential
B4 or C 4 – Suspicious
B5 or C 5 – Malignant

The letter B refers to core biopsy or mammotomy and C refers to fine needle aspiration cytology.

The assessment clinic biopsy results are subsequently compared with the definitive diagnosis of tissue removed during surgery (further histology). The table shows the results for Northern Ireland for 2010/11.

Table 6: Comparison of assessment clinic biopsy result with final diagnosis (further histology)

		Assessment clinic biopsy results					
		B or C5	B or C4	B or C3	B or C2	B or C1	Total
Further histology	Malignant	407	5	11	0	0	423**
	Invasive	335	3	5	0	0	343
	Non-invasive	72	2	6	0	0	80
	Benign	6	8	28	4	1	47
	No Further Histology	5*	2	29	467	54	557
	Total B or C Results	418	15	68	471	55	1027

* These are considered to be cancers.
**This figure differs from the total number of cancers (430) in the next section due to the way the pathology QA data are processed.

Absolute sensitivity = 96.3%
This is the percentage of all the cancers diagnosed (423+5*) that were categorised as being malignant (B or C 5) on the assessment clinic biopsy (407+5*). As can be seen from the table some cancers were initially categorised as normal, uncertain or suspicious.

The minimum threshold is >70% and the preferred threshold is >80%.

Complete sensitivity = 100.0%
This is the percentage of all cancers diagnosed (423+5*) that were categorised as uncertain (B or C 3), suspicious (B or C 4) or malignant (B or C 5) (407+5*+5+11).

The minimum threshold is >80 and the preferred threshold is > 90.

Positive predictive value = 98.6%
This measures the likelihood of having a final diagnosis of cancer (407+5*) if the assessment clinic biopsy is categorised as malignant (B or C 5) (418).

The minimum threshold is > 99 and the preferred threshold is > 99.5.

Total Number of Cancers Detected

347 invasive cancers were detected in 2011/12 – of these 189 were less than 15 mm in diameter

A total of 432 cancers were detected in 2011/12. Of these:

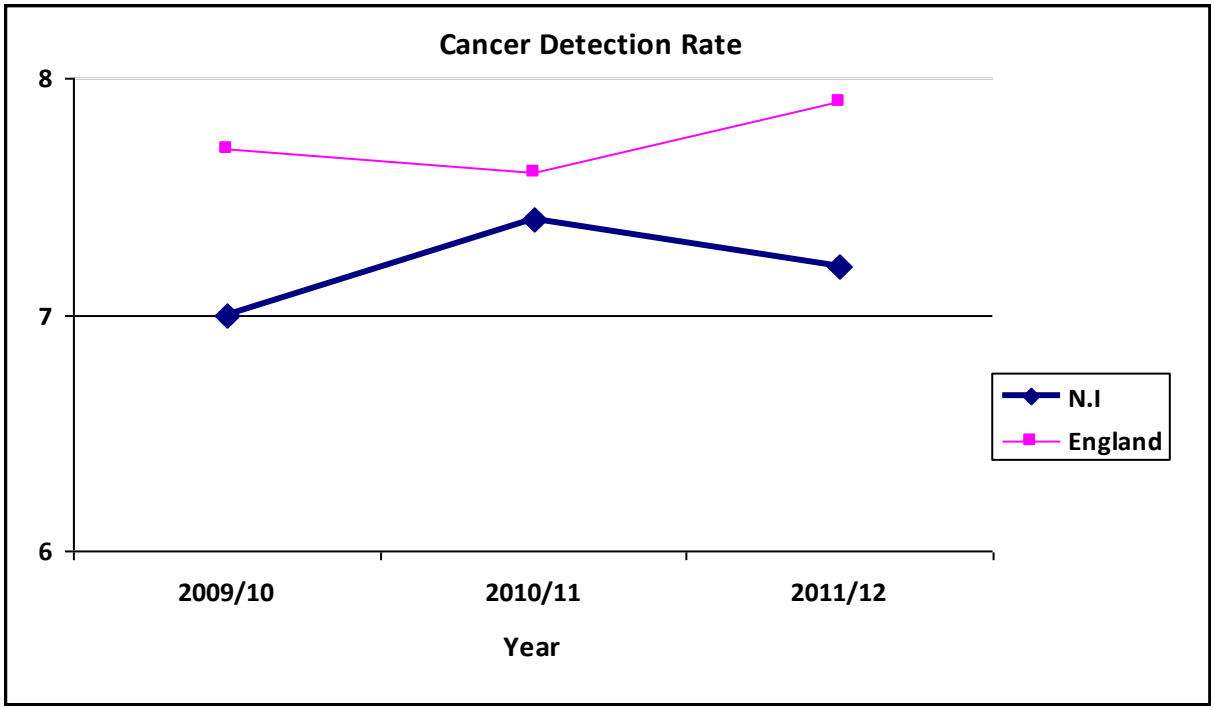
- 347 were invasive cancers;
- 81 were ductal carcinomas in situ (DCIS); and
- 4 were micro invasive cancers.

A proportion of cases of DCIS will eventually become invasive. However, it is not yet possible to identify which ones will and which won't. All women diagnosed with this disease are therefore offered treatment (surgery with or without radiotherapy).

Of the 341 invasive cancers that were treated surgically, 189 (55%) were under 15 mm in diameter. These are known as small invasive cancers and they are usually around 55% of the invasive cancer figure. In the UK 53% of invasive cancers were categorised as small invasive cancers in 2011/12.

The total cancer detection rate for the 50 -70 aged group in 2011/12 was 7.2 per 1,000 women screened. The comparative figure for England for 2011/12 was 7.9 per 1,000 women screened.

Figure 21: Total cancer detection rate for women aged 50-70 for Northern Ireland and England from 2009/10 to 2011/12



Invasive Cancer Detection Rate

4.0 per 1,000 women screened for the first time (aged under 53) were diagnosed with an invasive breast cancer. The figure for women attending for subsequent screening tests was 5.8 per 1,000

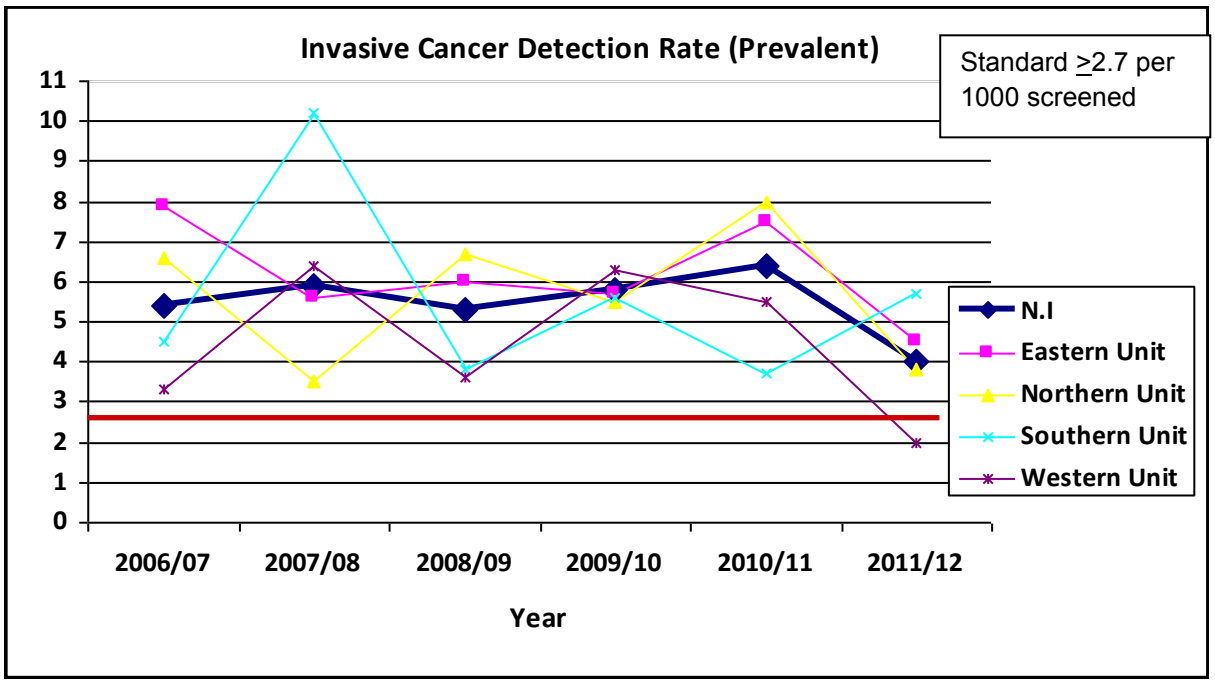
This measures the number of invasive cancers detected per 1,000 eligible women who were invited and screened.

Prevalent Screen

The minimum national standard for the invasive cancer detection rate is ≥2.7 per 1,000 women for the prevalent (first) screen; with a target rate of ≥3.6 per 1,000 women screened.

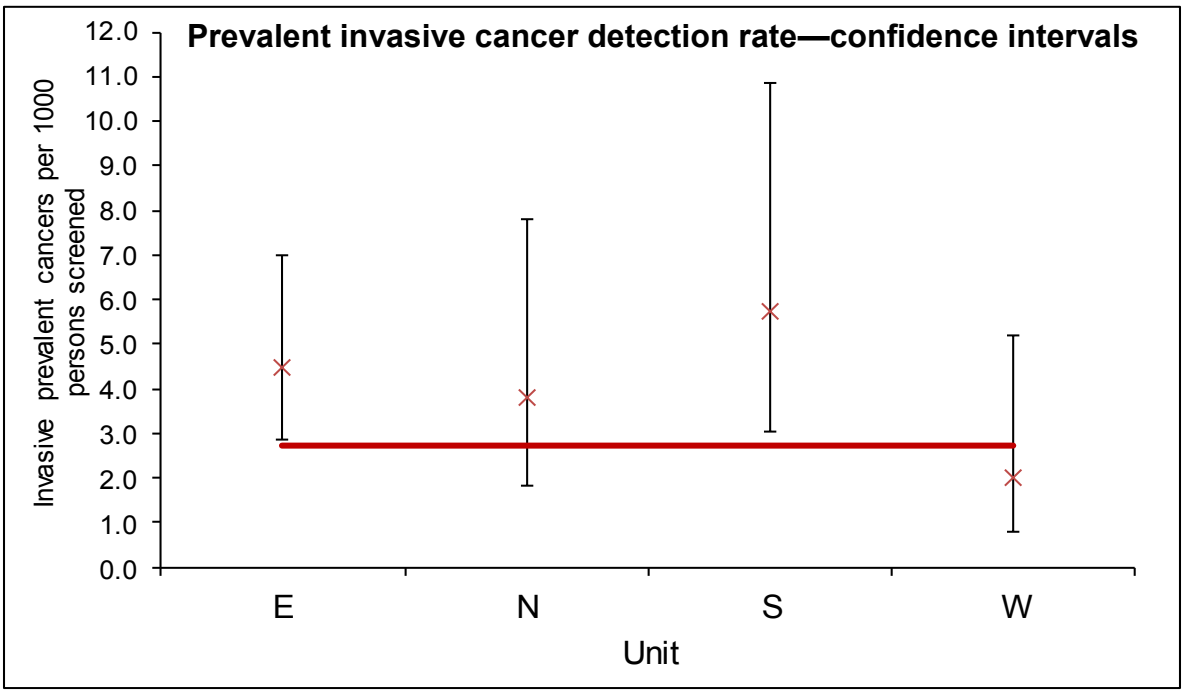
Figure 22 shows that over a 6 year period the Northern Ireland rate has been consistently above the minimum standard. The Eastern, Northern and Southern units exceeded the target in 2011/12. The rate for the Western Unit dipped below the minimum standard to 2.0 per 1,000. These figures tend to fluctuate from year to year due to the very small numbers involved e.g. the 2011/12 rate for the Western Unit is based on only 4 invasive cancers. The rate for Northern Ireland was 4.0 per 1,000 women screened. The comparative rate for England was 5.6 per 1,000 in 2011/12.

Figure 22: Invasive cancer detection rate for the prevalent (first) screen by unit and for Northern Ireland, 2006/07 to 20011/12



The invasive cancer detection rates for each breast screening unit in 2011/12 are shown again in figure 23. The vertical bars are 95% confidence intervals around each of the rates. These show us how confident we can be that true rate is above the minimum standard. In this case we can be 95% confident that the Eastern and the Southern units' true invasive cancer rate is above the minimum standard. In the other 2 units the true figure might be below the minimum standard for 2011/12. However, as noted above the rates have been consistently above the minimum standard in previous years and the numbers are small.

Figure 23: Prevalent invasive cancer detection rate by unit with confidence intervals 2011/12



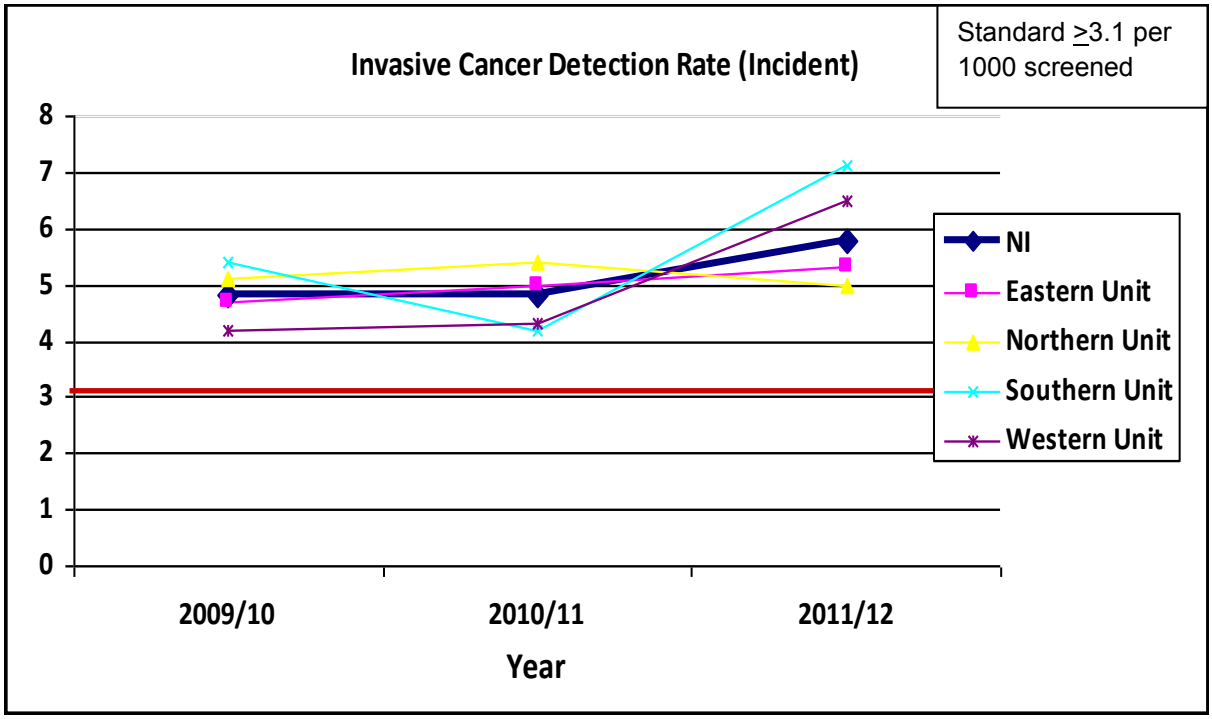
Incident Screen

The minimum national standard for the invasive cancer detection rate is ≥ 3.1 per 1,000 women for incident (subsequent) screens; with a target of ≥ 4.2 per 1,000 women screened.

Figure 24 shows that each of the units either met, or exceeded, the target for women aged 50-70 in 2011/12. The numbers involved are larger than for the prevalent screen e.g. the Western Unit's rate of 6.5 is based on 60 invasive cancers. Three years' worth of data are shown as prior to 2009/10 it was only women aged 50-64 who were invited for breast screening.

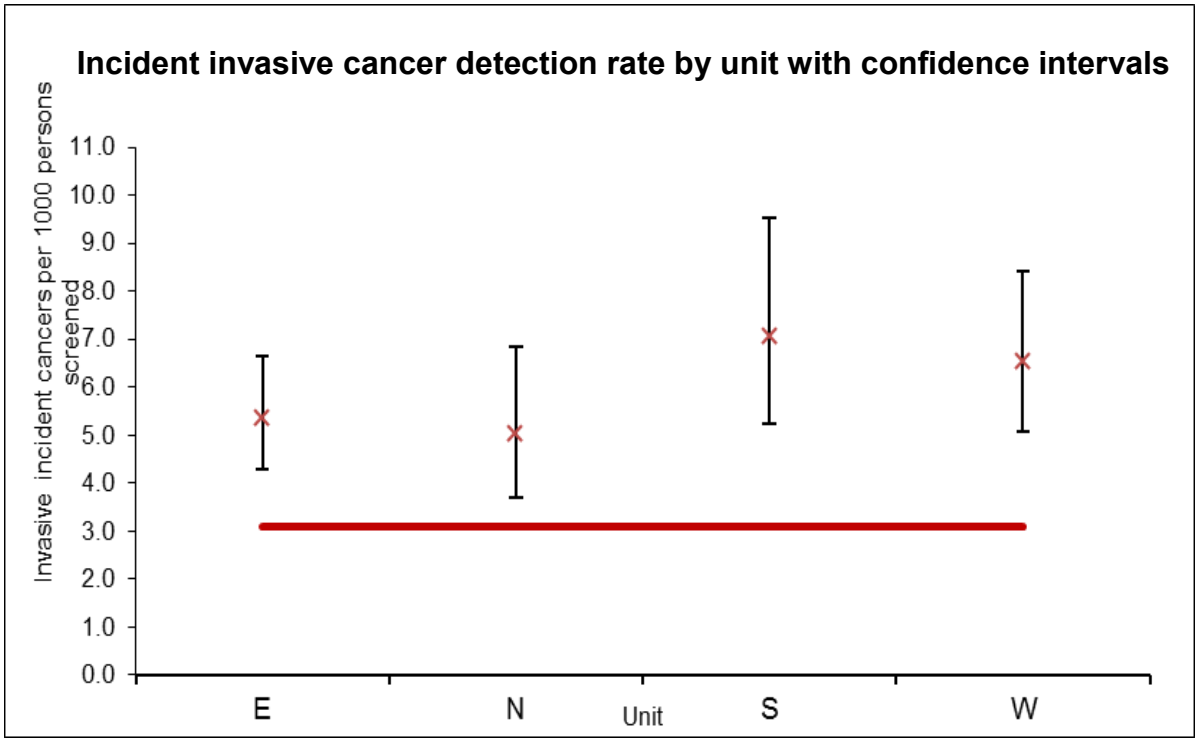
The Northern Ireland rate was 5.8 which exceeds the target. The comparative English rate was 6.1 per 1,000 in 2011/12.

Figure 24: Invasive cancer detection rates (incident screen) for women aged 50-70 by unit & for Northern Ireland 2009-2012



The rates for 2011/12 are shown again in figure 25 with the associated confidence intervals. This shows that we can be confident that the rate for each of the units exceeded the minimum standard in 2011/12.

Figure 25: Incident invasive cancer detection rate by unit with confidence intervals 2011/12



Small Invasive Cancers

2.2 per 1,000 women screened for the first time (aged under 53) had a small invasive cancer. The figure for women attending for subsequent screening was 3.4 per 1,000

The main aim of breast screening is to detect small invasive breast cancers at a time in their natural history when treatment is more likely to reduce the risk of death from the disease. Small cancers are defined as being less than 15 mm in their maximum diameter.

Prevalent

Figure 26 shows the small invasive cancer detection rates for the prevalent (first) screen over a three year period. The Northern Ireland programme as a whole exceeded the minimum standard (≥1.5 per 1,000 women screened) and the target figure of ≥2.00 per 1,000.

Rates for the individual units tend to fluctuate from year to year due to very small numbers. Each of the units met the minimum standard.

Figure 26: Small invasive cancer detection rate (prevalent screen) by unit and for N.I 2006-2012

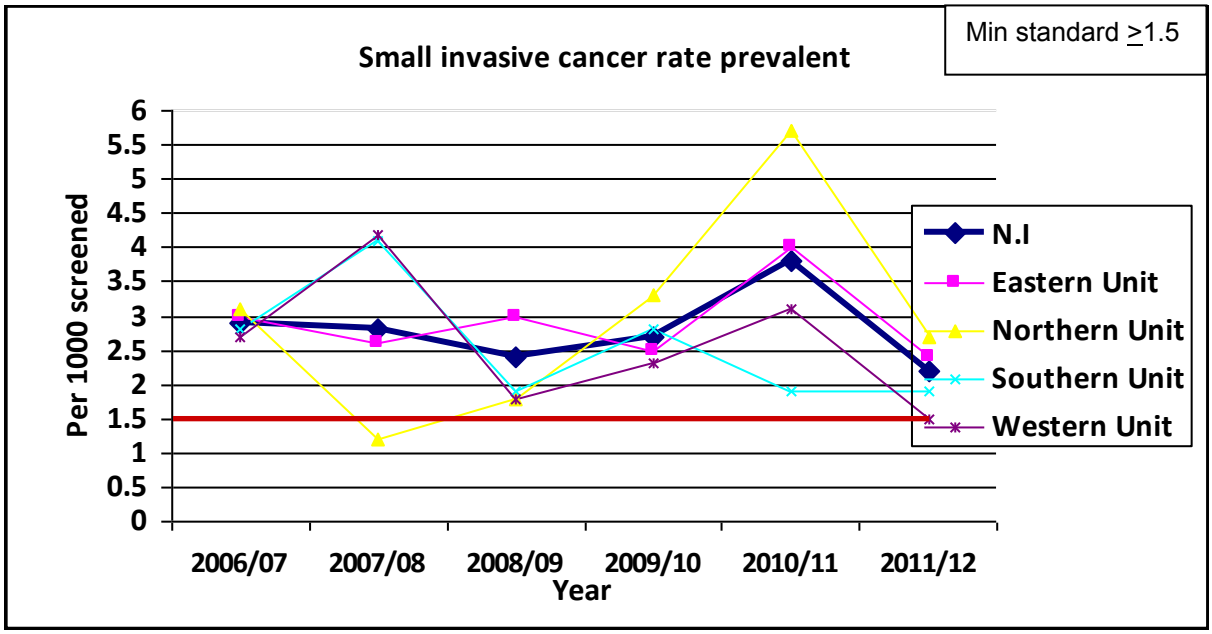
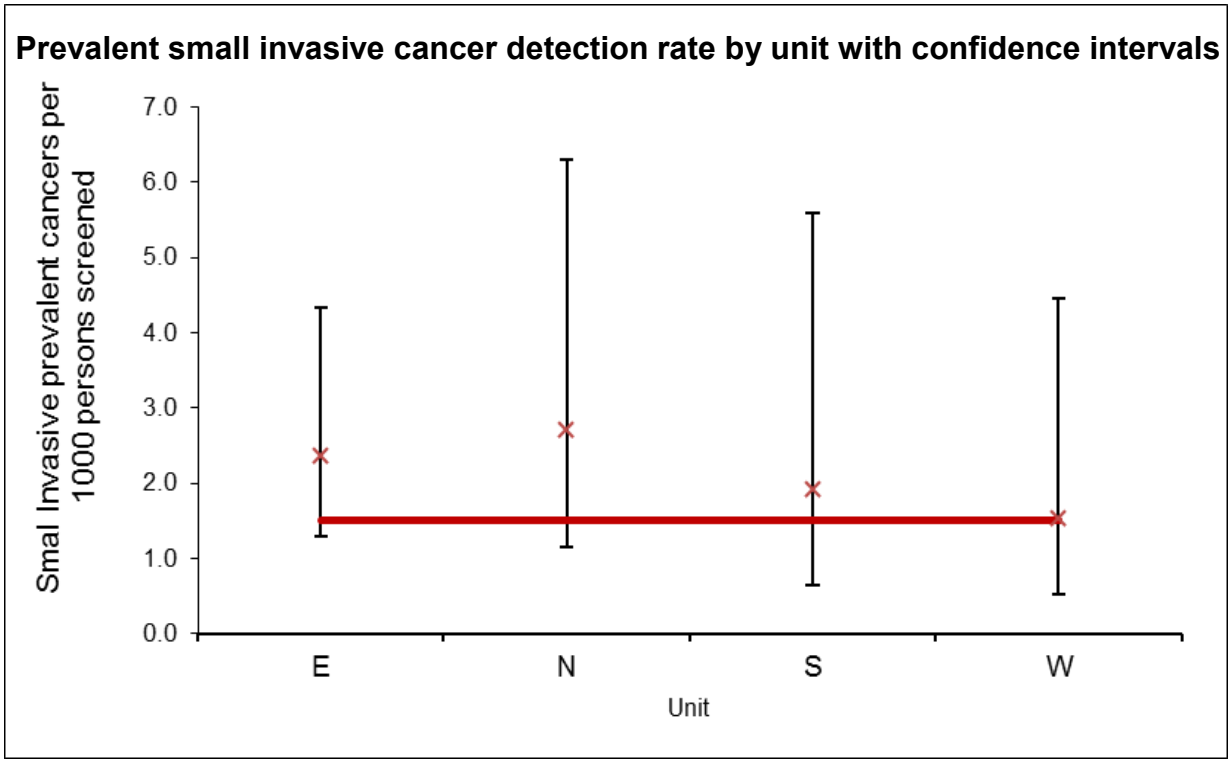


Figure 27 shows the small invasive cancer detection rate for the prevalent screen for each breast screening unit in 2011/12, with the associated confidence intervals. The red line is the minimum standard (1.5).

Figure 27: Prevalent small invasive cancer detection rate by unit with confidence intervals 2011/12



Incident

The small invasive cancer rate for the incident (subsequent) screens is shown in figure 28. Again the Northern Ireland programme as a whole exceeded the minimum standard (≥1.7 per 1,000) and the target of ≥ 2.3 per 1,000 women screened.

Figure 28: Small invasive cancer detection rates (incident screen) for women aged 50-70 by unit & for NI 2009/2012

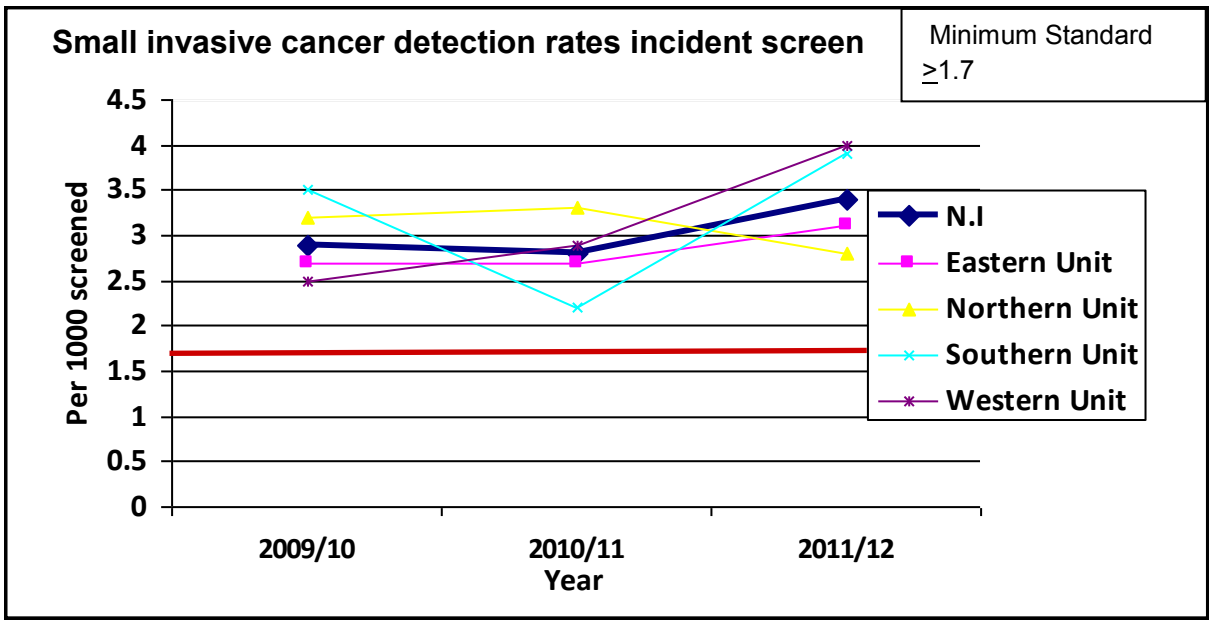
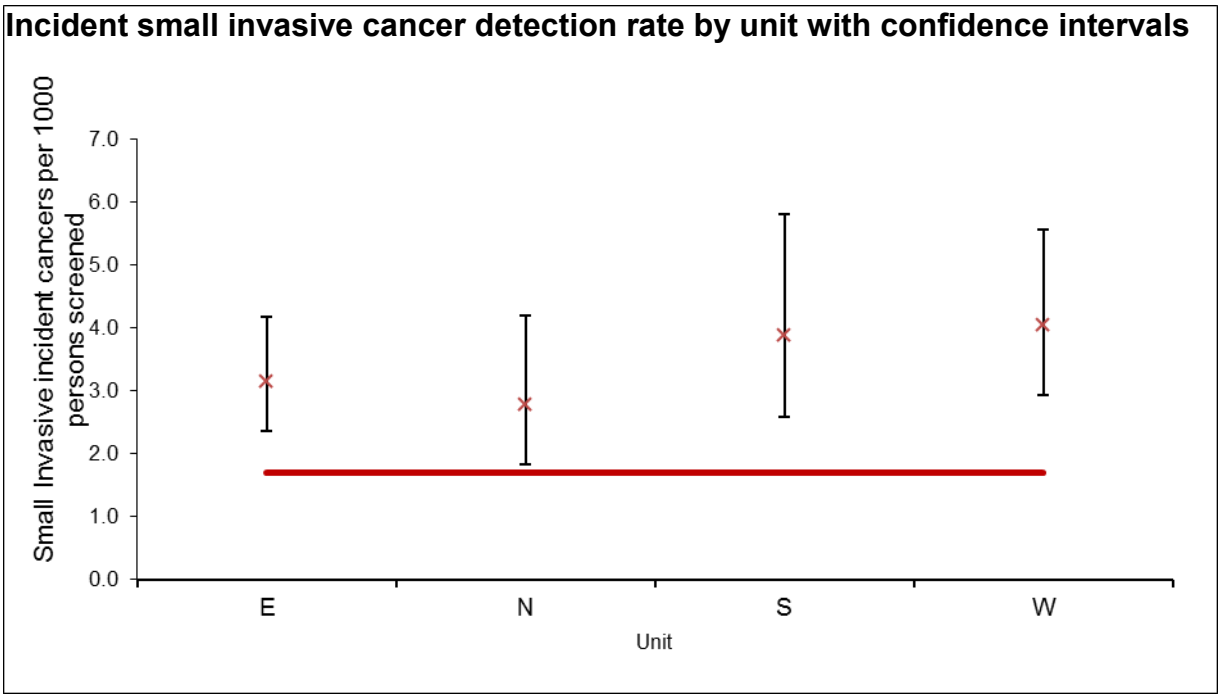


Figure 29 shows the small invasive cancer detection rate for the incident screen for each breast screening unit in 2011/12 with the associated 95% confidence intervals. The red line is the minimum standard (1.65)

Figure 29: Incident small invasive cancer detection rate by unit with confidence intervals 2011/12



Treatment of Invasive Cancers

74.6% of women diagnosed with an invasive cancer had breast conserving surgery

Of the 347 invasive cancers detected by the Northern Ireland Breast Screening Programme in 2011/12, 259 (74.6%) were treated using breast conservation surgery, while 82 (23.6%) were treated by mastectomy. Six women (1.7%) had no surgery. This can be due to patient choice or because the patient is too unwell for surgery. Figure 30 shows the percentages by screening unit. Figures for the same year, for the whole of the UK, show that 78.2% of women underwent conservation surgery and 20.8% had a mastectomy (1% had no surgery). Figure 31 shows the proportion of women treated by different methods in Northern Ireland over the past 3 years.

Figure 30: Treatment of invasive cancers by unit and for Northern Ireland

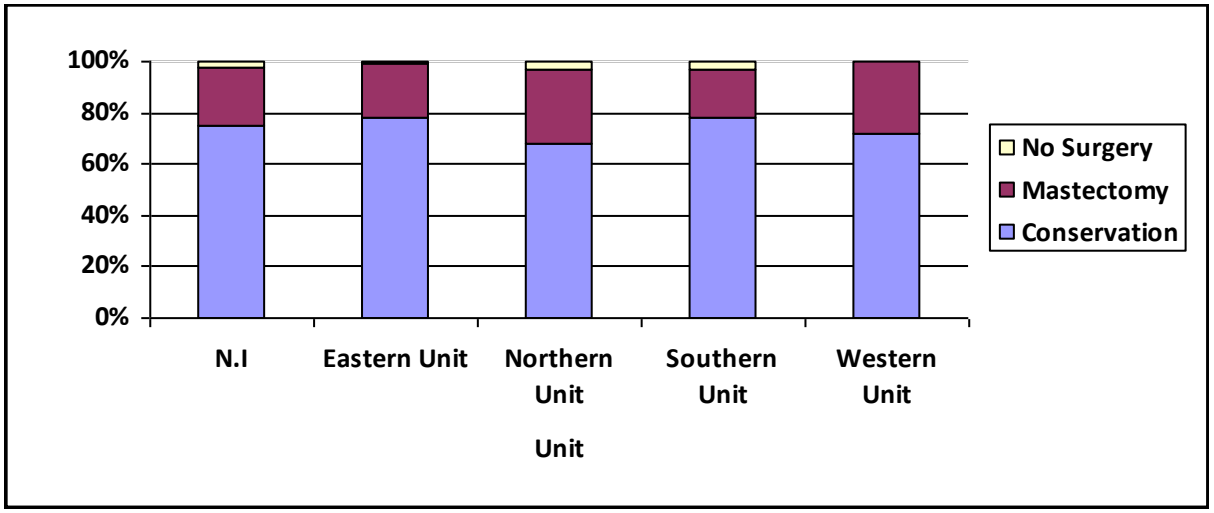
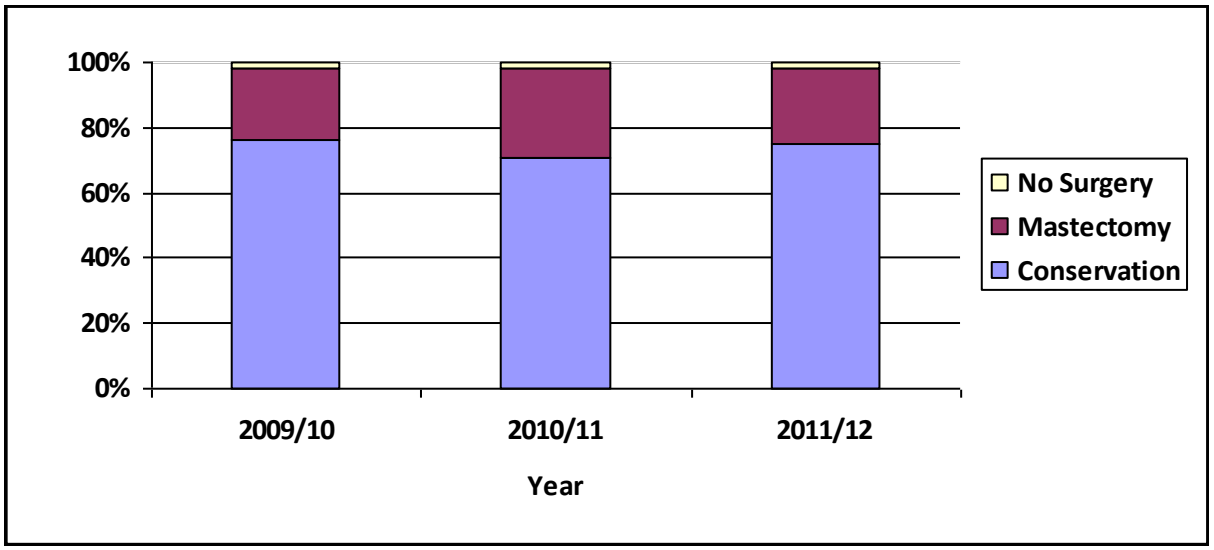


Figure 31: Treatment of invasive cancers over 3 year period for Northern Ireland



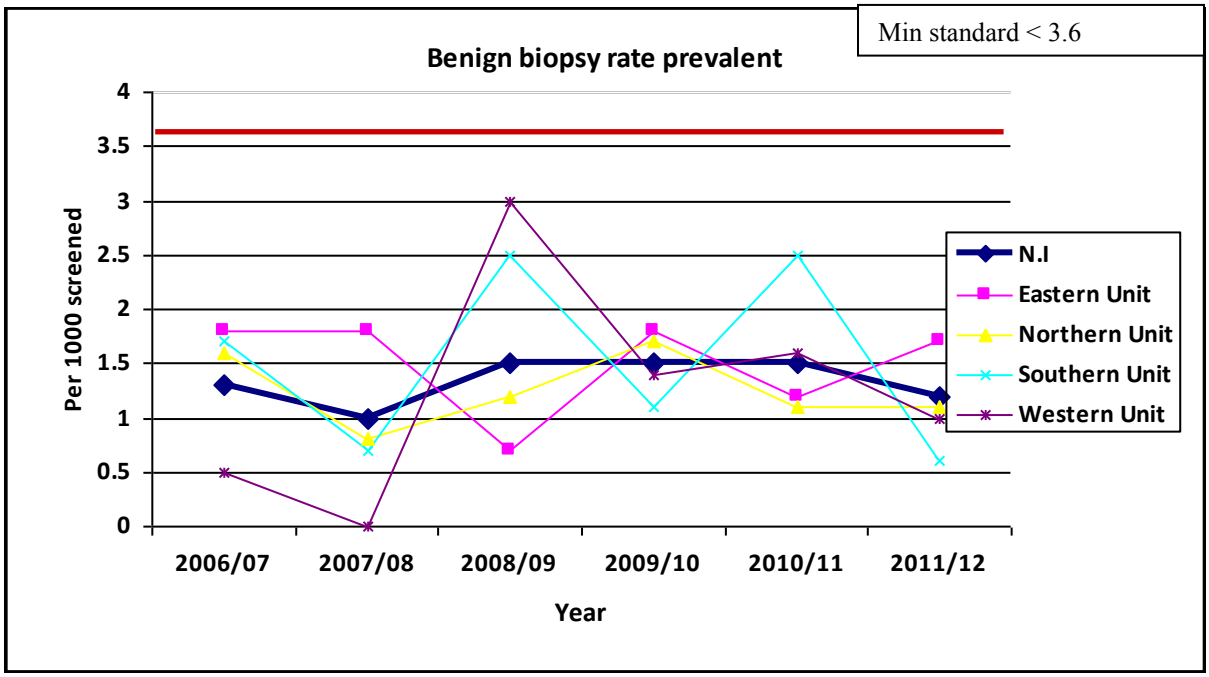
Benign Biopsy Rates

The proportion of women who had a surgical operation for what turned out to be benign disease was 1.2 per 1,000 screened for the prevalent (first) screen and 0.6 for the incident (subsequent) screen

This is a measure of the number of women per 1,000 women screened who had surgery for benign breast disease. The aim is to keep the rate as low as possible. However, with some lesions (e.g. fibroadenomas) the patient may choose to have surgery to remove a lump, even though it has been diagnosed as benign at the assessment clinic. In addition radial scars (a star shaped thickening of breast tissue which shows up on mammograms) are removed due to their association with tubular carcinoma of the breast; even though they are intrinsically benign.

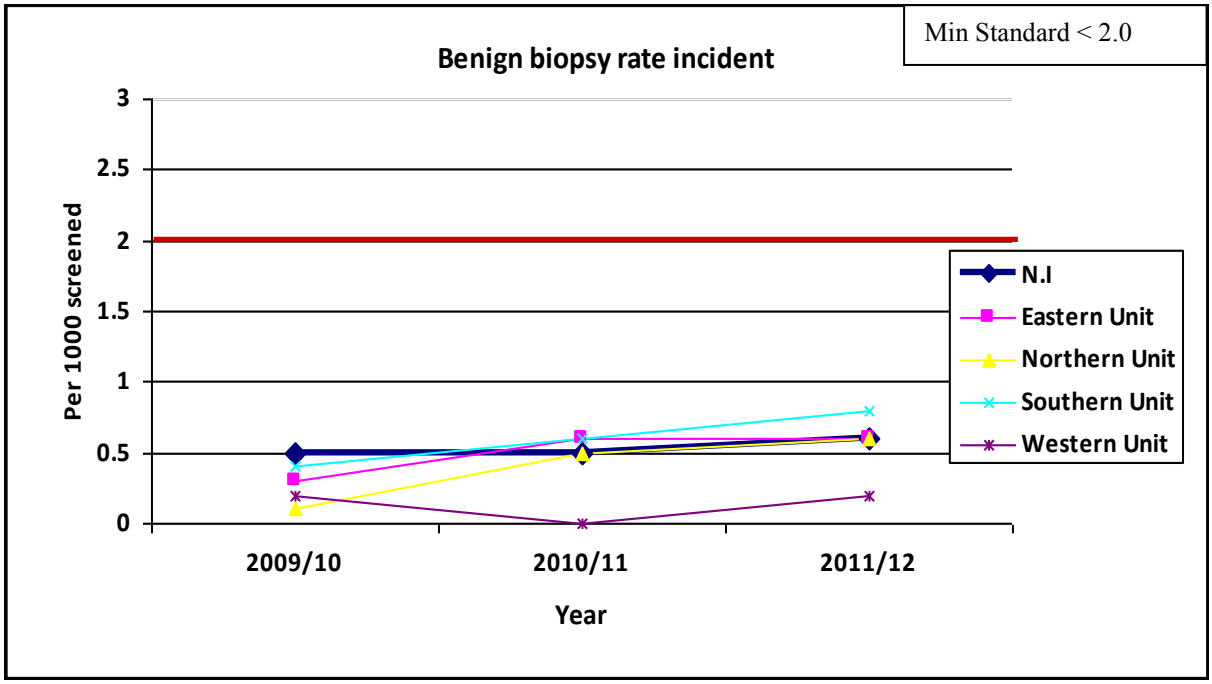
The benign biopsy rates for the prevalent (first) and incident (subsequent) screening rounds over a six year period are shown in figures 32 and 33. For the prevalent screen each of the units met the minimum standard (< 3.6 per 1,000) and the target (< 1.8) in 2011/12.

Figure 32: Benign biopsy rate for the prevalent (first screen) 2006/07-2011/12



For the incident screen each of the units met the minimum standard (< 2.0 per 1,000) and all meet the target figure of < 1.0.

Figure 33: Benign biopsy rate for the incident (subsequent screens) 2008/09-2011/12 in women aged 50 - 70



Repeat Surgical Operations

23% of women with invasive cancer required a repeat surgical operation.

Most women diagnosed with breast cancer by the Northern Ireland Screening Programme require a single surgical operation to remove the disease. Some women need repeat surgery e.g. to ensure complete removal of the cancer following the initial pathology report. However, the objective is to minimise the number of therapeutic operations.

Table 7 below shows that the reoperation rate for women with invasive cancer was 23% in Northern Ireland. This compares favourably with other parts of the UK and is equivalent to the UK average.

The reoperation rate for women with non-invasive, or micro-invasive, cancers is 24%, which is lower than the UK average of 27%.

Table 7: Repeat operations of surgically treated invasive and non/micro-invasive cancers

	Invasive			Non/micro invasive		
	Total	Re-op	%	Total	Re-op	%
Eastern Unit	135	38	28	38	8	21
Northern Unit	63	9	14	18	4	22
Southern Unit	65	21	32	13	5	38
Western Unit	78	10	13	16	4	25
Northern Ireland	341	78	**23**	85	21	**24**
UK	14664	3493	24	3746	1013	27

Screening Round Length

69.9% of women were offered an appointment for mammography screening within 36 months of their previous normal screen

The screening round length is the interval between each offered invitation for screening mammography. The NHS Breast Screening Guidance states that, to ensure women are recalled for screening at appropriate intervals, the percentage of eligible women whose first offered appointment is within 36 months of their previous screen should be 90% or more.

Measurement of screening round length provides an indicator of the efficiency with which a screening programme is managed. The long-term effectiveness of the programme is dependent on women in the target age group continuing to be screened at regular intervals.

Figure 34 shows the percentage of women screened within 36 months, by quarter, for the year 2011/12. The minimum standard was not met. Figure 35 shows the data broken down by unit. Both the Northern and the Eastern units had problems maintaining their round length in 2011/12 and this affected the Northern Ireland figure.

Figure 34: Screening round length by quarter for Northern Ireland 2011/12

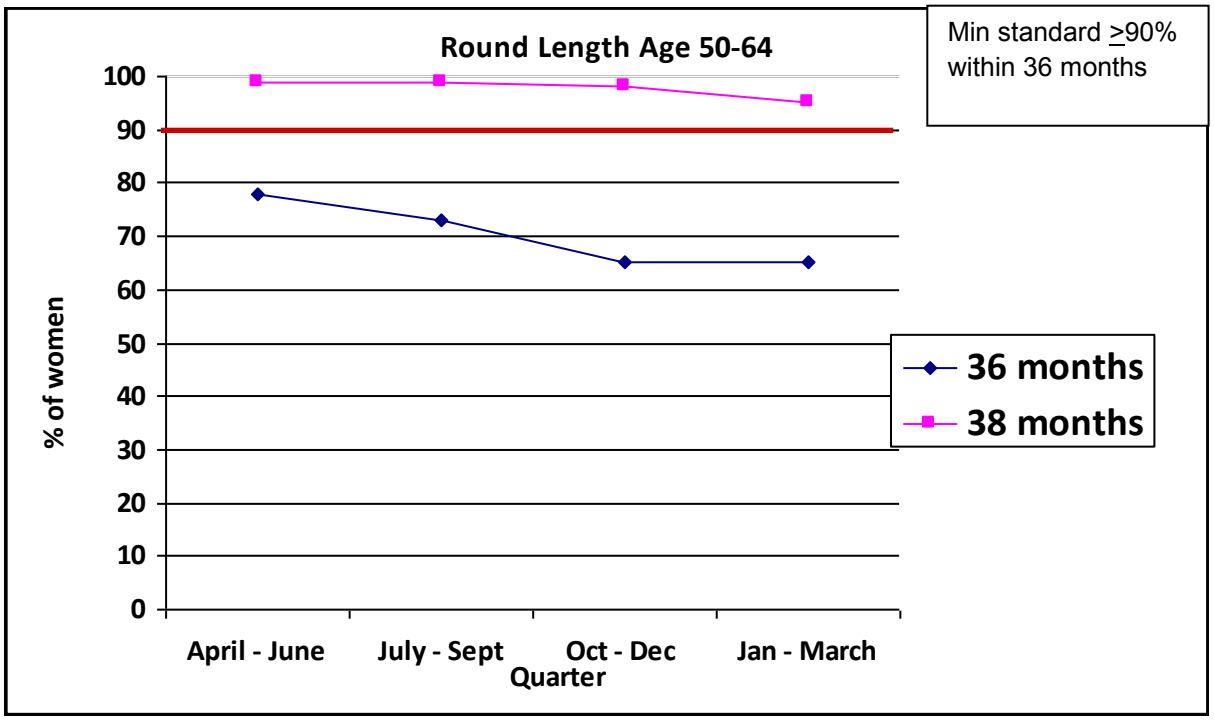
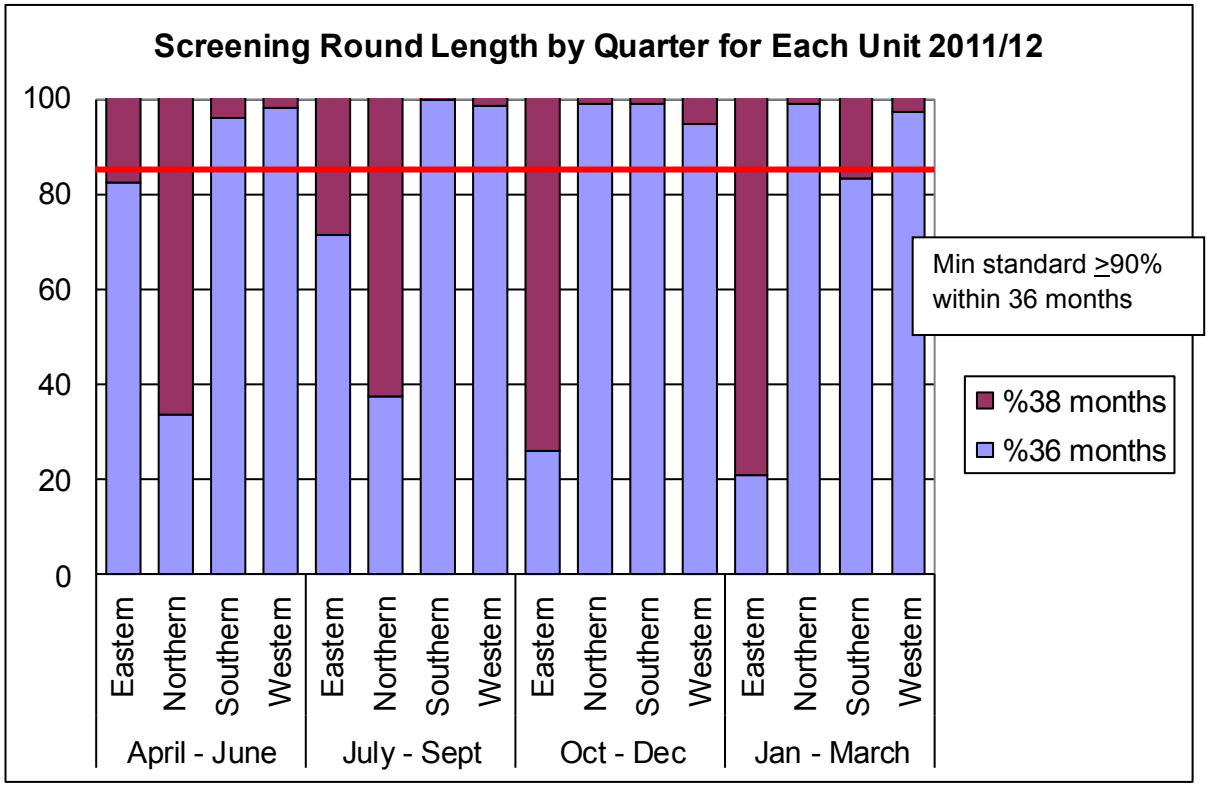


Figure 35: Screening round length 50-64 by quarter for each unit 2011/12



In the Eastern Unit the round length began to slip in June 2011. Part of the problem was that a pattern had developed of a busier screening year (which occurred in 2011/12); preceded/followed by 2 less busy years (see figures 3 and 4). QARC worked closely with the Belfast HSC Trust to get the round length back to standard. This was achieved in September 2012. The Trust is currently managing its round length plan with the aim of achieving a more even distribution of workload over the 3 year screening round.

The Northern Unit had received additional input from other units 3 years ago. This additional input was required in order to bring the round length back to standard at that time. However, following discussions between the Northern HSC Trust and QARC it was agreed that replicating this would not be sustainable. It was therefore agreed that the unit's round length would be allowed to slip for the 6 month period from April until September 2011; provided > 90% of women were screened within 38 months. The unit managed this well and the round length was brought back to standard in September 2011.

Figure 36: Northern Ireland round length 2006/07 to 2011/12

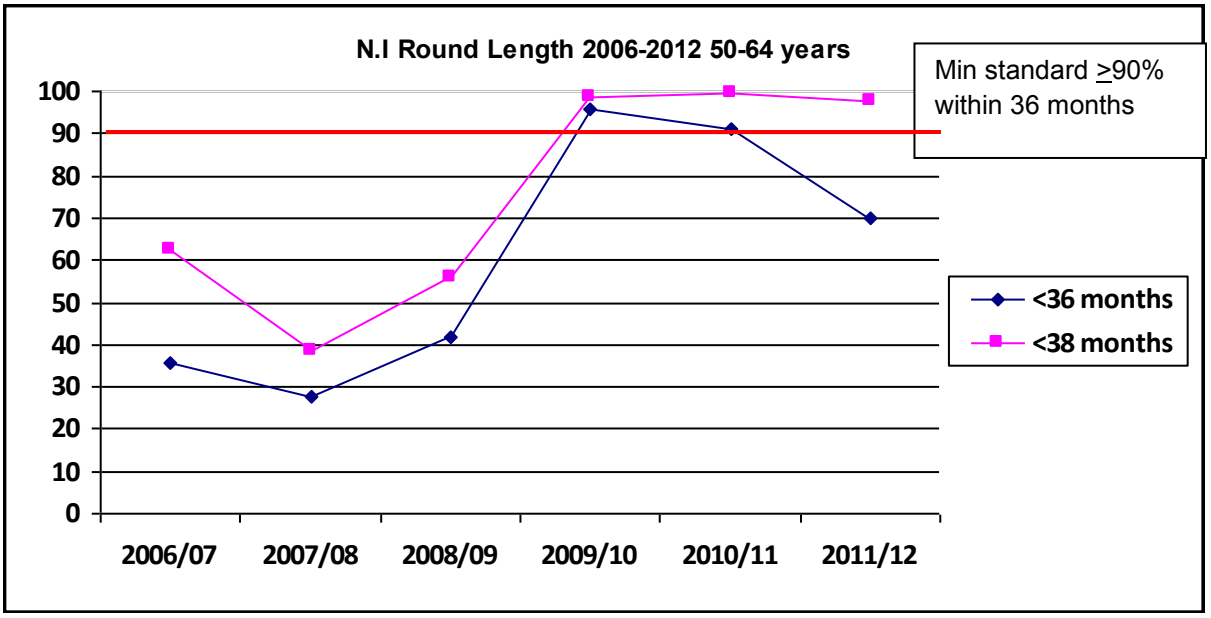
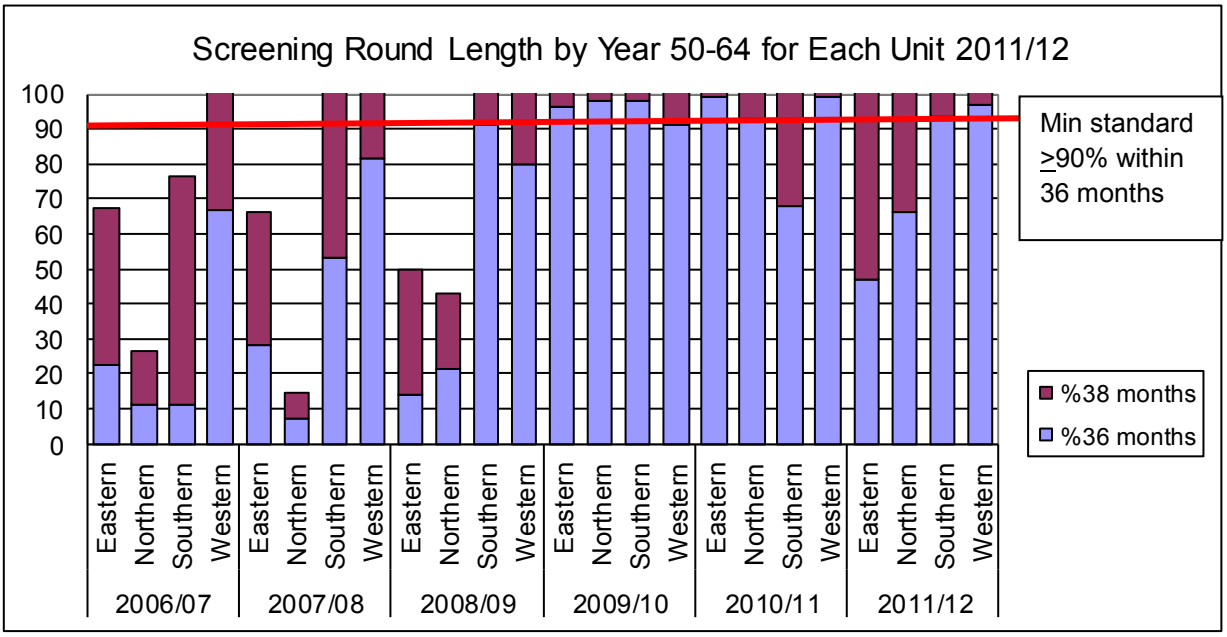


Figure 36 shows the round length for Northern Ireland over the six year period 2006/07 to 2011/12. Figure 37 shows the breakdown by unit. There have been problems maintaining the round length. A wide range of factors can affect it including staffing issues and closing a unit for refurbishment. QARC is working with units to ensure that they have robust round length plans in place to minimise the likelihood of falling below the standard. However, it is recognised that the replacement of all mammography equipment throughout Northern Ireland with new digital equipment, in 2013 and 2014, will adversely impact on the round length.

Figure 37: Unit round length 2006/07 to 2011/12



APPENDIX 1

The benefits and harms of breast screening

Benefits

Reduction in breast cancer deaths —The main benefit of the breast screening programme is the reduction in mortality from breast cancer. Screening saves about 1 life from breast cancer for every 200 women who are screened. This adds up to about 1,300 lives saved from breast cancer each year in the UK.

More conservative treatment —The cancers detected in screened women are smaller and are less likely to be treated by mastectomy, or to require chemotherapy.

Harms

Overdiagnosis and overtreatment – About 3 in every 200 women screened every 3 years from the age of 50 to 70 are diagnosed with a cancer that would never have been found without screening and would never have become life-threatening. This adds up to about 4,000 women each year in the UK who are offered treatment they did not need.

Overall for every 1 woman who has her life saved from breast cancer, about 3 women are diagnosed with a cancer that would never have become life-threatening.

Distress and anxiety—Most women who receive an abnormal screening result are found not to have breast cancer. These women experience unnecessary worry and some feel distress which affects their ability to do their normal day-to-day activities at the time.

When the mammogram is abnormal and the woman doesn't have breast cancer; this is known as a false positive result.

Exposure to radiation – mammography uses very low dose X-rays and the breasts are exposed to a small amount of radiation. The radiation exposure involved is about the same as the background radiation exposure during a flight to Australia and back.

Limitations

Screening mammography is not a diagnostic test and further diagnostic 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 and those who probably don't. As with other screening programmes, in breast screening there are false negative, as well as false positive screening test results. The sensitivity of the programme is estimated to be around 85%. This is the proportion of the screened population that has the disease and tests positive. The specificity is between 82% and 97%. This is the proportion of the screened population which does not have the disease and tests negative.

False negative test result – some cancers don't show up on mammography and some cancers are not identified on screening; even by expert film readers. This can cause false reassurance. Women are advised to be breast aware, as breast cancer can develop at any time. This includes the time in between breast screening appointments. If a woman is worried about a breast problem, or has a family history of breast cancer, she should contact her GP.

The breast awareness 5 point code

1. Know what is normal for you
2. Know what changes to look and feel for
3. Look and feel
4. Report any changes to your GP immediately
5. Make an informed choice about attending for breast screening from the age of 50

APPENDIX 2

Consolidated Guidance on Standards for the NHS Breast Screening Programme 50-64

Summary of KC62 source tables and age groups to be used in the calculation of standards (50–64)				
Objective	Criteria	Calculation	Minimum standard	Target
1. To maximise the number of eligible women who attend for screening*†	The percentage of eligible women who attend for screening	Tables: A, B, C1, C2 Age: 50–64	≥ 70% of invited women to attend for screening	80%
2. To maximise the number of cancers detected*†	(a) The rate of invasive cancers detected in eligible women invited and screened	Table: A Age: 50–52	Prevalent screen ≥ 2.7 per 1000	Prevalent screen ≥ 3.6 per 1000
		Table: C1 Age: 53–64	Incident screen ≥ 3.0 per 1000	Incident screen ≥ 4.2 per 1000
	(b) The rate of cancers detected which are in situ carcinoma	Table: A Age: 50–52	Prevalent screen ≥ 0.4 per 1000 to ≤ 0.9 per 1000	
		Table: C1 Age: 53–64	Incident screen ≥ 0.5 per 1000 to ≤ 1.0 per 1000	
	(c) SDR	Tables: A and B Age: 50–64	Prevalent screen ≥ 0.75	Prevalent screen ≥ 1.0
		Table: C1 Age: 50–64	Incident screen ≥ 0.75	Incident screen ≥ 1.0
		Tables: A, B, C1 Age: 50–64	Overall ≥ 0.75	Overall ≥ 1.0
3. To maximise the number of small invasive cancers detected*	The rate of invasive cancers less than 15 mm in diameter detected in eligible women invited and screened	Table: A Age: 50–52	Prevalent screen ≥ 1.5 per 1000	Prevalent screen ≥ 2.0 per 1000
		Table: C1 Age: 53–64	Incident screen ≥ 1.6 per 1000	Incident screen ≥ 2.2 per 1000
7. To minimise the number of women screened who are referred for further tests*†‡	(a) The percentage of women who are referred for assessment	Table: A Age: 50–52	Prevalent screen < 10%	Prevalent screen < 7%
		Table: C1 Age: 53–64	Incident screen < 7%	Incident screen < 5%
	(b) The percentage of women screened who are placed on short-term recall	Table: T Age: 50–64	< 1.0%	≤ 0.25%
8. To ensure that the majority of cancers, both palpable and impalpable, receive a nonoperative tissue diagnosis of cancer*	The percentage of women who have a non-operative diagnosis of cancer by cytology or needle histology after a maximum of two visits	Table: T Age: 50–64	≥ 80%	≥ 90%
9. To minimise the number of unnecessary operative procedures	The rate of benign biopsies	Table: A Age: 50–52	Prevalent screen < 3.6 per 1000	Prevalent screen < 1.8 per 1000
		Table: C1 Age: 53–64	Incident screen < 2.0 per 1000	Incident screen < 1.0 per 1000

http://www.cancerscreening.nhs.uk/breastscreen/publications/nhsbsp60v2.pdf

Summary of KC62 source tables and age groups to be used in the calculation of standards (50–70)				
Objective	Criteria	Calculation	Minimum standard	Target
1. To maximise the number of eligible women who attend for screening*†	The percentage of eligible women who attend for screening	Tables: A, B, C1, C2 Age: 50–70	≥ 70% of invited women to attend for screening	80%
2. To maximise the number of cancers detected*†	(a) The rate of invasive cancers detected in eligible women invited and screened	Table: A Age: 50–52	Prevalent screen ≥ 2.7 per 1000	Prevalent screen ≥ 3.6 per 1000
		Table: C1 Age: 53–70	Incident screen ≥ 3.1 per 1000	Incident screen ≥ 4.2 per 1000
	(b) The rate of cancers detected which are in situ carcinoma	Table: A Age: 50–52	Prevalent screen ≥ 0.4 per 1000	
		Table: C1 Age: 53–70	Incident screen ≥ 0.5 per 1000	
	(c) SDR	Tables: A and B Age: 50–70	Prevalent screen ≥ 0.85	Prevalent screen ≥ 1.0
		Table: C1 Age: 50–70	Incident screen ≥ 0.85	Incident screen ≥ 1.0
		Tables: A, B, C1 Age: 50–70	Overall ≥ 0.85	Overall ≥ 1.0
3. To maximise the number of small invasive cancers detected*	The rate of invasive cancers less than 15 mm in diameter detected in eligible women invited and screened	Table: A Age: 50–52	Prevalent screen ≥ 1.5 per 1000	Prevalent screen ≥ 2.0 per 1000
		Table: C1 Age: 53–70	Incident screen ≥ 1.7 per 1000	Incident screen ≥ 2.3 per 1000
7. To minimise the number of women screened who are referred for further tests*†‡	(a) The percentage of women who are referred for assessment	Table: A Age: 50–52	Prevalent screen < 10%	Prevalent screen < 7%
		Table: C1 Age: 53–70	Incident screen < 7%	Incident screen < 5%
	(b) The percentage of women screened who are placed on short-term recall	Table: T Age: 50–70	< 0.5%	≤ 0.25%
8. To ensure that the majority of cancers, both palpable and impalpable, receive a nonoperative tissue diagnosis of cancer*	The percentage of women who have a non-operative diagnosis of cancer by cytology or needle histology after a maximum of two visits	Table: T Age: 50–70	≥ 80%	≥ 90%
9. To minimise the number of unnecessary operative procedures	The rate of benign biopsies	Table: A Age: 50–52	Prevalent screen < 3.6 per 1000	Prevalent screen < 1.8 per 1000
		Table: C1 Age: 53–70	Incident screen < 2.0 per 1000	Incident screen < 1.0 per 1000

http://www.cancerscreening.nhs.uk/breastscreen/publications/nhsbsp60v2.pdf

APPENDIX 3

KC62 Data 2011/12 for women aged 50-64

Northern Ireland Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	25885	13706	1023	19	18	92	24	68	34
	Incident (C1&C2)	52721	43815	1203	27	26	329	60	269	151
	Early recalls	43	41	38	1	0	2	0	2	2
	Self/GP referrals	0	1180	59	0	0	9	1	8	2
	Total	**78649**	**58742**	**2323**	**47**	**44**	**432**	**85**	**347**	**189**
50-64	Prevalent (A:50-52 only)	13274	9631	711	14	12	54	15	39	21
	Incident (C1:53-64 only)	33525	29661	742	8	15	202	40	162	95
	Early recalls	29	28	27	1	0	0	0	0	0
	Self/GP referrals	0	537	32	0	0	3	0	3	1
	Total	**46828**	**39857**	**1512**	**23**	**27**	**259**	**55**	**204**	**117**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 64		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	73.9	74.6	72.6	>70%	80%
	Incident (C1)	88.7	89.4	88.5		
	Overall (A-C2)	75.4	76.5	73.8		
Technical recall/repeats%	Overall	1.9	1.5	1.0	<3%	<2%
Recall to Assessment %	Prevalent	7.6	8.9	7.4	<10%	<7%
	Incident	2.5	2.8	2.5	<7%	<5%
Early Recall %	Overall	0.04	0.06	0.06	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.5	1.5	1.2	<3.6	<1.8
	Incident	0.3	0.6	0.5	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	2.1	1.6	≥0.4	NA
	Incident	1.0	1.4	1.3	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.8	6.4	4.0	≥2.7	≥3.6
	Incident	4.5	4.5	5.5	≥3.0	≥4.0
Invasive cancers <15mm per 1000 women screened	Prevalent	2.7	3.8	2.2	>1.5	≥2.0
	Incident	2.7	2.3	3.2	>1.65	≥2.2
Pre-operative diagnosis rate %	Overall	95.6	95.0	95.9	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.5	1.6	1.2	≥1.00	≥1.4
	Incident	1.1	1.1	1.4		
	Overall	1.2	1.3	1.3		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.2	1.2	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.45	1.49	1.4	≥1.0	≥1.4
	Incident	1.25	1.25	1.2		
	Overall	1.31	1.31	1.3		
Round Length ≤ 36 months	Overall	95.8	90.9	69.9	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	98.7	99.3	97.8		
Screening to Results - (Date of screen)	Overall	96.6	98.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	94.4	96.9	94.9	≥90% within 3 weeks	100%

Belfast Health & Social Care Trust Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	12402	5994	498	14	8	40	9	31	16
	Incident (C1&C2)	21605	17520	480	22	11	131	29	102	58
	Early recalls	31	29	28	0	0	1	0	1	1
	Self/GP referrals	0	484	31	0	0	3	0	3	1
	Total	**34038**	**24027**	**1037**	**36**	**19**	**175**	**38**	**137**	**76**
50-64	Prevalent (A:50-52 only)	6117	4233	353	11	7	24	5	19	10
	Incident (C1:53-64 only)	13652	11944	285	7	6	85	23	62	34
	Early recalls	22	21	21	0	0	0	0	0	0
	Self/GP referrals	0	212	17	0	0	1	0	1	1
	Total	**19791**	**16410**	**676**	**18**	**13**	**110**	**28**	**82**	**45**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 64		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	68.9	73.8	69.2	>70%	80%
	Incident (C1)	86.8	89.3	87.5		
	Overall (A-C2)	70.4	74.9	70.1		
Technical recall/repeats%	Overall	2.7	1.5	1.1	<3%	<2%
Recall to Assessment %	Prevalent	9.6	9.3	8.3	<10%	<7%
	Incident	1.9	2.8	2.4	<7%	<5%
Early Recall %	Overall	0.1	0.1	0.11	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.8	1.2	1.7	<3.6	<1.8
	Incident	0.2	0.7	0.5	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.4	2.4	1.2	≥0.4	NA
	Incident	1.1	1.4	1.9	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.7	7.5	4.5	≥2.7	≥3.6
	Incident	4.4	5.4	5.2	≥3.0	≥4.0
Invasive cancers <15mm per 1000 women screened	Prevalent	2.5	4.0	2.4	>1.5	≥2.0
	Incident	2.57	2.6	2.8	>1.65	≥2.2
Pre-operative diagnosis rate %	Overall	93.5	97.9	96.9	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.7	1.9	1.36	≥1.00	≥1.4
	Incident	1.1	1.3	1.30		
	Overall	1.2	1.5	1.32		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.3	1.3	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.5	1.7	1.6	≥1.0	≥1.4
	Incident	1.3	1.4	1.2		
	Overall	1.4	1.4	1.3		
Round Length ≤ 36 months	Overall	96.3	99.1	46.9	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	99.3	99.3	96.5		
Screening to Results - (Date of screen)	Overall	99.3	99.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	95.3	96.9	93.9	≥90% within 3 weeks	100%

Northern Health & Social Care Trust Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	4553	2654	289	3	2	22	7	15	11
	Incident (C1&C2)	10502	8955	285	1	6	58	11	47	26
	Early recalls	4	4	3	0	0	0	0	0	0
	Self/GP referrals	0	179	9	0	0	3	0	3	1
	Total	**15059**	**11792**	**586**	**4**	**8**	**83**	**18**	**65**	**38**
50-64	Prevalent (A:50-52 only)	2444	1850	204	3	2	13	6	7	5
	Incident (C1:53-64 only)	6682	5965	174	0	3	34	6	28	16
	Early recalls	2	2	1	0	0	0	0	0	0
	Self/GP referrals	0	49	4	0	0	1	0	1	0
	Total	**9128**	**7866**	**383**	**3**	**5**	**48**	**12**	**36**	**21**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 64		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	80.4	78.2	75.7	>70%	80%
	Incident (C1)	91.0	91.8	89.3		
	Overall (A-C2)	81.5	80.9	77.2		
Technical recall/repeats%	Overall	1.8	2.0	1.1	<3%	<2%
Recall to Assessment %	Prevalent	9.3	13.2	11.0	<10%	<7%
	Incident	3.5	3.3	2.9	<7%	<5%
Early Recall %	Overall	0.0	0.0	0.04	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.7	1.1	1.1	<3.6	<1.8
	Incident	0.1	0.6	0.5	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	2.3	3.2	≥0.4	NA
	Incident	0.4	1.6	1.0	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.5	8.0	3.8	≥2.7	≥3.6
	Incident	4.8	4.5	4.7	≥3.0	≥4.0
Invasive cancers <15mm per 1000 women screened	Prevalent	3.3	5.7	2.7	>1.5	≥2.0
	Incident	2.95	2.4	2.7	>1.65	≥2.2
Pre-operative diagnosis rate %	Overall	98.2	93.7	96.2	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.2	1.7	1.2	≥1.00	≥1.4
	Incident	1.2	1.1	1.1		
	Overall	1.2	1.3	1.2		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.1	1.2	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.2	1.5	1.4	≥1.0	≥1.4
	Incident	1.2	1.2	1.2		
	Overall	1.2	1.2	1.2		
Round Length ≤ 36 months	Overall	98.1	93.2	66.1	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	98.2	99.5	99.4		
Screening to Results	Overall	98.2	98.0	99.0	≥90% within 2 weeks	100%
Screening to Assessment	Overall	98.3	98.6	98.3	≥90% within 3 weeks	100%

Southern Health & Social Care Trust Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	3910	2251	139	1	4	19	5	14	4
	Incident (C1&C2)	8428	7052	243	0	6	60	8	52	25
	Early recalls	5	5	4	0	0	0	0	0	0
	Self/GP referrals	0	229	11	0	0	1	0	1	0
	Total	**12343**	**9537**	**397**	**1**	**10**	**80**	**13**	**67**	**29**
50-64	Prevalent (A:50-52 only)	2072	1570	88	0	1	11	2	9	3
	Incident (C1:53-64 only)	5377	4779	173	0	5	40	6	34	18
	Early recalls	3	3	3	0	0	0	0	0	0
	Self/GP referrals	0	119	6	0	0	0	0	0	0
	Total	**7452**	**6471**	**270**	**0**	**6**	**51**	**8**	**43**	**21**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 64		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	75.9	73.8	75.8	>70%	80%
	Incident (C1)	88.6	88.7	88.9		
	Overall (A-C2)	76.2	76.3	76.1		
Technical recall/repeats%	Overall	1.6	1.6	1.2	<3%	<2%
Recall to Assessment %	Prevalent	5.5	6.1	5.6	<10%	<7%
	Incident	2.7	2.7	3.6	<7%	<5%
Early Recall %	Overall	0.05	0.0	0.00	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.1	2.5	0.6	<3.6	<1.8
	Incident	0.5	0.8	1.0	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	1.9	1.3	≥0.4	NA
	Incident	0.7	1.7	1.3	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.6	3.7	5.7	≥2.7	≥3.6
	Incident	5.3	3.7	7.1	≥3.0	≥4.0
Invasive cancers <15mm per 1000 women screened	Prevalent	2.8	1.9	1.9	>1.5	≥2.0
	Incident	3.3	1.6	3.8	>1.65	≥2.2
Pre-operative diagnosis rate %	Overall	96.5	86.7	93.4	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.49	1.2	1.7	≥1.00	≥1.4
	Incident	1.39	0.9	1.9		
	Overall	1.42	1.0	1.8		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.42	1.1	1.2	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.71	1.3	1.5	≥1.0	≥1.4
	Incident	1.44	1.3	1.4		
	Overall	1.51	1.3	1.4		
Round Length ≤ 36 months	Overall	98.2	67.8	93.3	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	98.5	99.3	99.6		
Screening to Results - (Date of screen)		97.6	97.0	95.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)		96.7	97.7	91.1	≥90% within 3 weeks	100%

Western Health & Social Care Trust Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	5020	2807	97	1	4	11	3	8	3
	Incident (C1&C2)	12186	10288	195	4	3	80	12	68	42
	Early recalls	3	3	3	1	0	1	0	1	1
	Self/GP referrals	0	288	8	0	0	2	1	1	0
	Total	**17209**	**13386**	**303**	**6**	**7**	**94**	**16**	**78**	**46**
50-64	Prevalent (A:50-52 only)	2641	1978	66	0	2	6	2	4	3
	Incident (C1:53-64 only)	7814	6973	110	1	1	43	5	38	27
	Early recalls	2	2	2	1	0	0	0	0	0
	Self/GP referrals	0	157	5	0	0	1	0	1	0
	Total	**10457**	**9110**	**183**	**2**	**3**	**50**	**7**	**43**	**30**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 64		2009/10	2010/11	2011/12	Minimum	Target
Uptake %	Prevalent (A)	74.3	72.3	74.9	>70%	80%
	Incident (C1)	89.0	86.9	89.2		
	Overall (A-C2)	76.4	73.8	76.6		
Technical recall/repeats%	Overall	1.3	0.4	0.7	<3%	<2%
Recall to Assessment %	Prevalent	5.4	5.6	3.3	<10%	<7%
	Incident	2.2	1.8	1.6	<7%	<5%
Early Recall %	Overall	0.01	0.04	0.01	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.4	1.6	1.0	<3.6	<1.8
	Incident	0.3	0.0	0.1	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	2.3	1.6	1.0	≥0.4	NA
	Incident	1.8	0.5	0.7	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	6.3	5.5	2.0	≥2.7	≥3.6
	Incident	4.0	3.8	5.4	≥3.0	≥4.0
Invasive cancers <15mm per 1000 women screened	Prevalent	2.3	3.1	1.5	>1.5	≥2.0
	Incident	2.2	2.1	3.9	>1.65	≥2.2
Pre-operative diagnosis rate %	Overall	95.5	100.0	96.2	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.6	1.4	0.4	≥1.00	≥1.4
	Incident	1.0	0.9	1.3		
	Overall	1.2	1.0	1.1		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.2	1.1	1.2	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.36	1.33	1.1	≥1.0	≥1.4
	Incident	1.10	1.11	1.1		
	Overall	1.16	1.17	1.1		
Round Length ≤ 36 months	Overall	91.1	99.1	97.2	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	98.4	99.3	97.7		
Screening to Results - (Date of screen)	Overall	90.6	98.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	85.0	90.6	97.0	≥90% within 3 weeks	100%

APPENDIX 4

KC62 Data 2011/12 for women aged 50-70

Northern Ireland Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	25885	13706	1023	19	18	92	24	68	34
	Incident (C1&C2)	52721	43815	1203	27	26	329	60	269	151
	Early recalls	43	41	38	1	0	2	0	2	2
	Self/GP referrals	0	1180	59	0	0	9	1	8	2
	Total	**78649**	**58742**	**2323**	**47**	**44**	**432**	**85**	**347**	**189**
50-70	Prevalent (A:50-52 only)	13274	9631	711	14	12	54	15	39	21
	Incident (C1:53-70 only)	42892	38000	964	20	21	271	49	222	129
	Early recalls	42	40	37	1	0	1	0	1	1
	Self/GP referrals	0	732	40	0	0	3	0	3	1
	Total	**56208**	**48403**	**1752**	**35**	**33**	**329**	**64**	**265**	**152**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 70		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	73.9	74.6	72.6	≥70%	80%
	Incident (C1)	88.6	89.5	88.6		
	Overall (A-C2)	75.4	75.8	73.3		
Technical recall/repeats%	Overall	1.9	1.5	1.0	<3%	<2%
Recall to Assessment %	Prevalent	7.6	8.9	7.4	<10%	<7%
	Incident	2.5	2.7	2.5	<7%	<5%
Early Recall %	Overall	0.04	0.05	0.07	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.5	1.5	1.2	<3.6	<1.8
	Incident	0.3	0.5	0.6	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	2.1	1.6	≥0.4	NA
	Incident	1.1	1.3	1.3	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.8	6.4	4.0	≥2.7	≥3.6
	Incident	4.8	4.8	5.8	≥3.1	≥4.2
Invasive cancers <15mm per 1000 women screened	Prevalent	2.7	3.8	2.2	≥1.5	≥2.0
	Incident	2.9	2.8	3.4	≥1.7	≥2.3
Pre-operative diagnosis rate %	Overall	95.9	95.0	95.9	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.5	1.6	1.2	≥1.00	≥1.4
	Incident	1.2	1.2	1.4		
	Overall	1.2	1.3	1.4		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.3	1.3	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.44	1.47	1.4	≥1.0	≥1.4
	Incident	1.26	1.26	1.3		
	Overall	1.31	1.31	1.3		
Round Length ≤ 36 months	Overall	85.3	81.2	64.6	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	88.1	89.4	90.4		
Screening to Results - (Date of screen)	Overall	96.6	98.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	94.4	96.9	94.9	≥90% within 3 weeks	100%

Belfast Health & Social Care Trust Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	12402	5994	498	14	8	40	9	31	16
	Incident (C1&C2)	21605	17520	480	22	11	131	29	102	58
	Early recalls	31	29	28	0	0	1	0	1	1
	Self/GP referrals	0	484	31	0	0	3	0	3	1
	Total	**34038**	**24027**	**1037**	**36**	**19**	**175**	**38**	**137**	**76**
50-70	Prevalent (A:50-52 only)	6117	4233	353	11	7	24	5	19	10
	Incident (C1:53-70 only)	17100	14955	354	16	9	105	25	80	47
	Early recalls	30	28	27	0	0	0	0	0	0
	Self/GP referrals	0	298	21	0	0	1	0	1	1
	Total	**23247**	**19514**	**755**	**27**	**16**	**130**	**30**	**100**	**58**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 70		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	68.9	73.8	69.2	≥70%	80%
	Incident (C1)	86.7	89.4	87.5		
	Overall (A-C2)	69.2	74.2	69.3		
Technical recall/repeats%	Overall	2.7	1.5	1.1	<3%	<2%
Recall to Assessment %	Prevalent	9.6	9.3	8.3	<10%	<7%
	Incident	1.9	2.7	2.4	<7%	<5%
Early Recall %	Overall	0.08	0.1	0.14	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.8	1.2	1.7	<3.6	<1.8
	Incident	0.3	0.6	0.6	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.4	2.4	1.2	≥0.4	NA
	Incident	0.9	1.3	1.7	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.7	7.5	4.5	≥2.7	≥3.6
	Incident	4.7	5.0	5.3	≥3.1	≥4.2
Invasive cancers <15mm per 1000 women screened	Prevalent	2.5	4.0	2.4	≥1.5	≥2.0
	Incident	2.7	2.7	3.1	≥1.7	≥2.3
Pre-operative diagnosis rate %	Overall	94.4	96.4	96.4	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.67	1.9	1.4	≥1.00	≥1.4
	Incident	1.11	1.2	1.3		
	Overall	1.25	1.4	1.3		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.30	1.3	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.52	1.6	1.6	≥1.0	≥1.4
	Incident	1.29	1.3	1.2		
	Overall	1.36	1.4	1.3		
Round Length ≤ 36 months	Overall	83.9	87.5	41.1	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	86.8	87.8	86.5		
Screening to Results - (Date of screen)	Overall	99.3	99.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	95.3	96.9	93.9	≥90% within 3 weeks	100%

Northern Health & Social Care Trust Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	4553	2654	289	3	2	22	7	15	11
	Incident (C1&C2)	10502	8955	285	1	6	58	11	47	26
	Early recalls	4	4	3	0	0	0	0	0	0
	Self/GP referrals	0	179	9	0	0	3	0	3	1
	Total	**15059**	**11792**	**586**	**4**	**8**	**83**	**18**	**65**	**38**
50-70	Prevalent (A:50-52 only)	2444	1850	204	3	2	13	6	7	5
	Incident (C1:53-70 only)	8864	7940	238	1	5	48	8	40	22
	Early recalls	4	4	3	0	0	0	0	0	0
	Self/GP referrals	0	83	5	0	0	1	0	1	0
	Total	**11312**	**9877**	**450**	**4**	**7**	**62**	**14**	**48**	**27**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 70		2009/10	2010/11	2011/12	Minimum	Target
Uptake %	Prevalent (A)	80.4	78.2	75.7	≥70%	80%
	Incident (C1)	90.8	91.7	89.6		
	Overall (A-C2)	80.8	79.8	77.2		
Technical recall/repeats%	Overall	1.8	2.0	1.1	<3%	<2%
Recall to Assessment %	Prevalent	9.3	13.2	11.0	<10%	<7%
	Incident	3.5	3.3	3.0	<7%	<5%
Early Recall %	Overall	0.0	0.0	0.04	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.7	1.1	1.1	<3.6	<1.8
	Incident	0.1	0.5	0.6	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	2.3	3.2	≥0.4	NA
	Incident	0.8	1.5	1.0	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.5	8.0	3.8	≥2.7	≥3.6
	Incident	5.1	5.4	5.0	≥3.1	≥4.2
Invasive cancers <15mm per 1000 women screened	Prevalent	3.3	5.7	2.7	≥1.5	≥2.0
	Incident	3.2	3.3	2.8	≥1.7	≥2.3
Pre-operative diagnosis rate %	Overall	98.8	94.2	94.8	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.2	1.7	1.3	≥1.00	≥1.4
	Incident	1.2	1.3	1.2		
	Overall	1.2	1.4	1.2		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.1	1.3	1.4	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.2	1.4	1.4	≥1.0	≥1.4
	Incident	1.2	1.2	1.3		
	Overall	1.2	1.3	1.3		
Round Length ≤ 36 months	Overall	89.2	84.1	64.2	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	89.3	90.3	95.1		
Screening to Results	Overall	98.2	98.0	99.0	≥90% within 2 weeks	100%
Screening to Assessment	Overall	98.3	98.6	98.3	≥90% within 3 weeks	100%

Southern Health & Social Care Trust Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	3910	2251	139	1	4	19	5	14	4
	Incident (C1&C2)	8428	7052	243	0	6	60	8	52	25
	Early recalls	5	5	4	0	0	0	0	0	0
	Self/GP referrals	0	229	11	0	0	1	0	1	0
	Total	**12343**	**9537**	**397**	**1**	**10**	**80**	**13**	**67**	**29**
50-70	Prevalent (A:50-52 only)	2072	1570	88	0	1	11	2	9	3
	Incident (C1:53-70 only)	6695	5939	209	0	5	49	7	42	23
	Early recalls	5	5	4	0	0	0	0	0	0
	Self/GP referrals	0	159	9	0	0	0	0	0	0
	Total	**8772**	**7673**	**310**	**0**	**6**	**60**	**9**	**51**	**26**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 70		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	75.9	73.8	75.8	≥70%	80%
	Incident (C1)	88.7	89.1	88.7		
	Overall (A-C2)	75.3	76.1	75.6		
Technical recall/repeats%	Overall	1.6	1.6	1.2	<3%	<2%
Recall to Assessment %	Prevalent	5.5	6.1	5.6	<10%	<7%
	Incident	2.7	2.7	3.5	<7%	<5%
Early Recall %	Overall	0.05	0.0	0.00	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.1	2.5	0.6	<3.6	<1.8
	Incident	0.4	0.6	0.8	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	1.7	1.9	1.3	≥0.4	NA
	Incident	1.3	1.7	1.2	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	5.6	3.7	5.7	≥2.7	≥3.6
	Incident	5.4	4.2	7.1	≥3.1	≥4.2
Invasive cancers <15mm per 1000 women screened	Prevalent	2.8	1.9	1.9	≥1.5	≥2.0
	Incident	3.5	2.2	3.9	≥1.7	≥2.3
Pre-operative diagnosis rate %	Overall	95.3	89.7	94.8	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.52	1.2	1.57	≥1.00	≥1.4
	Incident	1.37	1.0	1.79		
	Overall	1.40	1.1	1.73		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.43	1.2	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.71	1.3	1.4	≥1.0	≥1.4
	Incident	1.44	1.3	1.4		
	Overall	1.51	1.3	1.4		
Round Length ≤ 36 months	Overall	87.5	58.5	84.0	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	88.1	88.6	89.6		
Screening to Results - (Date of screen)	Overall	97.6	97.0	95.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	96.7	97.7	91.1	≥90% within 3 weeks	100%

Western Health & Social Care Trust Breast Screening Service

KC62 Data 2011/12

Activity Data		Invited	Screened	Assessed	Early Recall	Benign	Total Cancers	DCIS	Inv. Ca	Inv. Ca < 15mm
All Ages	Prevalent (A&B)	5020	2807	97	1	4	11	3	8	3
	Incident (C1&C2)	12186	10288	195	4	3	80	12	68	42
	Early recalls	3	3	3	1	0	1	0	1	1
	Self/GP referrals	0	288	8	0	0	2	1	1	0
	Total	**17209**	**13386**	**303**	**6**	**7**	**94**	**16**	**78**	**46**
50-70	Prevalent (A:50-52 only)	2641	1978	66	0	2	6	2	4	3
	Incident (C1:53-70 only)	10233	9166	163	3	2	69	9	60	37
	Early recalls	3	3	3	1	0	1	0	1	1
	Self/GP referrals	0	192	5	0	0	1	0	1	0
	Total	**12877**	**11339**	**237**	**4**	**4**	**77**	**11**	**66**	**41**

Performance against National Standards					National Standards	
Routine Screen Women aged 50 - 70		**2009/10**	**2010/11**	**2011/12**	**Minimum**	**Target**
Uptake %	Prevalent (A)	74.3	72.3	74.9	≥70%	80%
	Incident (C1)	88.8	87.0	89.6		
	Overall (A-C2)	75.5	73.6	76.3		
Technical recall/repeats%	Overall	1.3	0.4	0.7	<3%	<2%
Recall to Assessment %	Prevalent	5.4	5.6	3.3	<10%	<7%
	Incident	2.1	1.9	1.8	<7%	<5%
Early Recall %	Overall	0.02	0.03	0.03	<1%	≤0.25%
Benign open biopsy rate per 1000 women	Prevalent	1.4	1.6	1.0	<3.6	<1.8
	Incident	0.2	0.0	0.2	<2.0	<1.0
DCIS per 1000 women screened	Prevalent	2.3	1.6	1.0	≥0.4	NA
	Incident	1.6	0.8	1.0	≥0.5	NA
Invasive cancers per 1000 women screened	Prevalent	6.3	5.5	2.0	≥2.7	≥3.6
	Incident	4.2	4.3	6.5	≥3.1	≥4.2
Invasive cancers <15mm per 1000 women screened	Prevalent	2.3	3.1	1.5	≥1.5	≥2.0
	Incident	2.5	2.9	4.0	≥1.7	≥2.3
Pre-operative diagnosis rate %	Overall	95.9	100.0	96.6	≥80%	≥90%
Standardised Detection Ratios Invasive cancers (annual - all sizes)	Prevalent	1.5	1.5	0.5	≥1.00	≥1.4
	Incident	1.0	1.0	1.6		
	Overall	1.1	1.1	1.3		
Standardised Detection Ratios Invasive cancers < 15mm (3 yr average)	Overall	1.2	1.2	1.3	≥1.0	≥1.4
Rolling three year Standardised Detection Ratios Invasive cancers (all sizes)	Prevalent	1.32	1.34	1.2	≥1.0	≥1.4
	Incident	1.13	1.16	1.2		
	Overall	1.18	1.20	1.2		
Round Length ≤ 36 months	Overall	81.7	91.9	93.6	≥90% first offered appts within 36 months	100%
≤ 38 months	Overall	88.8	92.0	94.1		
Screening to Results - (Date of screen)	Overall	90.6	98.0	98.0	≥90% within 2 weeks	100%
Screening to Assessment (DoFOA)	Overall	85.0	90.6	97.0	≥90% within 3 weeks	100%