



Breast Screening Programme

Consolidated Annual Report
2018-2021

Contents

1. Introduction	3
2. Background	5
3. Programme Overview	11
4. Quality Assurance	14
5. The Impact of COVID-19	16
6. Programme Performance.....	17
6.1 Programme Standards	17
6.2 Monitoring Performance	17
6.3 Uptake	19
6.3.1 Screening Uptake	19
6.3.2 Screening Round Length.....	21
6.4 Test	23
6.4.1 Technical Recall/Repeat.....	23
6.4.2 Screen to Routine Recall.....	24
6.5 Referral.....	25
6.5.1 Referred for Assessment.....	26
6.5.2 Screen to Assessment (First Offered Appointment)	29
6.6 Diagnosis.....	30
6.6.1 Number of Cancers Detected	30
6.6.2 Early Recall	31
6.6.3 Non-Operative Diagnosis Rate.....	32
6.6.4 Non-Invasive Cancer Detection.....	34
6.6.5 Standardised Detection Ratio for Invasive Cancer	36
6.6.6 Standardised Detection Ratio for Small Invasive Cancer	37
6.6.7 Benign Biopsy Rates	38
7. Very High-Risk Breast Screening Programme.....	40
8. Promoting Informed Choice	42
References	44

1. Introduction

The Public Health Agency (PHA) monitors and quality assures the Northern Ireland Breast Screening Programme (NI BSP) to ensure that women in Northern Ireland have access to a high-quality breast screening service that meets national standards. This consolidated annual report describes the performance of the NI BSP during the three-year period between 2018 and 2021, including the impact of the COVID-19 pandemic on the delivery of breast screening in Northern Ireland.

The statistics presented within this report cover activity in the NI BSP between 1st April 2018 and 31st March 2021, including invitations for breast screening, breast screening uptake, the breast screening pathway, outcomes of breast screening and the number and type of breast cancers detected. Local performance against each key indicator outlined in the [NHS Breast Screening Programme Standards](#) has been assessed to determine whether an appropriate level of performance which aligns with national standards has been achieved.¹ Data are presented for each of the four Breast Screening Units (BSUs) in Northern Ireland, in addition to data describing overall regional performance.

Given that this is a consolidated annual report spanning the time-period between 2018 and 2021, statistics have been calculated to describe performance during each individual year, as well as average performance throughout the time-period. The majority of statistics have been derived from data submitted by each BSU in the form of Korner returns using data from the National Breast Screening System (NBSS), the IT system supporting the NI BSP. This information is routinely collected by the NI BSP for operational purposes, including quality assurance. Data on the number and subtype of screen-detected breast cancers in Northern Ireland between 2018 and 2021 have been obtained from national NHS Breast Screening Programme and Association of Breast Surgery (NHS BSP ABS) audit data.²

A summary of key statistics in the NI BSP is included on Page 4. Page 6 includes a table showing performance of each Breast Screening Unit and Northern Ireland as a whole against the standards discussed in this report.

Summary of Key Statistics in the Northern Ireland Breast Screening Programme 2018-2021



Uptake

234,434 women aged between 50 and 70 years were invited for breast screening; 176,031 attended for screening, giving an average annual uptake rate of 75.1%.



Invitation

71.0% of women were offered an appointment for mammography screening that was within 36 months of their previous normal screen.*



Results

99.7% of women, who had a normal test result, received their results within two weeks of their screening appointment.



Assessment

99.2% of women who required further tests were offered an appointment within three weeks of their screening mammogram.



Cancer Detection

1527 breast cancers were detected through screening; 1,245 (81.5%) of these were invasive cancers, 7 (0.5%) were micro-invasive and 275 (18.0%) were non-invasive.



Treatment of Invasive Cancer

Of the 1,245 women diagnosed with screen-detected invasive cancer, 994 (79.8%) had breast conserving surgery, 226 (18.1%) had a mastectomy and 25 (2.0%) had no surgery.

*The NI BSP paused for a period of four months during 2020 due to the impact of the COVID-19 pandemic. This pause has affected the number of women reported as having been offered a mammography screening appointment within 36 months of their previous normal screen during 2018-2020. Figures for this indicator during each individual year of this time period are as follows: 96.4% during 2018-2019, 99.3% during 2019-2020 and 12.3% during 2020-2021.

Performance against key standards, 2018/19 – 2020/21

Table 1 outlines performance of the NI BSP against key standards in the year 2023/24, providing data at regional level and by BSU.

The data in this table are colour coded green if the achievable standard is met, amber if the acceptable standard is met and red if the acceptable standard is not met. A definition of the acceptable and achievable performance thresholds is included in section 6.2.2.

Table 1: Performance of NI BSUs against key standards, 2018/19 – 2020/21

STANDARD	Region			Eastern			Northern			Southern			Western			National Standards
	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	
Uptake Rate (%)	76.9	76.0	72.2	74.1	74.4	68.6	80.4	76.8	75.8	77.4	76.4	74.1	78.5	78.1	73.1	Acceptable > 70% Achievable > 80%
Screening Round Length (%)	96.4	99.3	12.3	92.8	99.6	7.7	97.3	98.9	12.9	99.7	99.9	5.7	98.5	98.7	24.9	Acceptable > 90.0% Achievable 100.0%
Technical Recall / Repeat Rate (%)	2.7	2.4	2.9	2.5	2.8	2.9	2.8	2.2	2.7	2.5	2.2	3.2	2.8	1.9	2.9	Acceptable < 3.0 % Achievable < 2.0 %
Screen to Routine Recall (%)	99.7	99.6	99.9	99.8	99.8	99.8	99.9	98.9	99.9	100.0	100.0	100.0	99.3	99.3	100.0	Acceptable > 95% Achievable 100 %
Referred to Assessment (%)																
Prevalent Screen	6.5	5.7	4.9	6.5	5.7	4.9	5.6	4.1	4.1	8.1	8.0	7.2	3.6	4.6	4.3	Acceptable < 10% Achievable < 7%

STANDARD	Region			Eastern			Northern			Southern			Western			National Standards
	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	
Incident Screen	2.5	2.5	2.3	2.0	2.1	1.7	2.2	1.9	1.9	4.0	4.0	3.9	2.4	2.7	2.0	Acceptable < 7% Achievable < 5%
Screen to Assessment (Date of First Offered Appt.)	99.0	99.2	99.4	98.5	98.0	98.2	98.2	100.0	100.0	99.9	100.0	100.0	99.1	99.7	99.7	Acceptable > 98.0% Achievable 100%
Short term recall rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Acceptable < 0.25% Achievable < 0.12%
Non Operative Diagnosis Rate																
Invasive	100.0	98.7	99.7	100.0	99.3	99.2	100.0	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Acceptable >95%
Non-Invasive	92.2	96.4	94.9	100.0	96.8	92.6	90.0	95.8	80.0	93.3	100.0	100.0	84.6	94.4	100.0	Acceptable > 95.0%
Non -Invasive Cancer Detection Rate per 1000																
Prevalent	2.5	1.6	2.0	2.1	0.3	1.7	3.8	2.5	0.5	1.3	2.2	1.6	3.1	2.3	4.7	Acceptable > 0.5/1000

STANDARD	Region			Eastern			Northern			Southern			Western			National Standards
	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	
Incident	1.1	1.3	1.3	0.9	1.5	1.1	1.7	1.4	0.9	0.8	0.9	1.7	1.5	1.2	1.6	Acceptable > 0.6/1000
Standardised Detection Rate (Invasive Cancer)																
Prevalent	1.3	1.2	1.7	1.4	1.1	1.2	1.5	1.1	1.5	1.2	1.4	2.7	1.0	1.3	2.0	Acceptable ≥1.0 Achievable ≥1.4
Incident	1.4	1.6	1.5	1.2	1.5	1.4	1.3	1.5	1.3	1.5	1.9	2.0	1.7	1.7	1.4	Acceptable ≥1.0 Achievable ≥1.4
Standardised Detection Rate (Small Invasive Cancer, Prevalent and Incident screens)	1.3	1.4	1.4	1.1	1.3	1.1	1.3	1.1	1.5	1.5	2.1	2.2	1.4	1.5	1.2	Acceptable ≥1.0 Achievable ≥1.4
Benign Biopsy Rate																

STANDARD	Region			Eastern			Northern			Southern			Western			National Standards
	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	2018 - 19	2019 - 20	2020 - 21	
Prevalent	1.0	0.7	0.3	Due to small numbers, data are not presented at unit level											Acceptable < 1.5/1000 Achievable < 1.0/1000	
Incident	0.3	0.3	0.2	Due to small numbers, data are not presented at unit level											Acceptable < 1.0/1000 Achievable < 0.75/1000	

2. Background

2.1 The Northern Ireland Breast Screening Programme

The NI BSP invites women between the ages of 50 and 70 to attend for regular breast screening every three years. The main aim of breast screening is to detect breast cancer at an early stage, when treatment is more likely to reduce the risk of death from the disease.

2.2 Benefits and Harms of Breast Screening

As with all screening programmes, breast screening results in both benefits and harms.³ The main benefit is a reduction in breast cancer mortality. An independent review of the evidence on the benefits and harm of breast screening found a 20% reduced risk of death from breast cancer among women screened, compared to those not screened.³ This equates to one breast cancer death prevented for every 235 women invited for screening, one breast cancer death prevented for every 180 women who attend screening and around 1300 breast cancer deaths prevented every year in the UK.³

The main harm of breast screening is overdiagnosis, which refers to the detection of low-risk or non-progressing breast cancers through screening that would not have been diagnosed without screening and would not have become life threatening.³ For every breast cancer death prevented by screening in the UK, three women are diagnosed with and treated for a cancer that would never have been found without screening and would never have become life threatening.³ Other harms include the need for unnecessary invasive investigations, as well as the psychological distress and anxiety, which can arise from false positive screening results.³ False negative results due to missed cancer detection or incorrect diagnoses can also provide unwarranted reassurance, potentially affecting a woman's perception of her risk of breast cancer and resulting in delayed presentation following the development of symptoms.^{3,4}

3. Programme Overview

3.1 Eligibility

In Northern Ireland, eligible women aged between 50 and 70 are invited to attend for breast screening, by GP practice, every three 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 53rd birthday (the year they turn 52). All eligible women should be invited for the first time before their 53rd birthday. As the women who are invited before their 51st birthday are invited in the year they turn 50, some women 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 seven invitations. Women aged over 70 years are not automatically invited for screening, but are encouraged to continue attending every three years by phoning their local screening unit and requesting an appointment.

Women who have been identified as being at significantly increased risk of breast cancer (≥ 8 times the average risk) are invited to participate in more regular surveillance screening at an earlier age by the Very High-Risk (VHR) BSP, which commenced in 2013.

3.2 Screening Pathway

3.2.1 Invitation

- Invitations to attend for routine breast screening are sent to eligible women every three years based on their GP practice, along with information on breast screening, which describes the screening test and pathway involved.

- Approximately one third of the population eligible for breast cancer screening in Northern Ireland are invited to attend for screening every year.
- Each of the four Breast Screening Unit (BSUs) cover screening populations of varying sizes, with the number screened in each unit fluctuating on an annual basis, depending on the area being screened within the three-year round length.

3.2.2 Screening

- Women who accept the offer of screening attend their local BSU and undergo mammography, an imaging technique which involves low-dose radiation exposure to the breast tissue.
- The first time a woman enters the eligible age-range and attends for screening is referred to as a **prevalent screen**. The second and subsequent times a woman attends for screening are referred to as **incident screens**.
- Women should receive the results of the mammogram within two to three weeks of the screening appointment.
- A small number of women may be sent another screening appointment if their mammograms need to be repeated, for example, if the image was inadequate for diagnostic reporting.

3.2.3 Assessment

- If a potential abnormality is detected at initial screening, a woman may be asked to attend an assessment clinic for further investigations, including clinical examination, additional imaging or biopsy. A woman who receives a normal/benign result as the outcome of the assessment clinic should be returned to the routine screening programme for a further screen in three years.

3.2.4 Diagnosis

- If breast cancer is diagnosed, a woman should be referred for urgent treatment.
- If a definitive diagnosis cannot be made following the assessment process, a woman may be recalled for a further assessment at an interval shorter than the normal screening interval of three years.

3.3 Delivery

There are four BSUs in Northern Ireland; Eastern, Northern, Southern and Western. Table 2 outlines the locations and contact details of the headquarters of each unit.

Unit	Location	Contact Number
Eastern	12-22 Linenhall Street, Belfast	028 9033 3700
Northern	Antrim Area Hospital	028 9442 4425
Southern	Craigavon Area Hospital	028 3756 0820
Western	Altnagelvin Area Hospital	028 7161 1443

The Eastern Unit caters for the Belfast and South Eastern HSCT areas, while the Northern Unit covers most of the Northern HSCT, as well as providing surveillance screening for women at very high risk of breast cancer. The Southern Unit is responsible for delivering breast screening services in the Southern HSCT, while the Western Unit covers all of the Western HSCT areas and part of the Northern HSCT. The BSU in Linenhall Street provides mammography screening for women in the Belfast HSCT area. In other HSCT areas, most screening mammograms are carried out on mobile breast screening trailers, which rotate between a variety of locations across Northern Ireland.

4. Quality Assurance

Quality assurance (QA) is a fundamental part of all screening programmes. The aim of QA in the NI BSP is to maintain acceptable standards and continuously improve the performance of all aspects of breast screening in order to ensure that women have access to a high-quality service wherever they reside in Northern Ireland. QA helps to ensure that the benefits of breast screening outweigh the potential harms. It is a continuous process that is carried out externally by the PHA Breast Screening Team and internally by the BSUs and HSCTs.

4.1 Core QA Activities of the PHA

The core QA activities of the PHA Breast Screening Team include:

- Monitoring and review of programme management and delivery;
- Monitoring performance against agreed standards;
- Organising a rolling programme of formal QA Visits to BSUs;
- Review and monitoring of HSCT action plans to implement recommendations arising from QA visits;
- Adverse incident review and advice;
- Providing support and advice to HSCTs and BSUs.

4.2 QA Leads

The QA function is underpinned by an organised structure of public health and professional leads, supported by programme managers, information and administrative staff. There are seven QA Professional Leads in the NI BSP, covering each discipline involved in delivering the service. These include: radiology, radiography, surgery, pathology, breast care nursing, administrative and clerical and medical physics. QA Professional Leads assist with the coordination of QA activities for the NI BSP and provide professional advice to the PHA Breast Screening Team on issues relevant to the commissioning of the screening programme within their area of expertise. Each QA Professional Lead chairs a QA subgroup for their speciality. These groups play an important part in the QA Advisory Structure and work together to ensure that safe and effective breast

screening continues to be available to the eligible population. This includes working to ensure relevant national and local standards are met and that appropriate continuous quality improvement processes are in place.

4.3 QA Visits

A key component of the NI BSP QA Programme is the cycle of QA visits to each of the four BSUs in rotation. The process for these visits is based on national and local guidance

During the time-period covered by this report, public health measures implemented to control the COVID-19 pandemic impacted on the ability of the PHA Breast Screening Team to carry out in-person QA visits. To enable continuation of the QA visit cycle, in-person visits were replaced with alternative remote options, including desk-top reviews and virtual stakeholder meetings. In-person QA visits have now resumed.

5. The Impact of COVID-19

Along with the majority of routine healthcare services, breast screening in Northern Ireland was paused on the 24th March 2020, due to the emergence of the COVID-19 pandemic. The programme restarted on the 20th July 2020, the intervening period constituting a four-month interruption to the delivery of breast screening in Northern Ireland. Screening for women over 70 recommenced in September 2020. The VHR BSP continued without interruption throughout the COVID-19 pandemic. In addition to the temporary cessation of service delivery, the capacity of BSUs to perform routine breast screening during the time-period covered by this report has also been impacted by staff absences due to sickness or isolation, as well as social distancing requirements and enhanced infection control measures implemented to reduce transmission of COVID-19.

Breast screening round length is the interval between each offered invitation for screening mammography and is an important indicator of the efficiency with which a screening programme is managed. The pause in the delivery of routine breast screening in Northern Ireland resulted in an extension of the round length beyond the recommended 36 months in all BSUs, to a maximum of 40 months in October 2020. Given the importance of the breast screening round length in ensuring the long-term effectiveness of the programme, as well as the potential impact of delays in screening on individual patient outcomes, intensive efforts to recover the round length as quickly as possible were implemented by all BSUs, in collaboration with the PHA Breast Screening Team.

6. Programme Performance

This section of the report presents statistics to describe the performance of the NI BSP during 2018-2021, which have been collated and evaluated using the approach outlined below.

6.1 Programme Standards

The NI BSP uses the [NHS Breast Screening Programme Standards](#), for the purposes of quality assurance and programme monitoring.¹ Local performance during 2018-2021 has been assessed against the programme standards valid for data collected between 1st April 2017 and 31st March 2021. These standards have since been updated for data collected from 1st April 2021 onwards.

6.2 Monitoring Performance

6.2.1 Data Returns

The PHA Breast Screening Team monitor the performance of each of the four BSUs and the NI BSP against national standards using data submitted through Körner returns:

KC62 – This is an annual return made by HSCTs on: outcome of initial screen, outcome of further assessment, cancers diagnosed (by size and type) and overall output and outcome measures. KC62 data are obtained from the National Breast Screening System (NBSS), the IT system that supports the NI BSP.

KC63 – This is an annual return made by HSCTs 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.

6.2.2 Performance Thresholds

Two performance thresholds are specified within the national standards; acceptable and achievable.

Acceptable Standards: This is the lowest level of performance which services are expected to attain in order to ensure patient safety and service effectiveness. Programmes not meeting the acceptable threshold are expected to implement recovery plans to ensure rapid and sustained improvement.

Achievable Standards: This represents the level at which the services are likely to be running optimally. Screening services should aspire to attain and maintain performance at this level.

This report provides information on both the individual performance of the four BSUs and the overall NI BSP. Information on the performance of individual staff is not provided.

6.2.3 Performance Indicators

Performance indicators have been reported according to the corresponding stage of the screening pathway; uptake, test, referral and diagnosis. Table 3 outlines the various indicators used in assessing performance of the NI BSP during 2018-2021.*

Stage	Indicator
Uptake	Screening Uptake
	Screening Round Length
Test	Technical Recall/Repeat
	Screen to Routine Recall
Referral	Referred for Assessment (Prevalent)
	Referred for Assessment (Incident)
	Screen to Assessment (First Offered Appointment)
Diagnosis	Number of Cancers Detected
	Early Recall
	Non-Operative Diagnosis (Invasive)
	Non-Operative Diagnosis (Non-Invasive)
	Non-Invasive Cancer Detection (Prevalent)
	Non-Invasive Cancer Detection (Incident)
	Standardised Detection Rate Invasive Cancer (Prevalent)
	Standardised Detection Rate Invasive Cancer (Incident)
	Standardised Detection Rate Small Invasive Cancer (Prevalent and Incident)
	Benign Biopsy (Prevalent)
	Benign Biopsy (Incident)

* Indicators are reported to either one or two decimal places, to align with performance thresholds specified for each standard. Figures for average performance over the three-year period are calculated based on cumulative numbers, rather than averages of the rounded individual year performances. In some instances, these figures may therefore differ slightly to those that would be obtained by averaging the figures displayed for the individual years. Percentages may not always total 100 due to rounding. Numbers less than five are reported as <5.

6.3 Uptake

6.3.1 Screening Uptake

Screening Uptake is the proportion of women who attend for breast screening each year, following an invitation.

- **Acceptable standard:** $\geq 70.0\%$ of women invited accept the offer of breast screening.
- **Achievable standard:** $\geq 80.0\%$ of women invited accept the offer of breast screening.

During 2018-2021, 75.1% of women invited (176,031 of 234,034) took up the offer to attend for breast screening in Northern Ireland.

On average, during the three-year period between 2018 and 2021, 75.1% of women invited for breast screening took up the offer to attend. Table 4 outlines the number of women who were invited and the number who attended for breast screening, as well as associated uptake figures, for each individual year and the overall three-year period. During the three-year period between 2018 and 2021, 234,434 women aged between 50 and 70 were invited for breast screening in Northern Ireland, of whom 176,031 attended.

Table 4: Breast Screening Uptake (%) in the NI BSP 2018-2021

	2018-2019	2019-2020	2020-2021	2018-2021
Invited	80,989	78,181	75,264	234,434
Attended	62,275	59,428	54,328	176,031
Uptake (%)	76.9	76.0	72.2	75.1

The acceptable level of uptake was maintained throughout the three-year period between 2018 and 2021. Table 5 shows uptake figures for each individual BSU and Northern Ireland overall during 2018 to 2021, as well as comparative figures for England to enable benchmarking of performance.^{5,6}

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	74.1	74.4	68.6	72.5
Northern	80.4	76.8	75.8	77.5
Southern	77.4	76.4	74.1	76.1
Western	78.5	78.1	73.1	76.6
Northern Ireland	76.9	76.0	72.2	75.1
England	71.1	69.1	61.8	67.3

The Eastern Unit fell marginally below the acceptable level of uptake during 2020-2021, achieving 68.6% uptake, although maintained an overall average uptake of 72.5% over the three-year period. All other BSUs maintained uptake levels above the acceptable level during each of the three years. Breast screening uptake in Northern Ireland has remained consistently above uptake levels in England. Figure 1 shows trends in breast screening uptake per BSU and Northern Ireland overall between 2015 and 2021.

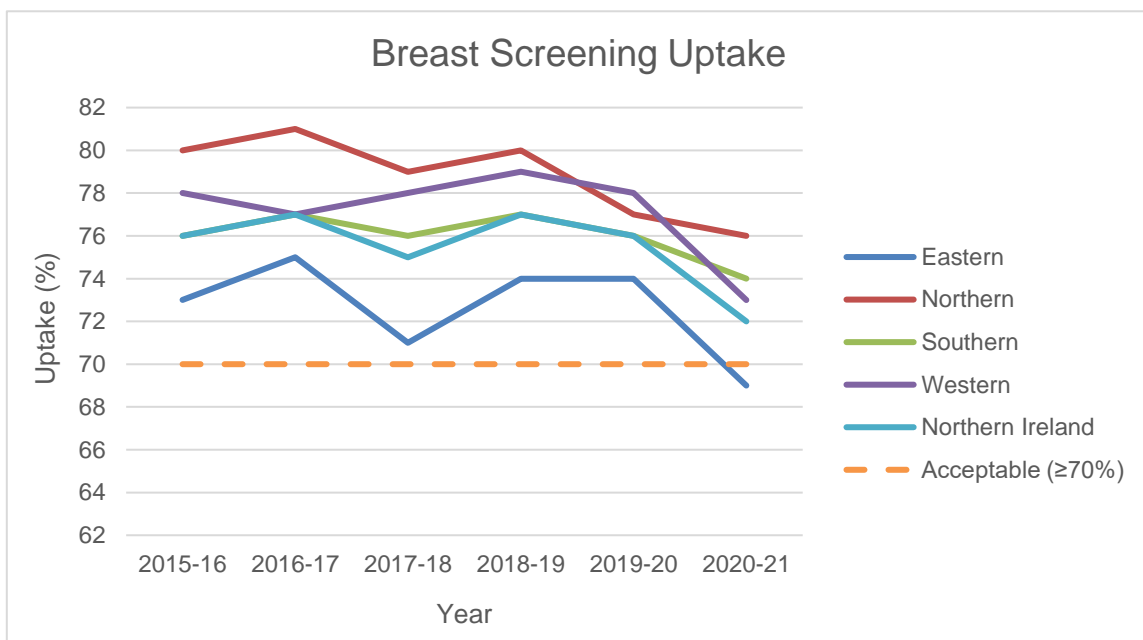


Figure 1: Breast Screening Uptake in Northern Ireland between 2015 and 2021

6.3.2 Screening Round Length

Screening Round Length is the interval between each offered invitation for screening mammography.

- **Acceptable standard:** $\geq 90.0\%$ of women should be offered an appointment that is within 36 months of their previous screen.
- **Achievable standard:** $\geq 99.0\%$ of women should be offered an appointment that is within 36 months of their previous screen.

On average during 2018-2021, 71.0% of women were offered an appointment that was within 36 months of their previous screen.

Measurement of the screening round length provides assurance that women with a previous invitation for screening have a subsequent invitation in a timescale that maximises the chance of cancer detection, whilst minimising harm to the woman. It also provides an indicator of the efficiency with which the screening programme is managed. The long-term effectiveness of the programme is dependent on women within the target age-group continuing to be screened at regular intervals.

On average during 2018 to 2021, only 71.0% of women were offered a screening appointment that was within 36 months of their previous screen. This falls below the acceptable standard of $\geq 90\%$, being largely attributable to the pause in the delivery of breast screening that occurred as a result of the COVID-19 pandemic. Table 6 outlines the proportion of women offered a screening appointment that was within 36 months of their previous screen for each BSU and Northern Ireland overall by year.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	92.8	99.6	7.7	69.8
Northern	97.3	98.9	12.9	69.9
Southern	99.7	99.9	5.7	70.1
Western	98.5	98.7	24.9	74.9
Northern Ireland	96.4	99.3	12.3	71.0

The data in this table show that the proportion of eligible women in Northern Ireland offered a screening appointment that was within 36

months of their previous screen fell to just 12% in 2020-2021, during which the NI BSP was paused for a period of four months. This compares to the figure of 99.3% achieved during the previous year. As outlined previously, intensive efforts to recover the breast screening round length were implemented by each BSU, in collaboration with the PHA Breast Screening Team, following the resumption of screening services in July 2020. Close monitoring of this indicator continues to be undertaken to ensure that performance has recovered to an acceptable level in each BSU and the NI BSP overall.

Figure 2 shows trends in the proportion of women offered a screening appointment within 36 months of their previous screen in Northern Ireland between 2015 and 2021.

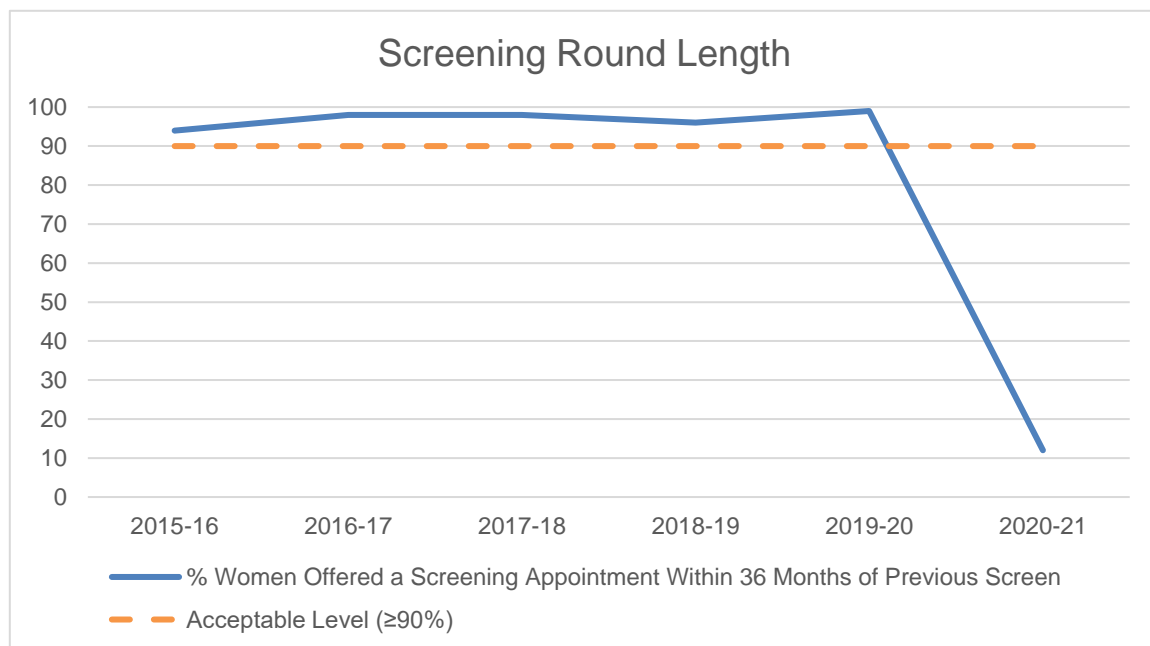


Figure 2: % of Women Offered a Screening Appointment within 36 Months of Previous Screen

6.4 Test

6.4.1 Technical Recall/Repeat

Technical Recall/Repeat measures the proportion of women who had additional mammograms due to technical recalls or technical repeats.

During 2018-2021, 2.7% of women screened in Northern Ireland had a repeat examination, due to a technical recall or technical repeat.

- **Acceptable standard:** <3.0% of women undergoing a repeat examination due to technical recalls or technical repeats.
- **Achievable standard:** <2.0% of women undergoing a repeat examination due to technical recalls or technical repeats.

Mammograms may need to be repeated if the quality of the first image is not adequate for diagnostic reporting. Technical recall refers to when women are recalled for a further appointment for repeat images, while technical repeat refers to when women undergo repeat imaging during the initial screening appointment. BSUs should aim to deliver the optimum image quality with as low a radiation dose as possible to minimise anxiety for women, as well as their exposure to radiation. The number and type of repeat examinations undertaken are monitored to make sure good quality practice is provided. Table 7 shows the technical recall/repeat rate for each BSU and Northern Ireland overall between 2018 and 2021.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	2.5	2.8	2.9	2.8
Northern	2.8	2.2	2.7	2.6
Southern	2.5	2.2	3.2	2.6
Western	2.8	1.9	2.9	2.6
Northern Ireland	2.7	2.4	2.9	2.7

The overall technical recall/repeat rate in Northern Ireland throughout the three-year period between 2018 and 2021 met the acceptable standard of <3.0%. Only the Southern Unit failed to meet the acceptable standard on one occasion in 2020-2021, when 3.2% of women underwent a repeat

examination. The Western Unit met the achievable standard of <2% in 2019-2020, with a technical recall/repeat rate of 1.9%.

6.4.2 Screen to Routine Recall

Screen to Routine Recall measures the proportion of women with a normal screening test who receive their results within two weeks of attendance for their screening mammogram.

During 2018-2021, 99.7% of women who had a normal screening test, received their results within two weeks of attendance for their screening mammogram.

- **Acceptable standard:** ≥ 95.0% women receiving their results within two weeks of attendance for their screening mammogram.
- **Achievable standard:** 100.0% women receiving their results within two weeks of attendance for their screening mammogram.

To minimise anxiety, it is essential that women receive the results of screening in a timely manner. The date a woman receives her result is not recorded, therefore the date her episode is closed on NBSS is taken as a proxy for this. This assumes the screening office has good administrative processes to minimise delays in posting the results letters. Table 8 shows the Screen to Routine Recall rate for each BSU and Northern Ireland overall, during each year between 2018 and 2021, as well as the average for the entire period.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	99.8	99.8	99.8	99.8
Northern	99.9	99.3	99.9	99.7
Southern	100.0	100.0	100.0	100.0
Western	99.3	99.3	100.0	99.5
Northern Ireland	99.7	99.6	99.9	99.7

The acceptable standard for Screen to Routine Recall was met consistently across all BSUs and Northern Ireland overall during 2018 to 2021, with an average of 99.7% of women with a normal screening test

receiving their results within two weeks of their screening appointment. The Southern Unit met the achievable standard of 100.0% during each year throughout this period. Figure 3 shows the trend in the proportion of women with a normal screening test receiving their results within two weeks of attendance for their screening mammogram in Northern Ireland between 2015 and 2021.

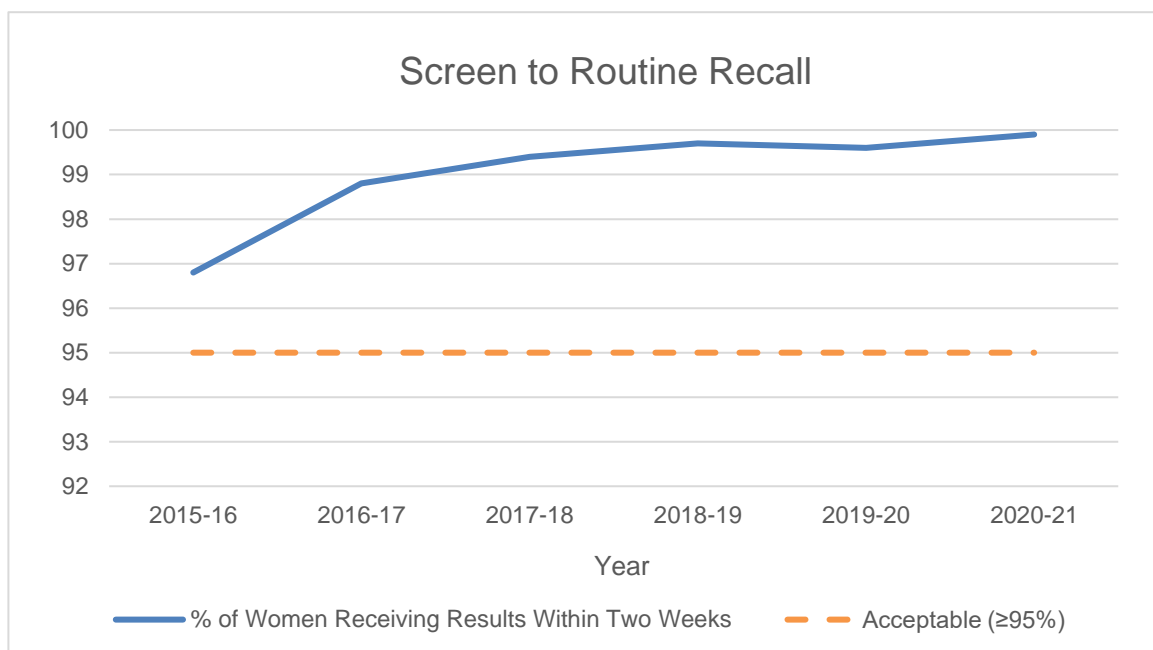


Figure 3: Percentage of Women with a Normal Screening Test Receiving Results within Two Weeks

6.5 Referral

About four in every one hundred women are asked to come back for more tests after screening as their mammogram looks abnormal. These women are invited to attend an assessment clinic for further tests (e.g. breast examination, ultrasound scan or biopsy) which will help confirm if the woman has breast cancer. On average, one in four women referred for assessment are found to have cancer. The three in four women confirmed as not having cancer are returned to the routine screening programme to be invited for screening again in three years (unless they will be over the age of 70, when they can self-refer).

6.5.1 Referred for Assessment

Referred for Assessment measures the proportion of women screened who are referred for further assessment.

The purpose of this standard is to provide assurance that women are not referred for further tests unnecessarily. Those responsible for interpreting the images from breast screening need to make sure that they are recalling women with areas of concern which require further investigation, whilst not recalling too many women where no abnormalities are subsequently found. The percentage of women who are recalled to an assessment clinic is normally higher in those attending their first screening mammogram (prevalent screens) than in those attending for subsequent screening mammography (incident screens).

Prevalent Screen

During 2018-2021, 5.5% of women screened during a prevalent screen were referred for assessment, while the equivalent figure for incident screens was 2.5%.

- Acceptable standard: <10.0% of women screened referred for further assessment.
- Achievable standard: <7.0% of women screening referred for further assessment.

During 2018 to 2021, 5.5% of women were referred for assessment from a prevalent (first screen), meeting the achievable standard of <7.0%. Table 9 outlines the proportion of women referred for assessment from a prevalent screen each year between 2018 and 2021 by BSU and Northern Ireland overall. All BSUs, apart from the Southern Unit, met the achievable standard of 7.0% in each year during the three-year period. The Southern Unit consistently met the acceptable standard of <10.0%.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	6.5	5.7	4.9	5.7
Northern	5.6	4.1	4.1	4.5
Southern	8.1	8.0	7.2	7.8
Western	3.6	4.6	4.3	4.1
Northern Ireland	6.5	5.7	4.9	5.7

Figure 4 shows trends in the proportion of women referred for assessment from a prevalent screen per BSU and Northern Ireland overall between 2015 and 2021.

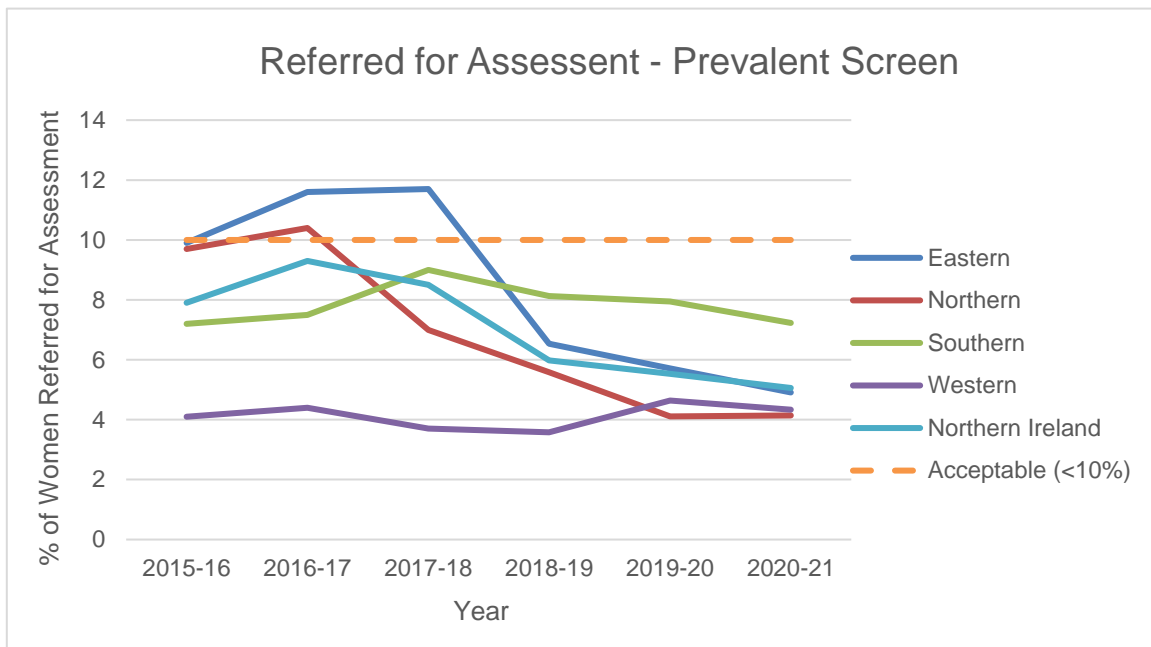


Figure 4: Percentage of Women Referred for Assessment from a Prevalent Screen

Incident Screen

- **Acceptable standard:** <7.0% of women screened referred for further assessment.
- **Achievable standard:** <5.0% of women screened referred for further assessment.

During 2018 to 2021, 2.5% of women were referred for assessment from an incident (subsequent screen), meeting the achievable standard of

<5.0%. Table 10 outlines the proportion of women referred for assessment from an incident screen each year between 2018 and 2021 by BSU and Northern Ireland overall. All BSUs consistently met the achievable standard for the proportion of women referred for assessment from incident screens.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	2.0	2.1	1.7	2.0
Northern	2.2	1.9	1.9	2.0
Southern	4.0	4.0	3.9	4.0
Western	2.4	2.7	2.0	2.4
Northern Ireland	2.5	2.5	2.3	2.5

Figure 5 shows trends in the proportion of women referred for assessment from an incident screen per BSU and Northern Ireland overall between 2015 and 2021.

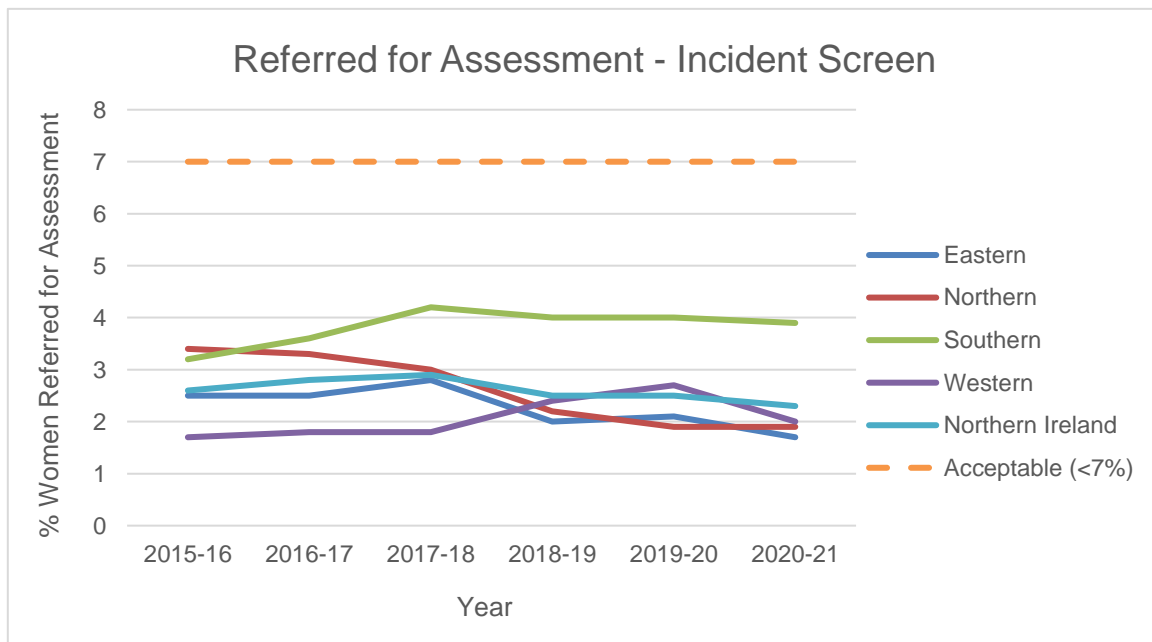


Figure 5: Percentage of Women Referred for Assessment from an Incident Screen

6.5.2 Screen to Assessment (First Offered Appointment)

Screen to Assessment measures the proportion of women who are offered an appointment at an assessment centre within three weeks of attendance for their screening mammogram.

During 2018-2021, 99.2% of women referred for assessment were offered an assessment appointment that was within three weeks of their screening mammogram.

- **Acceptable standard:** >98.0% women receiving an appointment for assessment within three weeks of attendance for their screening mammogram.
- **Achievable standard:** 100.0% women receiving an appointment for assessment within three weeks of attendance for their screening mammogram.

Monitoring this standard aims to minimise the time taken for women who need further investigations to obtain a definitive malignant, benign or normal diagnosis. Overall between 2018 and 2021, 99.2% of women who were referred for assessment in Northern Ireland were offered an assessment appointment that was within three weeks of their screening mammogram. Table 11 outlines the achievement of this standard by BSU and Northern Ireland overall for each individual year, as well as the three-year average. The acceptable standard was consistently met in all BSUs, with both the Southern and Western Units meeting the achievable standard of 100.0% in two of the three years.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	98.5	98.0	98.2	98.2
Northern	98.2	100.0	100.0	99.4
Southern	99.9	100.0	100.0	99.9
Western	99.1	99.7	99.7	99.5
Northern Ireland	99.0	99.2	99.4	99.2

Figure 6 shows trends in the proportion of women referred for assessment who are offered an assessment appointment within three weeks of their screening mammogram per BSU and Northern Ireland overall between 2015 and 2021.

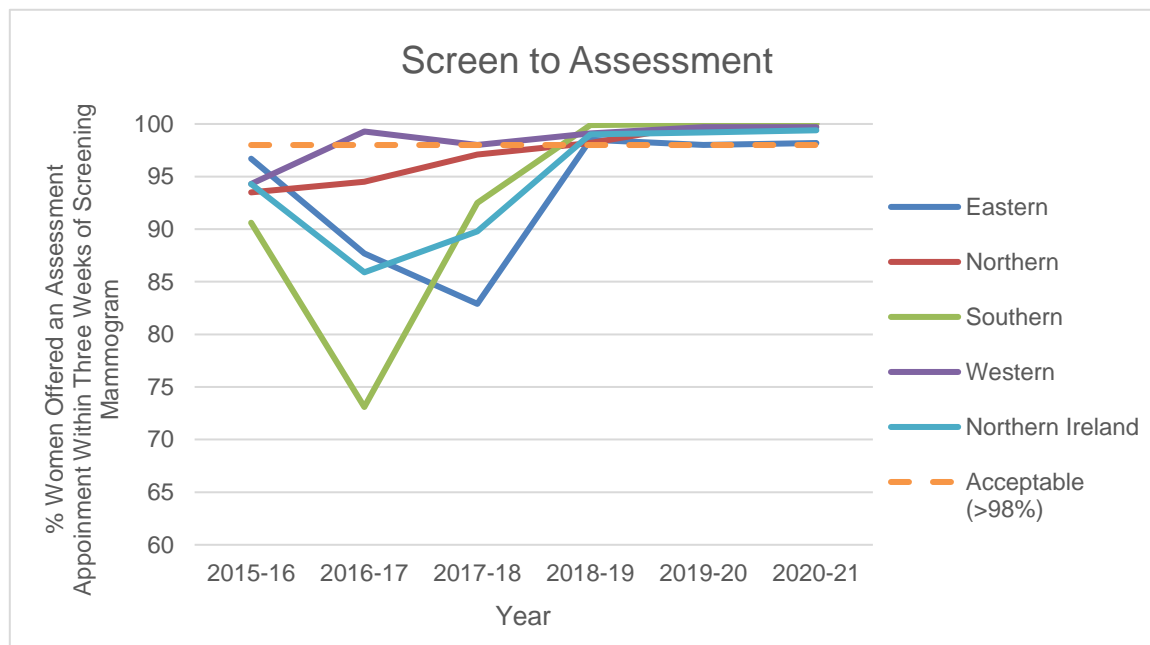


Figure 6: Percentage of Women Offered an Assessment Appointment within Three Weeks of Screening Mammogram

6.6 Diagnosis

6.6.1 Number of Cancers Detected

1,527 breast cancers were detected through screening in Northern Ireland between 2018-2021.

Between 2018 and 2021, 1,527 breast cancers were detected through screening in Northern Ireland. 1,245 (81.5%) of these were invasive cancers, 7 (0.5%) were micro-invasive cancers and 275 (18.0%) were non-invasive cancers. Table 12 outlines the number of screen-detected cancers overall and within each subcategory for each year during the period, as well as the cumulative total.

	2018-2019	2019-2020	2020-2021	2018-2021
Total cancers	527	520	480	1,527
Invasive	423	429	393	1,245
Micro-invasive	0	<5	6	7
Non-invasive	104	90	81	275
Unknown invasive status	0	0	0	0

6.6.2 Early Recall

Early Recall measures the proportion of women screened who are referred for further tests and invited back to assessment at an interval of at least one year (short-term recall).

During 2018-2021, 0.02% of women who were screened and referred for further tests were placed on short-term recall.

- Acceptable standard: <0.25% of women who are screened and referred for further tests should be placed on short-term recall.
- Achievable standard: <0.12% of women who are screened and referred for further tests should be placed on short-term recall.

Table 13 illustrates the proportion of women placed on short-term recall within each BSU and Northern Ireland overall during 2018 to 2021. Performance in each BSU and Northern Ireland overall consistently met the achievable threshold of <0.12%.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	0.02	0.00	0.01	0.01
Northern	0.05	0.01	0.03	0.03
Southern	0.00	0.01	0.00	0.00
Western	0.05	0.02	0.02	0.03
Northern Ireland	0.03	0.01	0.01	0.02

6.6.3 Non-Operative Diagnosis Rate

Non-Operative Diagnosis measures the proportion of women who have a non-operative diagnosis of cancer by needle histology or cytology after a maximum of two assessment clinic visits, as a proportion of all women screened diagnosed with breast cancer. This standard is reported separately for invasive and non-invasive cancers.

During 2018-2021, diagnosis was established prior to surgery for 99.5% of women with an invasive screen-detected cancer and 94.4% of women with a non-invasive screen-detected cancer.

It is important to minimise the number of operative procedures and to enable treatment planning in advance of surgery. To achieve this, the majority of women should receive a non-operative pathological diagnosis of cancer. However, some women may need to have a surgical biopsy i.e. a biopsy taken during surgery, if the diagnosis is difficult to establish beforehand.

Invasive Cancer

- **Acceptable standard:** $\geq 90.0\%$ of invasive screen-detected cancers should be diagnosed before surgery.
- **Achievable standard:** $\geq 95.0\%$ of invasive screen-detected cancers should be diagnosed before surgery.

Overall, 99.5% of invasive screen-detected cancers in Northern Ireland diagnosed between 2018 and 2021 had a non-operative pathological diagnosis of cancer, meeting the achievable standard of $\geq 95\%$. Table 14 shows non-operative diagnosis rates for invasive screen-detected cancers for each BSU and Northern Ireland overall during 2018 to 2021. The performance of all BSUs consistently exceeded the achievable standard of $\geq 95.0\%$, with 100.0% of women in both the Southern and Western Units receiving a non-operative diagnosis of invasive cancer throughout the three-year period.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	100.0	99.3	99.2	99.5
Northern	100.0	95.2	100.0	98.2
Southern	100.0	100.0	100.0	100.0
Western	100.0	100.0	100.0	100.0
Northern Ireland	100.0	98.7	99.7	99.5

Figure 7 shows trends in the proportion of invasive screen-detected cancers with a diagnosis established prior to surgery per BSU and Northern Ireland overall between 2015 and 2021.

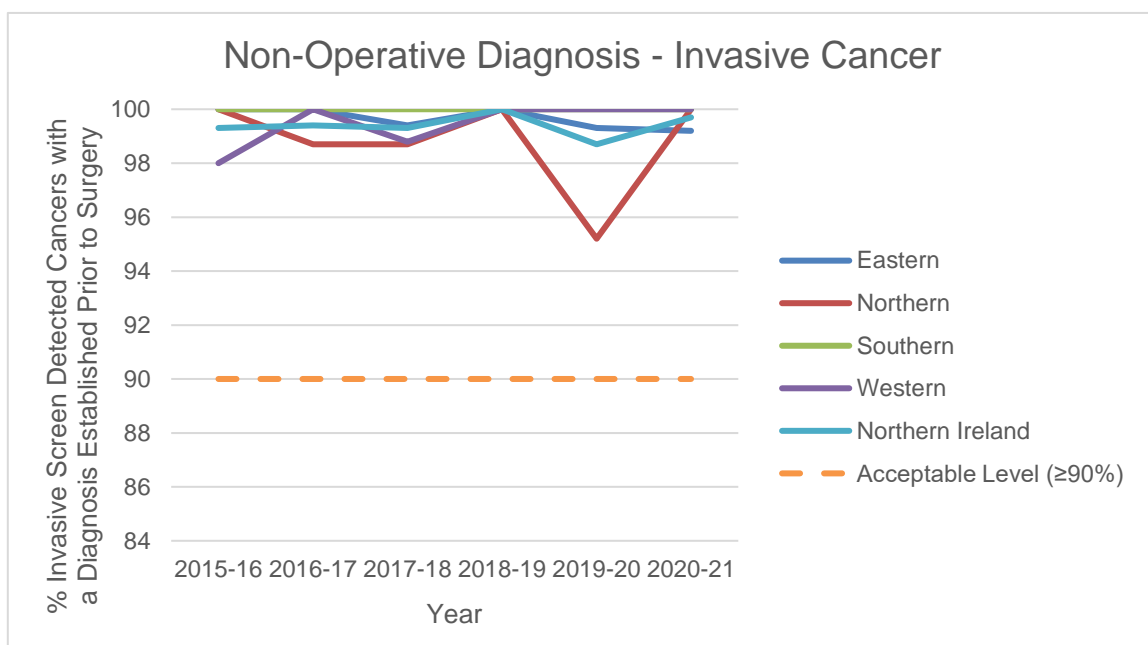


Figure 7: Percentage of Invasive Screen-Detected Cancers with a Diagnosis Established Prior to Surgery

Non-Invasive Cancer

- **Acceptable standard:** ≥85.0% of non-invasive screen-detected cancers should be diagnosed before surgery.
- **Achievable standard:** ≥90.0% of non-invasive screen-detected cancers should be diagnosed before surgery.

Overall, 94.4% of non-invasive screen-detected cancers in Northern Ireland diagnosed between 2018 and 2021 had a non-operative pathological diagnosis of cancer, meeting the achievable standard of

≥90.0%. Table 15 illustrates non-operative diagnosis rates for non-invasive screen-detected cancers for each BSU and Northern Ireland overall during 2018 to 2021. Performance dropped just below the acceptable level of ≥85.0% in the Western Unit in 2018-2019 (84.5%) and was 5.0% below the acceptable level in the Northern Unit in 2020-2021(80.0%). The three-year average for each BSU met the achievable standard.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	100.0	96.8	92.6	96.6
Northern	90.0	95.8	80.0	90.7
Southern	93.3	100.0	100.0	97.7
Western	84.6	94.4	100.0	92.5
Northern Ireland	92.2	96.4	94.9	94.4

6.6.4 Non-Invasive Cancer Detection

Non-Invasive Cancer Detection measures the number of non-invasive carcinoma (in situ) cancers that are detected per 1,000 women screened.

Between 2018-2021, the average non-invasive cancer detection rate was 2.0 per 1,000 women screened during a prevalent screen and 1.2 per 1,000 women screened during an incident screen.

Detection of non-invasive cancer at screening, predominantly Ductal Carcinoma in Situ (DCIS), particularly high-grade disease, is assumed to be a factor contributing to long-term reduction in mortality. It is believed to be good practice to detect and treat DCIS.

Prevalent

- **Acceptable standard:** ≥0.5 non-invasive cancers detected per 1,000 women screened.

The average non-invasive cancer detection rate from a prevalent screen was 2.0 per 1,000 eligible women screened, meeting the acceptable standard. Table 16 outlines non-invasive cancer detection rates from a prevalent screen during each year between 2018 and 2021, as well as the

three-year average for each BSU and Northern Ireland overall. Each BSU achieved an overall average which met the acceptable standard, although the Eastern Unit did not meet the acceptable standard during 2019-2020, achieving a non-invasive cancer detection rate of 0.3 per 1,000 women screened.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	2.1	0.3	1.7	1.4
Northern	3.8	2.5	0.5	2.2
Southern	1.3	2.2	1.6	1.7
Western	3.1	2.3	4.7	3.4
Northern Ireland	2.5	1.6	2.0	2.0

Incident

- **Acceptable standard:** ≥ 0.6 non-invasive cancers detected per 1,000 women screened.

The average non-invasive cancer detection rate from an incident screen was 1.2 per 1,000 women screened, meeting the acceptable standard. Table 17 outlines non-invasive cancer detection rates from an incident screen during each year between 2018 and 2021, as well as the three-year average for each BSU and Northern Ireland overall. The performance of all individual BSUs consistently exceeded the acceptable standard throughout the three-year period.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	0.9	1.5	1.2	1.2
Northern	1.7	1.4	0.9	1.3
Southern	0.8	0.9	1.7	1.1
Western	1.5	1.2	1.6	1.4
Northern Ireland	1.1	1.3	1.3	1.2

6.6.5 Standardised Detection Ratio for Invasive Cancer

Standardised Detection Ratio is the ratio of the observed number of invasive cancers to the expected number in the eligible population invited and screened, given the age distribution of the population.

The SDR for invasive cancers in Northern Ireland between 2018-2021 was 1.41 for prevalent screens and 1.49 for incident screens.

It is important to compare cancer detection between screening services with differing mean ages of screening populations, as the age of women screened is a major determinant of cancer detection rates. This is corrected for by using a standard detection ratio (SDR). This allows the observed invasive cancers to be compared to the expected number of invasive cancers, given the age distribution of the population. The expected number of cancers is based on applying criteria from the Swedish Two Counties randomised control trial which is used as a comparator of performance.¹ An SDR of one indicates the observed number of invasive cancers is the same as that expected; greater than one indicates a higher detection rate, and less than one a lower detection rate.

Prevalent Screen

- Acceptable standard: SDR \geq 1.00
- Achievable standard: SDR \geq 1.40

The overall SDR for invasive cancers from a prevalent screen in Northern Ireland between 2018 and 2021 was 1.41, meeting the achievable standard. Table 18 shows the SDR for invasive cancers from a prevalent screen each year between 2018 and 2021, as well as the three-year average, for each BSU and Northern Ireland overall.

Table 18: Standardised Detection Ratio Invasive Cancer by BSU and Northern Ireland Overall – Prevalent Screen

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	1.44	1.14	1.23	1.27
Northern	1.51	1.12	1.54	1.38
Southern	1.17	1.44	2.66	1.73
Western	0.97	1.31	1.97	1.39
Northern Ireland	1.28	1.23	1.73	1.41

Incident Screen

- Acceptable standard: SDR ≥ 1.00
- Achievable standard: SDR ≥ 1.40

The overall SDR for invasive cancers from an incident screen in Northern Ireland between 2018 and 2021 was 1.49, meeting the achievable standard. Table 19 shows the SDR for invasive cancers from an incident screen each year between 2018 and 2021, as well as the three-year average, for each BSU and Northern Ireland overall. The Northern Ireland average exceeded the achievable threshold during each year of the three-year period. All BSUs maintained at least an acceptable standard of performance throughout, while the Southern Unit consistently exceeded the achievable performance threshold.

Table 19: Standardised Detection Ratio Invasive Cancer by BSU and Northern Ireland Overall – Incident Screen

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	1.19	1.48	1.38	1.35
Northern	1.34	1.46	1.30	1.37
Southern	1.47	1.85	2.04	1.76
Western	1.71	1.72	1.38	1.61
Northern Ireland	1.40	1.58	1.49	1.49

6.6.6 Standardised Detection Ratio for Small Invasive Cancer

Standardised Detection Ratio Small Invasive Cancer is the ratio of the observed number of small invasive cancers (<15mm) to the expected number in the eligible population invited and screened, given the age distribution of the screened population.

This standard is measured for both prevalent and incident screens combined.

The SDR for small invasive cancers in Northern Ireland between 2018-2021 was 1.38.

Prevalent and Incident Screen:

- Acceptable standard: SDR ≥ 1.00
- Achievable standard: SDR ≥ 1.40

The overall SDR for small invasive cancers in Northern Ireland between 2018 and 2021 was 1.38, meeting the acceptable standard. Table 20 shows the SDR for small invasive cancers each year between 2018 and 2021, as well as the three-year average, for each BSU and Northern Ireland overall. All BSUs maintained an acceptable standard of performance throughout this three-year period, with the Southern Unit consistently exceeding the achievable threshold.

	2018-2019	2019-2020	2020-2021	2018-2021
Eastern	1.08	1.30	1.13	1.17
Northern	1.32	1.08	1.54	1.30
Southern	1.48	2.05	2.19	1.87
Western	1.40	1.49	1.20	1.37
Northern Ireland	1.28	1.41	1.44	1.38

6.6.7 Benign Biopsy Rates

Benign Biopsy Rate is a measure of the number of women per 1,000 women screened who had surgery for benign breast disease i.e. an open surgical biopsy with a benign or normal histological outcome.

0.7 women per 1,000 women screened during a prevalent screen had surgery for benign breast disease, while the equivalent figure for incident screens was 0.3 per 1,000 women screened.

The aim of this standard is to minimise harm to women due to unnecessary surgery. The number of open surgical biopsies performed because of screening that prove to be benign should be as low as possible.

Prevalent Screen

- Acceptable standard: <1.5 benign biopsies per 1,000 women screened.
- Achievable standard: <1.0 benign biopsies per 1,000 women screened.

The Northern Ireland average benign biopsy rate from prevalent screens between 2018 and 2021 was 0.7 per 1,000 women screened, meeting the achievable standard. Table 21 shows benign biopsy rates from prevalent screens for Northern Ireland overall during 2018 to 2021. Due to small numbers these data are not presented at BSU level.

Table 21: Benign Biopsy Rate (%) for Northern Ireland Overall – Prevalent Screen				
	2018-2019	2019-2020	2020-2021	2018-2021
Northern Ireland	1.0	0.7	0.3	0.7

Incident Screen

- Acceptable standard: <1.0 benign biopsies per 1,000 women screened.
- Achievable standard: <0.75 benign biopsies per 1,000 women screened.

The Northern Ireland average benign biopsy rate from incident screens between 2018 and 2021 was 0.3 per 1,000 women screened, meeting the achievable standard. Table 22 outlines benign biopsy rates from an incident screen for Northern Ireland overall during 2018 to 2021.

Table 22: Benign Biopsy Rate (%) for Northern Ireland Overall – Incident Screen				
	2018-2019	2019-2020	2020-2021	2018-2021
Northern Ireland	0.3	0.3	0.2	0.3

7. Very High-Risk Breast Screening Programme

Surveillance screening for women at very high risk (VHR) of developing breast cancer was introduced in Northern Ireland in 2013. In September 2020, the programme title was changed from the 'Higher Risk Breast Surveillance Screening Programme' to the 'Very High-Risk Breast Screening Programme (VHR BSP)', to reflect national guidance. This title change does not indicate any increase in cancer risk for those enrolled in the programme.

Women at VHR are defined as those with more than or equal to eight times the relative risk of developing breast cancer compared to women in the general population. A woman may be at VHR of developing breast cancer due to a genetic mutation, most commonly in the BRCA gene, or a result of previous radiotherapy to the chest area. Women may be referred into the VHR BSP by a specialist in genetics, family history or oncology, where their family or medical history indicate a higher risk of developing breast cancer. The VHR BSP offers breast imaging at an earlier age and on a more regular basis than the routine BSP. Women enrolled in the programme are invited for annual Magnetic Resonance Imaging (MRI), mammography, or both depending on their age and reason for referral, up until their 50th birthday. After this, some women will remain within the VHR BSP, while others will enter routine breast screening. The protocols for each risk category determine screening frequency.

The VHR BSP is provided regionally at Antrim Area Hospital, in the Northern HSCT. The VHR BSU at Antrim Area Hospital is managed by a lead radiologist, with input from other radiologists, radiographers and administrative support. The programme is managed in line with the Northern HSCT VHR Breast Screening Operational Policy and overseen by a VHR BSP Coordinating Group, chaired by the PHA Consultant Lead for the NI BSP. The VHR BSP Coordinating Group meets twice per year (and by exception) and includes representation from all HSCTs and disciplines involved in the delivery of the VHR BSP. A representative from BRCA Link NI (a voluntary organisation helping people to access information and support about BRCA genetic mutations, who were involved in the establishment of the VHR BSP), also sits on the VHR BSP

Coordinating Group. The programme is included in the QA Visits to the Northern Unit and in internal QA activities undertaken by the Northern HSCT.

National standards for the VHR BSP came into effect for data collected from April 2021 and will be reported in future annual reports.

8. Promoting Informed Choice

Although the overall uptake of breast screening in Northern Ireland is high, uptake rates within certain geographical areas and subpopulations of women remain consistently lower than the general population. During 2018 to 2021, the PHA Breast Screening Team, in partnership with other stakeholders, continued to work to ensure that all eligible women in Northern Ireland can make an informed choice about attending for breast screening and that the service is as accessible as possible.

Key actions to promote informed choice during 2018 to 2021 included:

Regional Group on Promoting Informed Choice in Breast Screening.

This group is chaired by the PHA Consultant Lead for the NI BSP and has representation from all BSUs, as well as HSCT Health Promotion staff. The remit of the group is to identify opportunities to promote informed choice in the NI BSP, with a particular focus on women from disadvantaged communities, women who have learning/physical/sensory disabilities, women from minority ethnic groups, older women and other women considered to have additional needs. The group also aims to identify and share good practice in relation to promoting informed choice within breast screening and to advise on the provision of information to the public and health care professionals.

Inclusion of Promoting Informed Choice meetings in QA Visits to BSUs.

The PHA Breast Screening Team include standalone meetings related to promoting informed choice in breast screening in the QA Visits to BSUs. A dedicated chapter on promoting informed choice is included within each QA visit report.

Working with the Women's Resource and Development Agency (WRDA).⁷

In 2015, the PHA commissioned the [WRDA](#), a local not-for-profit organisation, to raise awareness of the Breast, Cervical and Bowel Cancer Screening Programmes and to promote informed choice among individuals from communities and populations with historically lower

cancer screening uptake rates compared with the general population. The aim of the WRDA's programme of work is to provide individuals with sufficient information to enable them to make an informed decision about participating in cancer screening programmes. The WRDA recruit, train and support Peer Facilitators to deliver Educational Awareness Sessions to targeted service user groups, including; people from deprived areas, those from ethnic minorities, those from the LGBT+ community, homeless individuals and those with physical disabilities, learning disabilities or mental health issues. WRDA also carry out Bespoke Workshops for those latter groups with additional support needs.

Collaborating with HSCTs to ensure that comprehensive, up to date, information on screening is available on their website.

References

1. Public Health England. *NHS Breast screening programme screening standards valid for data collected from 1 April 2017*. [Internet] UK Government;2017. Available at: <https://www.gov.uk/government/publications/breast-screening-consolidated-programme-standards/nhs-breast-screening-programme-screening-standards-valid-for-data-collected-from-1-april-2017>
2. Association of Breast Surgery. *NHS BSP & ABS Audit of Screen Detected Breast Cancer*. [Internet] Available from: <https://associationofbreastsurgery.org.uk/professionals/audit/nhs-breast-screening-programme-audit/#:~:text=The%20annual%20NHS%20BSP%20%26%20ABS%20Audit%20of,recommended%20by%20the%20UK%20NHS%20Breast%20Screening%20Programme>
3. Marmot, M.G., Altman, G., Cameron, D.A. *et al.* (2012) The benefits and harms of breast cancer screening: an independent review. *Lancet* **380**(9855), 1778-1786.
4. World Health Organisation. *Cancer – Screening and early detection*. [Internet] World Health Organisation;2010. Available at: [Cancer - Screening and early detection \(who.int\)](http://www.who.int/cancer/screening)
5. NHS Digital. *NHS Breast Screening Programme England 2019-2020*. [Internet] NHS Digital;2021. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/breast-screening-programme>
6. NHS Digital. *NHS Breast Screening Programme England 2020-2021*. [Internet] NHS Digital;2022. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/breast-screening-programme>
7. Women’s Resource and Development Agency. *About Us*. [Internet] Available at: <https://wrda.net/about-us/>