

SOUTH EAST SCOTLAND CANCER NETWORK (SCAN) PROSPECTIVE CANCER AUDIT

BREAST CANCER 2023

COMPARATIVE AUDIT REPORT

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Document History

Version	Circulation	Date	Comments
Version 1	SCAN Breast Sign-Off Group	15/01/25	Results template sent in advance of Regional Sign off meeting (22/01/2025)
Version 2	Lead clinician	19/02/25	For lead clinician's commentary
Version 3	SCAN Breast Group	08/05/25	Draft 3 of report sent to SCAN Breast Group for comments and approval. Actions added for D&G in relation to TNM recording
Version 4	SCAN Group SCAN Governance Framework SCAN Action Plan Board Leads	23/05/25	Comments updated for final circulation QPI 11 and 17 results updated to include patients receiving peri-operative hormone therapy, erroneously omitted in first draft.
Version 4W	Published to the SCAN website	March 2026	Disclosure checked

Introduction

Welcome to the Breast Cancer Comparative Audit Report for Southeast Scotland for 2023.

The big new feature is availability of formal figures on breast cancer recurrence. Most of the QPI measures assess the process of breast cancer management while this looks at actual patient outcomes. This has not been straightforward, needed a lot of hard work and may require some tweaks but provides, for the first-time, real-world patient outcomes which can be compared within and between regions. This provides the opportunity to track improvements but also identify and deal with problems.

While results overall reveal no glaring problems, there are definite grounds for improvement. The existence of the QPIs helps with this to provide ammunition for arguing for more resource, notably for radiotherapy targets.

The evolution of QPIs also lets us address changes in practice, particularly to reduce morbidity of treatment, notably the minimisation of radiotherapy dose to the heart and unnecessary axillary node clearance.

Thanks to the clinical teams for the work demonstrated in these figures and to the audit teams for pulling them together.

Matthew Barber
SCAN Breast Group Chair
March 2025

Action Points for 2023

QPI	Action required	Lead	Date for follow up
6, 11 & 18	No action identified against the QPI result, but NHS D&G recording of TNM should be improved because D&G results are affected by missing TNM values.	Maria Bews-Hair Michael Charles	2025
8iii	Monitor going forward.	Lorna Bruce & SCAN Clinical Leads	2025
9	Fife action is in place to identify delays real-time and no further actions have been identified.	N/A	N/A
19	Continue to use QPIs as tool to argue for appropriate capacity.	Oncology Leads	2025
20	Continue to use QPIs as tool to argue for appropriate capacity. Investigate timelines to discern where delays may occur in the pathway.	Oncology Leads	2025

Action Points for 2022

QPI	Action required	Lead	Status
19 DIBH	Additional resource sought to provide this service for patients aged over 60 years.	Frances Yuille	Complete: DIBH is given to all patients (with left sided disease) under the age of 70

Breast Cancer QPI Attainment Summary 2023		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 6 Immediate Reconstruction Rate	(i) Immediate Reconstruction Rate	20	N 1 D 17	5.9%	N 2 D 26	7.7%	N 10 D 63	15.9%	N 38 D 151	25.2%	N 51 D 257	19.8%
	(ii) Immediate Reconstruction Rate (Within 6 Weeks of Treatment Decision)	90	N 1 D 1	100%	N 2 D 2	100%	N 5 D 8	62.5%	N 27 D 33	81.8%	N 35 D 44	79.5%
QPI 8 Minimising Hospital Stay for Mastectomy Without Reconstruction	(ii) Max stay of 1 night	By HB of Surgery	N 1 D 16	6.3%	N 30 D 37	81.1%	N 75 D 83	90.4%	N 124 D 204	60.8%	N 230 D 340	67.6%
		By HB of Residence	N 4 D 19	21.1%	N 32 D 41	78.0%	N 99 D 111	89.2%	N 104 D 190	54.7%	N 239 D 361	66.2%
	(iii) Day Case Surgery	By HB of Surgery	N 0 D 16	0.0%	N 3 D 37	8.1%	N 12 D 83	14.5%	N 3 D 205	1.5%	N 18 D 341	5.3%

Breast Cancer QPI Attainment Summary 2023			Target %	Borders		D&G		Fife		Lothian		SCAN	
	By HB of Residence	20	N 0 D 19	0.0%	N 3 D 41	7.3%	N 17 D 111	15.3%	N 3 D 190	1.6%	N 23 D 361	6.4%	
QPI 9 HER2 Status for Decision Making		90	N 95 D 99	96.0%	N 104 D 112	92.9%	N 178 D 207	86.0%	N 788 D 852	92.5%	N 1165 D 1270	91.7%	
QPI 11 Adjuvant Chemotherapy	(i) Hormone Receptor +ve, HER2 -ve & High NHS Predict / Oncotype Scores	80	N 7 D 14	50.0%	N 9 D 14	64.3%	N 18 D 27	66.7%	N 57 D 69	82.6%	N 91 D 124	73.4%	
	(ii) Triple -ve or HER2 +ve & High NHS predict Score	80	N 5 D 9	55.6%	N 4 D 9	44.4%	N 8 D 13	61.5%	N 24 D 36	66.7%	N 41 D 67	61.2%	
QPI 13 Re-excision Rates		<20	N 13 D 83	15.7%	N 16 D 61	26.2%	N 31 D 112	27.7%	N 153 D 747	20.5 %	N 213 D 1003	21.2%	
QPI 17 Genomic Testing		60	N 2 D 2	100%	N 4 D 8	50.0%	N 7 D 12	58.3%	N 19 D 26	73.1%	N 32 D 48	66.7%	
QPI 18 Neoadjuvant Chemotherapy	(i) Triple Negative or HER2 Positive, Stage II or III	80	N 14 D 16	87.5%	N 3 D 4	75.0%	N 33 D 42	78.6%	N 88 D 101	87.1%	N 138 D 163	84.7%	
	(ii) Triple -ve or HER2 +ve, Stage II or III with pathological complete response	30	N 9 D 14	64.3%	N 2 D 3	66.7%	N 12 D 33	36.4%	N 51 D 88	58.0%	N 74 D 138	53.6%	
QPI 19 Deep Inspiratory Breath Hold (DIBH) Radiotherapy		80	N 22 D 48	45.8%	N 11 D 27	40.7%	N 43 D 61	70.5%	N 234 D 353	66.3%	N 310 D 489	63.4%	
QPI 20 Optimal Time to Radiotherapy Treatment		80	N 27 D 62	43.5%	N 34 D 50	68.0%	N 33 D 85	38.8%	N 230 D 567	40.6%	N 324 D 764	42.4%	
QPI 21 Axillary Node Clearance		<10	N 2 D 3	66.7%	N 0 D 2	0.0%	N 3 D 7	42.9%	N 11 D 33	33.3%	N 16 D 45	35.6%	
QPI 22 Recurrence at 5 years following breast cancer treatment	(i) Local recurrence - Breast Conservation	<2.5	N 0 D 35	0.0%	N 0 D 62	0.0%	N 0 D 110	0.0%	N 11 D 570	1.9%	N 11 D 777	1.4%	
	(ii) Local recurrence - Mastectomy	<5	N 1 D 18	5.6%	N 0 D 33	0.0%	N 0 D 25	0.0%	N 7 D 132	5.3%	N 8 D 208	3.8%	
	(iii) Any recurrence - Breast Conservation or Mastectomy	<15	N 6 D 53	11.3%	N 10 D 95	10.5%	N 11 D 135	8.1%	N 68 D 702	9.7%	N 95 D 985	9.6%	

Numerator	% performance	Target met	Not met
Denominator			

Process and Methods

Cohort

This report covers patients newly diagnosed with breast cancer in SCAN between 01/01/2023 and 31/12/2023. The results contained within this report are presented by NHS board of staging and first treatment.

Dataset and Definitions

This report presents the performance of NHS Boards within the South East Scotland Cancer Network (SCAN) against Quality Performance Indicators (QPIs) developed by the Scottish Government in collaboration with the three regional cancer networks in Scotland, Information Services Division (ISD), and Healthcare Improvement Scotland.

The stated intention is that QPIs should be responsive to changes in clinical practice and emerging evidence, and, in keeping with the overarching aim of the cancer quality work programme, they should focus attention on areas most important in terms of improving survival and patient experience whilst reducing variance and ensuring safe, effective and person-centred cancer care.

Following a period of development, public engagement and finalisation, each set of QPIs is published by Healthcare Improvement Scotland.¹ Accompanying datasets and measurability criteria for QPIs are published on the ISD website.² NHS boards are required to report against QPIs as part of a mandatory, publicly reported programme at a national level.

The Breast Cancer QPIs were implemented from 01/01/2012 and have since undergone formal review in 2016, 2019 and 2022. The revisions based on the latest formal review were released in 2023. The v5 Breast Cancer QPIs were approved by both the National Cancer Quality Steering Group and the Scottish Cancer Strategic Board, published by Healthcare Improvement Scotland.

The standard QPI format is shown below:

QPI Title:	Short title of Quality Performance Indicator (for use in reports etc.)	
Description:	Full and clear description of the Quality Performance Indicator.	
Rationale and Evidence:	Description of the evidence base and rationale which underpins this indicator.	
Specifications:	Numerator:	Of all the patients included in the denominator those who meet the criteria set out in the indicator.
	Denominator:	All patients to be included in the measurement of this indicator.
	Exclusions:	Patients who should be excluded from measurement of this indicator.
	Not recorded for numerator:	Include in the denominator for measurement against the target. Present as not recorded only if the patient cannot otherwise be identified as having met/not met the target.
	Not recorded for exclusion:	Include in the denominator for measurement against the target unless there is other definitive evidence that the record should be excluded. Present as not recorded only where the record cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
	Not recorded for denominator:	Exclude from the denominator for measurement against the target. Present as not recorded only where the patient cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
Target:	Statement of the level of performance to be achieved.	

¹ QPI documents are available at www.healthcareimprovementscotland.org

² Datasets and measurability documents are available at www.isdscotland.org

Data Collection and Analysis

Data was collected and analysed by the Cancer Audit teams in each SCAN Health Board according to the measurability document provided by PHS. SCAN data was collated by Lincy Thanaslas, Tolu Osinjolu and Hazel Hanratty, Cancer Information Analysts in Lothian.

Data capture is focused around the weekly multidisciplinary meetings, ensuring that data covering patient referral, investigations, and diagnosis is being picked up through routine process.

Oncology data is obtained largely from electronic systems, including downloads from ARIA (within the radiotherapy department) and ChemoCare for chemotherapy data. However, processes vary between the five separate hospitals providing a breast service in SCAN. Recent years have seen significantly less reliance on the need to access case notes for data collection. Lothian has now ceased routine use of paper case notes; however, the process remains dependent on audit staff for capture and entry of most of the data, and for quality checks.

Patients were identified through registration at weekly multidisciplinary team meetings, including patients referred from the Scottish Breast Screening Programme. All SCAN Health Boards recorded the audit data in a national cancer audit database: eCase.

Lothian recurrence data (patients diagnosed in 2017) required access to audit data previously collected on TRAK, the Lothian hospital administration system.

It should be noted that Borders, Dumfries & Galloway, and Fife Health Boards each have one hospital providing a specialist service for the diagnosis and treatment of Breast cancer, whereas in Lothian there are two: St John's (SJH) in Livingston, West Lothian, and the Western General Hospital (WGH) in Edinburgh.

Each of the five hospitals provides surgery and chemotherapy, with radiotherapy being provided centrally in the Edinburgh Cancer Centre. Patients living closer to either Carlisle or Dundee may opt to have oncology treatment out with the SCAN region. Collecting complete audit data for these patients remains a challenge, although numbers are small.

Lead Clinicians and Audit Personnel

SCAN Region	Hospital	Lead Clinician	Audit Support
NHS Borders	Borders General Hospital	Mr Shareef Al-Sabounchi	Suzanne Tunmore
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Ms Maria Bews-Hair	Teresa Quintela Jennifer Bruce
NHS Fife	Queen Margaret Hospital	Mr Christopher Cartlidge	Julie Whyte
SCAN & NHS Lothian	St John's Hospital Western General Hospital	Mr Matthew Barber Mr Oliver Young	Tolu Osinjolu Lincy Thanaslas Hazel Hanratty

Data Quality

Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with breast cancer recorded in the audit) is made by comparison with the Scottish Cancer Registry five-year average data, from 2017 to 2021. High levels of case ascertainment provide confidence in the completeness of the audit recording and contribute to the reliability of results presented. Levels greater than 100% may be attributable to an increase in incidence. An allowance should be made when reviewing results where numbers are small and variation may be due to chance.

Cancer Registry totals by institution of diagnosis - all breast cancer referrals (screen-detected* and symptomatic)

*Patients diagnosed through the South East Scotland Breast Screening Service are counted under HB of first treatment

	Borders	D&G	Fife	Lothian	SCAN
2018	70	111	207	957	1346*
2019	68	96	203	960	1327
2020	75	92	230	682	1079
2021	91	98	209	1025	1423
2022	103	107	224	1024	1458
Total	407	504	1073	4648	6632
5-year average	81.4	100.8	214.6	929.6	1326.4

*Includes 1 patient of unknown SCAN HB in 2018

Number of cases recorded in audit: breast cancer patients diagnosed 01/01/2023 to 31/12/2023

	Borders	D&G	Fife	Lothian	SCAN
SCAN Audit 2023	113	120	234	1006	1473
2023 Cases from SCAN Audit as % of 5-year average of cancer registry cases	138.8%	119.0%	109.0%	108.2%	111.1%

Case Ascertainment Methodology

Data tables were provided by the Cancer Registry for the years 2018 – 2022 for all residents of the SCAN region with a diagnosis of a new primary breast cancer. The PHS analyst removed duplicate records for patients with bilateral disease or multiple tumours, as well as patients treated privately, to ensure figures were comparable. These were entered into the table above, by year of diagnosis, and by the most probable HB of audit, i.e. patients diagnosed through the South East Scotland Breast Screening Service were counted according to where they commenced treatment.

A high proportion of new patients are diagnosed via screening, with impalpable tumours requiring specialist equipment for investigations. These patients are frequently referred to the Edinburgh Breast Unit for staging rather than their local specialist unit.

These factors, and other instances of cross-border flows between HBs (sometimes as a result of patient preference) means that the overall estimate of case ascertainment for SCAN should be regarded as more reliable than the individual figure for each HB.

The overall number of women diagnosed through the South East Scotland Breast Screening Service was lower during the COVID-19 pandemic. This is the most likely reason for reduced case ascertainment during 2020. SCAN data indicates that the number of patients referred through non-screening routes was slightly higher during this period.

Quality Assurance

QA of the breast cancer data was carried out in 2019; all SCAN HBs attained more than 95% accuracy

Clinical Sign-off

This report compares data from reports prepared for individual hospitals and signed off as accurate following review by the lead clinicians from each service. The collated SCAN results are reviewed jointly by the lead clinicians, to assess variances and provide comments on results:

- Individual HB results are reviewed and signed-off locally.
- Collated results are presented and discussed by lead clinicians at the Edinburgh Breast Unit.
- The final draft of this SCAN regional comparative report is circulated to members of the SCAN Breast Group for final comments.

Actions for Improvement

After final sign-off, the process stipulates that this report should be sent to Clinical Governance groups with action plans for completion at Health Board level, if appropriate.

The report is uploaded to the SCAN website, together with action plans (where applicable), once it has been fully signed off and checked for any potentially disclosive material.

QPI Results

QPI 6 (i): Immediate Reconstruction Rate

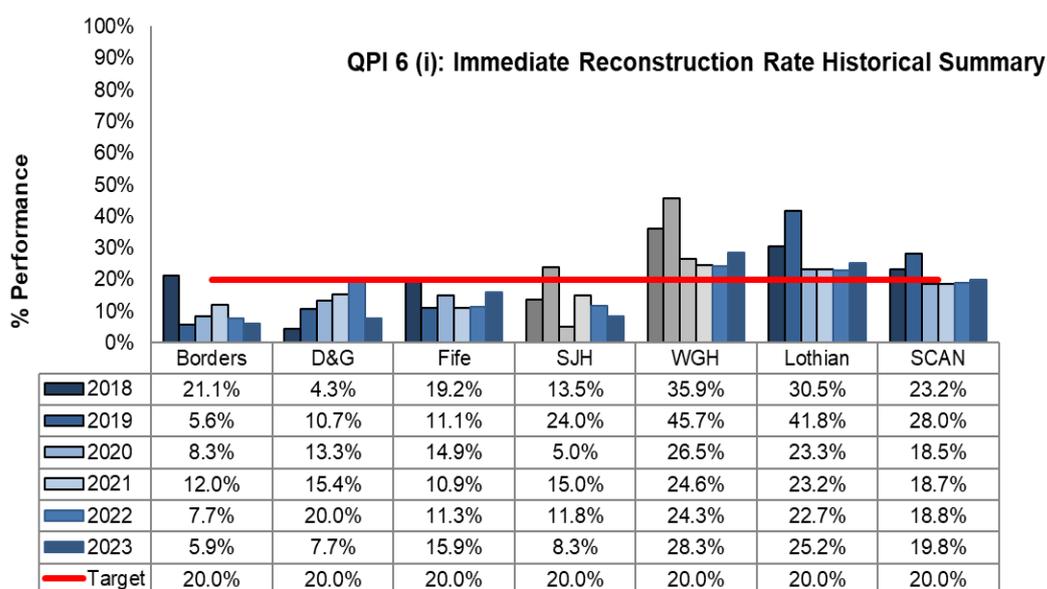
Target = 20%

Numerator = Number of patients with breast cancer undergoing immediate breast reconstruction at the time of mastectomy

Denominator = All patients with breast cancer undergoing mastectomy

Exclusions = Patients with M1 disease and males

Target = 20%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	96	94	171	88	767	855	1216
Numerator	1	2	10	2	36	38	51
Denominator	17	26	63	24	127	151	257
Not recorded for numerator	0	0	0	0	1	1	1
Not recorded for exclusion	0	18	0	0	1	1	19
Not recorded for denominator	0	1	0	1	0	1	2
% Performance	5.9%	7.7%	15.9%	8.3%	28.3%	25.2%	19.8%



Comments

The stated intention of this QPI is to provide evidence that this service is available to all patients fit enough for immediate reconstruction. In SCAN the procedure is available as required.

Borders: 16 patients did not have immediate reconstruction. All patients were counselled on the choice of immediate reconstruction at time of mastectomy during pre-op surgical clinic consultations. The additional waiting time for mastectomy & immediate reconstruction will influence patient decision for simple mastectomy. Of these 16 patients, 11 received adjuvant radiotherapy.

Dumfries & Galloway: 24 patients did not have immediate reconstruction. Reasons were patient preference, co-morbidities/BMI, inflammatory cancer or locally advanced and heavily node positive. For 3 cases there was no discussion documented. Note 18 patients had not recorded values for TNM.

Fife: Performance against this target has increased by 4.6% on the previous year. The main reasons for no immediate reconstruction were patient choice, potential for post-mastectomy radiotherapy, co-morbidities/frailty, clinical decision based on extent of disease, high BMI, smoking history and high anaesthetic risk.

SCAN: Did not meet the target with 19.8% of patients (51/257) undergoing immediate reconstruction. However, the 2023 result showed an improvement compared to last year (18.8%). Over time, increasing breast conservation options has meant that those having mastectomy have more disease and therefore receive more adjuvant therapy (particularly RT) which can affect result of reconstruction.

Action: No action identified against the QPI result, but NHS D&G recording of TNM should be improved.

QPI 6 (ii): Immediate Reconstruction Rate (Within 6 Weeks of Treatment Decision)

Target = 90%

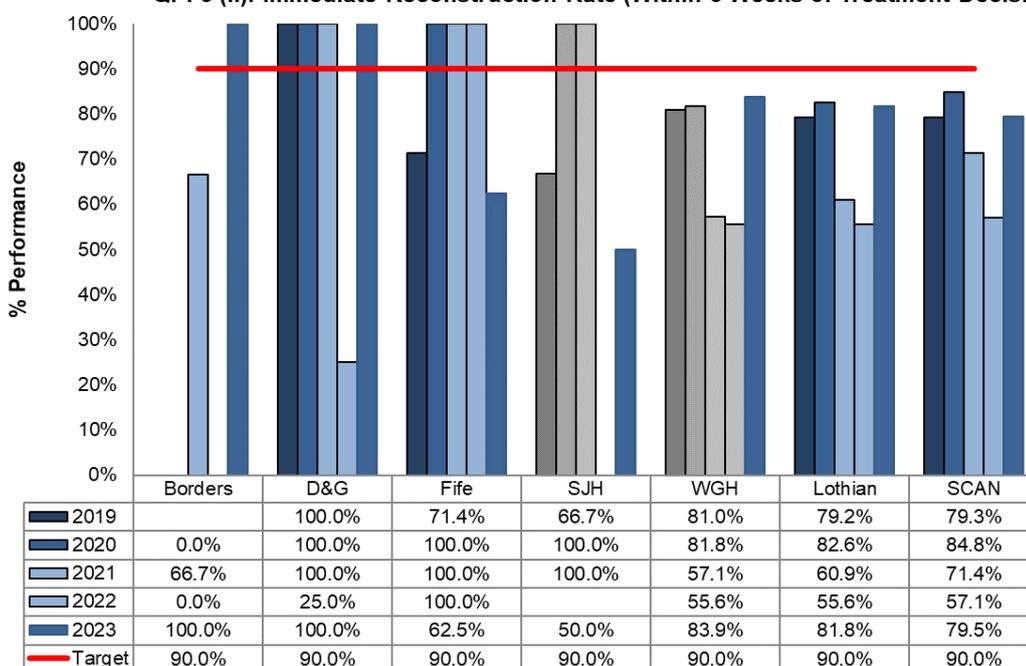
Numerator = Number of patients with breast cancer undergoing immediate breast reconstruction at the time of mastectomy & within 6 weeks (42 days) of treatment decision

Denominator = All patients with breast cancer undergoing immediate reconstruction at time of mastectomy

Exclusions = Patients with M1 disease, males, and patients undergoing neoadjuvant chemotherapy

Target = 90%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	112	118	226	110	863	973	1429
Numerator	1	2	5	1	26	27	35
Denominator	1	2	8	2	31	33	44
Not recorded for numerator	0	0	0	0	1	1	1
Not recorded for exclusion	0	2	0	0	0	2	2
Not recorded for denominator	0	0	0	1	3	4	4
% Performance	100.0%	100.0%	62.5%	50.0%	83.9%	81.8%	79.5%

QPI 6 (ii): Immediate Reconstruction Rate (Within 6 Weeks of Treatment Decision)



Comments

Fife: Of the 3 cases where the QPI was not met, 2 had DIEP flap reconstructions outwith Fife (1 only missing the target by three days). 1 patient had a BRCA mutation and was found to have an incidental breast cancer at the time of risk reducing surgery.

Lothian: The target was not met in 5 cases, for 3 of those, the delay was due to discussions with plastic surgeons about reconstruction options and a further 2 patients were awaiting further biopsies to be reviewed

SCAN: 2023 results show an improvement compared to the previous 2 years. Results decreased annually following the covid pandemic and demonstrate continued pressures on Plastic surgery departments as Diep flap reconstructions require the involvement of Plastics.

Action: No action identified.

Types of Reconstruction	Borders		D&G		Fife		Lothian		SCAN	
	N	%	N	%	N	%	N	%	N	%
Implant with mesh/ADM (prepectoral)	1	100	0	-	5	50.0	8	19.5	14	26.9
Implant with mesh/ADM (subpectoral)	0	-	0	-	1	10.0	0	-	1	1.9
Expander/Implant alone NOS	0	-	0	-	1	10.0	19	46.3	20	38.5
LD flap (no implant)	0	-	0	-	0	-	3	7.3	3	5.8
Free abdominal flap	0	-	2	100	3	30.0	7	17.1	10	19.2
Unknown immediate reconstruction	0	-	0	-	0	-	1	2.4	1	1.9
Other free flap	0	-	0	-	0	-	2	4.9	2	3.8
LD flap (with implant)	0	-	0	-	0	-	1	2.4	1	1.9
Total	1	100	2	100	10	100	41	100	52	100

QPI 8 (ii): Minimising Hospital Stay - Max Stay of 1 Night

(Mastectomy Without Reconstruction) Target = 60%

(Based on SMR01 data and provided to Boards by PHS via the ACaDMe system)

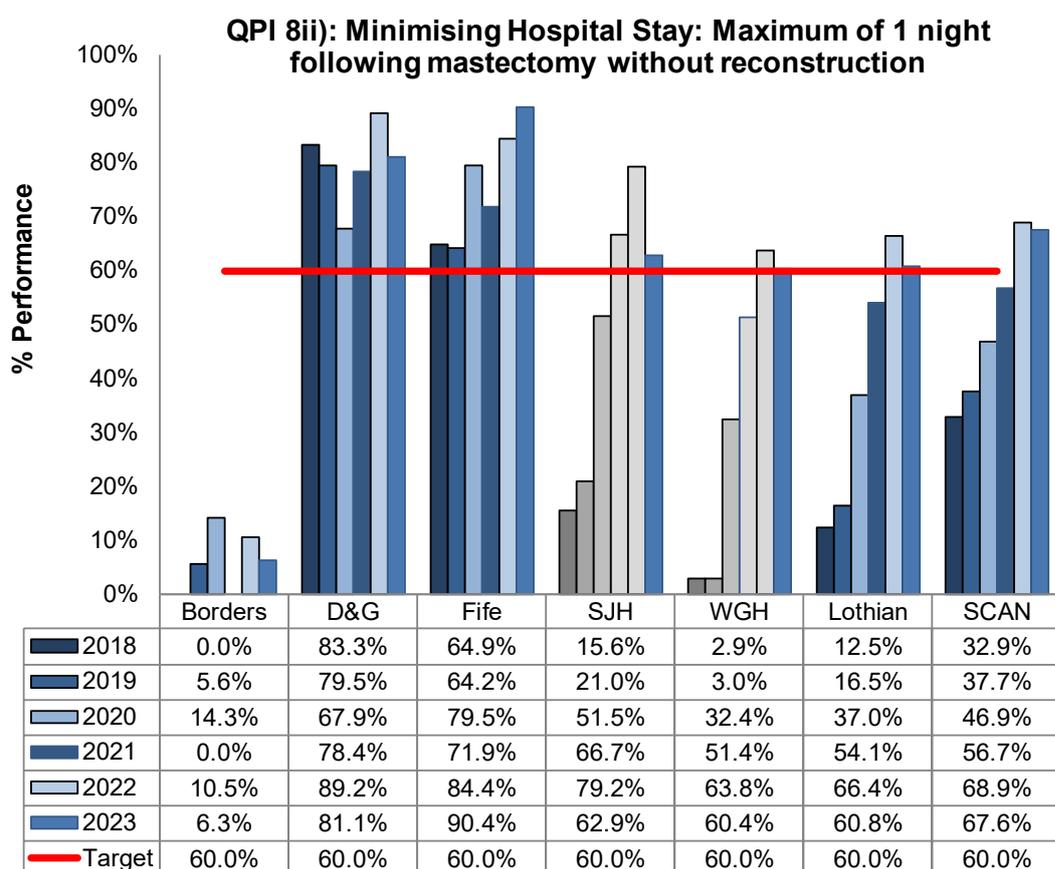
Numerator = Number of patients with breast cancer undergoing mastectomy (without reconstruction) with a maximum hospital stay of 1 night following their procedure

Denominator = All patients with breast cancer undergoing mastectomy (without reconstruction)

Exclusions = All patients undergoing breast reconstruction

By Health Board of Surgery Target = 60%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	1	30	75	22	102	124	230
Denominator	16	37	83	35	169	204	340
% Performance	6.3%	81.1%	90.4%	62.9%	60.4%	60.8%	67.6%

By Health Board of Residence (For info)	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	4	32	99	10	94	104	239
Denominator	19	41	111	37	153	190	361
% Performance	21.1%	78.0%	89.2%	27.0%	61.4%	54.7%	66.2%



Comments

Borders: There is currently an action plan being taken forward by the team at BGH to manage patient expectations in the pre-operative clinic and counsel patients for Day 1 discharge with or without a surgical drain in-situ.

Action: No further actions identified.

QPI 8 (iii): Minimising Hospital Stay – Day case surgery

(Mastectomy Without Reconstruction) Target = 60%

(Based on SMR01 data and provided to Boards by PHS via the ACaDMe system)

Numerator = Number of patients with breast cancer undergoing mastectomy (without reconstruction) as a day case (23hrs).

Denominator = All patients with breast cancer undergoing mastectomy (without reconstruction)

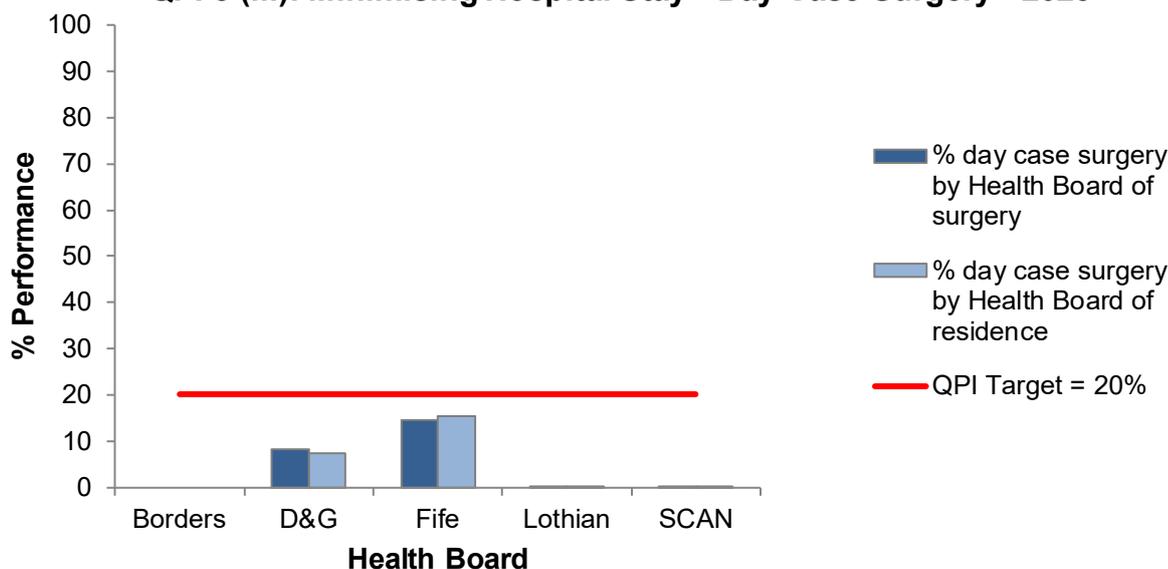
Exclusions = All patients undergoing breast reconstruction

By Health Board of Surgery Target = 20%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	0	3	12	0	3	3	18
Denominator	16	37	83	36	169	205	341
% Performance	0.0%	8.1%	14.5%	0.0%	1.8%	1.5%	5.3%

By Health Board of Residence (For info)	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	0	3	17	0	3	3	23
Denominator	19	41	111	35	155	190	361
% Performance	0.0%	7.3%	15.3%	0.0%	1.9%	1.6%	6.4%

Note: it appears that code B30.1 (implant based reconstruction) is not an exclusion so this has been submitted to the QPI Query Log for review nationwide.

QPI 8 (iii): Minimising Hospital Stay - Day Case Surgery - 2023



Comments

Borders: There is currently an action plan being taken forward by the team at BGH to manage patient expectations in the pre-operative clinic and counsel patients for Day 1 discharge with or without a surgical drain in-situ.

D&G: 34 cases at DGRI were greater than 0 day stay (of which 27 stayed 1 day). Operating lists were in the afternoon which made same day surgery across our large region challenging but as of 09/12/2024 the Breast lists will be in the morning and this should increase the possibility of Day-stay Mastectomies

Fife: This is the first year reporting this new QPI and Fife are not far off the 20% target. As this is a change in practice, Fife are hoping that performance improves as staff become more familiar with the strategy.

Lothian: This is a new target, we are trying to address theatre list timings and the issue of seroma cavity, to allow improvement of results. Progress is likely to be slow.

Action: Monitor going forward.

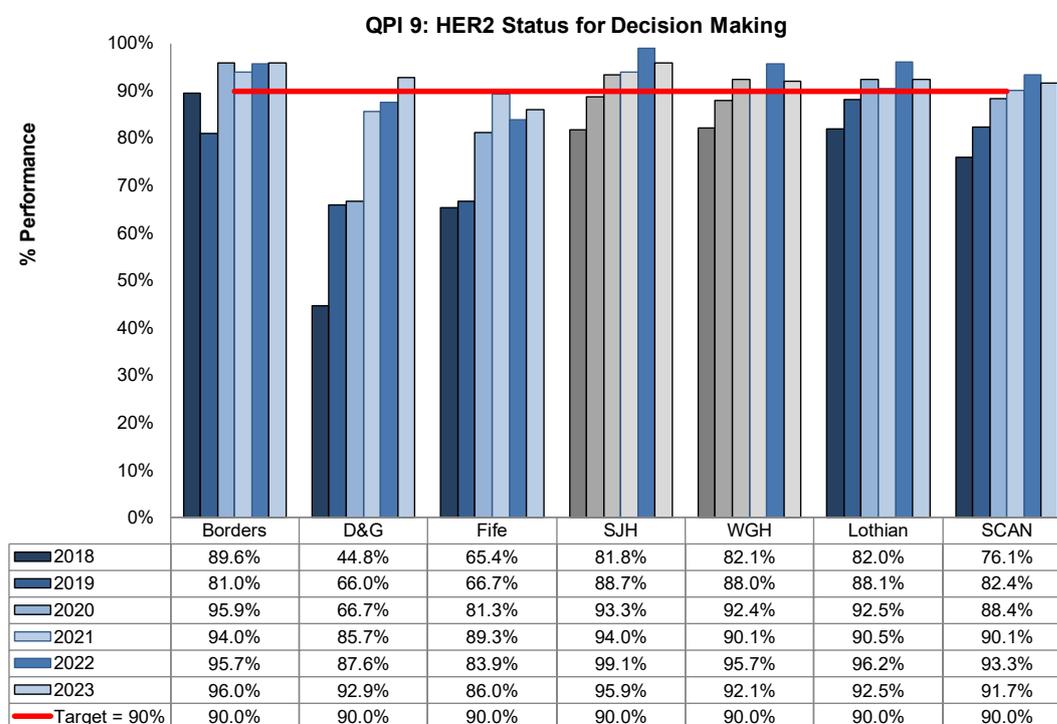
QPI 9: HER2 Status for Decision Making Target = 90%

Numerator = Number of patients with invasive breast cancer for whom the HER2 status (as defined by IHC) is available within 14 days of the core biopsy

Denominator = All patients with invasive breast cancer

Exclusions = Patients for whom no invasion is present in the core biopsy

Target = 90%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	14	8	27	15	139	154	203
Numerator	95	104	178	93	695	788	1165
Denominator	99	112	207	97	755	852	1270
Not recorded for numerator	0	0	0	0	7	0	7
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	96.0%	92.9%	86.0%	95.9%	92.1%	92.5%	91.7%



Comments

Fife: There has been a slight improvement in performance compared to 2022 (83.9%). Of the 29 outliers, 16 cases were delayed due to FISH analysis; and for the remainder, there appears to have been a delay in the sample initially being sent to Lothian (as per 'sample received' dates recorded on Lothian SCI-Store). It has proved difficult to explore these delays retrospectively so, beginning October 2024, Fife will be actively investigating any delays in 'real time' on a month-by-month basis.

SCAN: Met the target, with 91.7% of patients (1165/1270) having their HER2 status available within 14 days. This continues the good performance that has been seen in the last 3 years, and the Pathology team in Edinburgh is to be congratulated.

Action: Fife action is in place to identify delays real-time and no further actions have been identified.

QPI 11 (i): Adjuvant Chemotherapy (Hormone Receptor +ve, HER2 -ve & High nhs.predict or Oncotype Scores)

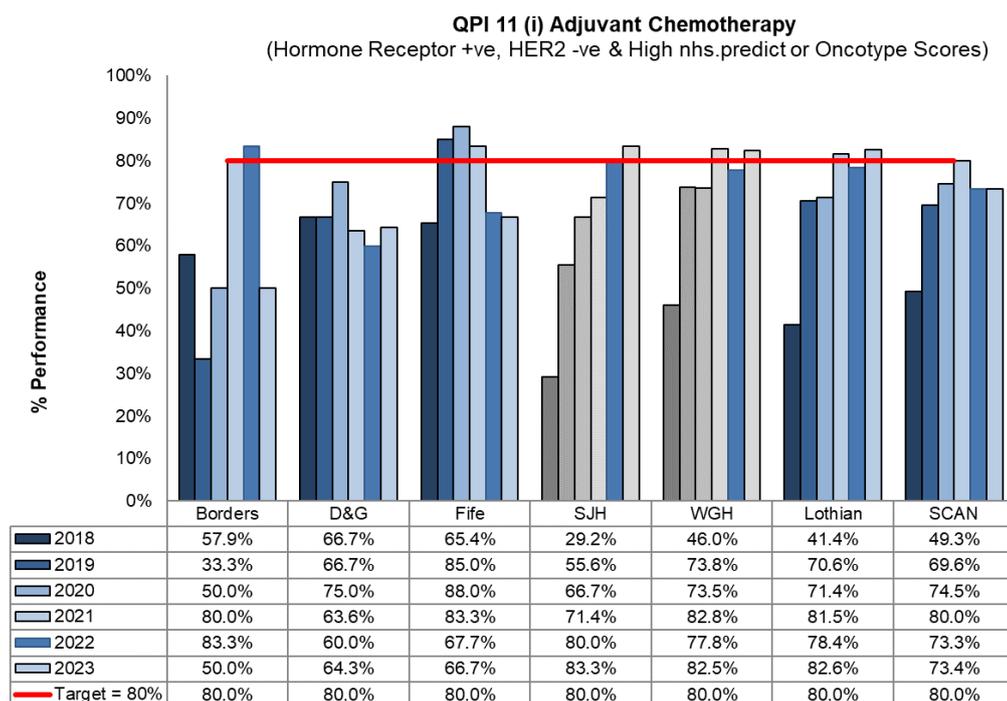
Target = 80%

Numerator = Number of patients with hormone receptor (ER plus/minus PR) positive, HER2 negative breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years and/or high risk genomic assay score that undergo adjuvant chemotherapy

Denominator = All patients with hormone receptor (ER plus/minus PR) positive, HER2 negative breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years and/or high risk genomic assay score

Exclusions = Patients taking part in trials of chemotherapy treatment, patients who have had neo-adjuvant chemotherapy, patients with M1 disease and patients with a low-risk genomic assay score

Target = 80%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	99	106	207	100	837	937	1349
Numerator	7	9	18	10	47	57	91
Denominator	14	14	27	12	57	69	124
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	9	0	0	0	0	9
Not recorded for denominator	0	0	0	0	2	2	2
% Performance	50.0%	64.3%	66.7%	83.3%	82.5%	82.6%	73.4%



Comments

In addition to the patients who are explicitly excluded from the denominator in the definition, some patients are also excluded from the denominator due to the specification of the nhs.predict algorithm which is used to calculate the denominator. The R Studio version of nhs.predict used to calculate scores for the audit was developed by Dr Peter Hall and colleagues. The algorithm excludes:

Patients younger than 25 and older than 85, patients who have in-situ disease only; patients whose tumour size or involved node count is not applicable, not assessable or not recorded; and patients who have received neo-adjuvant hormone/chemotherapy therapy. NHS.predict has not been validated for use in these cases, relying as it does on pathological tumour size for the calculation. The changes brought on by pre-operative

chemo/hormone therapy don't sit well with the calculations. For numbers of patients having neoadjuvant treatment, please see the Key Categories table in the appendix.

Borders: The target was not met showing a shortfall of 30% (7 patients). 6 patients declined adjuvant chemotherapy. 1 patient did not receive adjuvant chemotherapy based on clinical decision due to Grade 1 strongly ER positive cancer, the benefit from chemotherapy here would be likely small (PREDICT over-estimated risk & case was discussed with Oncology colleagues in Lothian).

Dumfries & Galloway: 5 patients elected to have adjuvant hormone treatment but not chemotherapy. Note 9 patients had TNM not recorded.

Fife: 9 patients did not receive chemotherapy; 5 declined chemotherapy; a clinical decision was made in 3 cases following review in the Oncology clinic; and the decision was made at MDT for the remaining case due to age/frailty.

SCAN: Did not meet the target, with 73.4% of patients (91/124) in the high-risk category defined by the QPI undergoing adjuvant chemotherapy. Compared to 2022 result (73.3%), there is a slight increase.

Action: No action identified against the QPI result, but NHS D&G recording of TNM should be improved.

QPI 11 (ii): Adjuvant Chemotherapy (Triple -ve or HER2 +ve & High nhs.predict Score)

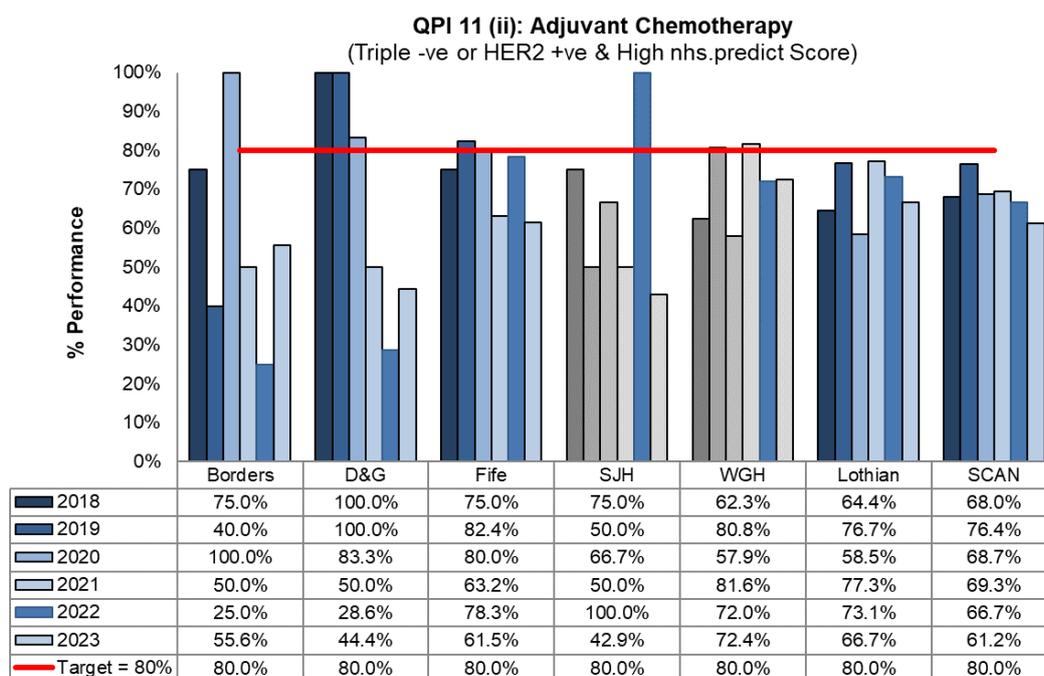
Target = 80%

Numerator = Number of patients with triple negative or HER2 positive breast cancer with a >5% overall survival benefit of chemotherapy treatment predicted at 10 years, who undergo adjuvant chemotherapy

Denominator = All patients with triple negative or HER2 positive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years

Exclusions = Patients taking part in trials of chemotherapy treatment, patients who have had neo-adjuvant chemotherapy, and patients with M1 disease.

Target = 80%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	105	111	221	105	865	970	1406
Numerator	5	4	8	3	21	24	41
Denominator	9	9	13	7	29	36	67
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	8	0	0	0	0	8
% Performance	55.6%	44.4%	61.5%	42.9%	72.4%	66.7%	61.2%



Comments

It should be noted that this group covers those patients who have not received neoadjuvant chemotherapy for higher-risk disease (see QPI 18). They are therefore already patients for whom a decision has been made not to give chemotherapy in the neoadjuvant setting and who are more likely to have contraindications to adjuvant treatment.

Borders: The target was not met showing a shortfall of 24.4% (4 patients). 2 patients declined adjuvant chemotherapy. 1 patient was diagnosed with another concurrent cancer & was not fit for chemotherapy. For 1 patient the MDT agreed patient would not manage adjuvant chemotherapy due to cognitive impairment.

Dumfries & Galloway: 5 cases. 1 had options discussed (by surgeons and oncologists) elected for surgery then declined all adjuvant treatment, 1 decided against in light of age and significant comorbidities, 1 patient opted to proceed then decided against. 1 patient was discussed at wider MDT and Med Oncology colleagues in Edinburgh, had a rare specific subtype of breast cancer with expected good prognosis felt to

have very low benefit from chemo, 1 had SACT discussed but was not pursued in light of multiple significant comorbidities including ongoing treatment for another concurrent malignancy.

Note 8 patients had TNM not recorded

Fife: Of the 5 cases not meeting this QPI, 3 patients declined chemotherapy and 1 was a clinical decision due to co-morbidities/poor PS; local guidelines recommended no treatment for the other as stage was only T1b - this patient was reviewed in Oncology clinic and indicated she also would have declined if offered.

Lothian: 12 patients had no adjuvant chemotherapy. There are clear reasons why treatment was not undergone in all 12 cases: 6 patients declined chemotherapy; 4 patients were not fit enough to pursue it in light of co-morbidities and for 2 patients it was not recommended in MDM.

SCAN: Did not meet the target, with 61.2% of patients (41/67) falling under the scope of this QPI having adjuvant chemotherapy.

Action: No action identified against the QPI result, but NHS D&G recording of TNM should be improved.

QPI 13: Re-excision Rates

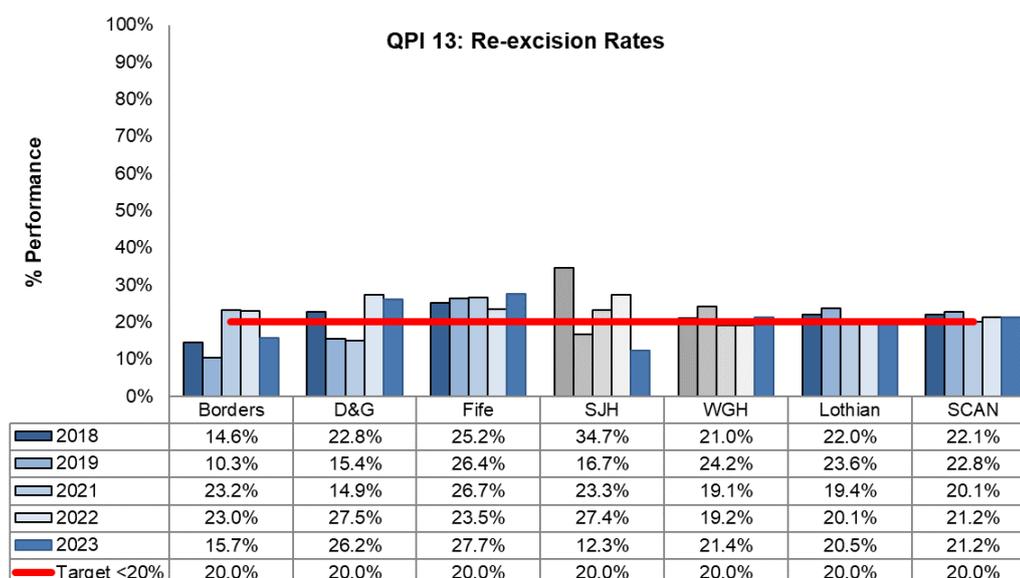
Target <20%

Numerator = Number of patients with breast cancer (invasive or in situ) having breast conservation surgery who undergo re-excision or mastectomy following initial breast surgery
(N.B. where the initial surgery is an excision biopsy, a WLE as a second procedure is not counted as a re-excision)

Denominator = All patients with breast cancer (invasive or in situ) having conservation surgery as their initial or only breast surgery

Exclusions = No exclusions

Target < 20%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	30	59	122	64	220	284	807
Numerator	13	16	31	9	144	153	213
Denominator	83	61	112	73	674	747	1003
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	1	0	1	1	2	3
% Performance	15.7%	26.2%	27.7%	12.3%	21.4%	20.5%	21.2%



Comments

Dumfries & Galloway: 16 cases had re-excision - all re-excisions were reviewed with no specific issues raised.

Fife: With the exception of one case, there were positive margins following the initial surgical procedure. The other case required further surgery to remove a marker clip (not identified at initial surgery) to ensure there was no residual disease associated with this.

SCAN: Again, came close to meeting the target, with 21.2% of patients (213/1003) having a re-excision. The new LCIS only exclusion made no difference to the figures. This measure represents a balance between trying to avoid reoperation while trying to minimise cosmetic impact of taking too much breast tissue. There is no effective intraoperative technique for assessing margins.

Action: No action identified.

QPI - 13 - Additional: Breakdown of Surgical Procedures (first surgery) across NHS Boards.

Proportion of patients undergoing each type of surgical procedure (first surgery).

Breakdown of Surgical Procedures	Borders		D&G		Fife		Lothian		Total	
	N	%	N	%	N	%	N	%	N	%
Mastectomy	0	0.00%	3	3.37%	1	0.56%	69	7.67%	73	5.77%
Other	0	0.00%	0	0.00%	2	1.13%	1	0.11%	3	0.24%
Axillary Surgery Alone	0	0.00%	1	1.12%	4	2.26%	0	0.00%	5	0.39%
Excision Biopsy	0	0.00%	0	0.00%	0	0.00%	10	1.11%	10	0.79%
Conservation Surgery	77	77.00%	60	67.42%	106	59.89%	696	77.3%	939	74.17%
Therapeutic Mammoplasty	6	6.00%	0	0.00%	3	1.69%	51	5.67%	60	4.74%
Simple Mastectomy	16	16.00%	22	24.72%	53	29.94%	45	5.00%	136	10.74%
Skin Sparing Mastectomy	0	0.00%	2	2.25%	7	3.95%	22	2.44%	31	2.45%
Nipple Sparing Mastectomy	1	1.00%	0	0.00%	0	0.00%	6	0.67%	7	0.55%
Therapeutic Mammoplasty – Displacement	0	0.00%	1	1.12%	1	0.56%	0	0.00%	2	0.16%
Not Recorded	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	100	100.00%	89	100%	177	100.00%	900	100.00%	1266	100.00%

QPI 17: Genomic Testing Target = 60%

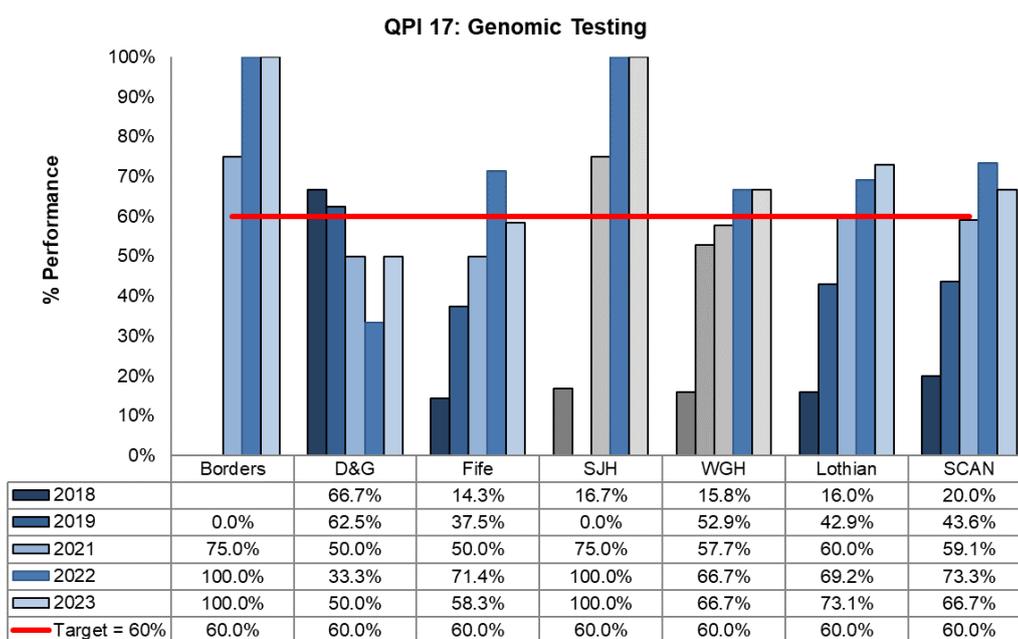
Numerator = Patients with ER positive, HER2 negative, node negative breast cancer who have a 3-5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo genomic testing

Denominator = All patients with ER positive, HER2 negative, node negative breast cancer who have a 3-5% overall survival benefit of chemotherapy treatment predicted at 10 years

Exclusions = Patients taking part in clinical trials of chemotherapy treatment and patients who undergo neoadjuvant therapy

Target = 60%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	111	112	222	107	873	980	1425
Numerator	2	4	7	5	14	19	32
Denominator	2	8	12	5	21	26	48
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	100.0%	50.0%	58.3%	100.0%	66.7%	73.1%	66.7%

The R Studio version of nhs.predict was used to calculate the predicted benefit of adjuvant chemotherapy.



Comments

Dumfries & Galloway: 4 patients did not have genomic testing, in all cases none had chemotherapy so no onco type was carried out. 3 had comorbidities and 1 barely hit the 3% threshold.

Fife: Of the 5 cases not meeting this QPI, 1 patient declined the Oncotype test; 3 were not appropriate for chemotherapy consideration due to co-morbidities; and 1 had T1c N0 lobular breast cancer for whom it was not felt appropriate as chemotherapy would not be offered.

SCAN: Met the target, with 66.7% of patients (32/48) being referred for genomic testing. However, compared to 2022 result (73.3%), there is a slight decline.

Action: No action identified.

QPI - 17(i) - Additional: Proportion of ER Positive, HER2 Negative Patients who undergo Genomic Testing (broken down by nodal status). - Node negative

Numerator = Number of patients with ER positive, HER2 negative, node negative breast cancer who undergo genomic testing.

Denominator = All patients with ER positive, HER2 negative, node negative breast cancer.

All patients with ER positive, HER2 negative, node negative breast cancer.	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Denominator	35	48	67	36	382	389	957
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	1	0	1
% Performance	11.4%	10.4%	28.4%	13.9%	6.3%	7.5%	9.0%

QPI - 17(ii) - Additional: Proportion of ER Positive, HER2 Negative Patients who undergo Genomic Testing (broken down by nodal status). - Node positive

Numerator = Number of patients with ER positive, HER2 negative, node positive breast cancer who undergo genomic testing.

Denominator = All patients with ER positive, HER2 negative, node positive breast cancer.

Proportion of ER Positive, HER2 Negative Patients who undergo Genomic Testing (broken down by nodal status). - Node positive	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	2	0	9	0	22	22	55
Denominator	29	18	39	20	134	154	394
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	6.9%	0.0%	23.1%	0.0%	16.4%	14.3%	14.0%

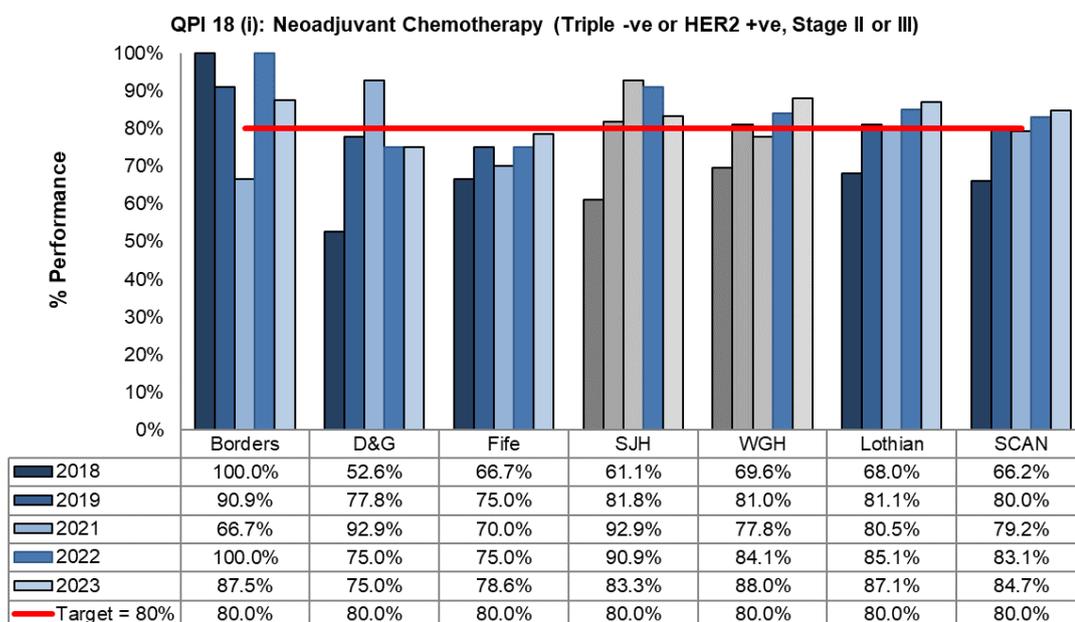
QPI 18 (i): Neoadjuvant Chemotherapy Target = 80%

Numerator = Patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who undergo neo-adjuvant chemotherapy

Denominator = All patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy

Exclusions = Patients who undergo palliative chemotherapy

Target = 80%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	97	116	192	94	810	904	1309
Numerator	14	3	33	15	73	88	138
Denominator	16	4	42	18	83	101	163
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	6	0	0	0	0	6
% Performance	87.5%	75.0%	78.6%	83.3%	88.0%	87.1%	84.7%



Comments

Dumfries & Galloway: 1 patient proceeded to conservative surgery first then had adjuvant chemo (just over 2cm in size, significant respiratory comorbidities). Note 6 patients had TNM not recorded

Fife: Of the 9 cases who failed this QPI, all were considered for neoadjuvant chemotherapy at MDT/Oncology clinic but 7 were considered to be best served by having surgery first given fitness/co-morbidities/high risk of chemo complications

SCAN: Met the target, with 84.7% of patients (138/163) having neoadjuvant chemotherapy. However, 2023 result showed an improvement compared to last year (83.1%).

Action: No action identified against the QPI result, but NHS D&G recording of TNM should be improved.

QPI 18 (ii): Neoadjuvant Chemotherapy (pathological complete response)

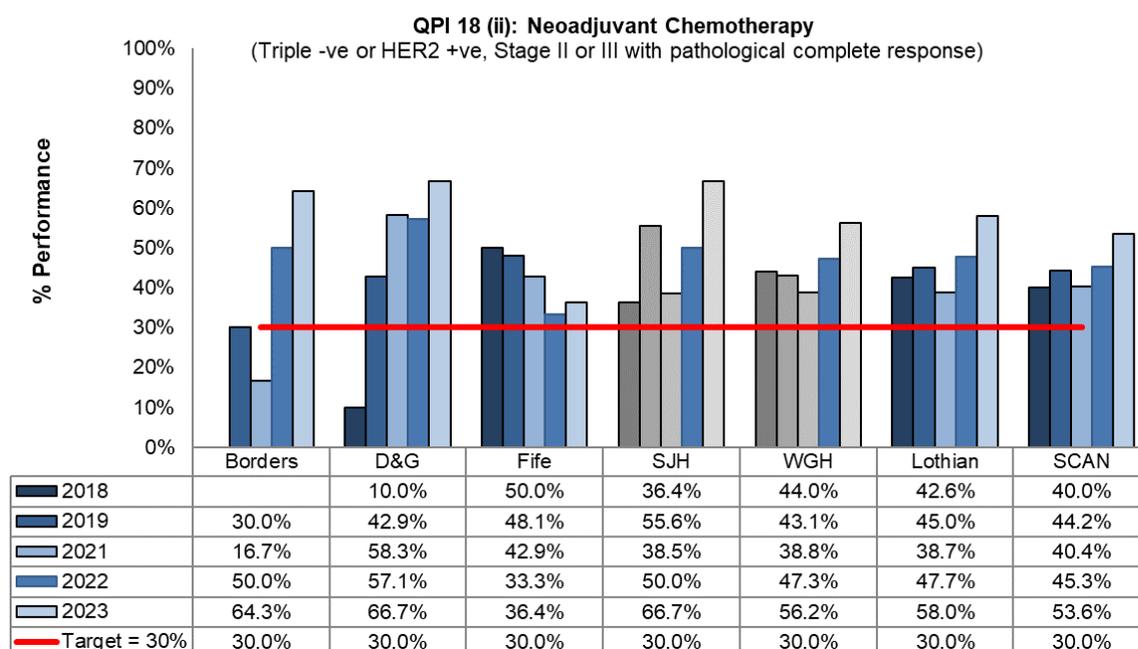
Target = 30%

Numerator = Number of patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who undergo neo-adjuvant chemotherapy who achieve a pathological complete response

Denominator = All patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who undergo neo-adjuvant chemotherapy

Exclusions = None

Target = 30%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	99	117	201	97	820	917	1334
Numerator	9	2	12	10	41	51	74
Denominator	14	3	33	15	73	88	138
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	4	0	0	0	0	4
% Performance	64.3%	66.7%	36.4%	66.7%	56.2%	58.0%	53.6%

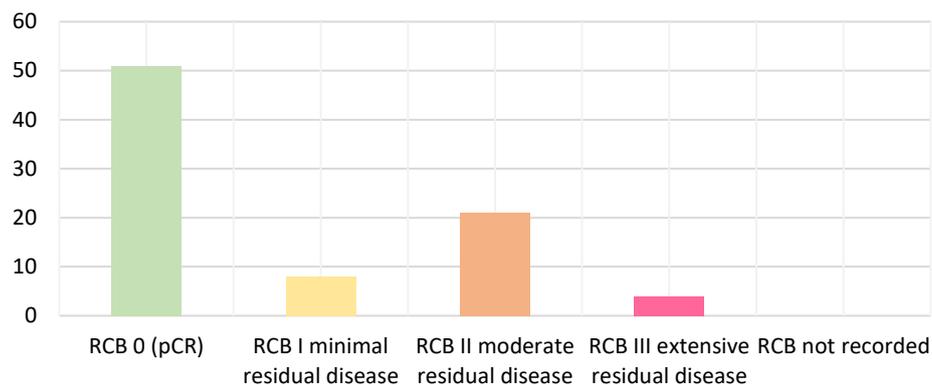


Comments

Dumfries & Galloway: It is worth noting that there were an additional 4 cases in 2023 that had Her2status = 1 and had neoadjuvant chemo but because the TNM staging was not complete for these records they were not included in the denominator (all had cM=99 or other staging missing)

Action: No action identified against the QPI result, but NHS D&G recording of TNM should be improved.

Lothian (Triple Neg or HER2 Pos, Stage II or III)
patients by residual cancer burden (RCB) after
neoadjuvant chemotherapy



Residual cancer burden (RCB class)	No of Lothian patients
RCB 0 (pCR)	51
RCB I minimal residual disease	8
RCB II moderate residual disease	21
RCB III extensive residual disease	4
RCB not recorded	0

QPI 19: Deep Inspiratory Breath Hold (DIBH) Radiotherapy

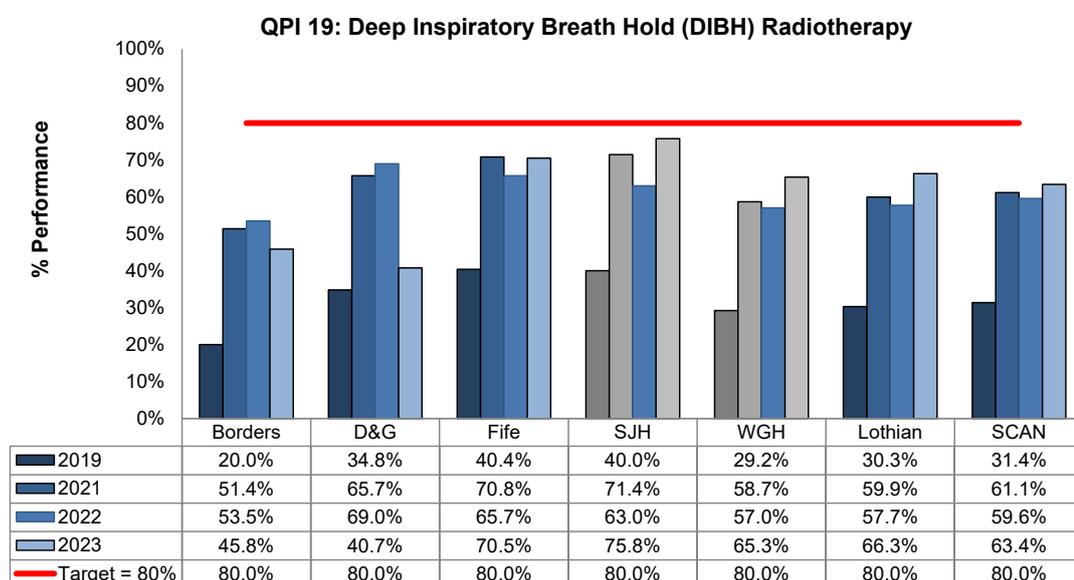
Target = 80%

Numerator = Patients with left sided breast cancer or DCIS, treated with radiotherapy, including the use of a DIBH technique

Denominator = All patients with left sided breast cancer or DCIS receiving adjuvant radiotherapy

Exclusions = Patients with bilateral disease

Target = 80%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	65	93	173	79	574	653	984
Numerator	22	11	43	25	209	234	310
Denominator	48	27	61	33	320	353	489
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	45.8%	40.7%	70.5%	75.8%	65.3%	66.3%	63.4%



Comments

Borders: The target was not met showing a shortfall of 24.7% (26 patients). 16 patients did not require DIBH as heart was not within the treatment field. 4 patients would not have managed to achieve the breath hold required for DIBH. 6 patients not treated in DIBH.

Dumfries & Galloway: 16 did not have DIBH, 14 aged 60+ and 2 aged under 60 both of whom were treated in Carlisle.

Fife: All radiotherapy for this cohort of patients has taken place within Lothian, with one exception who requested their treatment in Tayside. Due to lack of resources only patients under 60 years old or with cardiac issues or for chest wall treatment were put forward for DIBH in Lothian for the majority of 2023 (left sided disease). Of the 18 outliers, 16 were aged 60 or over and there was no mention of DIBH for the remaining 2. It is believed that additional resources have now been sourced and DIBH is now available for patients under 70 years old (left sided disease).

Lothian: 66.1% of patients (234/354) using DIBH. However, 85% of the 120 patients who did not meet the QPI in Western General were aged 60 years or over at the time of diagnosis, and there are other reasons why not all patients use DIBH. In St John's Hospital, the outlier patients were over the age of 60 so the QPI was not met due to resource implications.

SCAN: None of the Health Boards in SCAN met the target, with 63.3% of patients overall (310/490) using DIBH but there is an improvement compared to 2022 (59.2%).

Action: Continue to use QPIs as tool to argue for appropriate capacity.

QPI 20: Optimal Time to Radiotherapy Treatment

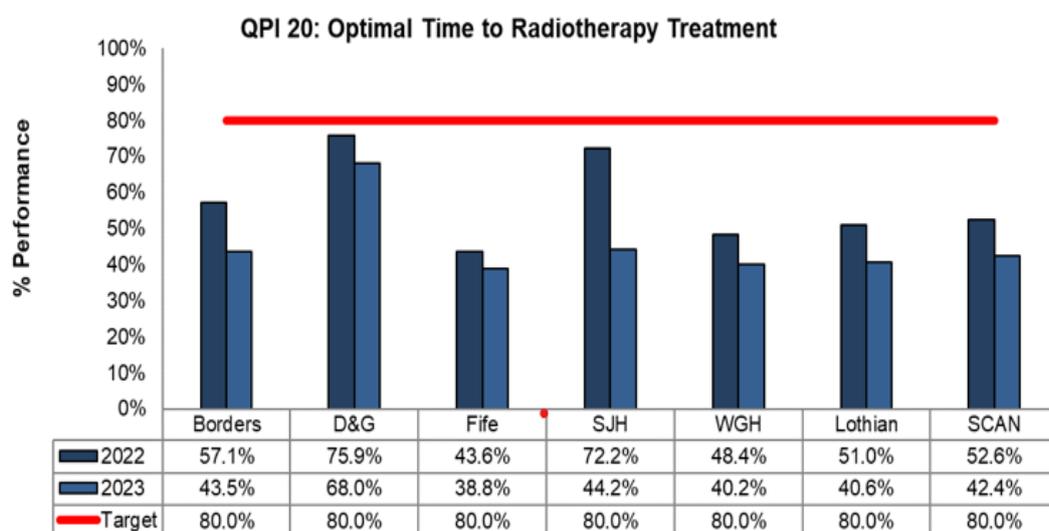
Target = 80%

Numerator = Patients with breast cancer who undergo adjuvant XRT who commence this within 8 weeks of final surgery

Denominator = All patients with breast cancer undergoing adjuvant radiotherapy

Exclusions = Patients undergoing adjuvant chemotherapy

Target = 80%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	51	70	149	60	379	439	709
Numerator	27	34	33	23	207	230	324
Denominator	62	50	85	52	515	567	764
Not recorded for numerator	0	0	0	2	0	2	2
Not recorded for exclusion	0	0	0	1	0	1	1
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	43.5%	68.0%	38.8%	44.2%	40.2%	40.6%	42.4%



Comments

Borders: The target was not met showing a shortfall of 36.5% (35 patients). 22 patients received radiotherapy treatment just outwith the 8 week target (within 9 weeks). 7 patients received radiotherapy treatment just outwith the 8 week target (within 10 weeks). 3 patients received radiotherapy treatment within 12 weeks. 3 patients were initially considering adjuvant chemotherapy but this was declined so they then received adjuvant radiotherapy.

Dumfries & Galloway: 16 did not commence radiotherapy within the 8 week timeframe (range 57-88 days); 10 within 7 days of target; 3 within 7-14 days of target and 3 >14 days of target.

Fife: Of the 52 outliers, 19 were delayed as they were initially being considered for adjuvant chemotherapy (+/- Oncotype); 6 were delayed due to further investigations being required post-surgery; and 2 were delayed as they were out of the country for an extended period of time.

Lothian: Did not meet the target, with 40.6% of patients (230/567) commencing adjuvant radiotherapy within 8 weeks of final surgery.

SCAN: Did not meet the target, with 42.4% of patients (324/764) commencing adjuvant radiotherapy within 8 weeks of final surgery.

Action: Continue to use QPIs as tool to argue for appropriate capacity.

QPI 21: Axillary Node Clearance

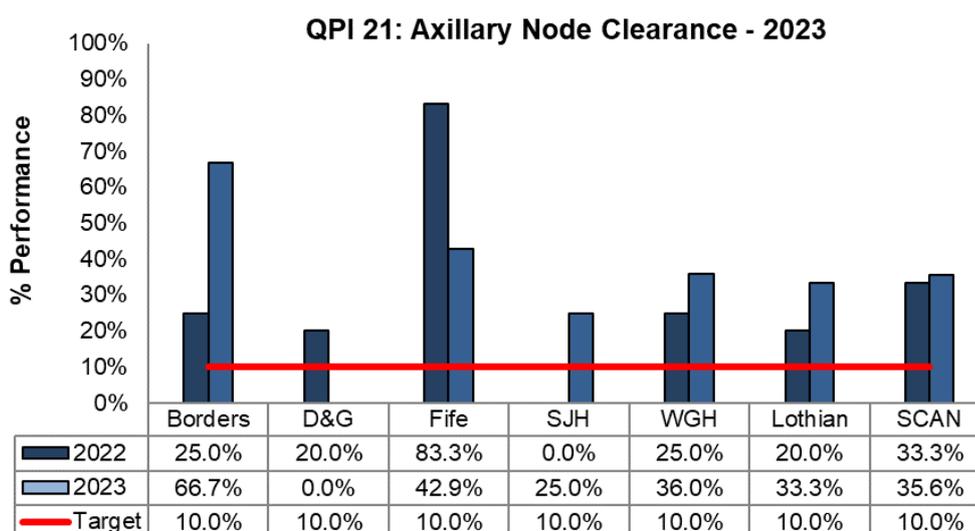
Target <10%

Numerator = Patients with node positive breast cancer undergoing neoadjuvant chemotherapy who achieve PCR in the axilla that have an ANC

Denominator = All patients with node positive breast cancer undergoing neoadjuvant chemotherapy who achieve PCR in the axilla

Exclusions = None

Target <10%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2023 cohort	113	120	234	112	894	1006	1473
Ineligible for QPI	110	118	227	105	869	979	1429
Numerator	2	0	3	2	9	11	16
Denominator	3	2	7	8	25	33	45
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	66.7%	0.0%	42.9%	25.0%	36.0%	33.3%	35.6%



Comments

Borders: The target was not met showing a shortfall of 2 cases.

Fife: Although Fife has not reached target, performance against this QPI has significantly improved going from 83.3% last year down to 42.9% this year. It is hoped that this trend will continue next year.

Lothian: Did not meet the target, with 33.3% of patients (11/33) who achieved PCR in the axilla having an ANC.

SCAN: Did not meet the target, with 35.6% of patients (11/45) who achieved PCR in the axilla having an ANC.

This is a new measure with an arbitrary target. The principle is to ensure that appropriate patients with previous node involvement have the option to avoid node clearance and this appears to be the case in all areas. In addition, the challenge is that a complete pathological response is only confirmed after the surgery has taken place.

Action: No action identified.

QPI 22 (i): Local Recurrence Following Breast Conservation at 5 years

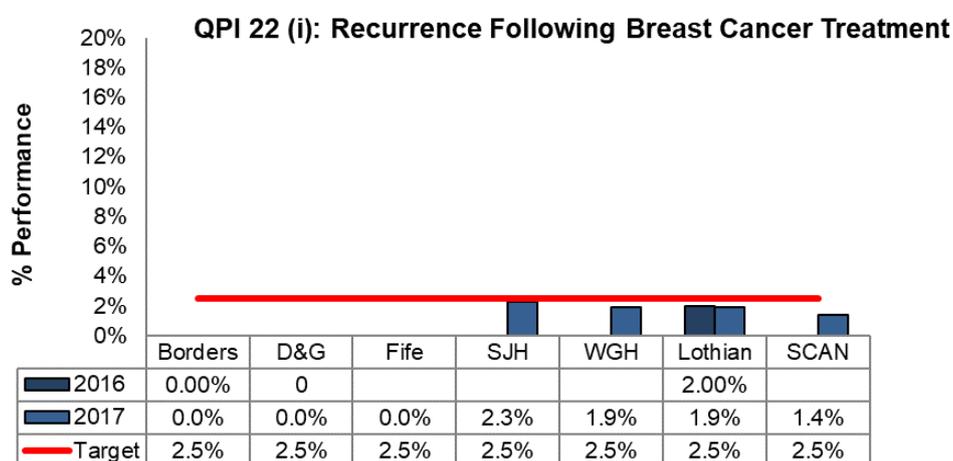
Target <2.5%

Numerator = Patients with invasive breast cancer who have breast conservation and develop local recurrence (or new cancer/DCIS) in the same breast

Denominator = All patients with invasive breast cancer who have undergone breast conservation

Exclusions = Patients with M1 at diagnosis

Target <2.5%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2017 cohort	80	110	182	107	805	912	1284
Ineligible for QPI	45	48	72	63	279	342	507
Numerator	0	0	0	1	10	11	11
Denominator	35	62	110	44	526	570	777
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	1	0	0	0	1
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	0.0%	0.0%	0.0%	2.3%	1.9%	1.9%	1.4%



Comments:

Fife:

Please note: the measurability/SSRS report for this QPI requires amendment as it currently does not include patients with local recurrence if they are also found to have regional and/or distant relapse. Fife have already raised this and submitted to the Query Log. Based on the correct measurability, Fife's figures would not change for this QPI.

The Not recorded for exclusion / include in the Denominator case was recorded as Mx at diagnosis; for audit purposes where Mx is recorded, the M staging must be completed as Not Recorded [cM = 99].

SCAN:

Matthew Barber, SCAN Breast Group Chair commented - "It is super to have formal figures for real world cancer outcomes for patients in the region. The targets were based on figures over the last few years. Small changes in the absolute numbers of patients with recurrence can have a big impact on the percentage, particularly in small boards, but if persistent trends appear we will be able to look further into the patient management pathways for the affected patients."

QPI - 22(i) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Breast conservation

Numerator = Number of patients with invasive breast cancer who have undergone breast conservation with no relapse found (insufficient follow up < 5 years).

Denominator = All patients with invasive breast cancer who have undergone breast conservation

Exclusions = Patients with M1 at diagnosis

QPI - 22(i) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Breast conservation	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	4	9	9	2	39	41	63
Denominator	35	62	110	44	526	570	777
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	1	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	11.4%	14.5%	8.2%	4.5%	7.4%	7.2%	8.1%

QPI 22 (ii): Local Recurrence Following Mastectomy at 5 years

Target <5%

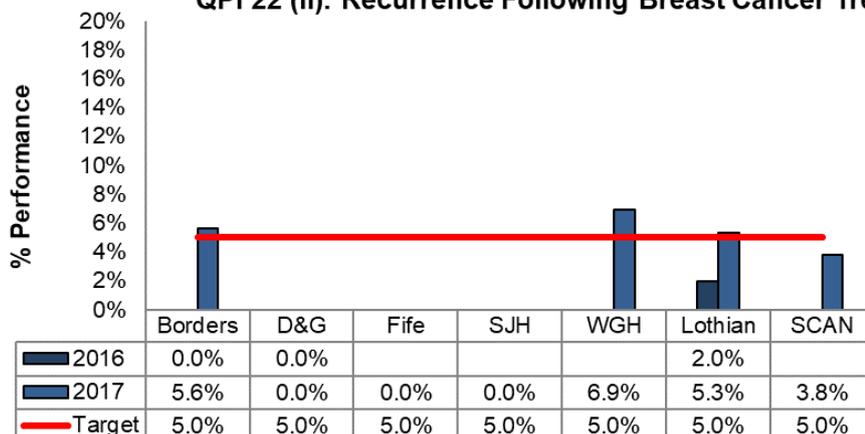
Numerator = Patients with invasive breast cancer who have a mastectomy and develop local recurrence (or new cancer/DCIS) in the same breast

Denominator = All patients with invasive breast cancer who have undergone a mastectomy

Exclusions = Patients with M1 at diagnosis

Target <5%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2017 cohort	80	110	182	107	805	912	1284
Ineligible for QPI	62	77	157	77	703	780	1076
Numerator	1	0	0	0	7	7	8
Denominator	18	33	25	30	102	132	208
Not recorded for numerator	0	1	0	0	0	0	1
Not recorded for exclusion	0	0	1	0	0	0	1
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	5.6%	0.0%	0.0%	0.0%	6.9%	5.3%	3.8%

QPI 22 (ii): Recurrence Following Breast Cancer Treatment



Comments:

Fife: Please note: the measurability/SSRS report for this QPI requires amendment as it currently does not include patients with local recurrence if they are also found to have regional and/or distant relapse. Fife have already raised this and submitted to the Query Log. Based on the correct measurability, Fife's figures would change to 1/25 which equates to 4%.

The Not recorded for exclusion / include in the Denominator case was recorded as Mx at diagnosis; for audit purposes where Mx is recorded, the M staging must be completed as Not Recorded [cM = 99].

Lothian: All cases with recurrence following mastectomy have been reviewed with no obvious underlying issue identified.

QPI - 22(ii) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Mastectomy

Numerator = Number of patients with invasive breast cancer who have undergone mastectomy with no relapse found (insufficient follow up < 5 years)

Denominator = All patients with invasive breast cancer who have undergone mastectomy

Exclusions = Patients with M1 at diagnosis

QPI - 22(ii) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Mastectomy	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	1	3	2	2	5	7	13
Denominator	18	33	25	30	102	132	208
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	1	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	5.6%	9.1%	8.0%	6.7%	4.9%	5.3%	6.3%

QPI 22 (iii): Any Recurrence Following Breast Conservation or Mastectomy at 5 years

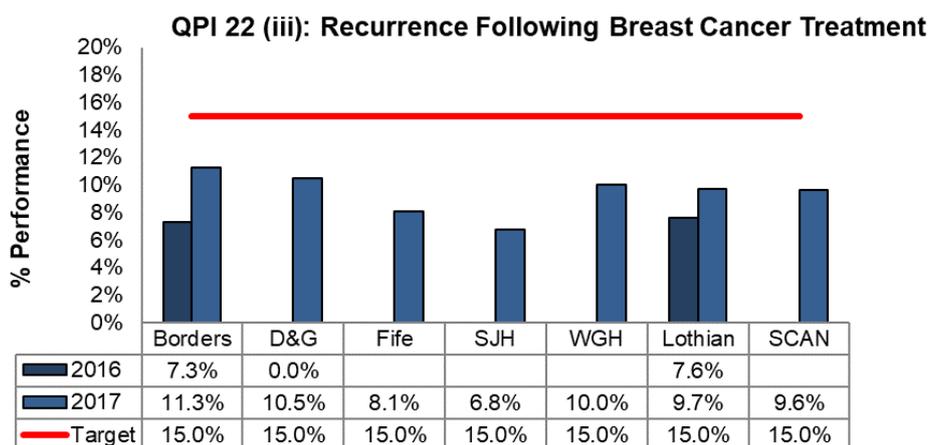
Target <15%

Numerator = Patients with invasive breast cancer who have undergone surgical treatment (conservation or mastectomy) and develop any recurrence (or new cancer/DCIS) in the same breast, axilla or distant site after surgical treatment

Denominator = All patients with invasive breast cancer who have surgical treatment (breast conservation or mastectomy)

Exclusions = Patients with M1 at diagnosis

Target <15%	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
2017 cohort	80	110	182	107	805	912	1284
Ineligible for QPI	27	15	47	33	177	210	299
Numerator	6	10	11	5	63	68	95
Denominator	53	95	135	74	628	702	985
Not recorded for numerator	0	1	0	0	0	0	1
Not recorded for exclusion	0	0	2	0	0	0	2
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	11.3%	10.5%	8.1%	6.8%	10.0%	9.7%	9.6%



QPI - 22(iii) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Surgical treatment (conservation or mastectomy)

Numerator = Number of patients with invasive breast cancer who have undergone surgical treatment (conservation or mastectomy) with no relapse found (insufficient follow up < 5 years)

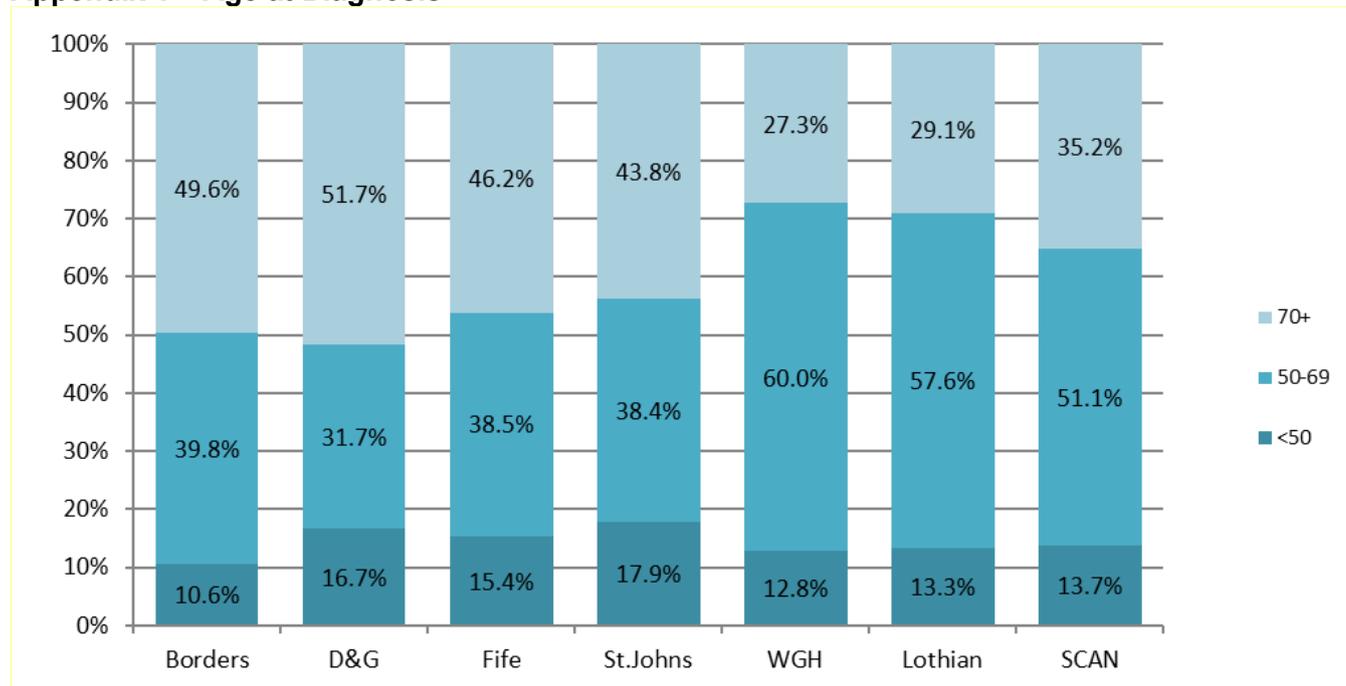
Denominator = All patients with invasive breast cancer who have undergone surgical treatment (conservation or mastectomy)

Exclusions = Patients with M1 at diagnosis

QPI - 22(iii) - Additional: Proportion of patients recorded as no relapse (insufficient follow up) - Mastectomy	Borders	D&G	Fife	SJH	WGH	Lothian	SCAN
Numerator	5	12	11	4	44	48	76
Denominator	53	95	135	74	628	702	628
Not recorded for numerator	0	0	0	0	0	0	0
Not recorded for exclusion	0	0	2	0	0	0	0
Not recorded for denominator	0	0	0	0	0	0	0
% Performance	9.4%	12.6%	8.1%	5.4%	7.0%	6.8%	12.1%

Appendices

Appendix 1 – Age at Diagnosis



Appendix 2 – Gender

2023	Borders		D&G		Fife		WGH		St John's		SCAN	
	N	%	N	%	N	%	N	%	N	%	N	%
Female	113	100%	118	98%	231	99%	890	99.55%	112	100%	1464	99.4%
Male	0	0%	2	2%	3	1%	4	0.45%	0	0%	9	0.6%
Total	113	100%	120	100%	234	100%	894	100%	112	100%	1473	100%

Appendix 3 – Summary of Key Categories – 2023

Referral	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
Primary Care Clinician	84	74.0%	95	79.2%	174	74.4%	392	43.8%	92	82.1%	837	56.8%
Breast Screening	17	15.0%	11	9.2%	15	6.4%	422	47.2%	5	4.5%	470	31.9%
Incidental/Secondary care	7	6.2%	11	9.2%	31	13.2%	55	6.2%	8	7.1%	112	7.6%
Review patients	1	1.0%	2	1.7%	13	5.6%	17	1.9%	3	2.7%	36	2.4%
Increased Risk Clinic	2	1.8%	0	0.0%	1	0.4%	1	0.1%	2	1.8%	6	0.4%
Ref from private healthcare	1	1.0%	1	0.8%	0	0.0%	3	0.3%	1	0.9%	6	0.4%
Other	1	1.0%	0	0.0%	0	0.0%	4	0.4%	1	0.9%	6	0.4%
Not recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%

T Stage	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
T0	3	2.7%	0	0.0%	1	0.4%	0	0.0%	0	0.0%	4	0.3%
T1	39	34.5%	20	16.7%	70	29.9%	444	49.7%	34	30.4%	607	41.2%
T2	47	41.6%	30	25.0%	104	44.4%	231	25.8%	46	41.1%	458	31.1%
T3	6	5.3%	5	4.2%	22	9.4%	49	5.5%	10	8.9%	92	6.2%
T4	11	9.7%	11	9.2%	21	9.0%	48	5.4%	10	8.9%	101	6.9%
Tis (DCIS)	7	6.2%	1	0.8%	10	4.3%	112	12.5%	11	9.8%	141	9.6%
Tx (not assessable)	0	0.0%	1	0.8%	5	2.1%	3	0.3%	1	0.9%	10	0.7%
T9 (not recorded)	0	0.0%	52	43.3%	1	0.4%	7	0.8%	0	0.0%	60	4.1%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%

N Stage	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
N0	93	82.3%	49	40.8%	168	71.8%	741	82.9%	78	69.6%	1129	76.6%
N1	17	15.0%	13	10.8%	55	23.5%	126	14.1%	25	22.3%	236	16.0%
N2	2	1.8%	1	0.8%	0	0.0%	7	0.8%	3	2.7%	13	0.9%
N3	0	0.0%	0	0.0%	5	2.1%	10	1.1%	4	3.6%	19	1.3%
NX	1	0.9%	1	0.8%	5	2.1%	5	0.6%	1	0.9%	13	0.9%
N9 (not recorded)	0	0.0%	56	46.7%	1	0.4%	5	0.6%	1	0.9%	63	4.3%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%

M Stage	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
M0	103	91.2%	28	23.3%	206	88.0%	837	93.6%	104	92.9%	1278	86.8%
M1	10	8.8%	9	7.5%	25	10.7%	42	4.7%	7	6.3%	93	6.3%
M9 (not recorded)	0	0.0%	83	69.2%	3	1.3%	15	1.7%	1	0.9%	102	6.9%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%
Part of TNM not recorded	Borders		Dumfries		Fife		WGH		St John's		SCAN	
		0.0%	89	74.2%	5	2.1%	0	0.0%	0	0.0%	0	0.0%
Tumour Types	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
DCIS	7	6.2%	4	3.3%	9	3.8%	97	10.9%	7	6.3%	124	8.4%
LCIS	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Paget's Disease	0	0.0%	0	0.0%	1	0.4%	0	0.0%	0	0.0%	1	0.1%
Other non-invasive	0	0.0%	0	0.0%	0	0.0%	6	0.7%	0	0.0%	6	0.4%
Non-invasive total	7	6.2%	4	3.3%	10	4.3%	103	11.5%	7	6.3%	131	8.9%
Ductal carcinoma	78	69.0%	91	75.8%	160	68.4%	600	67.1%	77	68.8%	1006	68.3%
Lobular carcinoma	9	8.0%	11	9.2%	33	14.1%	100	11.2%	13	11.6%	166	11.3%
Medullary carcinoma	0	0.0%	1	0.8%	0	0.0%	0	0.0%	0	0.0%	1	0.1%
Mucinous carcinoma	3	2.7%	1	0.8%	8	3.4%	21	2.3%	2	1.8%	35	2.4%
Tubular carcinoma	2	1.8%	0	0.0%	1	0.4%	16	1.8%	1	0.9%	20	1.4%
Mixed (invasive)	5	4.4%	9	7.5%	5	2.1%	28	3.1%	4	3.6%	51	3.5%
Other invasive	6	5.3%	3	2.5%	7	3.0%	21	2.3%	5	4.5%	42	2.9%
Occult, with +ve nodes	0	0.0%	0	0.0%	6	2.6%	1	0.1%	0	0.0%	7	0.5%
Pleomorphic carcinoma in-situ	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.9%	1	0.1%
Malignant cells, cytology NOS	0	0.0%	0	0.0%	1	0.4%	0	0.0%	0	0.0%	1	0.1%
Invasive total	103	91.2%	116	96.7%	221	94.4%	787	88.0%	103	92.0%	1330	90.3%
Inapplicable (no histology)	3	2.7%	0	0.0%	3	1.3%	4	0.4%	2	1.8%	12	0.8%
Not recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%

ER Status (Invasive tumours)	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
High Positive (6-8)	84	74.3%	98	81.7%	161	72.9%	745	83.3%	83	74.1%	1171	80.2%
Low positive (3-5)	5	4.4%	4	3.3%	14	6.3%	29	3.2%	6	5.4%	58	4.0%
Negative (0-2)	21	18.6%	14	11.7%	45	20.4%	116	13.0%	23	20.5%	219	15.0%
Not assessable	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Not recorded	0	0.0%	0	0.0%	1	0.5%	0	0.0%	0	0.0%	1	0.1%
Inapplicable	3	2.7%	4	3.3%	0	0.0%	3	0.3%	0	0.0%	10	0.7%
Total	113	100.0%	120	100.0%	221	100.0%	894	100.0%	112	100.0%	1460	100.0%

Her2 Status (Invasive tumours)	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
Her2 positive	10	8.9%	14	11.7%	35	15.8%	98	11.0%	12	10.7%	169	11.6%
Her2 negative	91	80.5%	102	85.0%	184	83.3%	685	76.6%	92	82.1%	1154	79.0%
Not recorded	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Not done / Inconclusive	0	0.0%	4	3.3%	0	0.0%	1	0.1%	0	0.0%	5	0.3%
Not assessable	11	9.7%	0	0.0%	2	0.9%	2	0.2%	0	0.0%	15	1.0%
Not Applicable	1	0.9%	0	0.0%	0	0.0%	107	12.0%	8	7.1%	116	7.9%
Total	113	100.0%	120	100.0%	221	100.0%	894	100.0%	112	100.0%	1460	100.0%

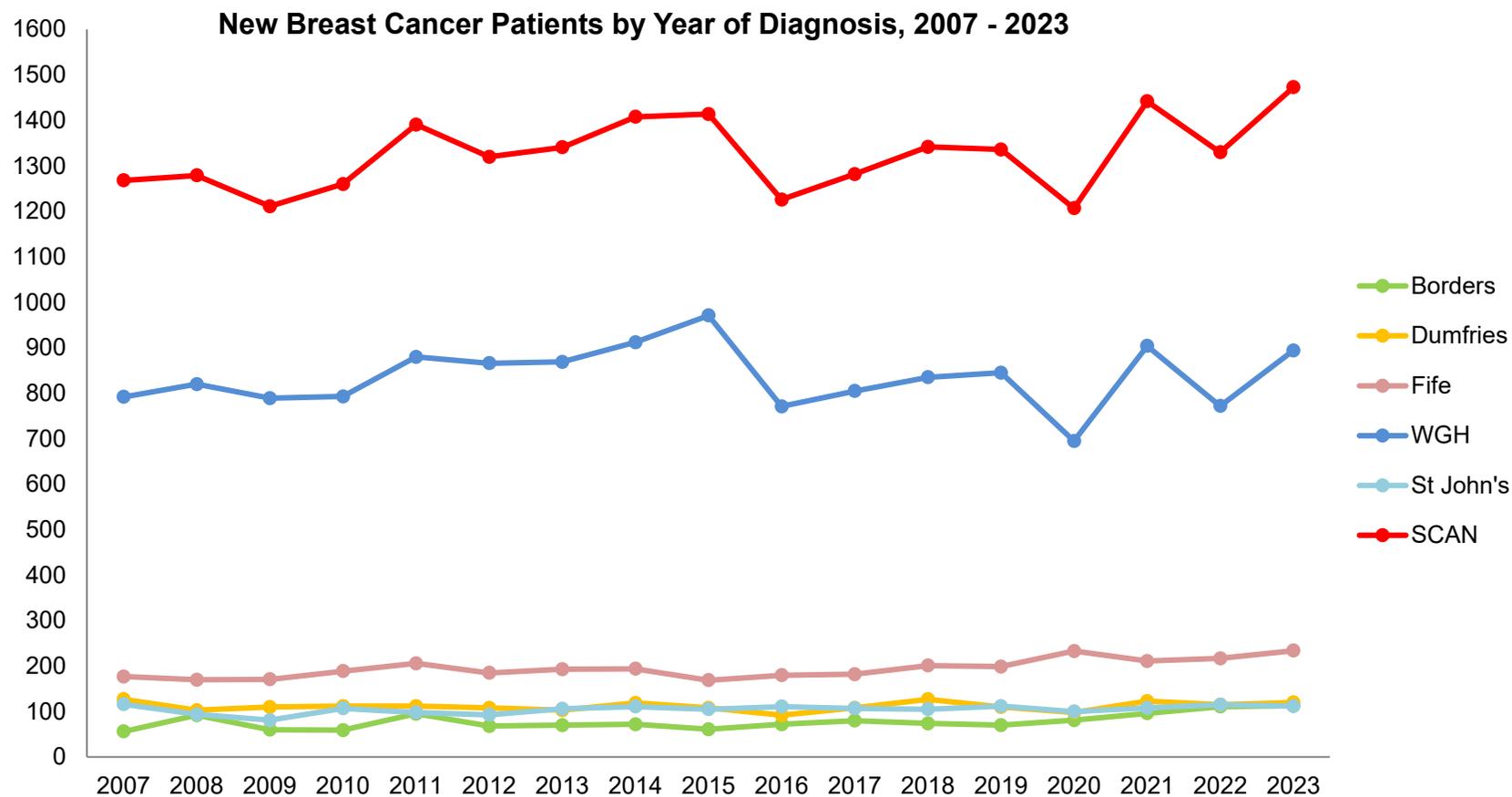
First treatment	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
Surgery	55	48.7%	43	35.8%	116	49.6%	488	54.6%	59	52.7%	761	51.7%
Hormone therapy	39	34.5%	63	52.5%	69	29.5%	289	32.3%	28	25.0%	488	33.1%
Chemotherapy	15	13.3%	12	10.0%	40	17.1%	100	11.2%	23	20.5%	190	12.9%
Radiotherapy	0	0.0%	1	0.8%	3	1.3%	8	0.9%	0	0.0%	12	0.8%
Biological therapy	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%
No active treatment (Supportive care)	3	2.7%	1	0.8%	3	1.3%	1	0.1%	1	0.9%	9	0.6%
Died before treatment	0	0.0%	0	0.0%	2	0.9%	2	0.2%	1	0.9%	5	0.3%
Declined all treatment	1	0.8%	0	0.0%	1	0.4%	4	0.4%	0	0.0%	6	0.4%
Not recorded	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Other	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%

Final Surgery	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
Localising/Excision biopsy	0	0.0%	0	0.0%	0	0.0%	5	0.6%	1	0.9%	6	0.4%
Conservation surgery	78	0.0%	59	49.2%	104	58.8%	623	69.7%	69	61.6%	933	63.3%
Therapeutic mammoplasty	4	69.0%	1	0.8%	3	1.7%	32	3.6%	1	0.9%	41	2.8%
Conservation Total	82	3.5%	60	50.0%	107	60.5%	660	74%	71	63.4%	980	66.5%
Mastectomy	0	0	26	21.7%	56	31.6%	61	6.8%	13	11.6%	156	10.6%
Simple Mastectomy	0	0	0	0	0	0	38	4.3%	10	8.9%	48	3.3%
Skin Sparing	0	0	0	0	0	0	27	3.0%	1	0.9%	28	1.9%
Nipple Sparing	17	15.0%	0	0	0	0	8	0.9%	0	0.0%	25	1.7%
Mastectomy + immed. reconstruction	1	0.9%	2	1.7%	10	5.6%	0	0.0%	0	0.0%	13	0.9%
Mastectomy total	18	15.9%	28	23.3%	66	37.3%	134	15%	24	21.4%	270	18.3%
Axillary surgery alone	0	0.0%	1	0.8%	4	2.3%	0	0.0%	0	0.0%	5	0.3%
Other	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Surgery total	100	88.5%	89	74.2%	177	75.6%	794	88.8%	95	84.8%	1255	85.2%
Declined treatment	1	0.9%	2	1.7%	6	2.6%	11	1.2%	2	1.8%	22	1.5%
Not yet/pending	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Not applicable	12	10.6%	28	23.3%	51	21.8%	89	10.0%	14	12.5%	194	13.2%
Not recorded	0	0.0%	1	0.8%	0	0.0%	0	0.0%	1	0.9%	2	0.1%
Total	113	100%	120	100%	234	10%	894	100%	112	100%	1473	100%

Radiotherapy	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	No	%	No	%								
Primary radical	2	1.8%	0	0.0%	0	0.0%	2	0.2%	0	0.0%	4	0.3%
Adjuvant	78	69.0%	67	55.8%	127	54.3%	627	70.1%	72	64.3%	971	65.9%
Palliative	3	2.7%	1	0.8%	6	2.6%	14	1.6%	2	1.8%	26	1.8%
Declined	8	7.1%	6	5.0%	17	7.3%	33	3.7%	4	3.6%	68	4.6%
Inapplicable	22	19.4%	45	37.5%	82	35.0%	217	24.3%	32	28.6%	398	27.0%
Not recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Not yet/pending	0	0.0%	1	0.8%	2	0.9%	1	0.1%	2	1.8%	6	0.4%
Total	113	100%	120	100%	234	100%	894	100%	112	100%	1473	100%

Chemotherapy	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	Nº	%	Nº	%								
Adjuvant	17	15.0%	16	13.3%	34	14.5%	102	11.4%	20	17.9%	189	12.8%
Neoadjuvant	15	13.3%	12	10.0%	35	15.0%	99	11.1%	22	19.6%	183	12.4%
Palliative	0	0.0%	2	1.7%	5	2.1%	11	1.2%	2	1.8%	20	1.4%
Declined	10	8.9%	4	3.3%	15	6.4%	22	2.5%	3	2.7%	54	3.7%
Inapplicable	71	62.8%	86	71.7%	145	62.0%	649	72.6%	62	55.4%	1013	68.8%
Not recorded	0	0.0%	0	0.0%	0	0.0%	2	0.2%	1	0.9%	3	0.2%
Not yet/pending	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Patient died before treatment	0	0.0%	0	0.0%	0	0.0%	8	0.9%	2	1.8%	10	0.7%
Total	113	100.0%	120	100%	234	100.0%	894	0.9%	112	100.0%	1473	100.0%
Hormone therapy (1st course)	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	Nº	%	Nº	%								
Neoadjuvant	14	12.4%	1	0.8%	19	8.1%	68	7.6%	3	2.7%	105	7.1%
Peri-operative	19	16.8%	33	27.5%	12	5.1%	150	16.8%	14	12.5%	228	15.5%
Primary	3	2.7%	29	24.2%	24	10.3%	57	6.4%	9	8.0%	122	8.3%
Palliative	4	3.5%	1	0.8%	16	6.8%	27	3.0%	4	3.6%	52	3.5%
Adjuvant	38	33.6%	37	30.8%	96	41.0%	371	41.5%	49	43.8%	591	40.1%
Inapplicable	31	27.4%	18	15.0%	63	26.9%	206	23.0%	28	25.0%	346	23.5%
Not recorded	0	0.0%	0	0.0%	1	0.4%	1	0.1%	0	0.0%	2	0.1%
Declined	4	3.5%	0	0.0%	3	1.3%	13	1.5%	2	1.8%	22	1.5%
Other	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	1.8%	2	0.1%
Not yet/pending	0	0.0%	1	0.8%	0	0.0%	1	0.1%	1	0.9%	3	0.2%
Total	113	100.0%	120	100.0%	234	100.0%	894	100.0%	112	100.0%	1473	100.0%
Biological therapy (Her2 +ve, invasive)	Borders		Dumfries		Fife		WGH		St John's		SCAN	
	Nº	%	Nº	%								
Her2 +ve, invasive	10	8.84%	5	4.2%	35	15.2%	98	11.0%	12	10.7%	160	10.86%
Herceptin treatment	8	80.0%	0	0.0%	25	71.4%	68	69.4%	11	91.7%	112	70.0%
<i>Other</i>	0	0.0%	2	40.0%	0	0.0%	0	0.0%	0	0.0%	2	1.25%
<i>Patient died before treatment</i>	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
No biological therapy	2	20.0%	3	60.0%	10	28.6%	30	30.6%	1	8.3%	46	28.7%
No decision yet	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Not recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	10	100.0%	5	100.0%	35	100.0%	98	100.0%	12	100.0%	160	100.0%

Appendix 4 – New Breast Cancer Patients by Year of Diagnosis



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Borders	56	92	60	59	95	68	70	72	61	72	80	74	70	81	96	111	113
Dumfries	127	103	110	112	112	108	103	119	108	92	108	127	110	98	123	115	120
Fife	177	170	171	189	206	185	193	194	169	180	182	201	199	233	211	217	234
WGH	792	820	789	793	880	866	869	912	971	771	805	835	845	695	904	772	894
St John's	116	94	81	107	98	93	106	111	105	111	107	105	112	100	108	115	112
SCAN	1268	1279	1211	1260	1391	1320	1341	1408	1414	1226	1282	1342	1336	1207	1442	1330	1473

Appendix 5 – Breast Clinic Attendance by Health Board

N.B. Only the first attendance by a new patient has been counted. Appointments that patients did not attend have been excluded, as have review clinic appointments for existing patients. These tables are included to indicate the relative proportion of new patients with benign conditions.

NHS Borders

Source: TrakCare

Breast Clinic Attendance, 2022

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Borders General Hospital	75	78	109	117	73	101	59	121	25	99	101	80	1038

NHS Dumfries & Galloway

Breast Clinic Attendance, 2021

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Dumfries and Galloway Royal Infirmary	130	129	132	90	125	112	115	171	127	145	154	113	1543
Galloway Community Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	130	129	132	90	125	112	115	171	127	145	154	113	1543

NHS Fife

Source: Carly Simpson, Information Services, NHS Fife - Report: RITM0496909

Breast Clinic Attendance, 2014-2023

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	221	234	212	235	238	217	253	206	246	245	234	255	2796
2015	251	221	248	242	209	237	238	217	255	220	226	269	2833
2016	233	219	252	204	207	249	180	274	241	223	250	214	2746
2017	216	213	236	221	205	226	116	221	233	251	259	155	2552
2018	201	146	158	134	260	178	194	185	287	214	258	223	2438
2019	302	293	274	265	297	291	213	271	194	241	232	210	3083
2020	241	256	228	82	100	179	209	131	238	224	311	264	2463
2021	200	208	233	243	242	257	240	257	268	287	248	199	2882
2022	239	250	245	214	260	263	231	279	226	187	286	227	2907
2023	236	234	287	178	242	226	204	270	237	196	272	226	2808

It should be noted that during 2023, as part of Mutual Aid, an additional 635 Fife patients had their initial clinic appointment / biopsy / imaging done in Forth Valley. These patients are not included in the above figures as their initial appointment was outwith Fife. However, those diagnosed with breast cancer are included within Fife's 2023 QPI data. For information, although their biopsy was performed elsewhere, their pathology specimens were processed and reported by Fife Labs and any MDT discussion (including benign cases) took place within Fife.

NHS Lothian

Source: Analytical Services Department.

Breast Clinic Attendance and Referral Source, 2023

Western General Hospital

Referral Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ASC Assessment	52	61	79	50	99	79	90	71	76	70	64	47	838
Community Health Service	0	0	0	0	0	0	0	0	0	1	0	0	1
Consultant from another Hospital outwith HB	0	0	0	0	0	0	0	1	0	0	0	0	1
Consultant from another Hospital within HB	0	0	0	0	0	0	0	0	1	1	0	0	2
Consultant within the Trust	50	49	57	38	51	39	36	49	18	24	32	37	480
GP	581	555	612	503	586	635	544	618	575	612	649	530	7000
Other (includes Armed Forces)	1	0	0	0	0	0	0	0	0	0	0	0	1
Outpatient Department	1	0	1	0	1	5	9	16	10	12	11	2	68
Prison/Penal Establishments	0	0	1	0	3	0	0	0	0	0	0	0	4
Self referral	0	0	0	0	0	0	0	0	0	0	0	0	0
(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	685	665	750	591	740	758	679	755	680	720	756	616	8395

St John's Hospital

Referral Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Accident and Emergency Department	0	0	0	0	0	0	0	0	0	0	0	0	0
ASC Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0
Community Health Service	0	0	0	0	0	0	0	0	0	0	0	0	0
Consultant from another Hospital outwith HB	0	0	0	0	0	0	0	1	0	0	1	0	2
Consultant from another Hospital within HB	0	0	0	0	0	1	2	2	1	3	0	0	9
Consultant within the Trust	3	1	3	5	5	5	3	5	1	3	4	5	43
GP	116	118	146	126	122	100	126	149	117	127	160	125	1532
Other Medic (Community)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	119	119	149	131	127	106	131	157	119	133	165	130	1586

Appendix 6 – Breast Cancer QPI Attainment Summary 2022

Breast Cancer QPI Attainment Summary 2022			Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 6 Immediate Reconstruction Rate	(i) Immediate Reconstruction Rate		20	N 1 D 13	7.7%	N 7 D 35	20.0%	N 6 D 53	11.3%	N 29 D 128	22.7%	N 43 D 229	18.8%
	(ii) Immediate Reconstruction Rate (Within 6 Weeks of Treatment Decision)		90	N 0 D 1	0.0%	N 1 D 4	25%	N 5 D 5	100.0%	N 10 D 18	55.6%	N 16 D 28	57.1%
QPI 8 Minimising Hospital Stay	(ii) Mastectomy Without Reconstruction	By HB of Surgery	60	N 2 D 19	10.5%	N 33 D 37	89.2%	N 38 D 45	84.4%	N 93 D 140	66.4%	N 166 D 241	68.9%
		By HB of Residence	60	N 2 D 20	10.0%	N 36 D 44	81.8%	N 56 D 66	84.8%	N 88 D 130	67.7%	N 182 D 260	70.0%
QPI 9 HER2 Status for Decision Making			90	N 90 D 94	95.7%	N 85 D 97	87.6%	N 162 D 193	83.9%	N 726 D 755	96.2%	N 1063 D 1139	93.3%
QPI 11 Adjuvant Chemotherapy	(i) Hormone Receptor Pos, HER2 Neg & High nhs.predict or Oncotype Scores		80	N 10 D 12	83.3%	N 6 D 10	60.0%	N 21 D 31	67.7%	N 29 D 37	78.4%	N 66 D 90	73.3%
	(i) Hormone Receptor Pos, HER2 Neg & High Scores Revised version, v5		80	N 10 D 12	83.3%	N 6 D 10	60.0%	N 19 D 22	86.4%	N 29 D 33	87.9%	N 64 D 77	83.1%
	(ii) Triple Negative or HER2 Positive & High nhs.predict Score		80	N 1 D 4	25.0%	N 2 D 7	28.6%	N 18 D 23	78.3%	N 19 D 26	73.1%	N 40 D 60	66.7%
QPI 13 Re-excision Rates			<20	N 17 D 74	23.0%	N 14 D 51	27.5%	N 27 D 115	23.5%	N 130 D 647	20.1%	N 188 D 887	21.2%
QPI 13 Re-excision Rates Revised version, v5			<20	N 17 D 74	23.0%	N 14 D 51	27.5%	N 27 D 115	23.5%	N 130 D 647	20.1%	N 188 D 887	21.2%
QPI 17 Genomic Testing			60	N 7 D 7	100.0%	N 1 D 3	33.3%	N 5 D 7	71.4%	N 9 D 13	69.2%	N 22 D 30	73.3%
QPI 18 Neoadjuvant Chemotherapy	(i) Triple Negative or HER2 Positive, Stage II or III		80	N 10 D 10	100.0%	N 6 D 8	75.0%	N 24 D 32	75.0%	N 63 D 74	85.1%	N 103 D 124	83.1%
	(ii) Triple Negative or HER2 Positive, Stage II or III Who Achieve a PCR		30	N 5 D 10	50.0%	N 4 D 7	57.1%	N 8 D 24	33.3%	N 31 D 65	47.7%	N 48 D 106	45.3%
QPI 19 Deep Inspiratory Breath Hold (DIBH) Radiotherapy			80	N 23 D 43	53.5%	N 20 D 29	69.0%	N 46 D 70	65.7%	N 135 D 234	57.7%	N 224 D 376	59.6%
QPI 19 Deep Inspiratory Breath Hold (DIBH) Radiotherapy Revised version, v5			80	N 23 D 41	56.1%	N 19 D 28	67.9%	N 46 D 68	67.6%	N 131 D 227	57.7%	N 219 D 364	60.2%
QPI 20 Optimal Time to Radiotherapy Treatment			80	N 32	57.1%	N 41	75.9%	N 34	43.6%	N 252	51.0%	N 359	52.6%

Breast Cancer QPI Attainment Summary 2022		Target %	Borders	D&G	Fife	Lothian	SCAN
			D 56	D 54	D 78	D 494	D 682
QPI 21 Axillary Node Clearance		<10	N 1 D 4 25.0%	N 1 D 5 20.0%	N 5 D 6 83.3%	N 3 D 15 20.0%	N 10 D 30 33.3%
QPI 22 Recurrence Following Breast Cancer Treatment	(i) Breast Conservation	<2.5	N 0 D 28 0.0%	N 1 D 52 1.9%	N D N/A	N 11 D 551 2.0%	N D N/A
	(ii) Mastectomy	<5	N 0 D 27 0.0%	N 0 D 24 0.0%	N D N/A	N 2 D 129 1.6%	N D N/A
	(iii) Breast Conservation or Mastectomy	<15	N 4 D 55 7.3%	N 11 D 76 14.5%	N D N/A	N 52 D 680 7.6%	N D N/A

Numerator	% performance
Denominator	

Target met	Not met
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Appendix 7 – Glossary

Adjuvant therapy/ treatment

Additional cancer treatment given after the primary treatment to lower the risk that the cancer will come back. Adjuvant therapy may include chemotherapy, radiation therapy, hormone therapy, targeted therapy or biological therapy.

Audit

The measuring and evaluation of care against best practice with a view to improving current practice and care delivery.

Axilla

The armpit.

Biopsy

Removal of a sample of tissue from the body to assist in diagnosis of a disease.

Case ascertainment

Number of cases recorded as a proportion of those expected using the average of the most recent available five years reported in the Scottish Cancer Registry.

Chemotherapy

The use of drugs that destroy cancer cells, or prevent or slow their growth.

Co-morbidity

The condition of having two or more diseases at the same time.

DIBH (Deep Inspiration Breath Hold)

A radiation therapy technique where patients take a deep breath during treatment, and hold this breath while the radiation is delivered, reducing the dose to the heart and the lung, whilst ensuring the breast / chest wall area receives the full dose as prescribed.

Diagnosis

The process of identifying disease from its signs and symptoms.

ECC

Edinburgh Cancer Centre.

Genomic Test

This looks at all a patient's genes, unlike a genetic test, which is about detecting a single gene mutation.

Histology/Histological

The study of cells and tissue on the microscopic level.

IBR

Immediate Breast Reconstruction.

Lymph nodes

Small bean shaped organs located along the lymphatic system. Nodes filter bacteria or cancer cells that might travel through the lymphatic system. In breast cancer, particular attention is focussed on the axillary lymph nodes.

Malignant

Cancerous. Malignant cells can invade and destroy nearby tissue and spread to other parts of the body.

MDM

The Multi-Disciplinary Meeting of the MDT. See **MDT**.

MDT: Multi-Disciplinary Team

A multi-professional group of people from different disciplines (both healthcare and non-healthcare) who work together to provide care for patients with a particular condition. The composition of multi-disciplinary teams will vary according to many factors. These include: the specific condition, the scale of the service being provided; and geographical/ socio-economic factors in the local area.

Metastatic disease (metastases)

Spread of cancer away from the primary site to somewhere else, e.g. via the bloodstream or the lymphatic system.

Neo-adjuvant chemotherapy

Drug treatment which is given before the treatment of a primary tumour with the aim of improving the results of surgery and preventing the development of metastases.

One-Stop Clinic

A service in which patients with a known lesion (e.g. a woman with a breast mass identified by her GP) of an unascertained nature (benign vs. malignant) undergo a multimodality (physical examination, imaging and fine-needle aspiration cytology and biopsy) evaluation during the same visit and in most (average 96%) cases leave the clinic with a definitive diagnosis, already booked for further therapy if needed.

Palliative care

Palliative care is the active total care of patients and their families by a multi-professional team when the patient's disease is no longer responsive to curative treatment. The aim is to alleviate symptoms and improve quality of life.

Palliative Radiotherapy

When it is not possible to cure a cancer, radiotherapy can be given to alleviate symptoms. Lower doses are given than for curative or radical radiotherapy and generally over a shorter period of time.

Pathological diagnosis

The microscopic examination (histological or cytological) of the specimen by a pathologist to determine the presence of malignancy and the classification of the malignant tumour.

PREDICT

PREDICT, or nhs.predict, is a tool used across NHS Scotland to calculate PREDICT scores (the predicted 10-year survival benefit of adjuvant chemotherapy) for patients. The latest version was released in October 2020.

Primary Tumour

Original site of the cancer. The mass of tumour cells at the original site of abnormal tissue growth.

Quality Performance Indicators (QPIs)

A set of quality measures developed collaboratively with the three Scottish Regional Cancer Networks, Information Services Division (ISD), and Healthcare Improvement Scotland. The Breast Cancer QPIs were first reported for patients diagnosed during 2012.

Radical Radiotherapy

Radiotherapy is given with the aim of destroying cancer cells to attain cure.

Radiotherapy

The use of radiation, usually X-rays or gamma rays, to kill tumour cells.

Resection

Surgical removal of a portion of any part of the body.

SCAN

South East Scotland Cancer Network: 1 of 3 regional cancer networks in Scotland, covering a population of 1.4 million across 4 Health Boards (Borders, Dumfries & Galloway, Fife and Lothian). A multidisciplinary, patient-focused network of professionals aiming to improve cancer care by facilitating communication and partnership working.

Sentinel Lymph Node Biopsy (SNB)

A surgical procedure used to determine if cancer has spread beyond a primary tumor into the lymphatic system, via the axilla.

SESBSP

South East Scotland Breast Screening Programme.

Staging

The process of determining whether cancer has spread. Staging involves clinical, surgical, radiological and pathological assessment.

TAD

Targeted axillary dissection.

TNM Classification

TNM classification provides a system for staging the extent of cancer. T refers to the size and position of the primary tumour. N refers to the involvement of the lymph nodes. M refers to the existence of metastatic disease.

Tumour

An abnormal mass of tissue. A tumour may be either benign (not cancerous) or malignant. Also known as a neoplasm.

USS

Ultrasound – a type of imaging used in the investigation of breast abnormalities.

WLE (Wide Local Excision)

Breast conserving surgery – removal of the tumour with a margin of normal looking tissue around it. It may also be referred to as a lumpectomy.