NCA Breast QPI report

Patients diagnosed from 1st October 2021 to 30th September 2022
Extracted from eCASE on 12/09/2023

Background

Definitions for the QPIs reported in this section are published by Health Improvement Scotland, while further information on datasets and measurability used are available from Public Health Scotland2. Data are largely presented by Board of diagnosis. However, surgical focussed QPIs (QPI 8ii) is reported by hospital of surgery.

Please note: Western Isles patients are diagnosed and audited in Highland.

Where the number of cases per Board is between one and four, results have been excluded from charts and tables to minimise the risk of disclosure. However, all board results are included within the total for the North of Scotland.

In regards to mortality following SACT, a decision has been taken nationally to move to a new generic QPI (30-day mortality for SACT) applicable across all tumour types. This new QPI will use CEPAS (Chemotherapy ePrescribing and Administration System) data to measure SACT mortality to ensure that the QPI focuses on the prevalent population rather than the incident population. The measurability for this QPI is still under development to ensure consistency across the country and in the meantime all deaths within 30 days of SACT will continue to be reviewed at NHS Board level.

Governance and Risk

QPI performance is overseen by the North Cancer Alliance and its constituent groups, with an assessment of clinical risk and action planning undertaken collaboratively and reporting at board and regional level. Actions will be overseen by the Pathway Boards and reported concurrently into the NCA governance groups and the Clinical Governance committees at each North of Scotland health board.

Further information is available here.

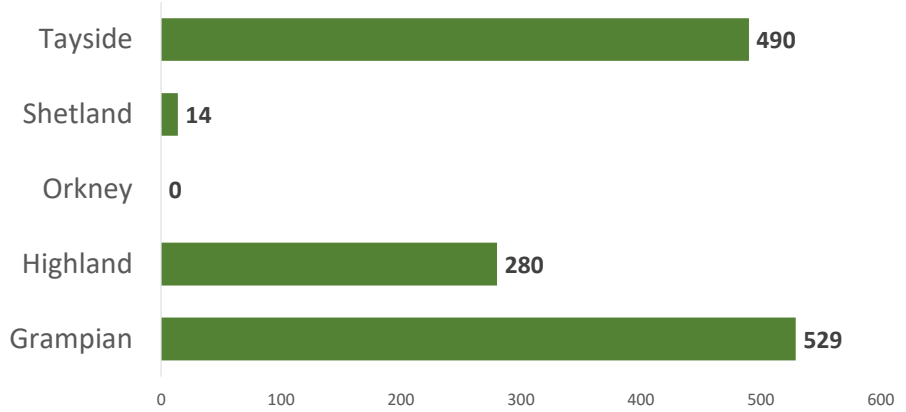
The data contained within this report was extracted from eCASE. Cancer audit is a dynamic process with patient data continually being revised and updated as more information becomes available. This means that apparently comparable reports for the same time period and cancer site may produce different figures if extracted at different times.

QPIs v4.0 - published August 2019
Measurability v4.5

NCA Breast QPI Overview

[redacted] Patient overview 2022

Number of Patients in the NCA **1313**



[redacted] QPI Performance overview

		Breast		
		vs Target	2022	vs Target
Board of Diagnosis	QPI 6(i): Immediate Reconstruction Rate	vs 20%	**21.2%**	
Board of Diagnosis	QPI 6(ii): Immediate Reconstruction Rate	vs 90%	**41.7%**	
Board of Surgery	QPI 8(ii): Minimising Hospital Stay	vs 60%	**83.6%**	
Board of Diagnosis	QPI 9: HER2 Status for Decision Making	vs 90%	**81.5%**	
Board of Diagnosis	QPI 11(i): Adjuvant Chemotherapy	vs 80%	**73.1%**	
Board of Diagnosis	QPI 11(ii): Adjuvant Chemotherapy	vs 80%	**75.8%**	
Board of Diagnosis	QPI 13: RE-exicision Rates	vs <20%	**17.6%**	
Board of Diagnosis	QPI 17: Genomic Testing	vs 60%	**71.2%**	
Board of Diagnosis	QPI 18(i): Neoadjuvant Chemotherapy	vs 80%	**80.9%**	
Board of Diagnosis	QPI 18(ii): Neoadjuvant Chemotherapy	vs 30%	**35.2%**	
Board of Diagnosis	QPI 19: Deep Inspiratory Breath Hold (DIBH) Radiotherapy	vs 80%	**64.6%**	

QPI 6(i): Immediate Reconstruction Rate

QPI 6(i) **Patients undergoing mastectomy for breast cancer should have access to timely immediate breast reconstruction.**

Description Proportion of patients who undergo immediate breast reconstruction at the time of mastectomy for breast cancer.

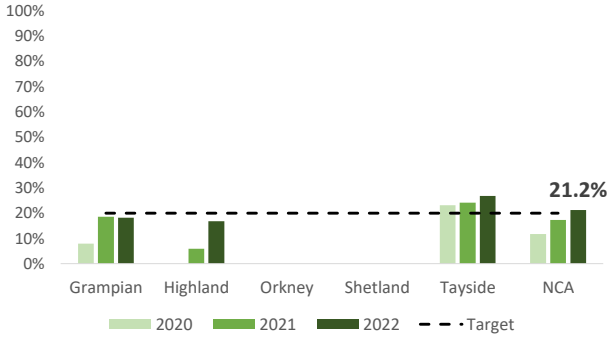
Numerator Number of patients with breast cancer undergoing immediate breast reconstruction at the time of mastectomy.

Denominator All patients with breast cancer undergoing mastectomy.

Target **20%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	18.2%	25	137	18.6%	8.0%
	Highland	16.9%	14	83	5.9%	0.0%
	Orkney	-	0	0	-	-
	Shetland	0.0%	0	7	-	0.0%
	Tayside	26.9%	43	160	24.2%	23.1%
	NCA	**21.2%**	**82**	387	**17.4%**	**11.8%**

NCA boards



Comments: Target met

Exclusions
1. All patients with M1 disease
2. All male patients

QPI 6(ii): Immediate Reconstruction Rate

QPI 6(ii) **Patients undergoing mastectomy for breast cancer should have access to timely immediate breast reconstruction.**

Description Proportion of patients with breast cancer undergoing immediate breast reconstruction at the time of mastectomy, and within 6 weeks of treatment decision.

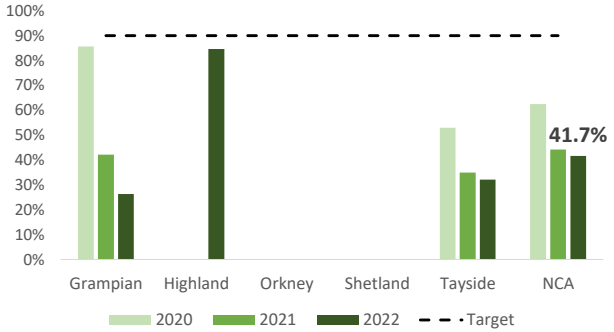
Numerator Number of patients with breast cancer undergoing immediate breast reconstruction at the time of mastectomy within 6 weeks of treatment decision.

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

Target **90%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	26.3%	5	19	42.1%	85.7%
	Highland	84.6%	11	13	-	-
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	32.1%	9	28	35.0%	52.9%
	NCA	**41.7%**	**25**	60	**44.2%**	**62.5%**

NCA boards



Comments:
The NCA region missed the 90% target, hitting only 41.7% due to theatre availability, individual factors and COVID impact. Several patients faced delays due to limited theatre slots and staffing issues. Other patients postponed surgery for personal reasons or needed additional specialist input. Reduced theater access during COVID-19 significantly affected Plastic Surgery, persisting as a challenge even after October 2022.
Efforts were made to manage delays by prioritising treatment for certain patients and working to reinstate theatre capacity since early 2021.

Exclusions
1. All patients with M1 disease
2. All male patients
3. Patients who undergo neoadjuvant chemotherapy

QPI 8(ii): Minimising Hospital Stay

By Board of Surgery

QPI 8(ii) **Minimising Hospital Stay - Patients should have the opportunity for day case/"23 hour" breast surgery wherever appropriate.**

Description Proportion of patients with breast cancer undergoing mastectomy (without reconstruction) with a maximum hospital stgay of 1 night following their procedure

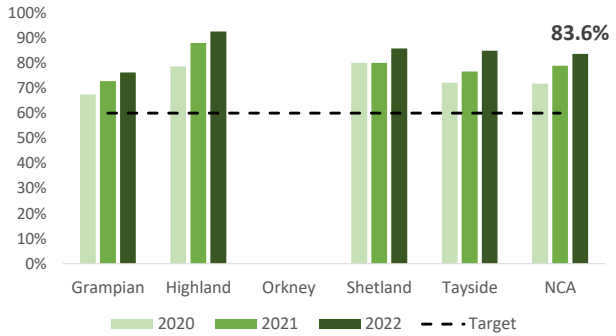
Numerator Number of patients with brest cancer undergoing mastectomy (without reconstruction) with a maximum hosital tay of 1 night following their procedure

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

Target **60%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	76.3%	106	139	72.8%	67.4%
	Highland	92.6%	87	94	87.9%	78.7%
	Orkney	-	0	0	-	-
	Shetland	85.7%	6	7	80.0%	80.0%
	Tayside	84.8%	123	145	76.6%	72.1%
	NCA	**83.6%**	**322**	385	**78.8%**	**71.7%**

NCA boards



Comments: Target met

Exclusions No exclusions

QPI 9: HER2 Status for Decision Making

QPI 9 **HER2 status should be available to inform treatment decision making.**

Description Proportion of patients with invasive breast cancer for whom the HER2 status (as detected by immunohistochemistry (IHC) and/or FISH analysis) is reported within 2 weeks of core biopsy.

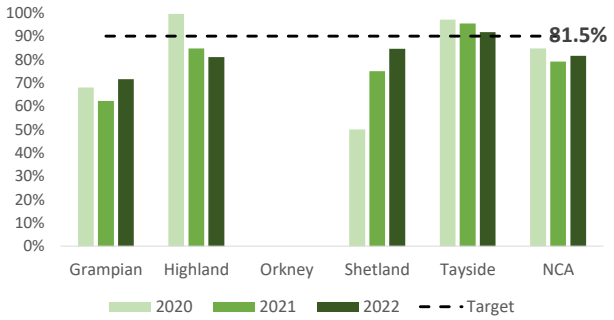
Numerator Number of patients with invasive breast cancer for whom the HER2 status (as detected by IHC and/or FISH analysis) is reported within 2 weeks of core biopsy.

Denominator All patients with invasive breast cancer.

Target **90%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	71.6%	310	433	62.2%	68.0%
	Highland	81.0%	196	242	84.8%	99.5%
	Orkney	-	0	0	-	-
	Shetland	84.6%	11	13	75.0%	50.0%
	Tayside	91.6%	395	431	95.4%	97.1%
	NCA	**81.5%**	**912**	1119	**79.1%**	**84.7%**

NCA boards



Comments: The NCA region missed the 90% target, reaching 81.5% due to FISH testing delays. Most FISH test results were within 7 days, but some faced delays due to late receipt or testing schedules or when cases were assigned to specific pathology consultants, leading to delays during their absence. Staff shortages prevented covering for these gaps. Other patients with uncertain HER-2 results faced delays of 15 and 22 days for essential testing, impacting their treatment timelines.

Exclusions Patients in whom no invasive carcinoma is present on core biopsy.

QPI 11(i): Adjuvant Chemotherapy

QPI 11(i) **Patients with breast cancer should receive chemotherapy post operatively where it will provide a survival benefit for patients.**

Description Proportion of patients with invasive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo adjuvant chemotherapy.

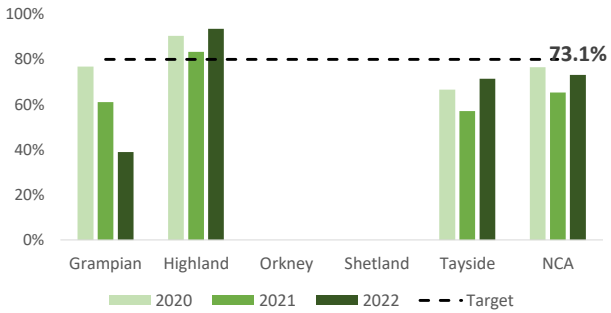
Numerator Number of patients with hormone receptor (ER plus/minus PR) positive HER2 negative breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years and/or high risk genomic assay score that undergo adjuvant chemotherapy.

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.

Target **80%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	38.9%	7	18	61.1%	76.7%
	Highland	93.5%	29	31	83.3%	90.5%
	Orkney	-	0	0	-	-
	Shetland	-	1	1	-	-
	Tayside	71.4%	20	28	57.1%	66.7%
	NCA	**73.1%**	**57**	78	**65.4%**	**76.5%**

NCA boards



Comments: The NCA region fell short of the 80% target, achieving 73.1%, though this marks an improvement from the 2021 rate of 65.4%. The majority of the cases that failed were when the patients declined chemotherapy, or other patients were unfit due to comorbidity issues.

Exclusions

1. All patients with breast cancer taking part in clinical trials of chemotherapy treatment
2. All patients with breast cancer who had had neo-adjuvant chemotherapy
3. All patients with M1 disease

QPI 11(ii): Adjuvant Chemotherapy

QPI 11(ii) **Patients with breast cancer should receive chemotherapy post operatively where it will provide a survival benefit for patients.**

Description Proportion of patients with invasive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo adjuvant chemotherapy.

Numerator Number of patients with triple negative or HER2 positive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years. that 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.

Target **80%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	73.8%	31	42	77.5%	61.4%
	Highland	71.4%	15	21	83.3%	73.1%
	Orkney	-	0	0	-	-
	Shetland	-	2	2	-	-
	Tayside	80.0%	24	30	69.2%	62.1%
	NCA	**75.8%**	**72**	95	**75.6%**	**65.0%**

NCA boards

Comments: The majority of the cases that failed were when the patients declined chemotherapy, or other patients were unfit due to comorbidity issues.

Exclusions

1. All patients with breast cancer taking part in clinical trials of chemotherapy treatment
2. All patients with breast cancer who had had neo-adjuvant chemotherapy
3. All patients with M1 disease

QPI 13: RE-exicision Rates

QPI 13 **Patients undergoing surgery for breast cancer should only undergo one definitive operation where possible.**

Description Proportion of surgically treated patients with breast cancer (invasive or in situ) who undergo re-excision or mastectomy following their initial breast surgery.

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.

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

Target **<20%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	21.2%	65	306	18.0%	24.1%
	Highland	18.9%	31	164	14.6%	21.0%
	Orkney	-	0	0	-	0.0%
	Shetland	-	1	4	-	50.0%
	Tayside	12.5%	33	264	15.6%	16.4%
	NCA	**17.6%**	**130**	738	**16.5%**	**20.9%**

NCA boards

Comments: Target met

Exclusions Lobular carcinoma in situ (LCIS) alone.

QPI 17: Genomic Testing

QPI 17 **Patients with breast cancer should be offered genomic testinge where appropriate.**

Description Proportion of patients 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.

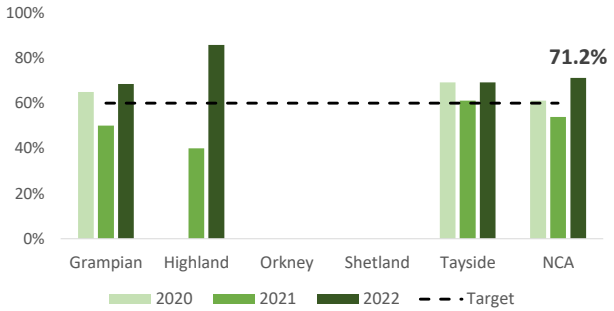
Numerator Number of patients with ER positive, HER2 negative, node negative breast cancer who have a 3-5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo genomic testing.

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.

Target **60%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	68.4%	13	19	50.0%	65.0%
	Highland	85.7%	6	7	40.0%	0.0%
	Orkney	-	0	0	-	-
	Shetland	-	0	0	-	-
	Tayside	69.2%	18	26	61.1%	69.2%
	NCA	**71.2%**	**37**	52	**53.8%**	**61.1%**

NCA boards



Comments: Target met

Exclusions
1. All patients with breast cancer taking part in clinical trials of chemotherapy treatment.
2. All patients who undergo neo-adjuvant therapy.

QPI 18(i): Neoadjuvant Chemotherapy

QPI 18(i) **Patients with breast cancer who receive chemotherapy should be offered neoadjuvant chemotherapy with the aim of achieving pathological complete response where appropriate.**

Description Proportion of patients with triple negative (ER / PR / HER2 negative) or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy that undergo neoadjuvant chemotherapy.

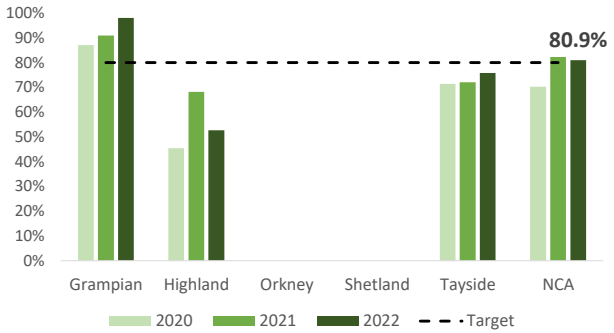
Numerator Number of patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy that undergo neoadjuvant chemotherapy.ual disease.

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

Target **80%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	98.1%	51	52	90.9%	87.1%
	Highland	52.6%	10	19	68.2%	45.5%
	Orkney	-	0	0	-	-
	Shetland	-	1	2	-	-
	Tayside	75.9%	44	58	72.0%	71.4%
	NCA	**80.9%**	**106**	131	**82.3%**	**70.3%**

NCA boards



Comments: Target met

Exclusions Patients who undergo palliative chemotherapy.

QPI 18(ii): Neoadjuvant Chemotherapy

QPI 18(ii) **Patients with breast cancer who receive chemotherapy should be offered neoadjuvant chemotherapy with the aim of achieving pathological complete response where appropriate.**

Description Proportion of patients with triple negative (ER / PR / HER2 negative) or HER2 positive, Stage II or III ductal breast cancer who undergo neoadjuvant chemotherapy who achieve a pathological complete response.

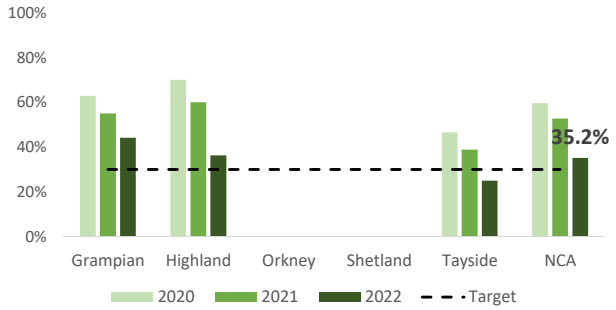
Numerator Number of patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who undergo neoadjuvant chemotherapy who achieve a pathological complete response.

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

Target **30%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	44.2%	23	52	55.0%	63.0%
	Highland	36.4%	4	11	60.0%	70.0%
	Orkney	-	0	0	-	-
	Shetland	-	0	1	-	-
	Tayside	25.0%	11	44	38.9%	46.7%
	NCA	**35.2%**	**38**	108	**52.7%**	**59.6%**

NCA boards



Comments: Target met

Exclusions No exclusions

QPI 19: Deep Inspiratory Breath Hold (DIBH) Radiotherapy

QPI 19 **Patients with left sided breast cancer or DCIS undergoing adjuvant radiotherapy treatment should use a deep inspiratory breath hold (DIBH) radiotherapy technique.**

Description Proportion of patients with left sided breast cancer or DCIS receiving adjuvant radiotherapy treatment who use a DIBH radiotherapy technique.

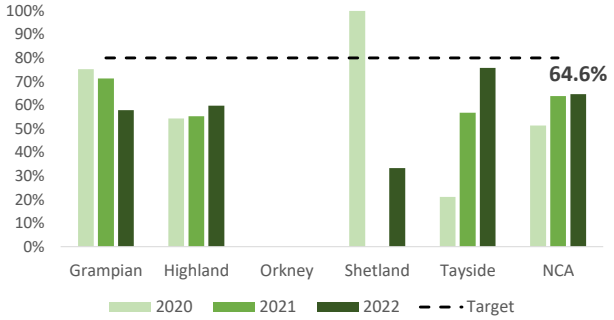
Numerator Number of patients with left sided breast cancer or DCIS receiving adjuvant radiotherapy treatment who use a DIBH radiotherapy technique.

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

Target **80%**

		2022	Numerator	Denominator	2021	2020
2022	Grampian	57.9%	99	171	71.3%	75.2%
	Highland	59.8%	61	102	55.2%	54.4%
	Orkney	-	0	0	-	-
	Shetland	33.3%	2	6	-	100.0%
	Tayside	75.8%	125	165	56.8%	21.1%
	NCA	**64.6%**	**287**	444	**63.8%**	**51.3%**

NCA boards



Comments: The NCA region missed the 80% target, reaching only 64.4% due to several factors. Most patients who failed the indicator couldn't undergo the Deep Inspiration Breath Hold (DIBH) technique due to various reasons like tumour location or patient choices. Other circumstances include the workload in the physics department, impacting their ability to meet the target. Elderly patients with health issues affecting breathing or positioning influenced decisions, leading to deviations from planned techniques.

Exclusions No exclusions