Quality Performance Indicators Audit Report

Tumour Area:	Breast Cancer
Patients Diagnosed:	1st January – 31st December 2021
Published Date:	March 2023

1. Patient Numbers and Case Ascertainment in the North of Scotland

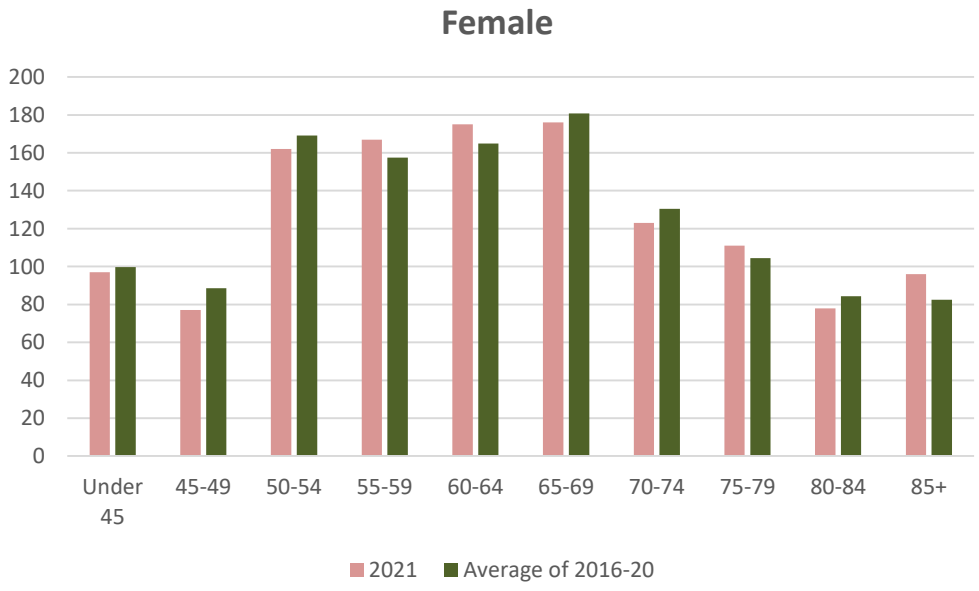
Between 1st January and 31st December 2021 a total of 1,271 cases of breast cancer were diagnosed in the North Cancer Alliance and recorded through audit. Overall case ascertainment was high at 98.0%. QPIs based on cancer audit data are considered to be representative of all patients diagnosed with breast cancer during the audit period.

Case ascertainment and proportion of NCA total for patients diagnosed with Breast Cancer in 2021

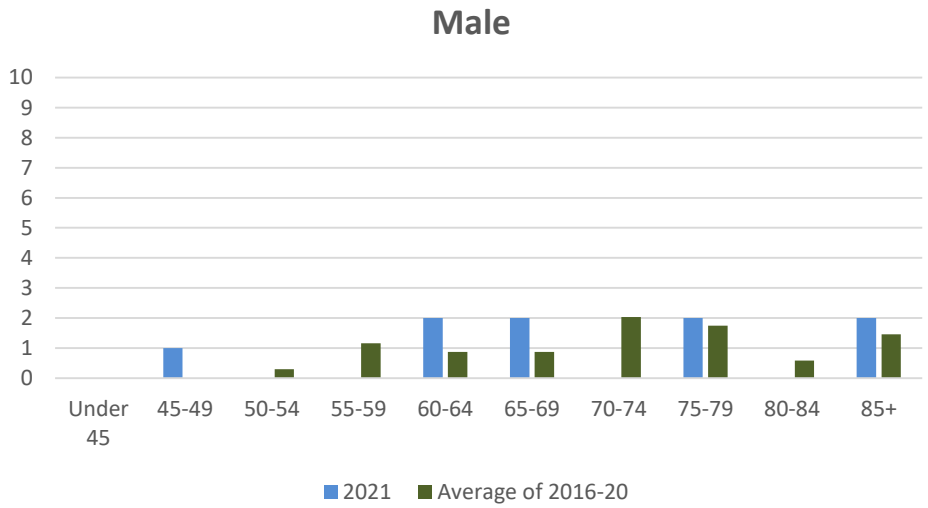
	Grampian	Highland & W Isles	Orkney	Shetland	Tayside	NoS
No. of Patients 2021	546	263	0	10	452	1271
% of NoS total	43.0%	20.7%	0.0%	0.8%	35.6%	100%
Mean ISD Cases 2016-20	507.6	290.0	2.6	12.4	484.6	1297.2
% Case ascertainment 2021	107.6%	90.7%	0.0%	80.6%	93.3%	98.0%

2. Age Distribution

The figures below shows the age distribution of patients diagnosed with breast cancer in the North Cancer Alliance in 2021 and 5 years (2016-2020) average number of patients. The first graph shows, in 2021 the highest number of female patients were diagnosed in the 60-69 age group followed by 50-59 age group. Also an increased number of female patients were diagnosed in the 85+ age group in 2021, up from 61 in 2020 to 96 in 2021. In comparison with 5 years average female patient numbers the pattern is similar with a slight decrease in numbers for the 55-64, 75-79 and 85+ age groups.



The second graph shows the number of male patients were diagnosed in 2021 and 5 year average of male patients.



Age distribution of patients diagnosed with breast cancer in the NCA in 2021 and Average of 2016-2020

3. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland[1], while further information on datasets and measurability used are available from Public Health Scotland (PHS)[2]. Data is presented by Board of Audit, with the exception QPI 8, which is reported by Board of Surgery.

**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 it is anticipated that performance against this measure will be reported in the next audit cycle (the target will be revised from <5% to <10% when it is reported using CEPAS due to the increased clinical cohort who will be receiving appropriate palliative chemotherapy). In the meantime all deaths within 30 days of SACT will continue to be reviewed at NHS Board level.

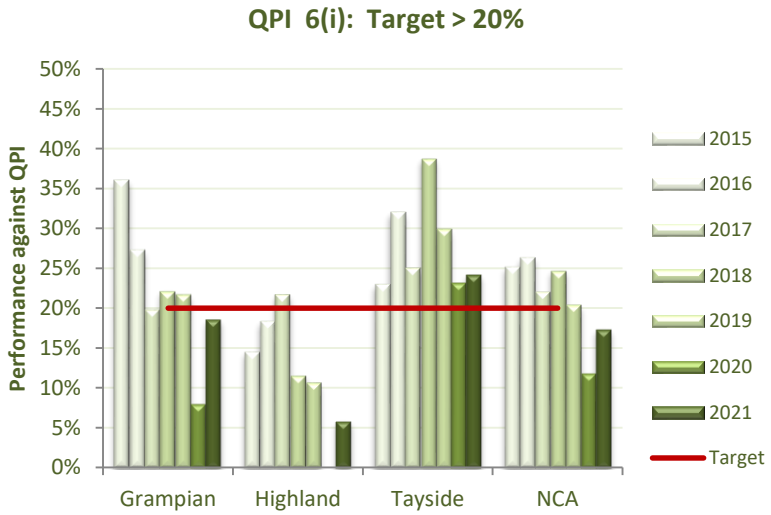
4. Governance and Risk

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

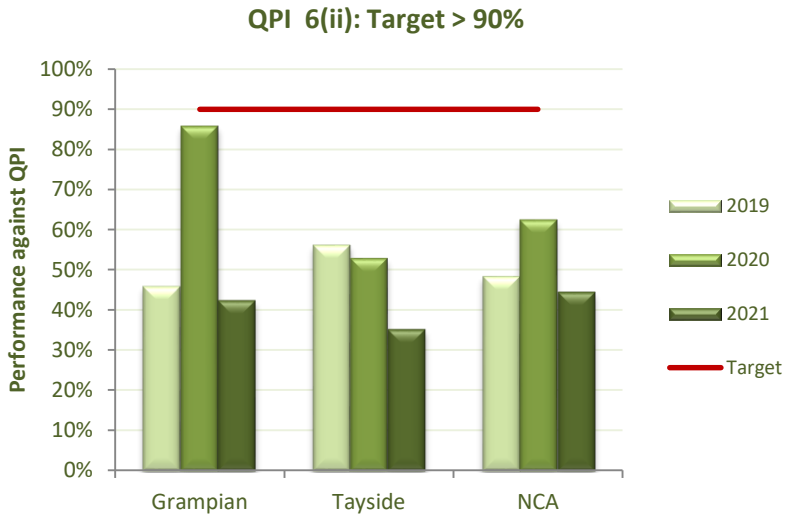
QPI 6	Immediate Reconstruction Rate
Patients undergoing mastectomy for breast cancer should have access to timely immediate breast reconstruction.	

Specification (i) Patients undergoing immediate breast reconstruction at the time of mastectomy



	Performance (%)	Numerator	Denominator
Grampian	18.6%	24	129
Highland & W Isles	5.9%	5	85
Orkney	-	0	0
Shetland*	-	-	-
Tayside	24.2%	30	124
NCA	**17.4%**	**59**	**340**

Specification (ii) Patients undergoing immediate breast reconstruction at the time of mastectomy, and within 6 weeks of treatment decision

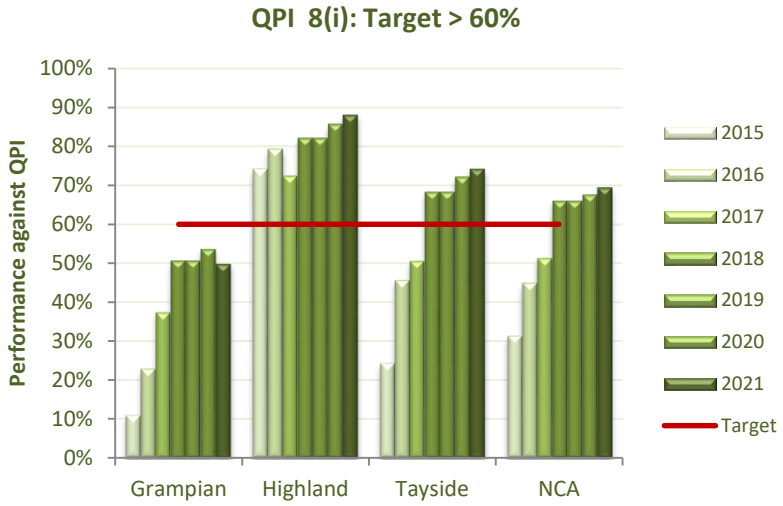


	Performance (%)	Numerator	Denominator
Grampian	42.1%	8	19
Highland & W Isles*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	35.0%	7	20
NCA	**44.2%**	**19**	**43**

Ongoing Covid-19 restrictions during 2021 meant surgical availability was reduced for a period of time due to service pressures on staff and theatre capacity. As per national advice from the Association of Breast Cancer Surgery (https://associationofbreastsurgery.org.uk/), some North of Scotland boards paused reconstructive surgery at the time of mastectomy until May 2022. Boards are recovering the capacity to offer reconstruction as service recovery continues.

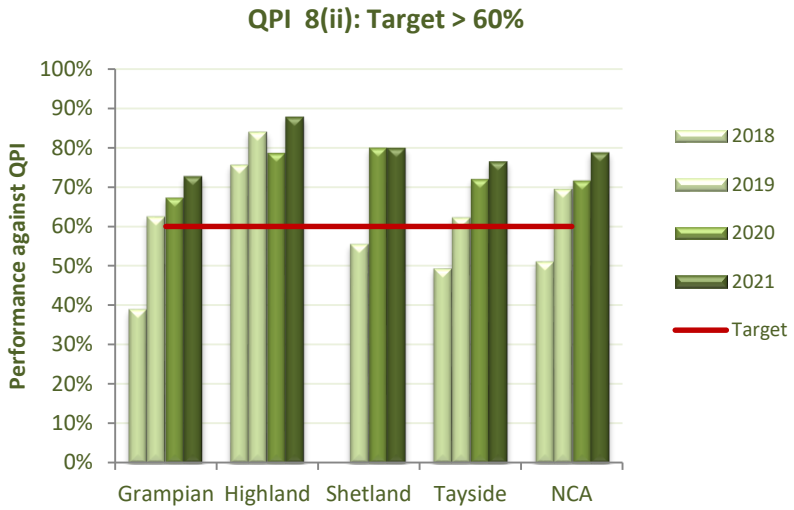
QPI 8	Minimising Hospital Stay
Patients should have the opportunity for day case / 23 hour breast surgery wherever appropriate.	

Specification (i) Patients undergoing wide excision and / or an axillary sampling procedure as day case surgery



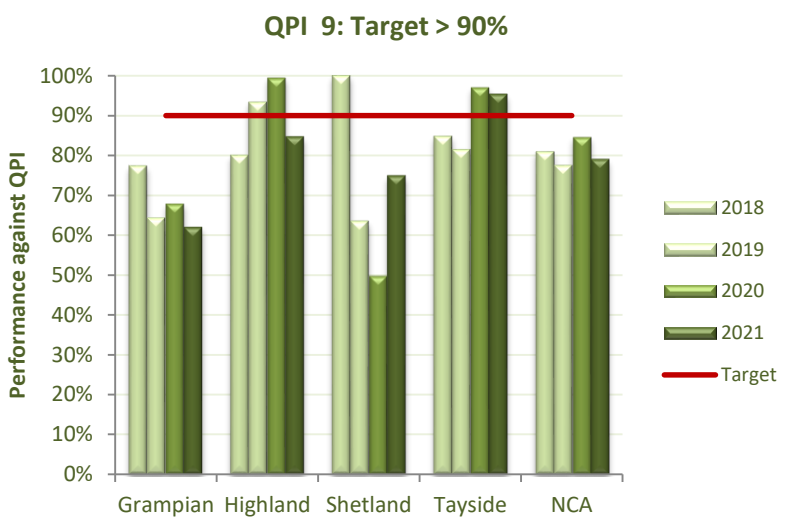
	Performance (%)	Numerator	Denominator
Grampian	50.0%	107	214
Highland & W Isles	88.2%	149	169
Orkney	-	0	0
Shetland*	-	-	-
Tayside	74.4%	177	238
NCA	**69.6%**	**434**	**624**

Specification (ii) Patients undergoing mastectomy (without reconstruction) with a maximum hospital stay of 1 night following their procedure



	Performance (%)	Numerator	Denominator
Grampian	72.8%	75	103
Highland & W Isles	87.9%	80	91
Orkney	-	0	0
Shetland	80.0%	4	5
Tayside	76.6%	72	94
NCA	**78.8%**	**231**	**293**

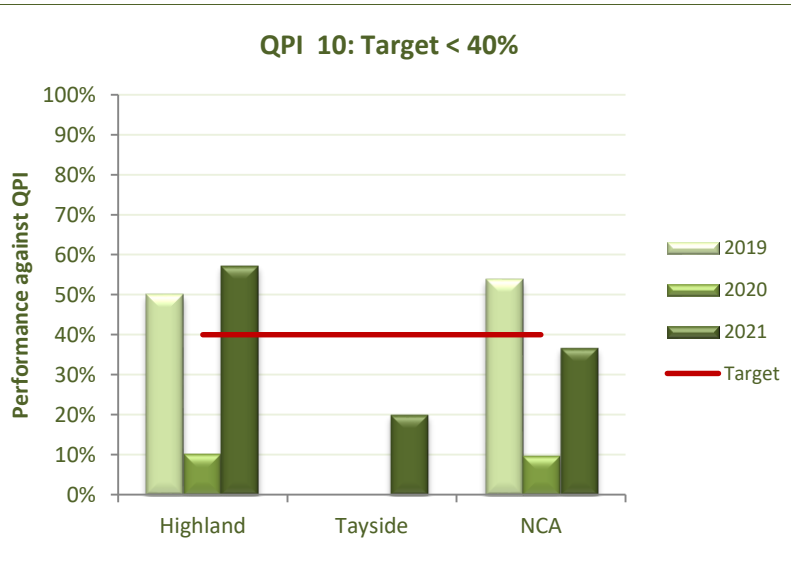
QPI 9	HER2 Status for Decision Making
Proportion of patients with invasive breast cancer for whom the HER2 status (as detected by immunohistochemistry (IHC) and/or FISH analysis) is reported within 2 weeks of core biopsy.	



	Performance (%)	Numerator	Denominator
Grampian	62.2%	293	471
Highland & W Isles	84.8%	195	230
Orkney	-	0	0
Shetland	75.0%	6	8
Tayside	95.4%	391	410
NCA	**79.1%**	**885**	**1119**

FISH testing is completed at external laboratories to the North of Scotland and performance has been affected by logistics of sample transportation and the sharing of results. The NCA is supporting regional work to reduce delays in FISH testing pathways. This QPI is currently under formal review.

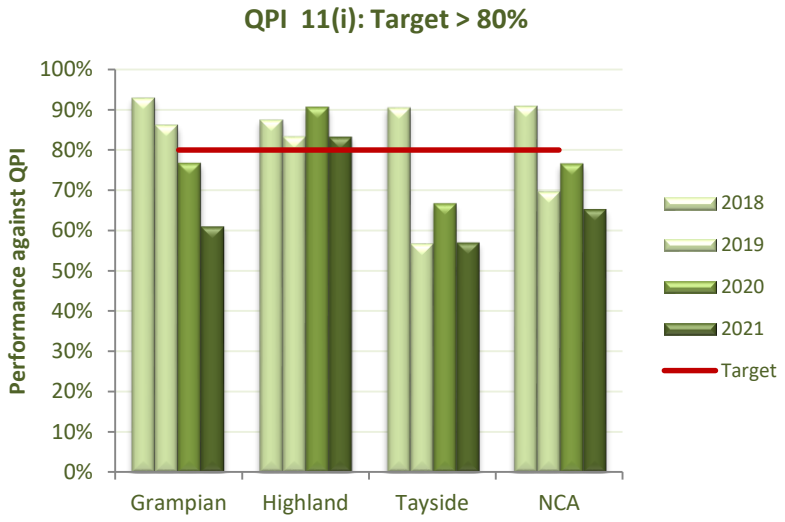
QPI 10	Radiotherapy for Breast Conservation in Older Adults
Proportion of patients ≥ 70 years of age with T1 N0, ER-positive, HER2-negative, LVI negative, Grade I to II breast cancers undergoing conservation surgery (completely excised with margin ≥1mm) with hormone therapy who receive radiotherapy.	



	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland & W Isles	57.1%	4	7
Orkney	-	0	0
Shetland	-	0	0
Tayside	20.0%	4	20
NCA	**36.7%**	**11**	**30**

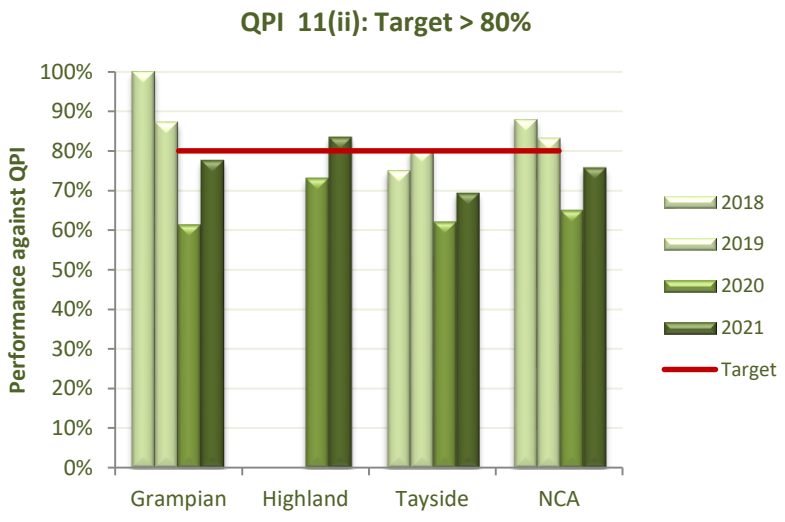
QPI 11	Adjuvant Chemotherapy
Proportion of patients with invasive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo adjuvant chemotherapy.	

Specification (i): Patients with hormone receptor (ER plus/minus PR) positive, HER2 negative breast cancer with a >5% overall survival benefit of chemotherapy treatment predicted at 10 years and/or high risk genomic assay score.



	Performance (%)	Numerator	Denominator
Grampian	61.1%	22	36
Highland & W Isles	83.3%	20	24
Orkney	-	0	0
Shetland*	-	-	-
Tayside	57.1%	24	42
NCA	**65.4%**	**68**	**104**

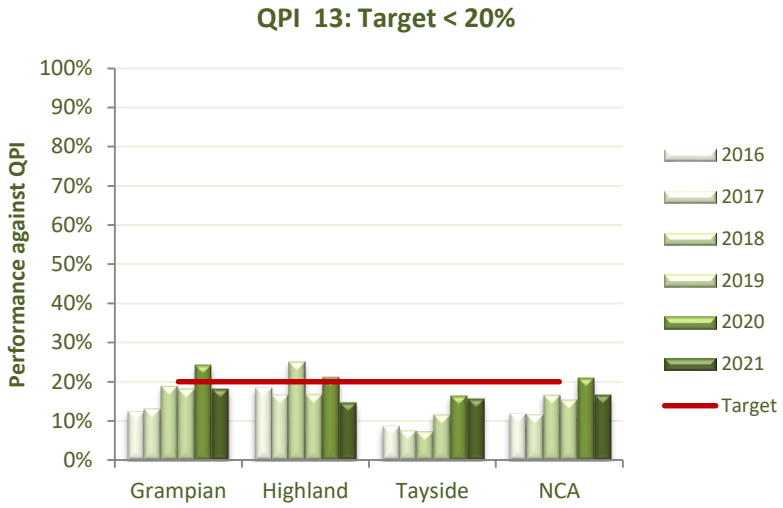
Specification (ii) Patients with triple negative (ER negative, PR negative, HER2 negative) or HER2 positive breast cancer with >5% overall survival benefit of chemotherapy treatment predicted at 10 years.



	Performance (%)	Numerator	Denominator
Grampian	77.5%	31	40
Highland & W Isles	83.3%	10	12
Orkney	-	0	0
Shetland	-	0	0
Tayside	69.2%	18	26
NCA	**75.6%**	**59**	**78**

This QPI has been audited; the majority of cases where this QPI has not been met have been due to patient choice or patient fitness for treatment.

QPI 13	Re-excision Rates
Proportion of surgically treated patients with breast cancer (invasive or in situ) who undergo re-excision or mastectomy following their initial breast surgery.	

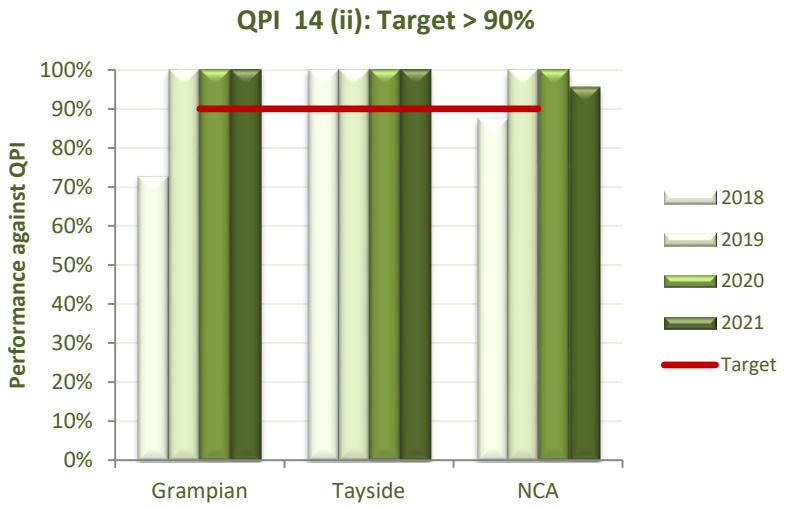


	Performance (%)	Numerator	Denominator
Grampian	18.0%	59	328
Highland & W Isles	14.6%	22	151
Orkney	-	0	0
Shetland*	-	-	-
Tayside	15.6%	41	263
NCA	**16.5%**	**123**	**744**

QPI 14	Referral for Genetics Testing
Proportion of patients who meet the following criteria for gene testing and are referred to a specialist genetics clinic.	

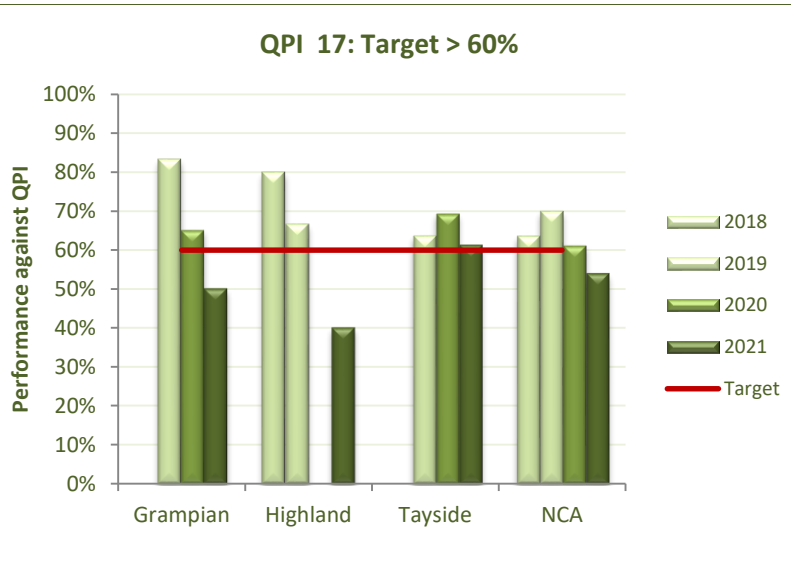
Specification (i): Patients with breast cancer who are under 30 years of age;
This specification is not reported due to the number of patients included in the denominator being less than 5.

Specification (ii) Patients with triple negative breast cancer who are under 50 years of age



	Performance (%)	Numerator	Denominator
Grampian	100%	13	13
Highland & W Isles*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	100%	5	5
NCA	**95.5%**	**21**	**22**

QPI 17	Genomic Testing
Proportion 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.	

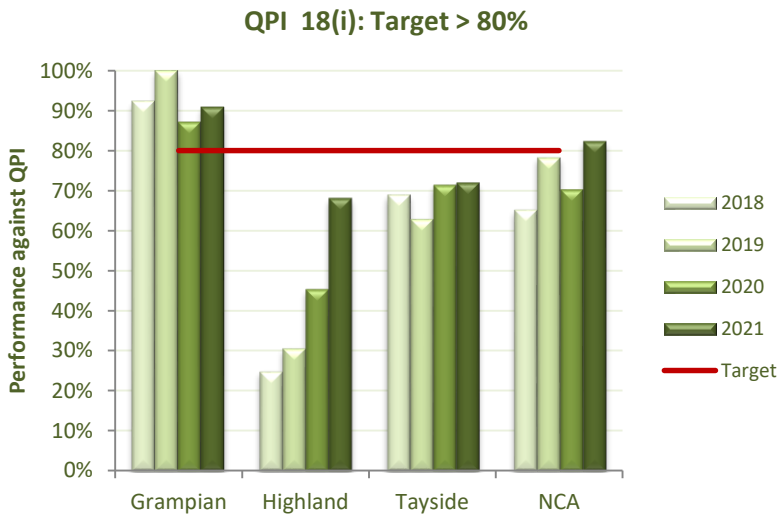


	Performance (%)	Numerator	Denominator
Grampian	**50.0%**	8	16
Highland & W Isles	**40.0%**	2	5
Orkney	-	0	0
Shetland	-	0	0
Tayside	**61.1%**	11	18
NCA	**53.8%**	**21**	**39**

This QPI has been audited; the majority of cases where this QPI has not been met were due to patient choice to undergo genomic testing.

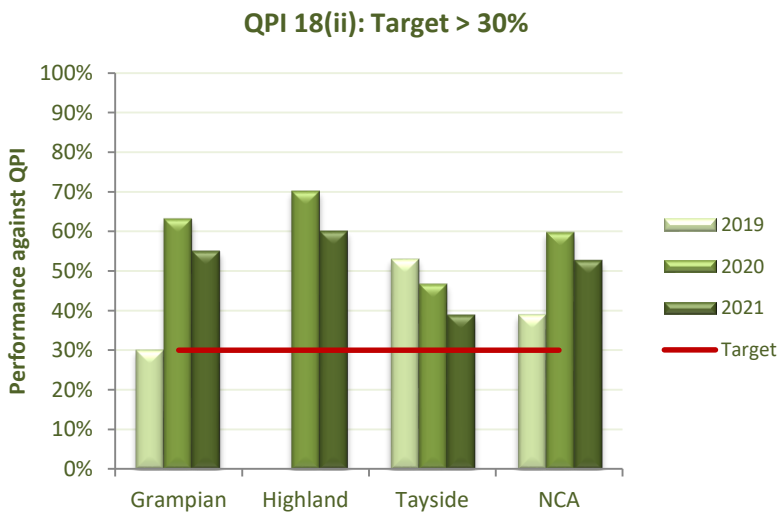
QPI 18	Neoadjuvant Chemotherapy
Proportion of patients with triple negative (ER / PR / HER2 negative) or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy that undergo neoadjuvant chemotherapy with the aim of achieving pathological complete response.	

Specification (i) Patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy that undergo neoadjuvant chemotherapy.



	Performance (%)	Numerator	Denominator
Grampian	90.9%	60	66
Highland & W Isles	68.2%	15	22
Orkney	-	0	0
Shetland	-	0	0
Tayside	72.0%	18	25
NCA	**82.3%**	**93**	**113**

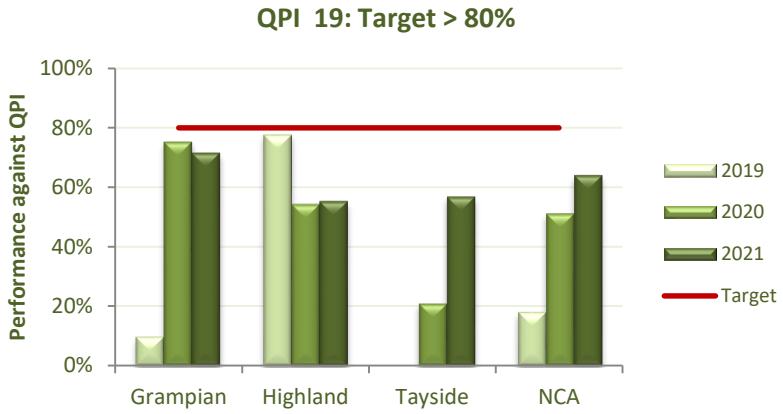
Specification (ii) Patients with triple negative or HER2 positive, Stage II or III ductal breast cancer who undergo neoadjuvant chemotherapy who achieve a pathological complete response.



	Performance (%)	Numerator	Denominator
Grampian	55.0%	33	60
Highland & W Isles	60.0%	9	15
Orkney	-	0	0
Shetland	-	0	0
Tayside	38.9%	7	18
NCA	**52.7%**	**49**	**93**

The ongoing recovery from the Covid-19 pandemic continues to impact on service recovery. Some cases where this QPI was not met were impacted by patient choice and fitness to undergoing neoadjuvant treatment.

QPI 19	Deep Inspiratory Breath Hold (DIBH) Radiotherapy
Proportion of patients with left sided breast cancer or DCIS receiving adjuvant radiotherapy treatment who use a DIBH radiotherapy technique.	



	Performance (%)	Numerator	Denominator
Grampian	71.3%	127	178
Highland & W Isles	55.2%	37	67
Orkney	-	0	0
Shetland*	-	-	-
Tayside	56.8%	67	118
NCA	**63.8%**	**233**	**365**

North of Scotland boards are confident all fit patients were offered DIBH radiotherapy, cases where this QPI have not been met are due to recording errors, patient fitness and patient choice.

Work is ongoing to ensure accurate recording of these figures. This QPI is currently under formal review.

References

1. Scottish Cancer Taskforce, 2021. Breast Cancer Clinical Performance Indicators, Version 4.0. Health Improvement Scotland. http://www.healthcareimprovementscotland.org/his/idoc.ashx?docid=967353aa-a887-4112-86fe-582b266d1ac2&version=-1

2. http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/