

Quality Performance Indicators Audit Report



Tumour Area:	Breast Cancer
Patients Diagnosed:	1 st January – 31 st December 2020
Published Date:	Draft V7 May 2022

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

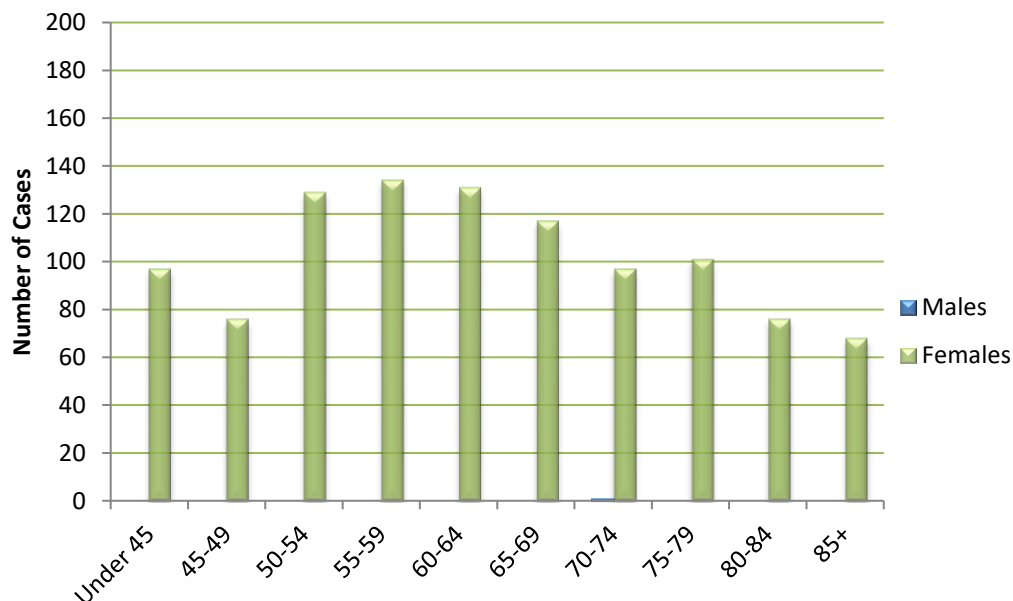
Between 1st January and 31st December 2020 a total of 1,027 cases of breast cancer were diagnosed in the North of Scotland and recorded through audit. Overall case ascertainment was 77.1%. QPIs based on cancer audit data are considered to be representative of all patients diagnosed with breast cancer during the audit period.

Case ascertainment and proportion of NoS total for patients diagnosed with Breast Cancer in 2020

	Grampian	Highland & W Isles	Orkney	Shetland	Tayside	NoS
No. of Patients 2019	435	220	1	11	360	1027
% of NoS total	42.4%	21.4%	0.1%	1.1%	35.1%	100%
Mean ISD Cases 2015-19	513.2	301.2	3.0	12.0	500.8	1332.0
% Case ascertainment 2020	84.8%	73.0%	33.3%	91.7%	71.9%	77.1%

2. Age Distribution

The figure below shows the age distribution of patients diagnosed with breast cancer in the North of Scotland in 2020, with numbers of patients diagnosed highest in the 55-59 year age bracket.



Age distribution of patients diagnosed with breast cancer in the NoS in 2020

3. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland¹, while further information on datasets and measurability used are available from Information Services Division². Data is presented by Board of Audit, with the exception QPI 8, which is reported by Board of Surgery, and QPI 16, which is reported by Board of residence of the patient.

**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.

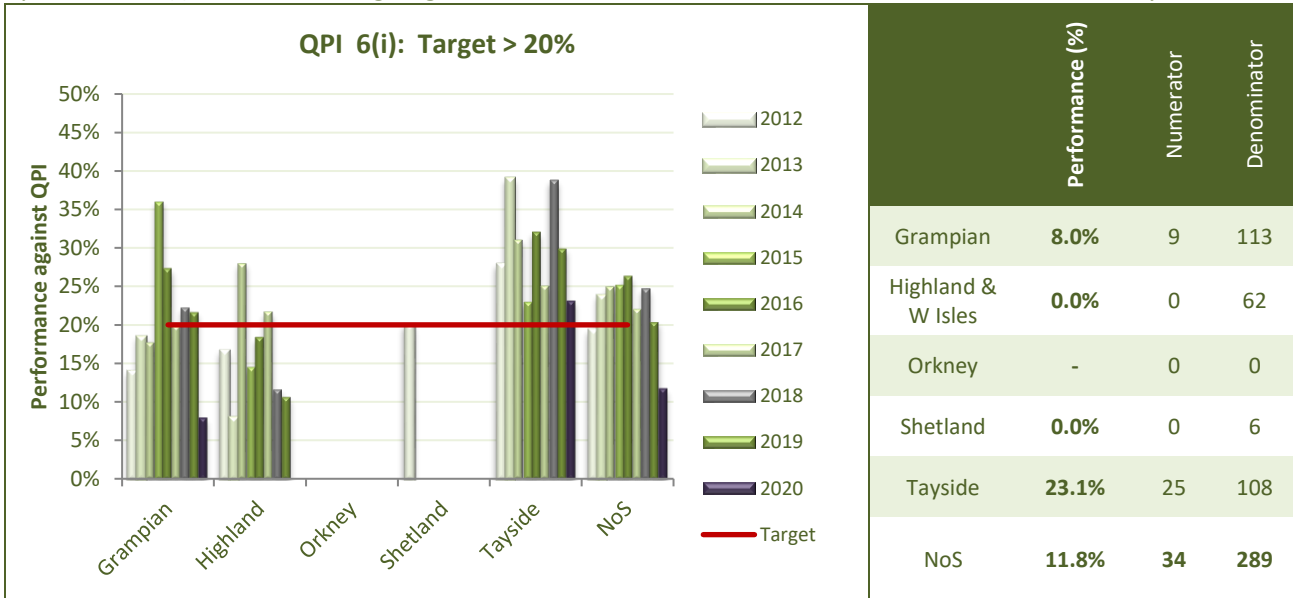
4. Governance and Risk

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

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



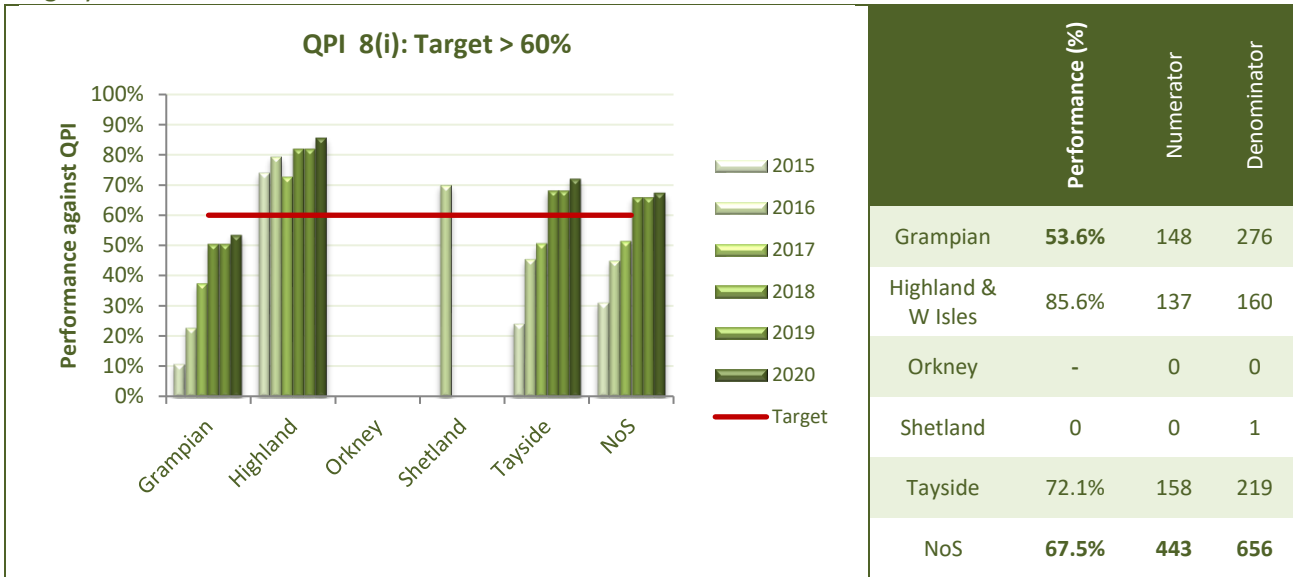
Specification (ii) Patients undergoing immediate breast reconstruction at the time of mastectomy, and within 6 weeks of treatment decision



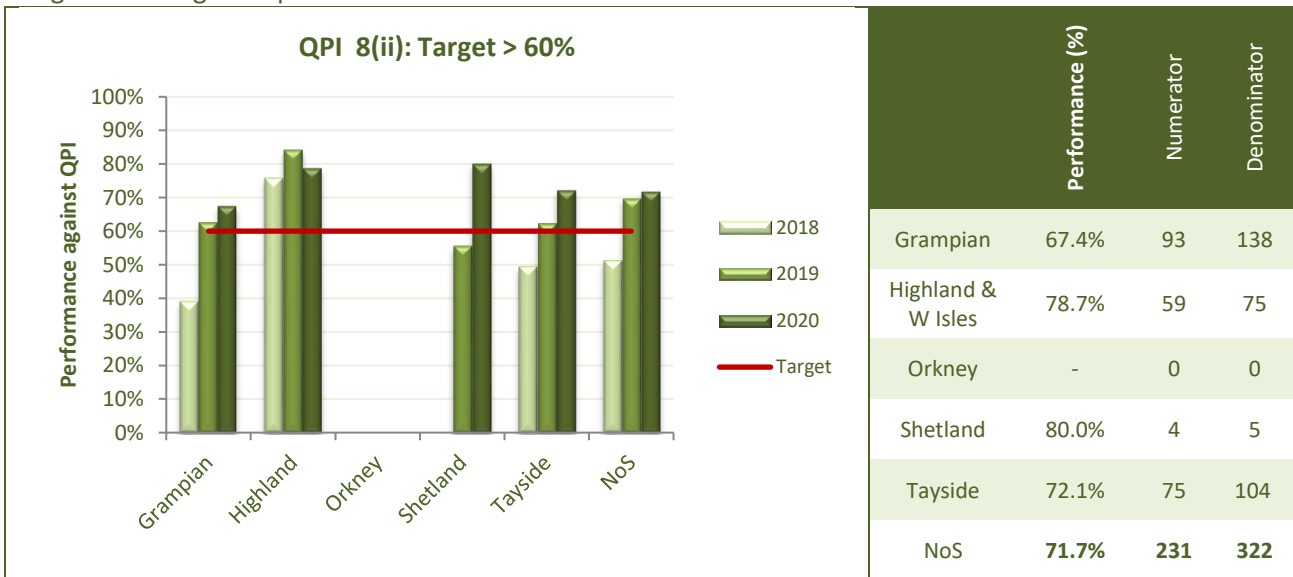
Covid-19 restrictions meant surgical availability was reduced for a period of time, and redeployment of staff affected the ability for boards to offer immediate breast reconstruction at the time of mastectomy. Patient choice to defer reconstruction is also a factor in this QPI.

QPI 8	Minimising Hospital Stay
Proportion of patients undergoing day case / 23 hour surgery for breast surgery.	

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



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



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.	



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In some cases this information is not definitively recorded at MDT as two treatment paths are provisionally agreed, depending on missing test results.

After an audit by NHS Highland they have found the HER2 date has been recorded as the date the biopsy was conducted, not the date of reporting. This will be corrected for future QPI reporting.

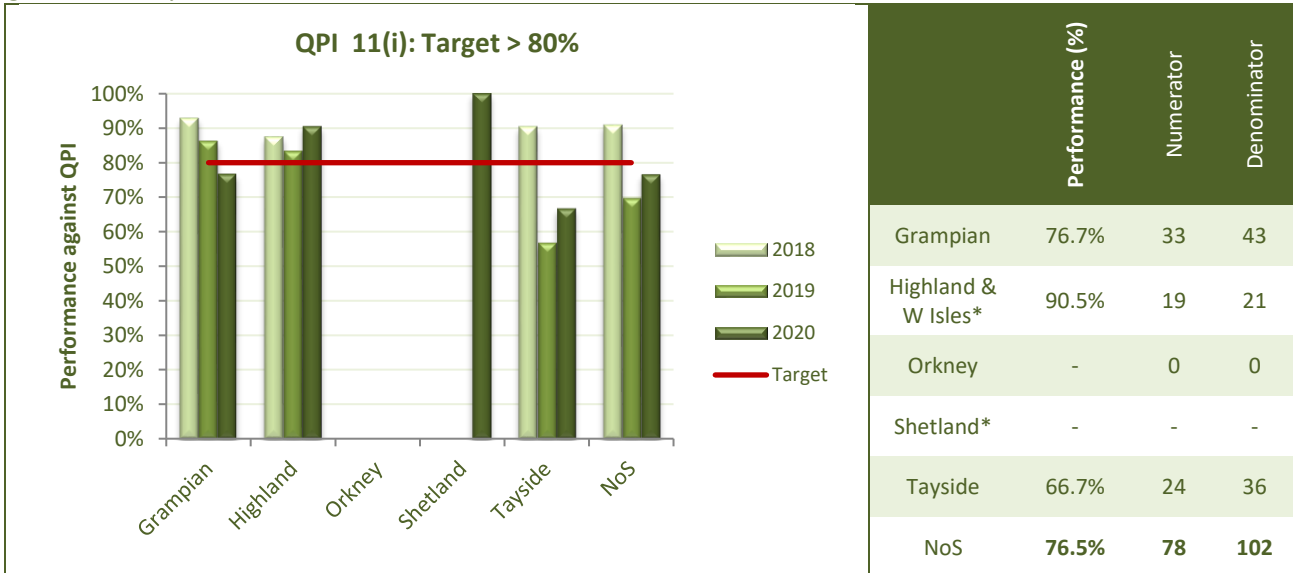
The two week turnaround time for FISH testing remains a challenge within the North of Scotland and work is ongoing to support pathways and improved compliance.

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 ≥ 1 mm) with hormone therapy who receive radiotherapy.	



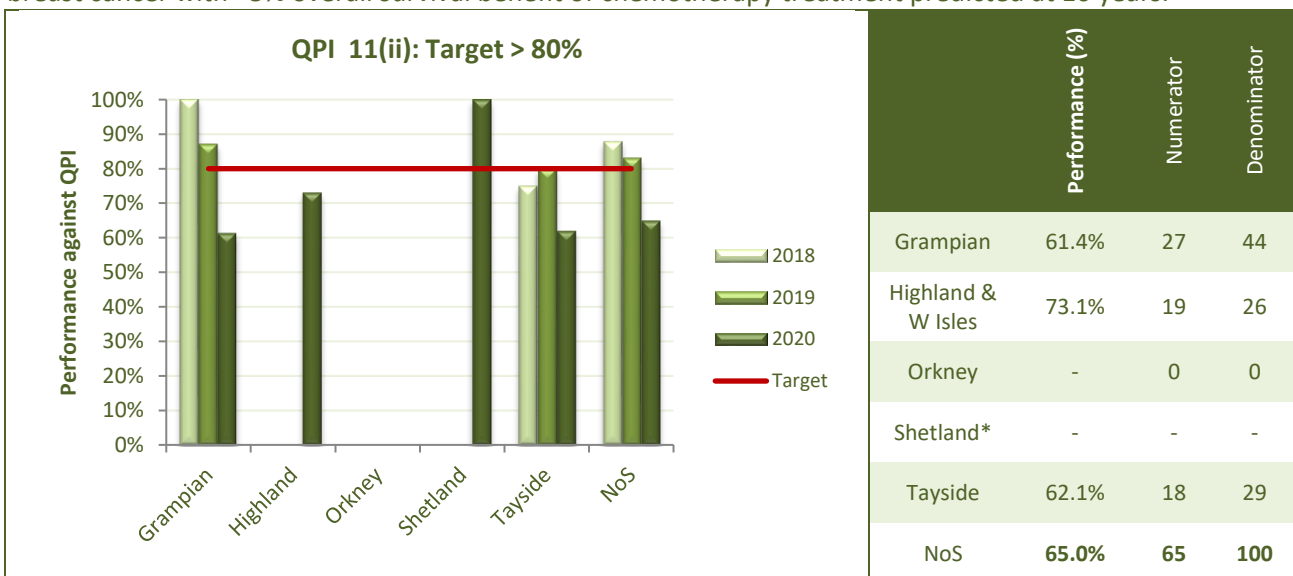
QPI 11	Adjuvant Chemotherapy
Proportion of patients with invasive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo adjuvant chemotherapy.	

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.



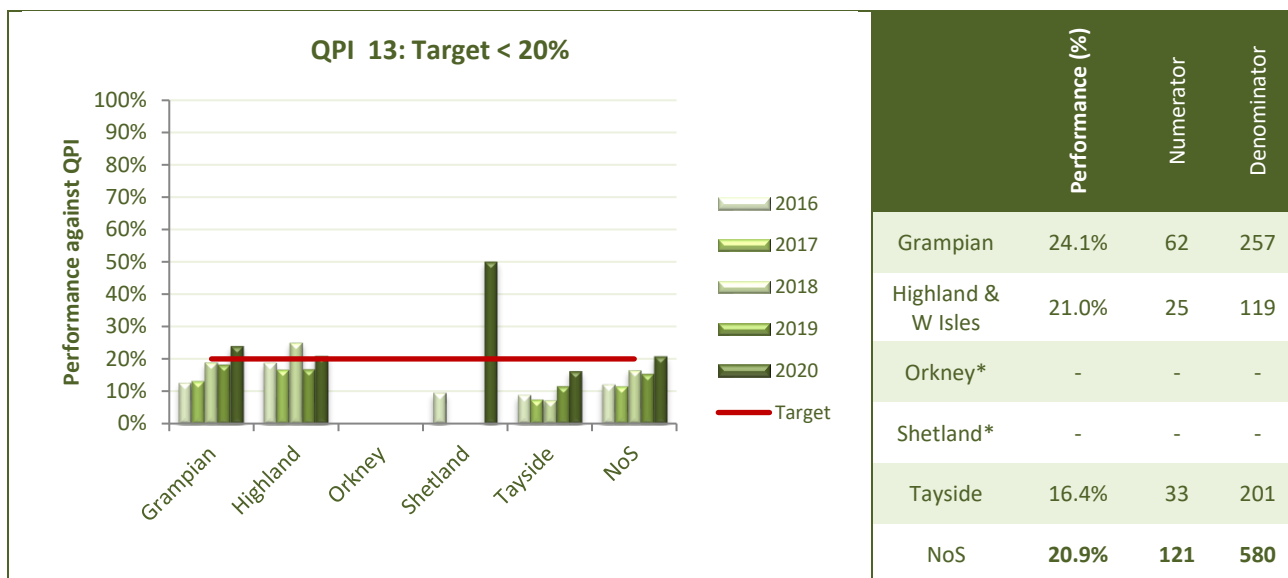
*Where the number of cases per Board is between one and four, results have been excluded from charts and tables to minimise the risk of disclosure. However, all board results are included within the total for the North of Scotland.

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.



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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.	



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In NHS Grampian, a new localisation technique was introduced. This technique was audited and there was an associated learning curve. During the COVID pandemic, a different operating site was used by the NHS Grampian team, which used different equipment.

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.	

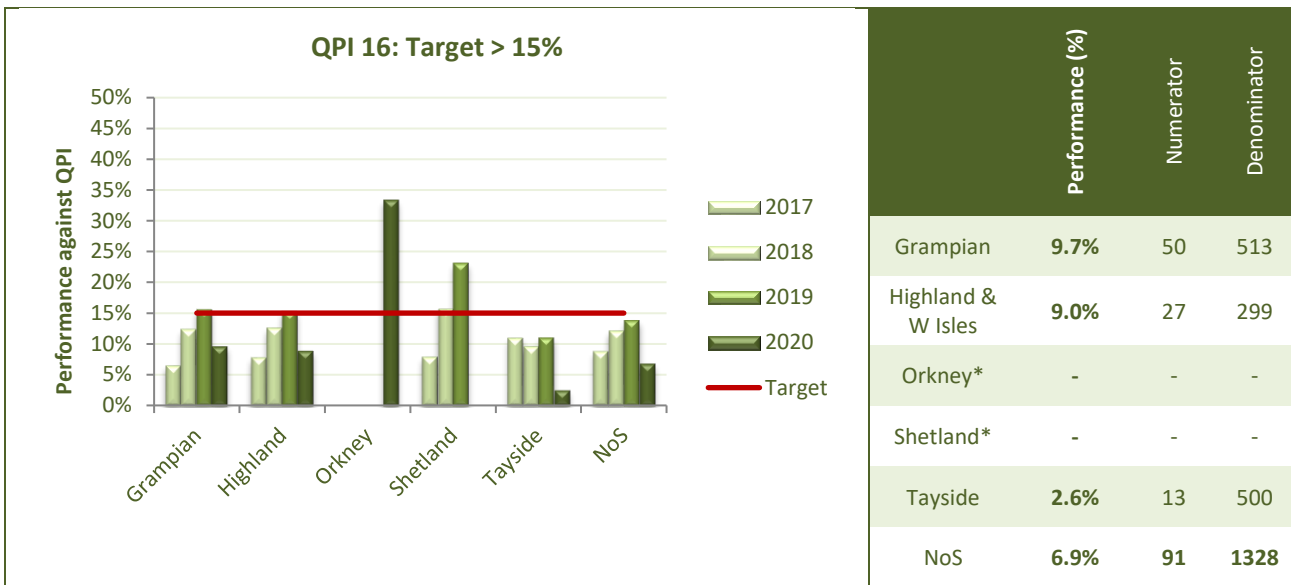
	Specification (i) Patients with breast cancer who are under 30 years of age (Target > 90%)			Specification (ii) Patients with triple negative breast cancer who are under 50 years of age (Target > 90%)		
	Performance (%)	Numerator	Denominator	Performance (%)	Numerator	Denominator
Grampian*	100%	3	3	100%	11	11
Highland & W Isles	100%	1	1	100%	3	3
Orkney	-	0	0	-	0	0
Shetland	-	0	0	-	0	0
Tayside*	100%	3	3	100%	9	9
NoS*	100%	7	7	100%	23	23

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QPI 15	30 Day Mortality following Chemotherapy
Proportion of patients with breast cancer who die within 30 days of chemotherapy.	

QPI 15 was amended through the Formal Review of Breast Cancer QPIs in 2019. Data required to report this revised standard is not yet available for patients treated in 2020 and therefore it is not possible to report performance against this target.

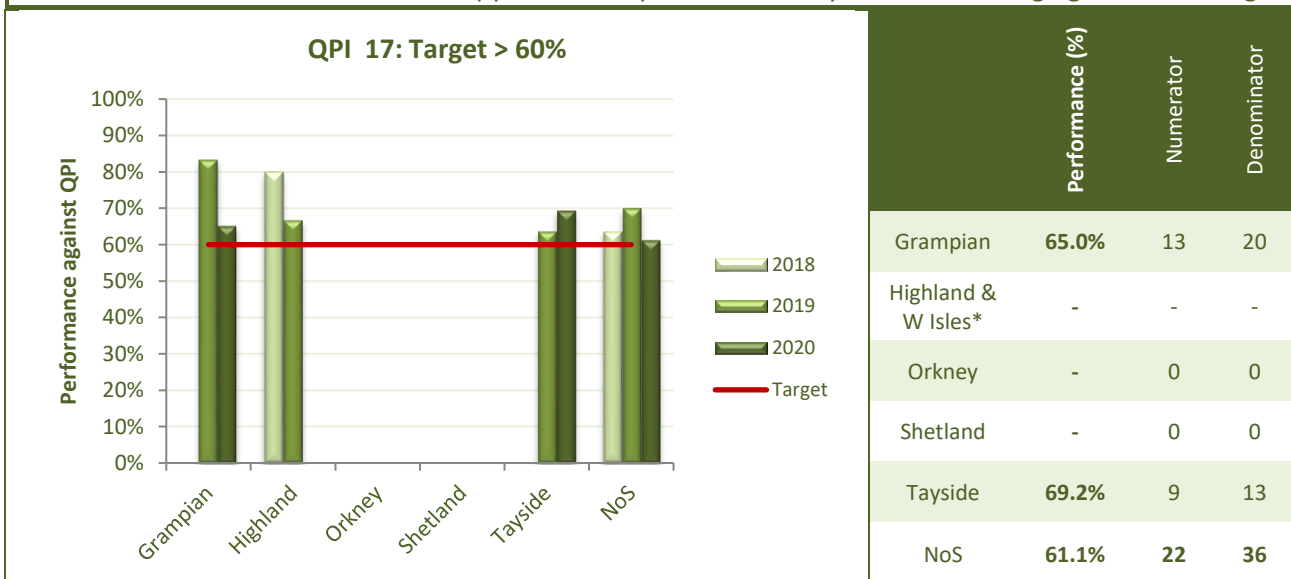
QPI 16	Clinical Trials and Research Study Access
Proportion of patients with breast cancer who are consented for a clinical trial / research study. Figures show patients consented for clinical trials or research studies during 2020.	



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There was reduced access to appropriate trials available for all patients in this time period.

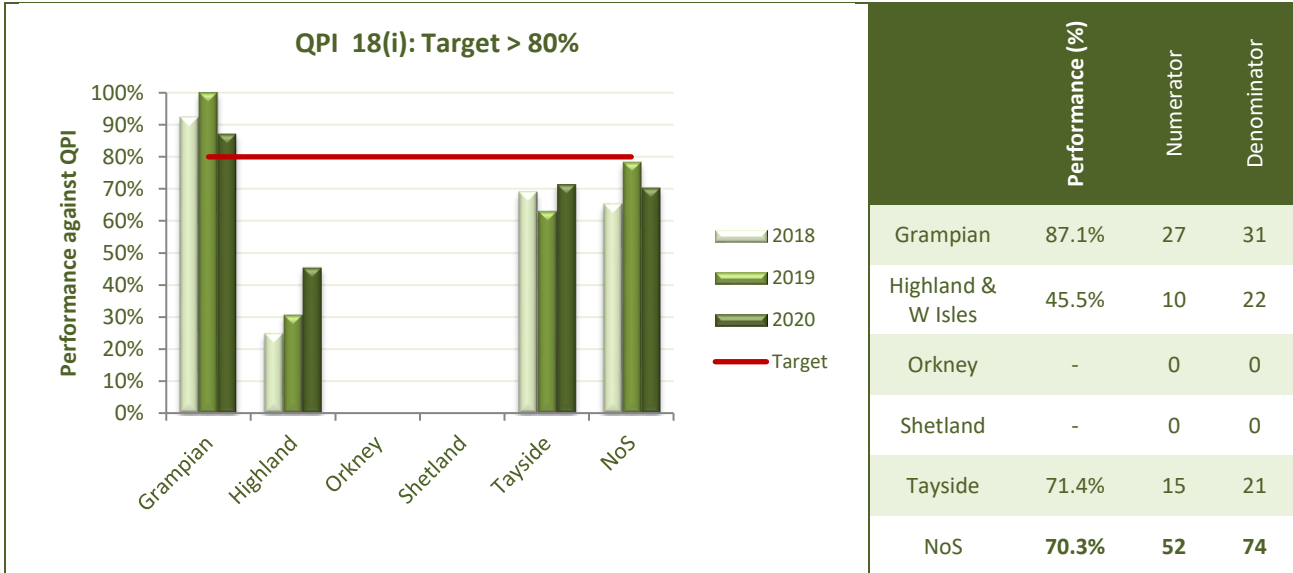
QPI 17	Genomic Testing
Proportion of patients with ER positive, HER2 negative, node negative breast cancer who have a 3-5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo genomic testing.	



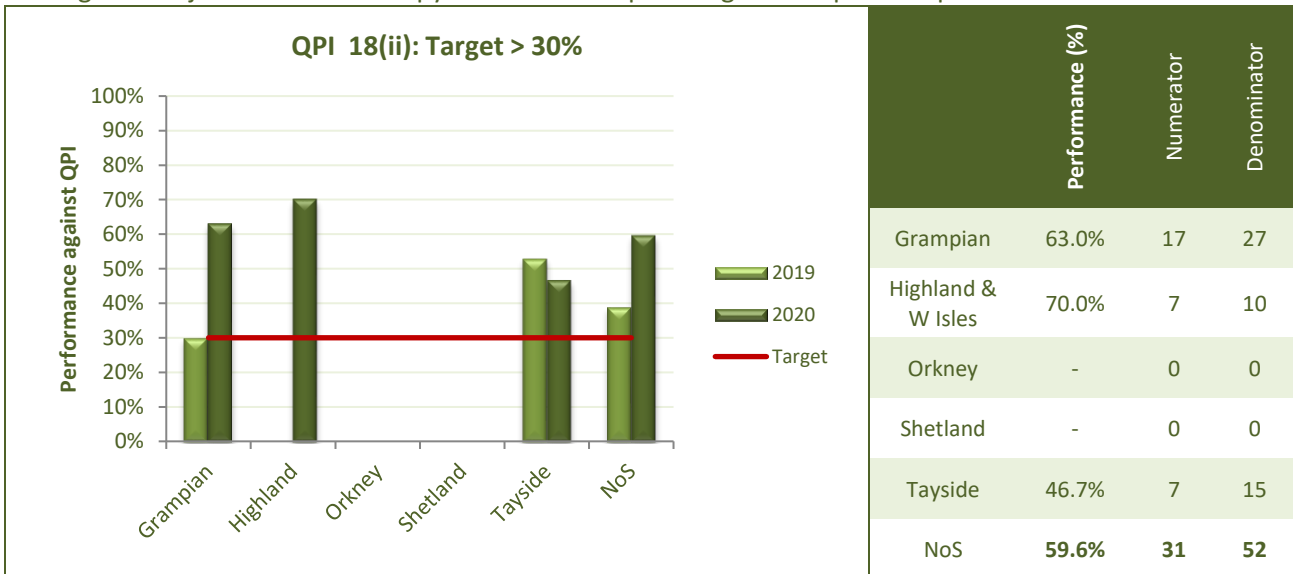
*Where the number of cases per Board is between one and four, results have been excluded from charts and tables to minimise the risk of disclosure. However, all board results are included within the total for the North of Scotland.

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.



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.



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.	



There remains work to be done to embed DIBH radiotherapy within all the North of Scotland health boards.

References

1. Scottish Cancer Taskforce, 2020. 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/>

Appendix 1: Clinical Trials and Research Studies for breast cancer open to recruitment in the North of Scotland in 2020

Trial	Principle Investigator	Patients consented
A-BRAVE	Fen-Yi Soh (Highland)	N
Add Aspirin	Trevor McGoldrick (Grampian) Russell Mullen (Highland) Douglas Adamson (Tayside)	Y
AURORA	Sarah Vinnicombe (Tayside)	Y
Baronet	Jane Macaskill (Tayside)	N
CAPItello-291	Trevor McGoldrick (Grampian)	Y
Characterisation of breast tumours by Fast Field Cycling MRI	Yazan Masannat (Grampian)	Y
CONDOR	Sarah Savaridas (Tayside)	Y
CONTEST Study	Andy Evans	Y
DS8201-A-301	Gordon Urquhart	N
DS8201-A-302	Gordon Urquhart	N
HORIZONS	Chrissie Lane (Highland) Debbie Forbes (Tayside)	Y
KEYLYNK-009	Feng-Yi Soh (Highland)	N
LORIS	Jane Macaskill (Tayside)	N
PIONEER	Beatrix Elsberger (Grampian) Vassilis Pitsinis (Tayside)	Y
POSNOC	Nick Abbott (Highland) Ravi Sharma (Grampian) Douglas Brown (Tayside)	Y
PRIMETIME	Nick Abbott (Highland) Ravi Sharma (Grampian)	Y
The Pre-Bra Feasibility Study	Yazan Masannat (Grampian)	Y
UNIRAD	Jane Macaskill (Tayside)	Y
VIOLETTE	Trevor McGoldrick (Grampian)	Y