

# Quality Performance Indicators Audit Report

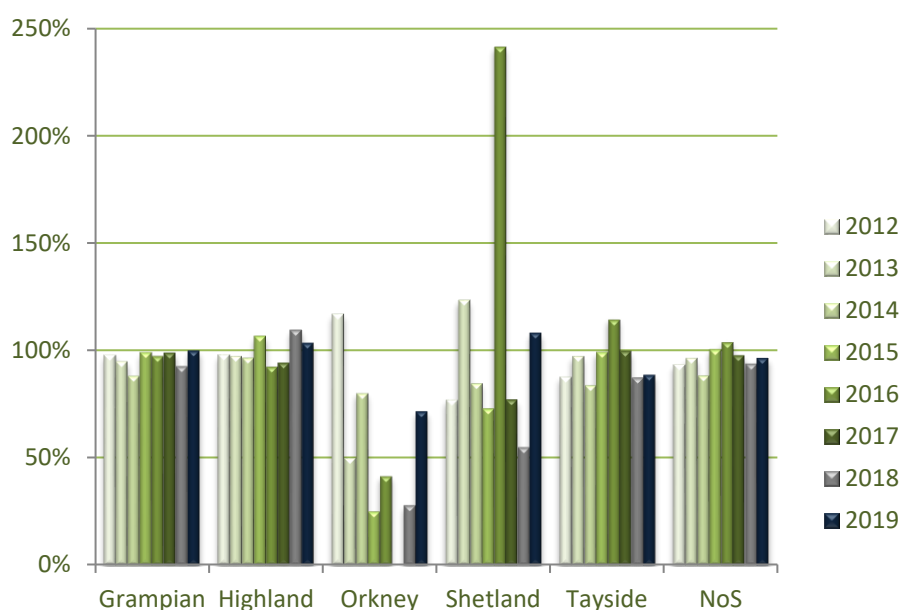


<b>Tumour Area:</b>	Breast Cancer
<b>Patients Diagnosed:</b>	1 <sup>st</sup> January – 31 <sup>st</sup> December 2019
<b>Published Date:</b>	December 2021

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

Between 1<sup>st</sup> January and 31<sup>st</sup> December 2019 a total of 1,255 cases of breast cancer were diagnosed in the North of Scotland and recorded through audit. Overall case ascertainment was high at 96.1% which indicates very good data capture through audit. As such QPIs based on cancer audit data are considered to be representative of all patients diagnosed with breast cancer during the audit period.

	Grampian	Highland & W Isles	Orkney	Shetland	Tayside	NoS
No. of Patients 2019	497	304	2	14	438	1255
% of NoS total	39.6%	24.2%	0.2%	1.1%	34.9%	100%
Mean ISD Cases 2014-18	499	295	3	13	496	1306
% Case ascertainment 2019	99.6%	103.2%	71.4%	107.7%	88.3%	96.1%

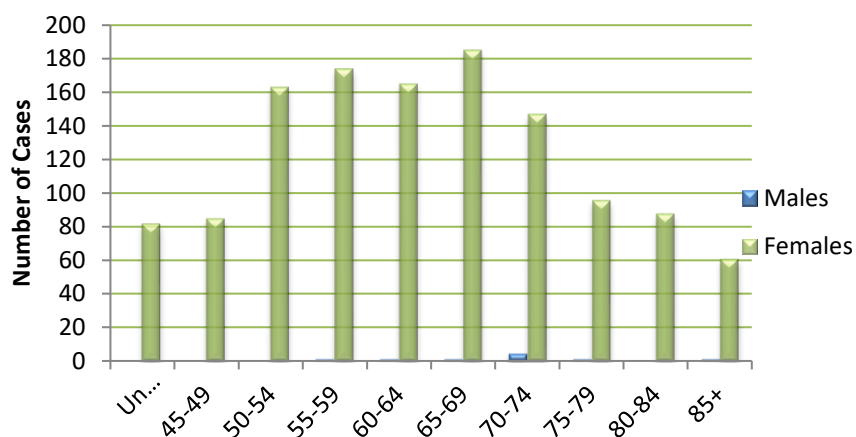


**Case ascertainment by NHS Board for patients diagnosed with breast cancer in 2012-2019.**

The number of instances of data not being recorded was higher in the current year of data reporting (2019 data) compared to the previous year of reporting (2018 data). Fields with high numbers of Not Recorded results include (but are not limited to) – disease stage (c M), Her2 Status, % Predicted Survival Benefit, Oestrogen Receptor Status and Recurrence Score (Oncotype DX). As such, it was not possible to identify whether these patients should be included within the QPIs and they were therefore excluded from calculations. The QPIs impacted by data not being recorded include QPI 6, 9, 11, 17 & 18.

## 2. Age Distribution

The figure below shows the age distribution of patients diagnosed with breast cancer in the North of Scotland in 2019, with numbers of patients diagnosed highest in the 65-69 year age bracket.



Age distribution of patients diagnosed with breast cancer in the NoS in 2018.

## 3. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland<sup>1</sup>, while further information on datasets and measurability used are available from Information Services Division<sup>2</sup>. 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.

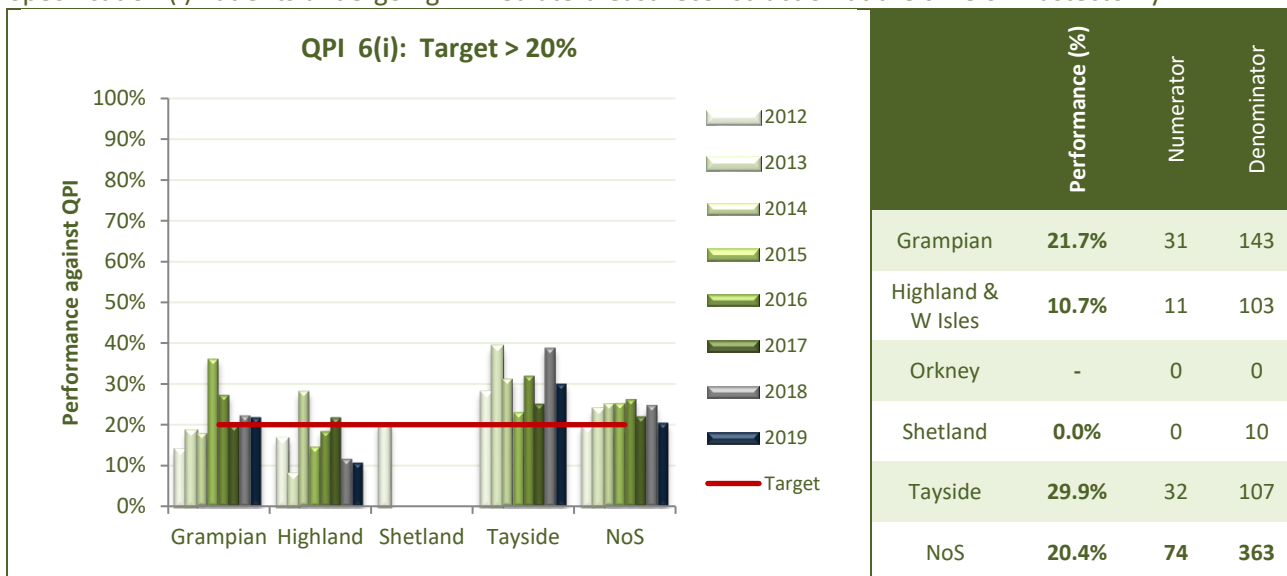
## 4. Governance and Risk

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 cancer strategy committees at each North of Scotland health board.

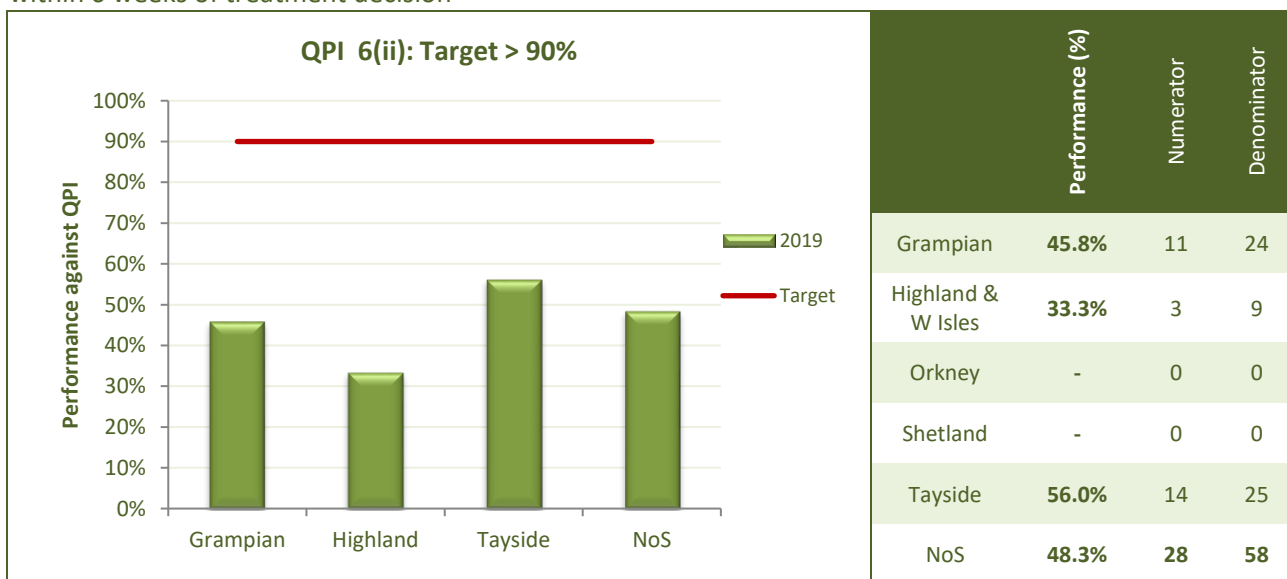
Further information is available [here](#)

<b>QPI 6</b>	<b>Immediate Reconstruction Rate</b>
Proportion of patients who undergo immediate breast reconstruction at the time of mastectomy for breast cancer, and within 6 weeks of treatment decision.	

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



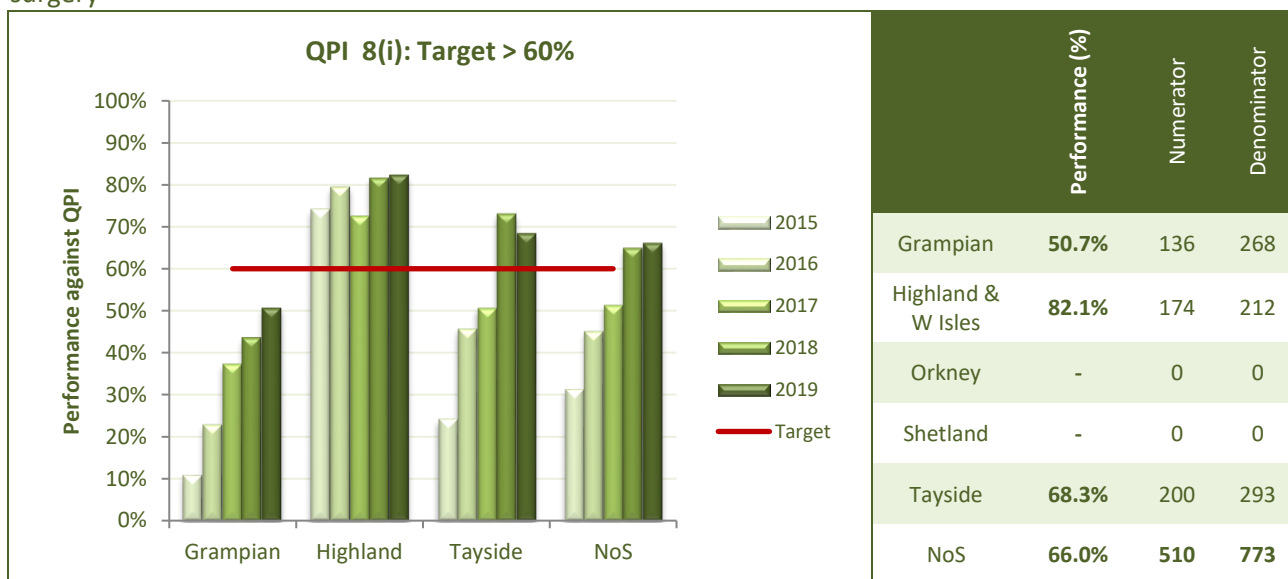
Specification (ii) Patients undergoing immediate breast reconstruction at the time of mastectomy, and within 6 weeks of treatment decision



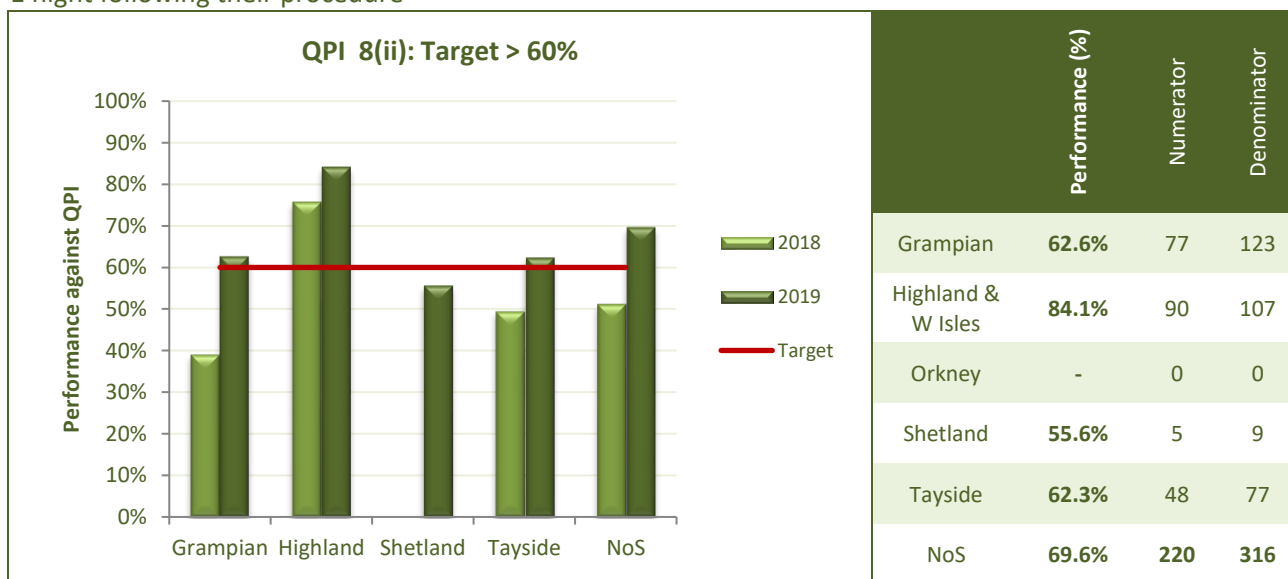
Patient choice is a factor in decision for immediate breast reconstruction and work is still required to ensure appropriate pathways to ensure this is undertaken within 6 weeks of treatment decision.

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

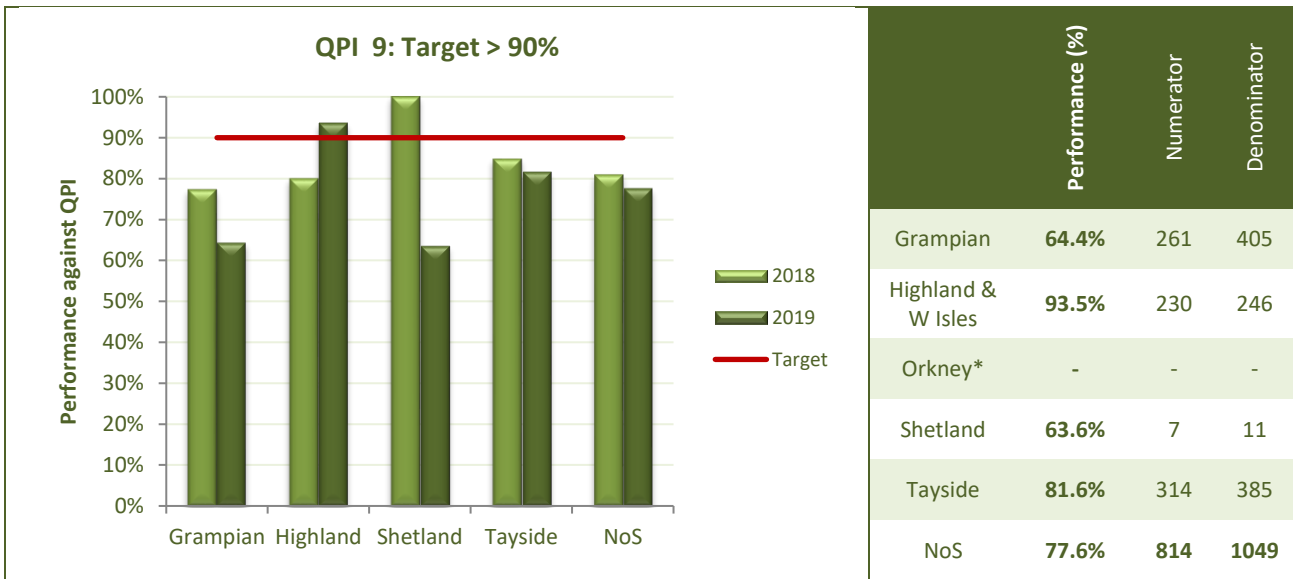
Specification (i) Patients undergoing wide excision and / or an axillary sampling procedure as day case surgery



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

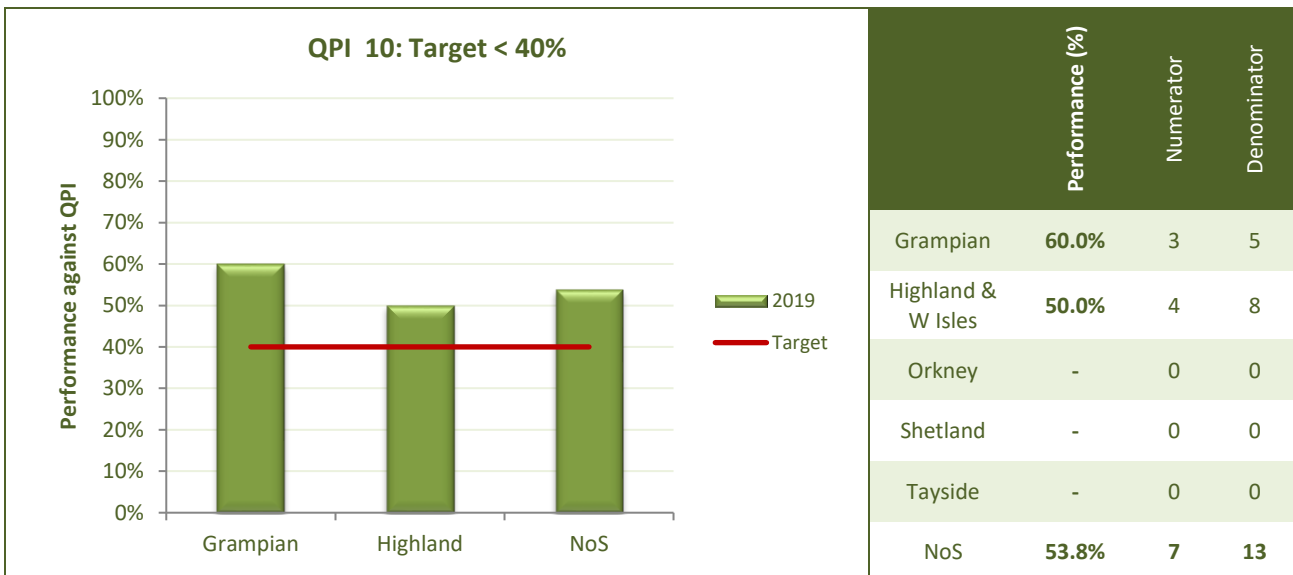


<b>QPI 9</b>	<b>HER2 Status for Decision Making</b>
Proportion of patients with invasive breast cancer for whom the HER2 status (as detected by immunohistochemistry (IHC) and/or FISH analysis) is reported within 2 weeks of core biopsy.	



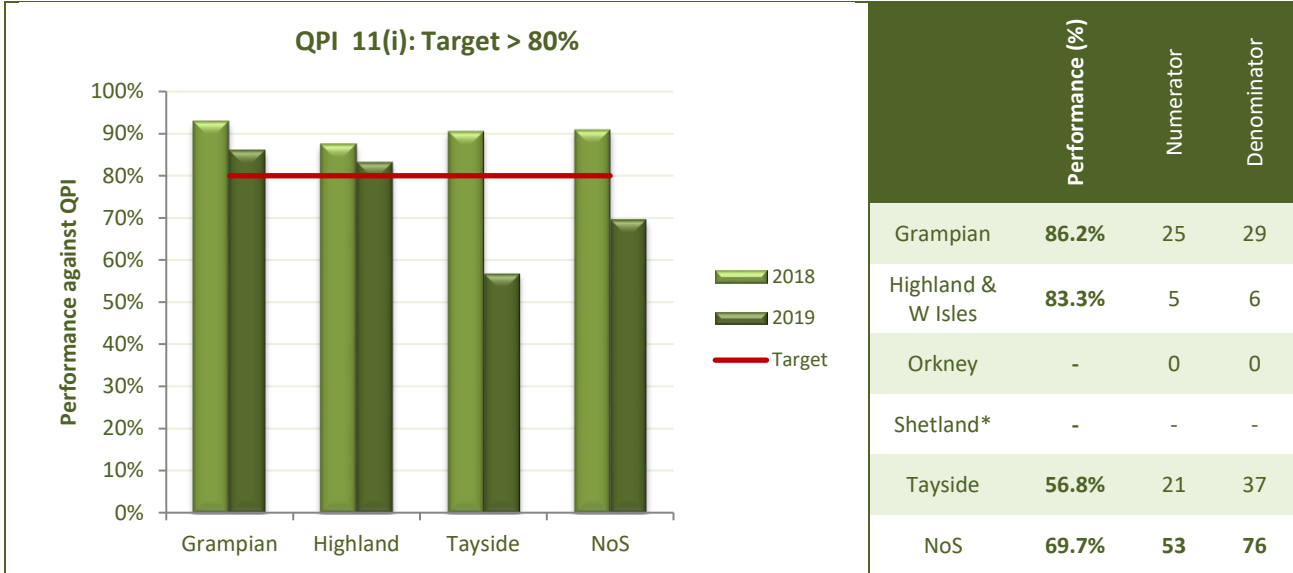
The two week turnaround time for FISH testing remains a challenge within the North of Scotland and work is ongoing to support pathways and improved compliance with the 90% target.

<b>QPI 10</b>	<b>Radiotherapy for Breast Conservation in Older Adults</b>
Proportion of patients $\geq 70$ 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 $\geq 1$ mm) with hormone therapy who receive radiotherapy.	

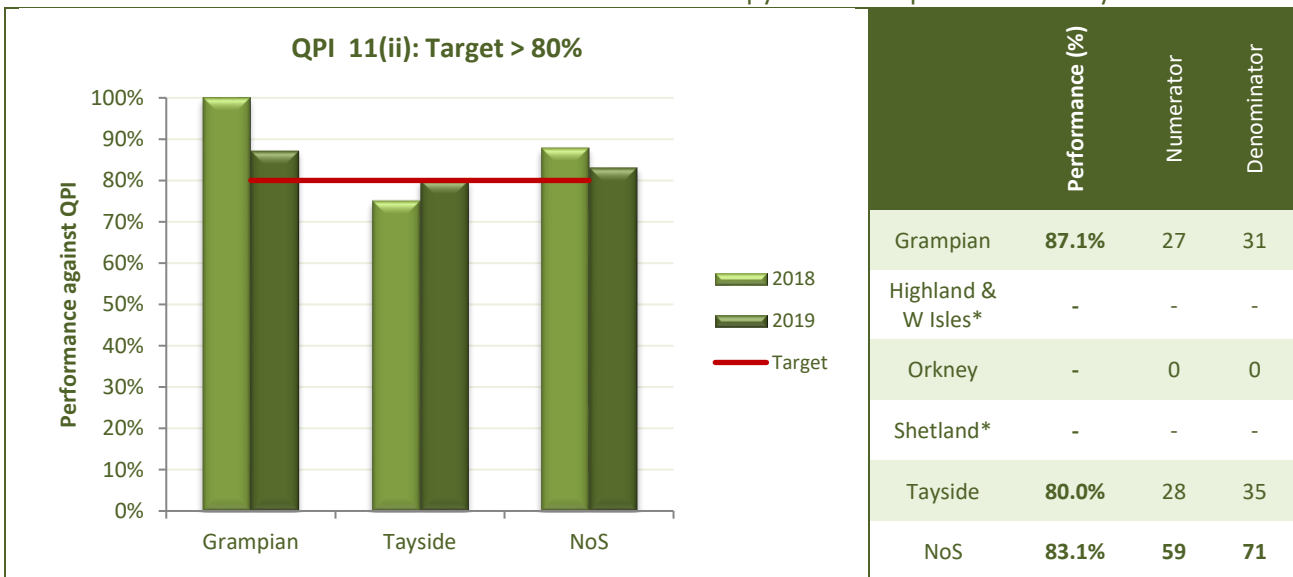


<b>QPI 11</b>	<b>Adjuvant Chemotherapy</b>
Proportion of patients with invasive breast cancer who have a >5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo adjuvant chemotherapy.	

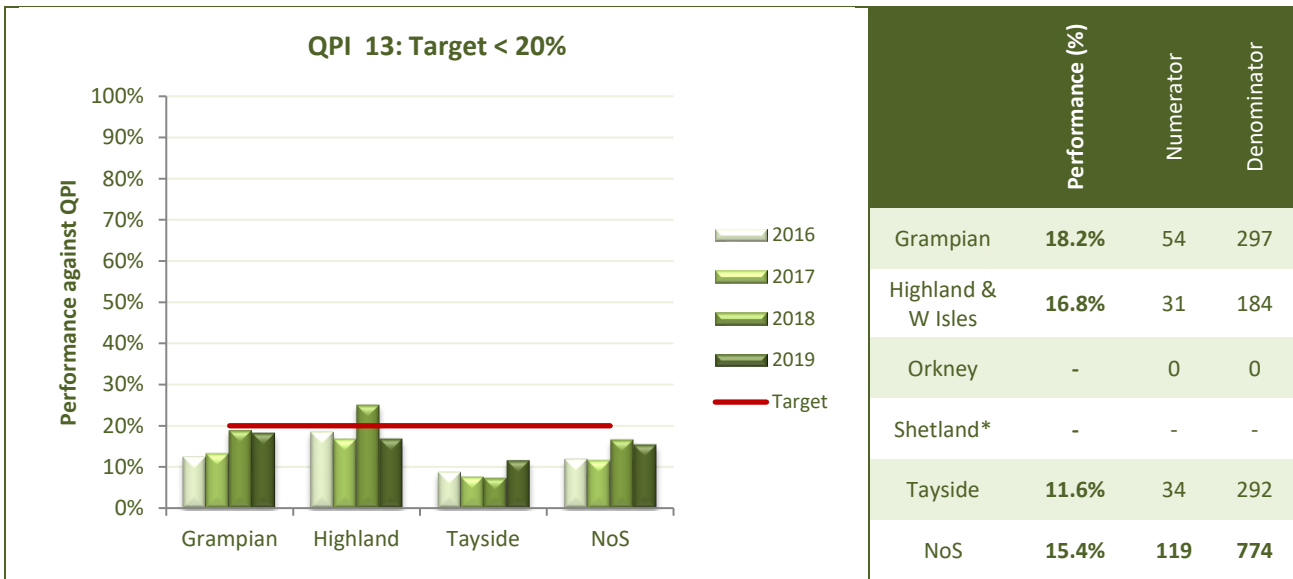
Specification (i): Patients with hormone receptor (ER plus/minus PR) positive, HER2 negative breast cancer with a >5% overall survival benefit of chemotherapy treatment predicted at 10 years and/or high risk genomic assay score.



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.



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



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

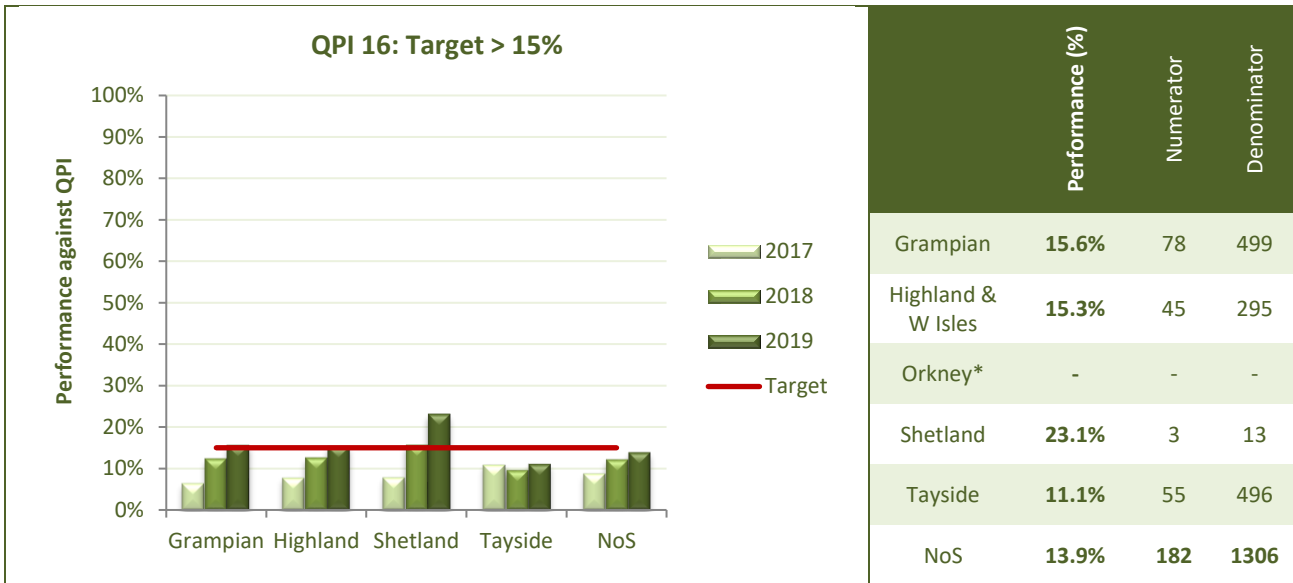
	Specification (i) Patients with breast cancer who are under 30 years of age (Target > 90%)			Specification (ii) Patients with triple negative breast cancer who are under 50 years of age (Target > 90%)		
	Performance (%)	Numerator	Denominator	Performance (%)	Numerator	Denominator
Grampian*	-	-	-	100%	14	14
Highland & W Isles	-	0	0	-	-	-
Orkney	-	0	0	-	0	0
Shetland	-	0	0	-	0	0
Tayside*	-	-	-	100%	5	5
NoS*	-	-	-	100%	22	22

Note: Denominators for specification (i) were too low to present in bar chart format.

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

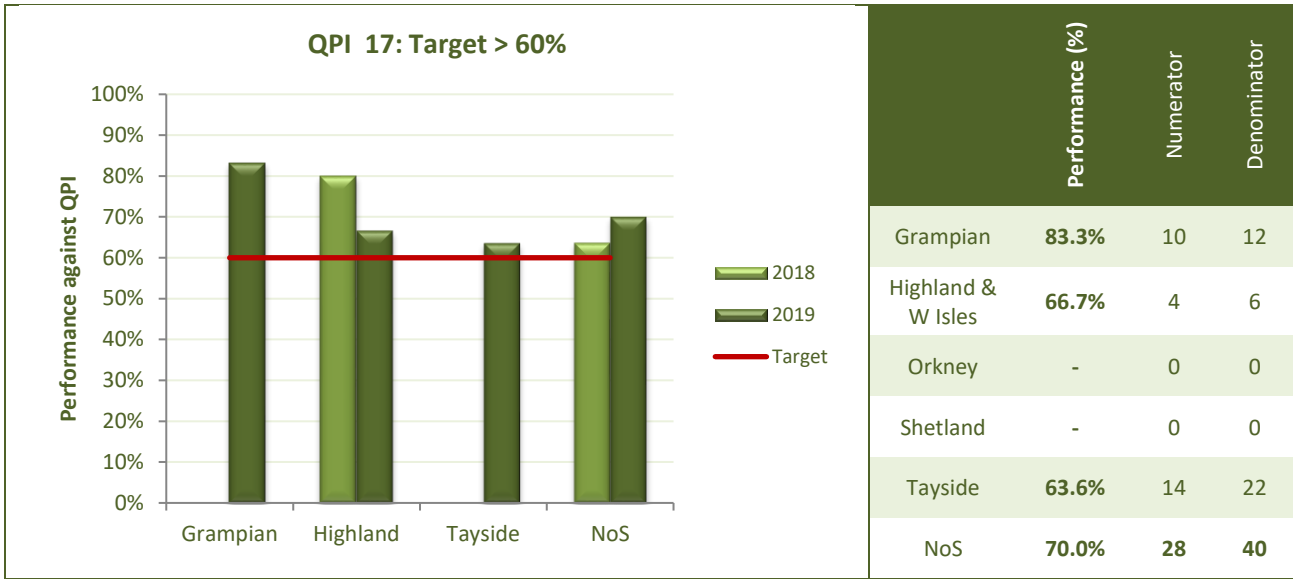
QPI 15 was amended through the Formal Review of Breast Cancer QPIs in 2019. Data required to report this revised standard is not yet available for patients treated in 2019 and therefore it is not possible to report performance against this target.

<b>QPI 16</b>	<b>Clinical Trials and Research Study Access</b>
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 2019.	



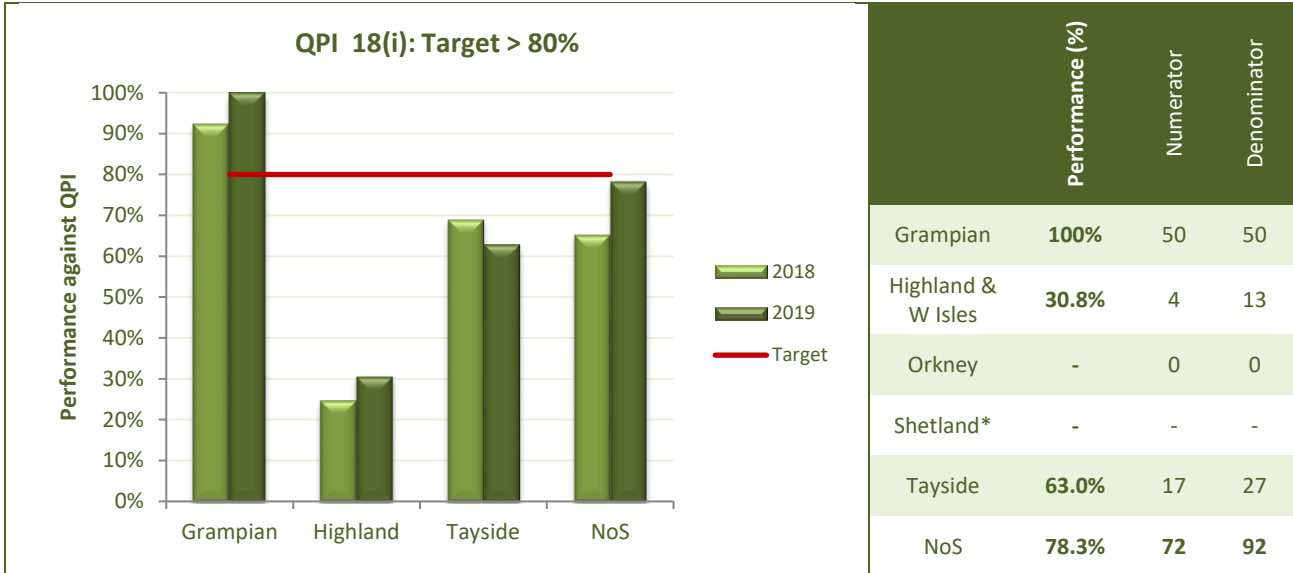


<b>PI 17</b>	<b>Genomic Testing</b>
Proportion of patients with ER positive, HER2 negative, node negative breast cancer who have a 3-5% overall survival benefit of chemotherapy treatment predicted at 10 years that undergo genomic testing.	

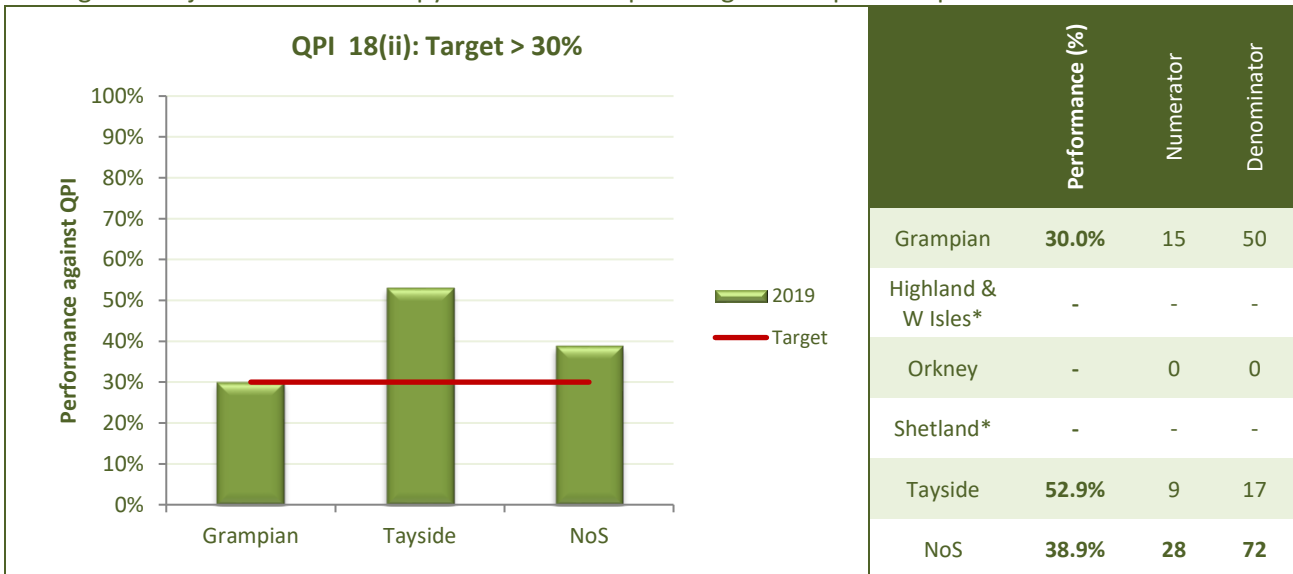


<b>QPI 18</b>	<b>Neoadjuvant Chemotherapy</b>
Proportion of patients with triple negative (ER / PR / HER2 negative) or HER2 positive, Stage II or III ductal breast cancer who receive chemotherapy that undergo neoadjuvant chemotherapy with the aim of achieving pathological complete response.	

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.



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

Deep Inspiratory Breath Hold (DIBH) Radiotherapy was only available for all North of Scotland patients from November 2019 and therefore this QPI will be reported for the first time for 2020 patients.

## References

1. Scottish Cancer Taskforce, 2019. 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 2019

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