

**NOSCAN**

North of Scotland  
Cancer Network

**Breast Cancer  
Managed Clinical Network**

# **Audit Report**

## **Breast Cancer Quality Performance Indicators**

Patients diagnosed during 2013

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## EXECUTIVE SUMMARY

This publication reports the performance of breast cancer services in the six NHS Boards in the North of Scotland (NOS) against the Breast Cancer Quality Performance Indicators (QPIs) for patients diagnosed during 2013. This is the second year in which QPIs have been reported in Scotland and performance in 2013 is compared with that in 2012.

- 1210 patients diagnosed with breast cancer in 2013 were audited in the North of Scotland, a slight increase from 2012 (1162 patients).
- Overall 2013 case ascertainment was high at 96%, an increase from 93% in 2012, and results were considered to be representative of breast cancer services in the region.
- As in 2012, the main sources of referral during 2013 were via a Primary Care Clinician and Screening Services (52% and 40% of referrals respectively).

### Summary of QPI Results

QPI	QPI Target	Performance by Board	
		NOSCAN	Range <sup>b</sup>
<b>QPI 1: Non-Operative Diagnosis</b> - Patients with breast cancer should have a non-operative histological diagnosis.	95%	<b>95.4%</b>	91.4% - 98.1%
<b>QPI 2: Pre-Operative Assessment of Axilla</b> - Patients with breast cancer should have pre-operative assessment of the axilla.			
i. All patients with invasive breast cancer should undergo ultrasound assessment of the axilla	95%	<b>98.2%</b>	97.5% - 100%
ii. If findings of ultrasound are suspicious of cancer spread to nodes all patients should undergo FNA/core biopsy.	85%	<b>98.0%</b>	97.7% - 98.1%
<b>QPI 3: Conservation Rate</b> - Patients with small breast cancers should undergo breast conservation whenever appropriate	85%	<b>90.5%</b>	89.1% - 92.9%
<b>QPI 4: Surgical Margins</b> - Breast cancers which are surgically treated should be adequately excised.	< 5%	<b>3.7%</b>	3.4% - 4.3%
<b>QPI 5: Immediate Reconstruction Rate</b> - Patients undergoing mastectomy for breast cancer should have access to immediate breast reconstruction.	> 10%	<b>23.9%</b>	0% - 39.0%
<b>QPI 6: Negative Axillary Clearance Rate</b> - Over treatment of the axilla should be minimised.	< 10%	<b>1.6%</b>	0% - 4.3%
<b>QPI 7: Minimising Hospital Stay - "23 Hour" Surgery</b> - Patients should have the opportunity for "23 hour" surgery (a maximum of 1 overnight stay following surgery) wherever appropriate.	80%	<b>83.8%</b>	76.4% - 89.3%

<b>QPI 8: HER2 Status for Decision Making</b> - HER2 status should be available to inform treatment decision making.	90%	<b>65.1%</b>	1.2% - 96.5%
<b>QPI 9: Radiotherapy for Breast Conservation</b> - After wide local excision patients with breast cancer should receive radiotherapy.	95%	<b>96.8%</b>	94.8% - 98.9%
<b>QPI 10: Adjuvant Chemotherapy</b> - Patients with higher risk breast cancer should receive chemotherapy post operatively.	85%	<b>70.9%</b>	28.6% - 81.5%
<b>QPI 11: Anti-HER2 Positive Therapy</b> - Patients with HER2 positive intermediate or high risk breast cancer should receive anti-HER2 positive therapy.	90%	<b>87.8%</b>	75.0% - 100%

Performance shaded pink where QPI target has not been met.

<sup>b</sup> Excluding Boards with less than 5 patients.

This is the second year of QPI reporting, during which NOSCAN boards have performed well against the standards, exceeding the target for 8 of the 11 measured outcomes: this is an improvement against 2012 where only 5 of the standards were met or exceeded.

The three QPI's 8, 10 and 11 that weren't met this year were also unmet in 2012. Review of these suggests that all boards are performing to high levels against these standards and where the targets weren't met there were valid reasons or excluded patients.

The following actions have been identified for future years to help monitor and maintain excellent patient care and compliance with the QPI standards:

- **QPI 2: NOSCAN to support amendment of the NHSBSP (NHS Breast Screening Programme) forms to include a tick-box for the assessment of axilla by ultrasound to make audit of the standard easier.**
- **QPI 5: NHS Highland to monitor performance against this QPI to increase provision of immediate breast reconstruction as and when patients wish it.**
- **QPI 7: NOSCAN to ensure that in future years SMR01 data used to derive this indicator are easily accessible to NHS Boards. All NHS Boards to check these data against Cancer Audit data to identify any issues with data accuracy.**
- **QPI 8: NHS Grampian to highlight to senior management that their failure to attain the required standard is partly due to issues with availability of pathology resource.**

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## 1. Introduction

In 2010, the Scottish Cancer Taskforce established the National Cancer Quality Steering Group (NCQSG) to take forward the development of national QPIs for all cancer types to enable national comparative reporting and drive continuous improvement for patients. In collaboration with the three Regional Cancer Networks and Information Services Division (ISD), the first QPIs were published by Healthcare Improvement Scotland (HIS) in January 2012. These were for breast cancer. CEL 06 (2012) mandates all NHS Boards in Scotland to report on specified QPIs on an annual basis. Data definitions and measurability criteria to accompany the Breast Cancer QPIs are available from the ISD website<sup>1</sup>.

This report assesses the performance of the North of Scotland (NoS) breast cancer services using clinical audit data relating to patients diagnosed with breast cancer in the twelve months from 1<sup>st</sup> January 2013 to 31<sup>st</sup> December 2013. Results are measured against the Breast Cancer Quality Performance Indicators (QPIs)<sup>2</sup> which were implemented for patients diagnosed on or after 1<sup>st</sup> January 2012. Regular reporting of activity and performance is a fundamental requirement of a Managed Clinical Network (MCN) to assure the quality of care delivered across the region.

This report presents performance against 11 Breast Cancer QPIs using clinical audit and SMR01 data and compares this second year of QPI reporting with results from 2012, as reported in the ISD Breast Cancer QPI report<sup>3</sup>.

## 2. Background

Six NHS Boards across the NoS serve the 1.38 million population<sup>4</sup>. There were 1210 patients diagnosed with breast cancer in the NoS between 1<sup>st</sup> January and 31<sup>st</sup> December 2013. The configuration of the three Multidisciplinary Teams (MDTs) in the region is set out below.

MDT	Constituent Hospitals
Grampian	Aberdeen Royal Infirmary, Balfour + Gilbert Bain
Highland	Raigmore Hospital, Inverness + Stornoway
Tayside	Ninewells Hospital, Dundee

Best practice recommends that patients diagnosed with cancer should have all aspects of their clinical management multidisciplinary considered thereby ensuring enhanced consistency and quality of patient care and clinical outcomes.

On that basis, it is recognised that patients diagnosed with breast cancer should be discussed at a Multidisciplinary Team Meeting (customarily referred to as an MDT or MDTM), which is usually convened on a weekly basis. A QPI to measure the proportion of patients with breast cancer discussed at MDT has been developed and has been implemented for all patients diagnosed on or after 1<sup>st</sup> January 2014. This QPI therefore does not feature within this year's audit report but Boards are asked to remain vigilant in ensuring all patients are discussed at an MDT meeting in the interim.

## 2.1 National Context

Breast cancer is the most common cancer in women (and second most common cancer in both men and women combined) with over 4300 cases diagnosed in Scotland each year since 2008<sup>5</sup>.

Over the last decade the incidence rate has increased by 11%; this is partly due to:

- increased detection by the Scottish Breast Screening Programme, which has seen a rise in attendance over the same time period,

and

- an extension in the age range invited for screening (which previously excluded women between 65 - 70 years), which was phased in over the 3-year period beginning 1st April 2003<sup>6</sup>.

Relative survival for breast cancer is also increasing<sup>7</sup>. The table below shows the percentage change in one-year and five-year age-standardised survival rates for patients diagnosed in 1983-1987 compared to those diagnosed in 2003-2007. The improvement in survival for breast cancer is likely to reflect the introduction and increasing use of systemic adjuvant therapy<sup>8</sup> as well as the national breast-screening programme.

**Relative age-standardised survival for breast cancer in Scotland at 1 year and 5 years showing percentage change from 1983-1987 to 2003-2007<sup>7</sup>.**

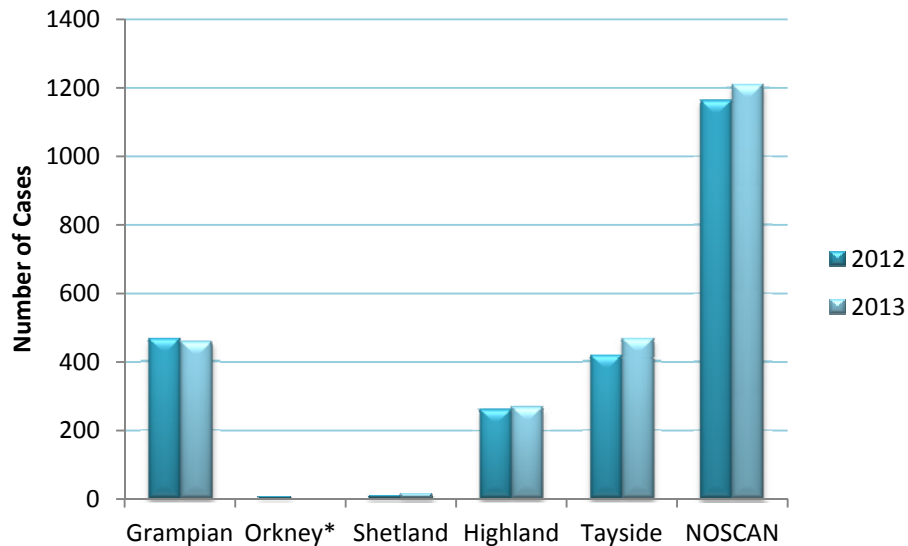
	Relative survival at 1 year (%)		Relative survival at 5 years (%)	
	2003-2007	% change	2003-2007	% change
<b>Breast Cancer</b>	93.8 %	+ 7.6 %	81.4 %	+ 20.5 %

## 2.2 North of Scotland Context

A total of 1210 cases of breast cancer were recorded through audit as diagnosed in the NoS between 1<sup>st</sup> January 2013 and 31<sup>st</sup> December 2013, a slight increase compared with 2012 (1163 patients). The number of patients diagnosed within each Board is presented below.

	Grampian	Highland <sup>a</sup>	Orkney	Shetland	Tayside	NoS
Number of Patients	456	269	3	16	466	1210
% of NoS total	37.7%	22.2%	0.2%	1.3%	38.5%	100%

<sup>a</sup> Highland results include patients from Argyll & Bute and the Western Isles.



### 3. Methodology

The clinical audit data presented in this report was collected by clinical audit staff in each NHS Board in accordance with an agreed dataset and definitions<sup>1</sup>. The data was entered locally into the electronic Cancer Audit Support Environment (eCASE): a secure centralised web-based database.

Data for patients diagnosed between 1<sup>st</sup> January 2013 and 31<sup>st</sup> December 2013 and any comments on QPI results were then signed-off at NHS Board level to ensure that the data was an accurate representation of service in each area prior to submission to NOSCAN for collation at a regional level. The reporting timetable was developed to take into account the patient pathway and ensure that a complete treatment record was available for the vast majority of cases.

Where the number of cases meeting the denominator criteria for any indicator is between one and four, the results has not been shown in any associated charts or tables. This is to avoid any unwarranted variation associated with small numbers and to minimise the risk of disclosure. Any charts or tables impacted by this are denoted with an asterisk (\*). However, any commentary provided by NHS Boards relating to the impacted indicators will be included as a record of continuous improvement.

## 4. Results

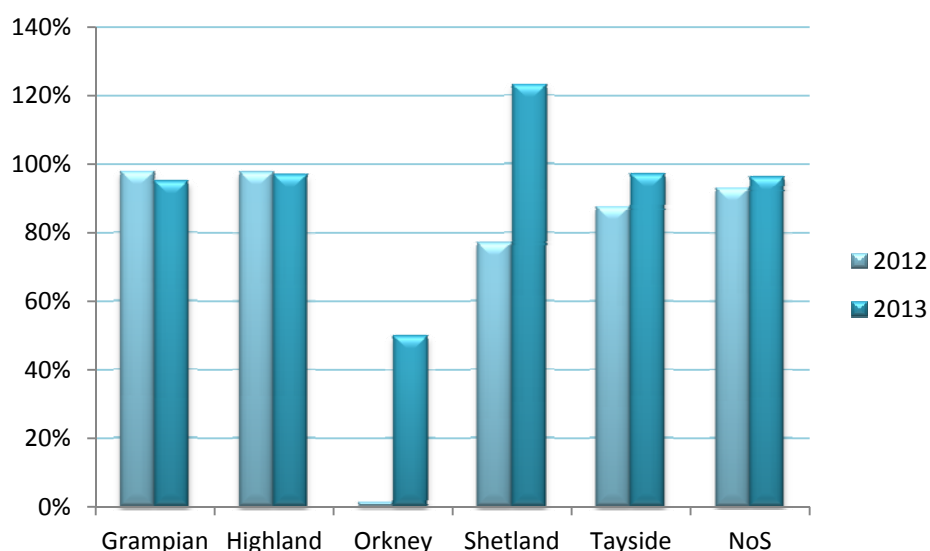
### 4.1 Case Ascertainment

Audit data completeness can be assessed from case ascertainment, the proportion of expected patients that have been identified through audit. Case ascertainment is calculated by comparing the number of new cases identified by the cancer audit with a five year average of the numbers recorded by the National Cancer Registry, with analysis being undertaken by NHS Board of diagnosis. Cancer Registry figures were extracted from ACaDMe (Acute Cancer Deaths and Mental Health), a system provided by ISD. Due to



timescale of data collection and verification processes, National Cancer Registry data are not available for 2013. Consequently an average of the previous five years' figures is used to take account of annual fluctuations in incidence within NHS Boards.

Overall case ascertainment for the North of Scotland is high at 96%, which indicates excellent data capture through audit. This is an increase from the 2012 figure of 93%. Case ascertainment figures are provided for guidance and are not an exact measurement of audit completeness as it is not possible to compare the same cohort of patients. Case ascertainment for each Board across NoS is illustrated below. There is variation in percentage case ascertainment across the Boards ranging from 50% to 123%. The wider variation in Orkney and Shetland will reflect the screening cycle in that area, with mobile screening in Shetland in 2013 contributing to the increase in cases in 2013 and the lack of screening in Orkney during the audit period resulting in lower levels of diagnosis there.



**Case ascertainment by NHS Board for patients diagnosed with breast cancer January – December 2013.**

	Grampian	Highland <sup>a</sup>	Orkney*	Shetland	Tayside	NoS
<b>Cases from audit</b>	456	269	3	16	466	<b>1210</b>
<b>ISD Cases annual average (2008-2012)</b>	481	277	6	13	480	<b>1257</b>
<b>% Case ascertainment</b>	94.8%	97.1%	50.0%	123.1%	97.1%	<b>96.3%</b>

<sup>a</sup>Highland results include patients from the Western Isles

Audit data were sufficiently complete to allow QPI calculations. The number of instances of data not being recorded was very low, with the only notable gaps being the absence of recording of exclusions in NHS Tayside for QPIs 5, 9 and 10. For these the number of patients where exclusions were not recorded was not more that 15% in NHS Tayside and no

more than 6% across the North of Scotland. This was a considerable improvement on results in 2012 where there were significant gaps in data records by NHS Tayside for many of the QPIs, with up to 86% of data not being recorded in some instances.

## 4.2 Source of referral

The majority of patient referrals in Scotland were from a Primary Care Clinician (52%) and Screening Service (40%), and were similar across boards.

- In NHS Orkney all referrals were from a primary care clinician, as there was no breast-screening visit in 2013.
- In 2013 NHS Shetland received a breast screening visit from the mobile service therefore half (50%) of referrals were via that source.

Source of referral (%)	Grampian	Highland <sup>a</sup>	Orkney	Shetland	Tayside	NoS
<b>Primary Care Clinician</b>	49.1%	47.6%	100%	43.8%	58.4%	<b>52.4%</b>
<b>Screening Service</b>	43.2%	42.8%	0%	50.0%	34.3%	<b>39.7%</b>
<b>Secondary Care</b>	3.5%	5.2%	0%	0%	0.6%	<b>2.7%</b>
<b>Review Clinic</b>	3.3%	2.6%	0%	0%	2.4%	<b>2.7%</b>
<b>Referral from private healthcare</b>	0.7%	0.7%	0%	0%	0%	<b>0.4%</b>
<b>Increased Risk Clinic</b>	0%	0%	0%	0%	0.2%	<b>0.1%</b>
<b>Other</b>	0.2%	1.1%	0%	6.3%	4.1%	<b>2.0%</b>

<sup>a</sup> Highland results include patients from the Western Isles

## 4.3 Performance against Quality Performance Indicators (QPIs)

Results of the analysis of Breast Cancer Quality Performance Indicators are set out in the following sections. Graphs and charts have been provided where this aids interpretation and, where appropriate, numbers have also been included to provide context. Data are presented by Board of diagnosis and for the whole NoS. Where performance is shown to fall below the target, commentary from the relevant NHS Board is often included to provide context to the variation. Specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis.

## QPI 1: Non Operative Diagnosis

***QPI 1: Non Operative Diagnosis: Patients with breast cancer should have a non-operative histological diagnosis.***

Diagnosis of patients non-operatively allows them, where possible, to have only one definitive procedure. However, it may not always be technically possible to undertake a biopsy and patient choice may also be a factor.

Numerator: Number of patients with a non-operative diagnosis of breast cancer (core biopsy / large volume biopsy).

Denominator: All patients with invasive or in-situ breast cancer.

Exclusions: All breast cancer patients with lobular carcinoma in situ (LCIS).

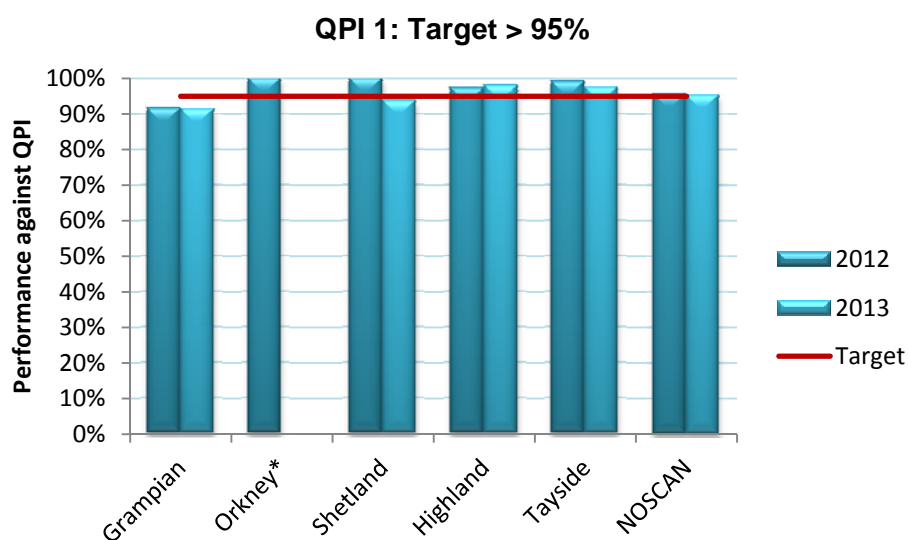
Target: 95% or above

### QPI 1 Performance against target

Of the 1206 invasive or in-situ breast cancer patients diagnosed in NoS in 2013, 1151 were given a non operative diagnosis, which equates to a rate of 95.4% and is above the target rate of 95%. This is a similar level to the 95.7% recorded in 2012.

At NHS Board level only two Boards fell short of the target set by the QPI, Grampian and Shetland.

- NHS Shetland failed to meet the target due to small numbers of patients. The one patient in NHS Shetland who did not have a non-operative diagnosis had normal imaging (M1U1) and non-diagnostic FNA. The patient proceeded to excision biopsy which confirmed diagnosis of invasive breast cancer.
- In NHS Grampian 91.4% of patients had a non-operative diagnosis, a similar level to 2012 (91.6%). In NHS Grampian some patients who are frail and elderly and have to travel a long way are diagnosed on cytology alone but the QPI only allows recording of core biopsy in the denominator. Targeted audit of patients who failed this QPI has been undertaken and the Board are satisfied that all patients have been treated appropriately. Results of the targeted audit are available on request.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>91.4%</b>	417	456	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>98.1%</b>	260	265	0	0%	0	0%	1
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland</b>	<b>93.8%</b>	15	16	0	0%	0	0%	0
<b>Tayside</b>	<b>97.9%</b>	456	466	0	0%	0	0%	0
<b>NoS</b>	<b>95.4%</b>	<b>1151</b>	<b>1206</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>1</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	91.6%	466	<b>91.4%</b>	456	-0.2%
<b>Highland<sup>a</sup></b>	97.3%	259	<b>98.1%</b>	265	+0.8%
<b>Orkney*</b>	100%	7	-	-	-
<b>Shetland</b>	100%	10	<b>93.8%</b>	16	-6.2%
<b>Tayside</b>	99.3%	406	<b>97.9%</b>	466	-1.4%
<b>NoS</b>	<b>95.7%</b>	<b>1148</b>	<b>95.4%</b>	<b>1206</b>	<b>-0.3%</b>

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 2: Pre-Operative Assessment of Axilla

**QPI2: Pre-Operative Assessment of Axilla (i): patients with breast cancer should have pre-operative ultrasound assessment of the axilla.**

A pre-operative diagnosis of nodal disease enables definitive treatment of axilla at the time of initial breast surgery. However, some patients may refuse investigation and/or treatment.

Numerator: Number of patients with invasive breast cancer who undergo assessment of the axilla by ultrasound before surgery.

Denominator: All patients with invasive breast cancer undergoing surgery.

Exclusions: No exclusions.

Target: 95% or above

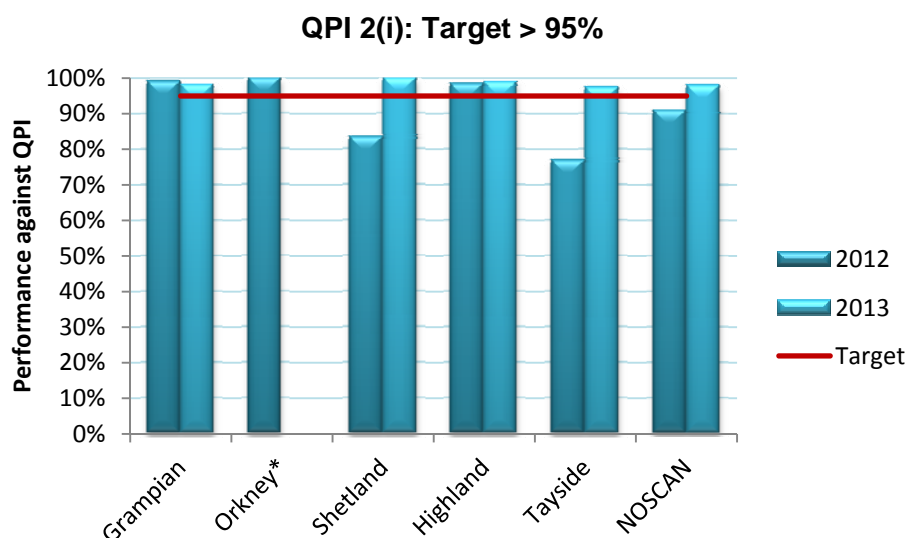
### QPI 2(i) Performance against target

The regional average rate for pre-operative assessment of axilla (i) was 98.2%, above the target rate of 95%. This is an increase compared with the 2012 result of 91.2%.

All Boards in the North of Scotland exceeded the target rate with the majority exceeding levels from 2012.

#### Actions required:

- **NOSCAN to support amendment of the NHSBSP forms to include a tick-box for the assessment of axilla by ultrasound to make audit of the standard easier.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>98.3%</b>	348	354	1	0.3%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>99.1%</b>	218	220	0	0%	0	0%	0
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland</b>	<b>100%</b>	12	12	0	0%	0	0%	0
<b>Tayside</b>	<b>97.5%</b>	352	361	3	0.8%	0	0%	0
<b>NoS</b>	<b>98.2%</b>	<b>932</b>	<b>949</b>	<b>4</b>	<b>0.4%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	99.2%	354	<b>98.3%</b>	354	- 0.9%
<b>Highland<sup>a</sup></b>	98.6%	210	<b>99.1%</b>	220	+0.5%
<b>Orkney*</b>	100%	5	-	-	-
<b>Shetland</b>	83.3%	6	<b>100%</b>	12	+20.0%
<b>Tayside</b>	76.9%	308	<b>97.5%</b>	361	+26.8%
<b>NoS</b>	91.2%	883	<b>98.2%</b>	<b>949</b>	+7.7%

<sup>a</sup> Highland results include patients from the Western Isles

***QPI2: Pre-Operative Assessment of Axilla (ii): patients with breast cancer whose pre-operative ultrasound assessment of the axilla found suspicious morphology should undergo FNA/core biopsy.***

Patients with invasive breast cancer should undergo pre-treatment ultrasound assessment of the axilla and if morphologically suspicious nodes are identified these should be sampled using FNA or core biopsy. However, FNA/core biopsy of the axilla is not always technically possible.

Numerator: Number of patients with invasive breast cancer with suspicious morphology on ultrasound who undergo an FNA/core biopsy.

Denominator: All patients with invasive breast cancer undergoing surgery with suspicious morphology reported on ultrasound.

Exclusions: No exclusions.

Target: 85% or above

**QPI 2(ii) Performance against target**

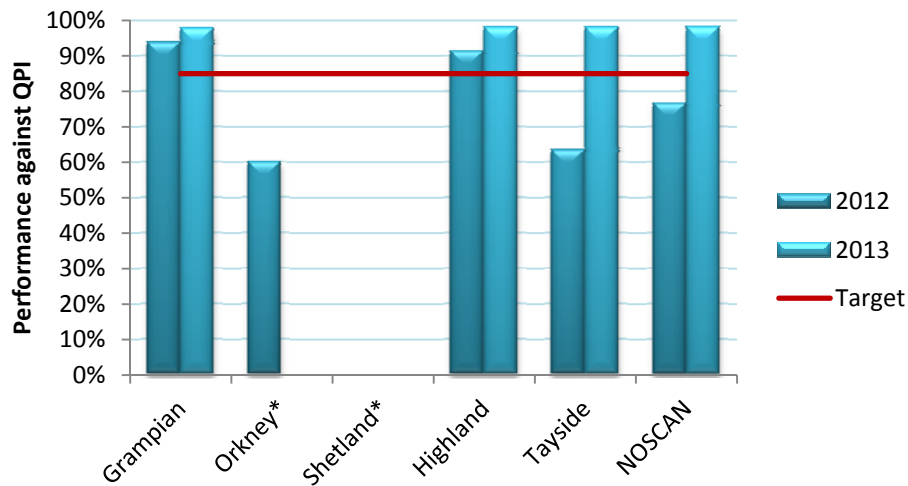
A total of 352 breast cancer patients in the North of Scotland were found to have morphologically suspicious nodes after ultrasound assessment of the axilla. Of these, 345 (98.0%) underwent FNA/core biopsy; this means that at a regional level, the target of 85% was met. This is a large increase compared with the 2012 result of 76.6%.

All NHS Boards within the North of Scotland significantly exceeded the target level of 85% and all demonstrated an increase from 2012. Whilst there has been a significant improvement in results from NHS Tayside, these appear to reflect improved data gathering rather than an improvement in services.

**Actions required:**

- **None**

**QPI 2(ii): Target > 85%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>97.7%</b>	86	88	0	0%	0	0%	1
<b>Highland<sup>a</sup></b>	<b>98.1%</b>	105	107	0	0%	0	0%	0
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>98.0%</b>	149	152	0	0%	0	0%	7
<b>NoS</b>	<b>98.0%</b>	<b>345</b>	<b>352</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>8</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	93.8%	97	97.7%	88	+4.2%
<b>Highland<sup>a</sup></b>	91.4%	93	98.1%	107	+7.3%
<b>Orkney*</b>	60.0%	5	-	-	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	63.5%	230	98.0%	152	+54.3%
<b>NoS</b>	76.6%	427	98.0%	352	+27.9%

<sup>a</sup> Highland results include patients from the Western Isles



### QPI 3: Conservation rate

***QPI 3: Conservation rate: patients with small breast cancers should undergo breast conservation whenever appropriate.***

Breast conservation is appropriate for small breast cancers; randomised trials have shown no difference in survival for tumours treated by conservation surgery followed by radiotherapy to mastectomy.

Breast conservation may not be appropriate for all patients for a variety of reasons including patient choice and genetic risk.

Numerator: Number of surgically treated patients with breast cancer less than 20mm whole tumour size on histology (invasive plus in situ disease) treated by breast conservation surgery.

Denominator: All surgically treated patients with breast cancer less than 20mm whole tumour size on histology (invasive plus in situ disease).

Exclusions: All patients with multifocal breast cancer. All patients with breast cancer who have received neoadjuvant systemic therapy for  $\geq 6$  weeks (hormonal therapy or chemotherapy). All male patients.

Target: 85% or above

### QPI 3 Performance against target

The breast conservation rate in the North of Scotland was 90.5% in 2013, above the target rate of 85%. This is a decrease compared with the 2012 result of 94.3%, with rates declining across all NHS Boards.

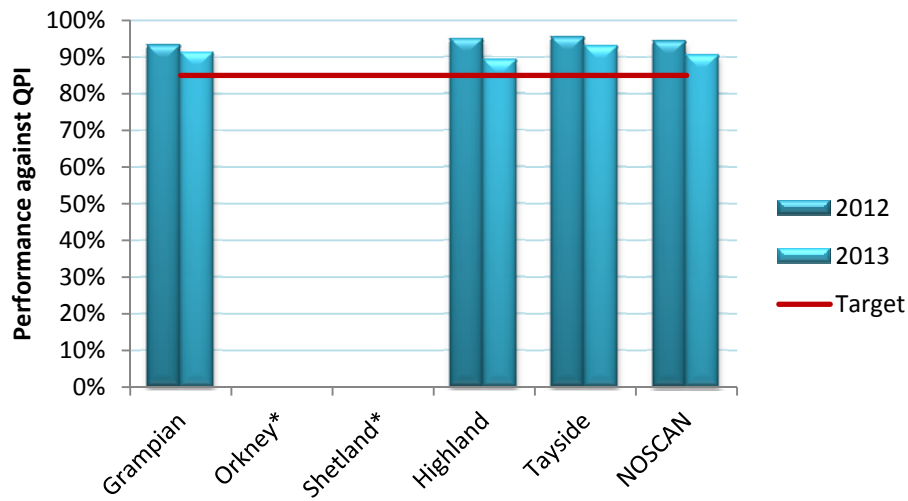
Four of the six NHS Boards with patients meeting the denominator criteria achieved the target. NHS Orkney and Shetland did not achieve the target rate. These Boards had very small numbers of patients for which this QPI is relevant (1 and 2 respectively).

In Shetland both patients were offered the option of conservation surgery either in Shetland or in Grampian but both elected to have mastectomies in Shetland instead.

### Actions required:

- None

**QPI 3: Target >85%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>91.3%</b>	136	149	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>89.1%</b>	90	101	0	0%	0	0%	0
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>92.9%</b>	117	126	0	0%	0	0%	0
<b>NoS</b>	<b>90.5%</b>	<b>343</b>	<b>379</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	93.3%	150	91.3%	149	-2.1%
<b>Highland<sup>a</sup></b>	94.9%	78	89.1%	101	-6.1%
<b>Orkney*</b>	-	0	-	-	-
<b>Shetland*</b>	-	0	-	-	-
<b>Tayside</b>	95.3%	107	92.9%	126	-2.5%
<b>NoS</b>	<b>94.3%</b>	<b>335</b>	<b>90.5%</b>	<b>379</b>	<b>-4.0%</b>

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 4: Surgical Margins

**QPI 4: Surgical margins: Breast cancers which are surgically treated should be adequately excised.**

There is an increased risk of local recurrence if radial surgical excision margins are less than 1mm after breast cancer surgery.

Numerator: Number of patients with breast cancer (invasive or ductal carcinoma in situ) having breast conservation surgery with final radial (i.e. superior, inferior, medial or lateral) excision margins less than 1mm (on pathology report).

Denominator: All patients with breast (invasive or ductal carcinoma in situ) cancer having breast conservation surgery.

Exclusions: LCIS alone.

Target: Less than 5%

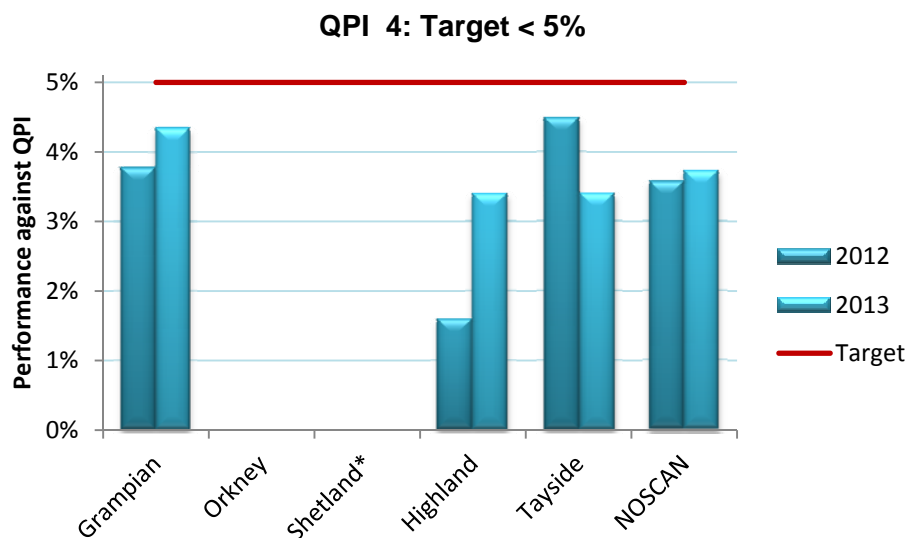
### QPI 4 Performance against target

Overall in 2013, 22 out of 592 surgically treated breast cancer patients in the region had final radial excision margins of less than 1mm. At a rate of 3.7%, this meets the target set at less than 5% of patients. This is very similar to results from 2012 when the rate was 3.6%.

All NHS Boards in the North of Scotland met the target set, with some increases and decreases in rates for individual boards.

#### Actions required:

- None



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>4.3%</b>	9	207	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>3.4%</b>	5	147	0	0%	0	0%	0
<b>Orkney</b>	-	0	0	0	-	0	-	0
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>3.4%</b>	8	237	1	0.4%	0	0%	0
<b>NoS</b>	<b>3.7%</b>	<b>22</b>	<b>592</b>	<b>1</b>	<b>0.2%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	3.8%	238	<b>4.3%</b>	207	+13.2%
<b>Highland<sup>a</sup></b>	1.6%	125	<b>3.4%</b>	147	+112.5%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	4.5%	223	<b>3.4%</b>	237	-24.4%
<b>NoS</b>	<b>3.6%</b>	<b>587</b>	<b>3.7%</b>	<b>592</b>	<b>+2.8%</b>

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 5: Immediate Reconstruction Rate

***QPI 5: Immediate Reconstruction Rate: Patients undergoing mastectomy for breast cancer should have access to immediate breast reconstruction.***

Evidence suggests that breast reconstruction is not associated with an increase in the rate of local recurrence, nor does it affect the ability to detect recurrence and it can yield psychological benefit. Access to immediate breast reconstruction is difficult to measure so uptake is used as a proxy. Patient choice is a key factor in the number who undergo immediate breast reconstruction. Age and co-morbidity factors (associated with deprivation category) should be taken into account when reviewing data for this QPI.

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: All patients with M1 disease. All male patients.

Target: Greater than 10%

### QPI 5 Performance against target

In 2013, 94 patients with breast cancer underwent immediate breast reconstruction at the time of mastectomy, a rate of 23.9%. This is considerably higher than the target rate of more than 10%. This is an increase on the 2012 rate of 19.4%.

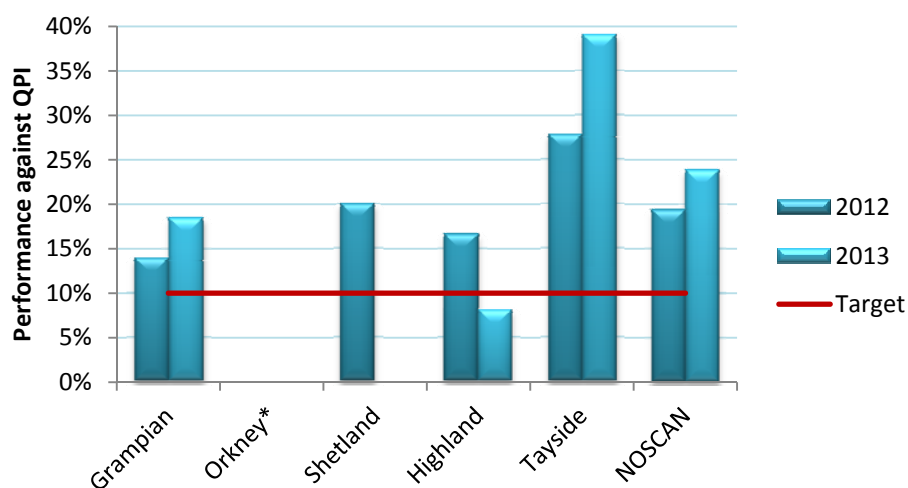
There was wide variation in immediate reconstruction rates among the NHS Boards from 0% in NHS Orkney and NHS Shetland to 39.0% in NHS Tayside, with rates declining in some areas and increasing in others. Three Boards, NHS Orkney, NHS Shetland and NHS Highland (including the Western Isles) did not meet the target set for this QPI.

- In NHS Shetland all patients that the MDT view as eligible for immediate reconstructive surgery will be offered the option. Those who take up the offer will have surgery in Grampian and therefore be included in the Grampian audit data.
- In NHS Highland local audit data showed that immediate reconstruction is discussed with the majority of patients having mastectomy and greater than 80% of those under the age of 70 years. 2013 appears to be an outlier with a significantly higher proportion of patients receiving immediate reconstruction in 2012 and 2014. In addition QPI 5 is flawed for bilateral tumours as it uses the poorest prognosis tumour to drive the dataset recorded and this is inappropriate for this question where surgical options for local control are being highlighted. To have a mastectomy and reconstruction ignored because of this methodology needs to be addressed.

### Actions required:

- **NHS Highland to monitor performance against this QPI to increase provision of immediate breast reconstruction as and when patients wish it.**

### QPI 5: Target > 10%



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	18.5%	25	135	0	0%	0	0%	0
Highland <sup>a</sup>	8.0%	7	87	0	0%	1	1.1%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland	0%	0	10	0	0%	0	0%	0
Tayside	39.0%	62	159	0	0%	16	10.1%	0
NoS	23.9%	94	394	0	0%	17	4.3%	0

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
Grampian	14.0%	143	18.2%	135	+30.0%
Highland <sup>a</sup>	16.7%	96	8.0%	87	-52.1%
Orkney*	0%	5	-	-	-
Shetland	20.0%	5	0%	10	-100.0%
Tayside	27.8%	133	39.0%	159	+40.3%
NoS	19.4%	382	23.9%	394	+23.2%

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 6: Negative Axillary Clearance Rate

***QPI 6: Negative Axillary Clearance Rate: Over treatment of the axilla should be minimised.***

Surgical axillary clearance is associated with increased arm morbidity compared with other surgical staging procedures and should therefore not be utilised unless there is evidence of nodal metastatic disease.

Numerator: Number of patients with breast cancer undergoing surgical axillary clearance found to have no nodal metastasis (including nodes taken at any previous sampling procedure).

Denominator: All patients with breast cancer undergoing surgical axillary clearance.

Exclusions: All patients with breast cancer who have received neoadjuvant systemic therapy for  $\geq 6$  weeks (hormonal therapy or chemotherapy).

Target: Less than 10%

### QPI 6 Performance against target

The overall rate for NoS for 2013 was 1.6%, well below the target rate of less than 10%. This is a considerable decrease compared with the 2012 result of 8.0%.

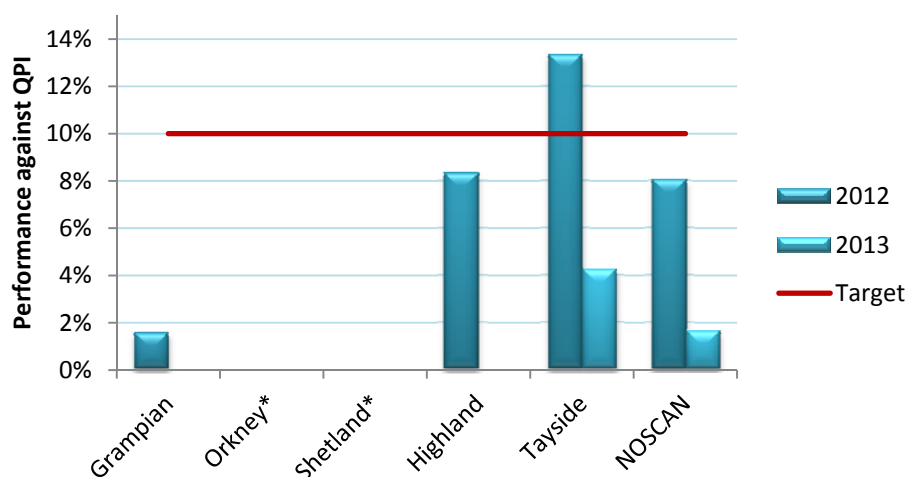
All NHS Boards the negative axillary clearance rate met the QPI target and all improved their results from the previous year.

The marked improvement in Highland is likely to be explained by a change in surgical practice following a change the surgical consultant staffing and avoidance of axillary clearance except where there is proven axillary disease.

### Actions required:

- None

### QPI 6: Target < 10%



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	0%	0	43	0	0%	1	2.3%	0
Highland <sup>a</sup>	0%	0	66	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	4.3%	3	70	0	0%	0	0%	0
NoS	1.6%	3	182	0	0%	1	0.5%	0

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
Grampian	1.6%	64	0%	43	-100.0%
Highland <sup>a</sup>	8.3%	72	0%	66	-100.0%
Orkney*	-	-	-	-	-
Shetland*	-	-	-	-	-
Tayside	13.3%	60	4.3%	70	-67.7%
NoS	8.0%	199	1.6%	182	-80.0%

<sup>a</sup> Highland results include patients from the Western Isles



## QPI 7: Minimising Hospital Stay

***QPI 7: Minimising Hospital Stay – “23 Hour” Surgery: Patients should have the opportunity for a maximum of 1 overnight stay following surgery wherever appropriate.***

It is safe to perform wide excision and axillary staging as a short stay procedure in the majority of patients & clinical quality has been shown to be improved utilising this model, resulting in better patient outcomes. Benefits of short stay include reduction in readmissions, reduction in complications, improved patient mobility and enhanced recovery.

However, it is not always appropriate for all patients due to social circumstances, co-morbidities and/or geographical residence.

Numerator: Number of patients with breast cancer undergoing wide excision and/or axillary sampling procedure (sentinel node biopsy or node sample ( $\geq 4$  nodes) with a maximum hospital stay of 1 night following their procedure.

Denominator: All patients with breast cancer undergoing wide excision and/or axillary sampling procedure (sentinel node biopsy or node sample ( $\geq 4$  nodes)).

Exclusions: All patients with breast cancer undergoing partial breast reconstruction.

Target: 80% or above

### QPI 7 Performance against target

In 2013, there were 591 operations conducted as a short stay procedure out of a possible 705 – at 83.8% this is above the target level of 80% for the QPI. This is an increase compared with the 2012 when the rate for the NoS was 71.1%.

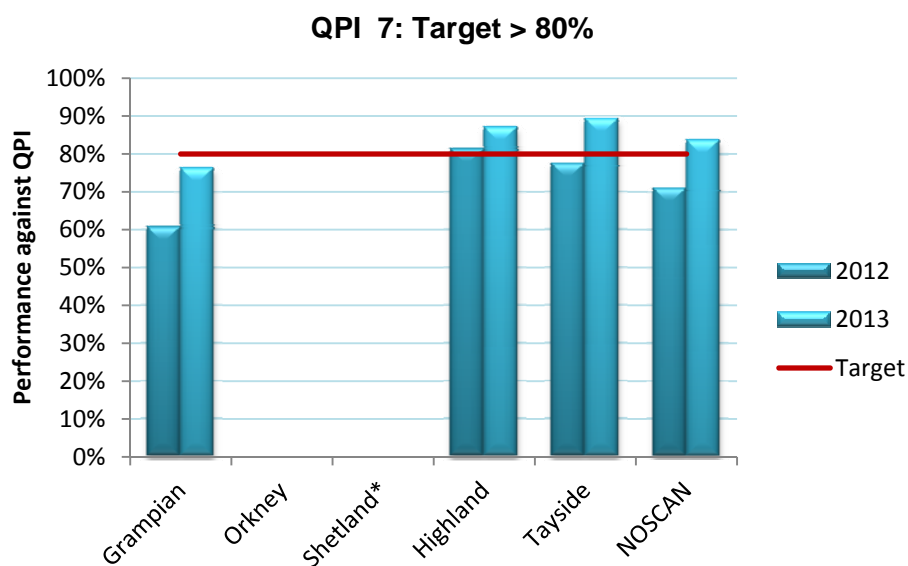
All NHS Boards improved their performance against this QPI between 2012 and 2013, with all but one, NHS Grampian exceeding the target level of 80%. While NHS Grampian did not meet the target level, the board showed considerable improvement in this area between 2012 and 2013 with performance increasing from 61 % to 76%.

It appears that NHS Grampian fails to meet this standard, however, the hospital stay figures are taken from SMR01 data which is supplied by ISD. NHS Grampian believe that, in some cases, total hospital stay has been reported rather than hospital stay following surgery. Targeted audit of patients who did not meet this QPI will be undertaken locally to confirm whether this is the case once ISD provide the service with the CHI numbers of all those believed to have stayed more than one night postoperatively.

Whilst NHS Highland has met the standard there is surprise that the performance isn't better: there are concerns and evidence that this dataset has coding inaccuracies. As such details of the data used to derive these results should be checked in future years and the process of requesting the data needs to be streamlined and be provided automatically as is the case for all other data points.

**Actions required:**

- **NOSCAN to ensure that in future years SMR01 data used to derive this indicator are easily accessible to NHS Boards. All NHS Boards to check these data against Cancer Audit data to identify any issues with data accuracy.**
- **NHS Grampian to attempt to introduce a system for prospectively monitoring the numbers of women with pre-operative overnight stays so that should we fail this QPI in future years these women can be easily identified and reported.**



	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	60.7%	280	76.4%	275	+25.9%
<b>Highland<sup>a</sup></b>	81.4%	140	87.2%	156	+7.1%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	77.5%	222	89.3%	271	+15.2%
<b>NoS</b>	71.1%	643	83.8%	705	+17.9%

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 8: HER2 Status for Decision Making

***QPI8: HER2 Status for Decision Making: HER2 status should be available to inform treatment decision making.***

HER2 status has a significant impact on survival and so has a significant influence on decisions on neoadjuvant and adjuvant treatment. However, it is not always possible to undertake IHC on a core biopsy e.g. due to tumour size.

Numerator: Number of patients with invasive breast cancer for whom the HER2 status (as defined by IHC) is known at initial MDT meeting to decide first treatment.

Denominator: All patients with invasive breast cancer.

Exclusions: No exclusions.

Target: 90% or above

### QPI 8 Performance against target

From a total of 1103 patients with invasive breast cancer diagnosed during 2013, 718 patients had their HER2 status known at the initial multidisciplinary team (MDT) meeting. This equates to 65.1% and is well below the target figure of over 90%. This is a slight decline compared with the 2012 result of 67.2%.

All but two NHS Boards, NHS Tayside and NHS Orkney, failed to meet the QPI target level. In NHS Highland only 1.2% of patients had their HER2 status known at the initial MDT meeting, which fell well below that of other NHS Boards within the North of Scotland and impacted on regional results.

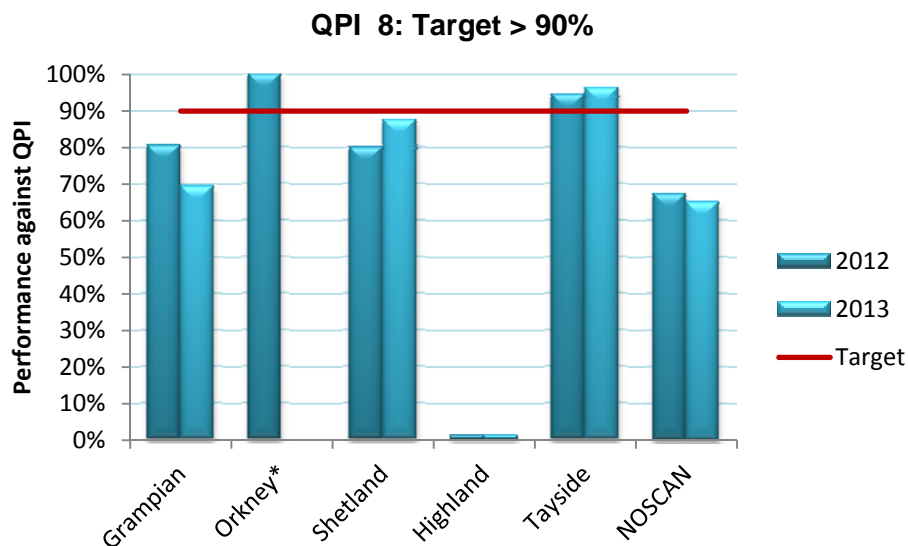
- In NHS Shetland one patient had DCIS only on biopsies. Invasive cancer was only confirmed following resection. Another patient had normal imaging (M1U1) and non-diagnostic FNA and proceeded to excision biopsy which confirmed diagnosis of invasive breast cancer. As excision is first treatment and was done before initial MDT HER2 status was not available however it was available and discussed at MDT prior to subsequent surgery.
- NHS Highland remains the centre with the fastest turnaround of NCB results and to delay this so that we can have the HER2 at the MDT is unacceptable. Where neoadjuvant therapy is considered NHS Highland are now re-discussing these patients at MDT meeting so the HER2 for all relevant patients will be available at the treatment MDT decision.
- NHS Grampian failure in QPI8 is partly attributable to pathology resource issues due to the loss of a consultant pathologist mid 2013. The local cancer auditor also feels it is often difficult to tell whether the HER2 status was available at the MDT so there may be inaccuracies in the data. NHS Grampian's performance appears to have worsened since 2012 and as the data recording issues would be likely to be

reasonably consistent year on year the service feels the lack of pathology resource has played a significant part in the reduction in their performance against this standard.

It is noted that the measurability of this QPI was changed following review of the first year's data. In future the indicator will report the proportion of patients with invasive breast cancer for whom the HER2 status is known at 'pre-treatment MDT', rather than the 'initial MDT' as used for patients diagnosed in 2012 and 2013. This will mean that a higher proportion of NHS Highland patients will meet this QPI, as patients with HER2 results relevant to their treatment will be re-discussed at MDT prior to treatment. However, it is unlikely that NHS Highland will meet this target following these revisions as patients will not be re-discussed at MDT in cases where the HER2 result is not relevant for making treatment decisions.

**Actions required:**

- **All Boards to review performance next year in light of revised QPI measurability.**
- **NHS Grampian to highlight to senior management that their failure to attain the required standard is partly due to issues with availability of pathology resource.**
- **NHS Grampian to improve accuracy of recording of HER2 status at the time of MDT.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>69.5%</b>	290	417	1	0.2%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>1.2%</b>	3	244	0	0%	0	0%	0
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland</b>	<b>87.5%</b>	14	16	0	0%	0	0%	0
<b>Tayside</b>	<b>96.5%</b>	409	424	0	0%	0	0%	0
<b>NoS</b>	<b>65.1%</b>	<b>718</b>	<b>1103</b>	<b>1</b>	<b>0.1%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	80.8%	422	<b>69.5%</b>	417	-14.0%
<b>Highland<sup>a</sup></b>	1.3%	237	<b>1.2%</b>	244	-7.7%
<b>Orkney*</b>	100%	7	-	-	-
<b>Shetland</b>	80.0%	10	<b>87.5%</b>	16	+9.4%
<b>Tayside</b>	94.5%	348	<b>96.5%</b>	425	+2.1%
<b>NoS</b>	67.2%	1024	<b>65.0%</b>	<b>1104</b>	-3.1%

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 9: Radiotherapy for Breast Conservation

### *QPI 9: Radiotherapy for Breast Conservation: After wide local excision patients with breast cancer should receive radiotherapy*

Trials have demonstrated a significant reduction in local recurrence with the use of radiotherapy after breast conservation. Patient choice and fitness for treatment will have an effect on uptake.

Numerator: Number of patients with invasive breast cancer having conservation surgery receiving radiotherapy to the breast.

Denominator: All patients with invasive breast cancer having conservation surgery.

Exclusions: All patients with breast cancer taking part in clinical trials of radiotherapy treatment. All patients with M1 disease.

Target: 95% or above

### QPI 9 Performance against target

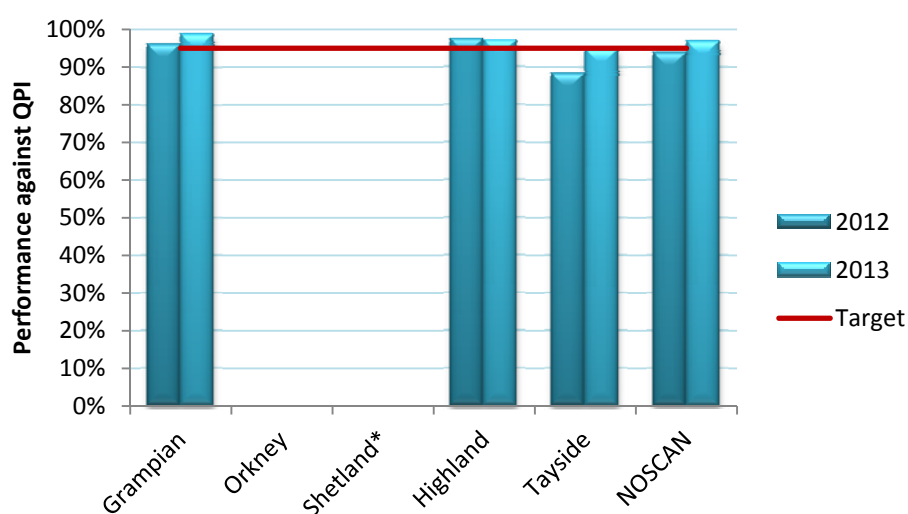
Overall, in 2013 the majority of breast cancer patients in the North of Scotland received radiotherapy after wide local excision, 519 out of 536 patients (96.8%), which exceeds the target of 95%. This is an increase compared with the 2012 result where 93.9% of these patients received radiotherapy.

NHS Tayside was the only NHS Board not to meet the target in the North of Scotland during 2013, although performance here improved from the previous year.

### Actions required:

- None

**QPI 9: Target > 95%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>98.9%</b>	186	188	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>97.0%</b>	130	134	0	0%	0	0%	0
<b>Orkney</b>	-	0	0	0	0%	0	0%	0
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>94.8%</b>	202	213	1	0.5%	19	8.9%	0
<b>NoS</b>	<b>96.8%</b>	<b>519</b>	<b>536</b>	<b>1</b>	<b>0.2%</b>	<b>19</b>	<b>3.5%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	96.2%	212	<b>98.9%</b>	188	+2.8%
<b>Highland<sup>a</sup></b>	97.3%	111	<b>97.0%</b>	134	-0.3%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	88.4%	164	<b>94.8%</b>	213	+7.2%
<b>NoS</b>	93.9%	488	<b>96.8%</b>	<b>536</b>	+3.1%

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 10: Adjuvant Chemotherapy

### ***QPI10: Adjuvant chemotherapy: patients with higher risk breast cancer should receive chemotherapy post operatively.***

Clinical trials have demonstrated that adjuvant drug treatments substantially reduce 5-year recurrence rates and 15-year mortality rates. However, it may not always be undertaken due to factors such as patient choice, co-morbidities and fitness for treatment.

Numerator: Number of patients between 50 and 70 years of age at diagnosis with surgically proven node positive or at least G3 > 20mm breast cancer who receive adjuvant chemotherapy.

Denominator: All patients between 50 and 70 years of age at diagnosis with surgically proven node positive or at least G3 > 20mm breast cancer.

Exclusions: All patients with breast cancer taking part in trials of chemotherapy treatment. All patients with breast cancer who have had neo-adjuvant chemotherapy. All patients with M1 disease.

Target: 85% or above

## QPI 10 Performance against target

Over two thirds of patients in the North of Scotland (70.9%) with higher risk breast cancer received chemotherapy post operatively in 2013. This is an improvement compared with 2012 when 51.7% of such patients received chemotherapy post operatively, but well below the target of 85%.

No individual NHS Board in the North of Scotland met this QPI target although all Boards performed significantly better in 2013 than in 2012. Some of the improvement may be due to refinement of the data definitions to ensure tumour size only reflected the invasive component. Otherwise the patients missing the target seems appropriate as reviewed by each board below.

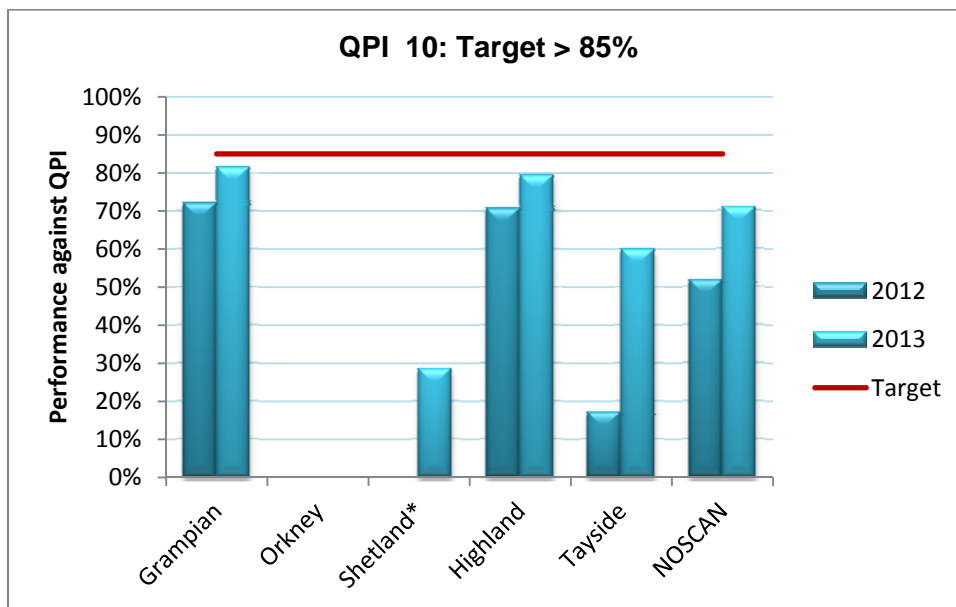
- In NHS Shetland two patients refused chemotherapy. Another patient with grade 1 tumour but had a single micrometastasis. MDT advice was for no chemotherapy. A further patient with invasive tumour <20mm and grade 2 but had a single micrometastasis. MDT advice was for no chemotherapy. In addition one patient was planned for chemotherapy but it was 4½ months following surgery before they were fit to proceed and by then the benefit of chemotherapy was outweighed by the risks and toxicities associated with it.
- NHS Highland noted that whilst an appropriate consideration for patients not all will be fit or wish to have the chemotherapy that is, or should be, offered. NHS Highland has looked at each individual case where chemotherapy was not delivered and this decision was actively discussed in the MDT for every patient in this QPI group.



- An NHS Tayside internal audit of the patients who did not receive chemotherapy showed 20% declined chemotherapy; 20% were not fit enough; 45% other favourable characteristics (ITCs only, grade 1 ER positive tumours etc. where chemotherapy benefit was <4% OS improvement at 10 years) and for 12.5% there were insufficient data. All were discussed through MDT. There were also some issues with data collection which have since been addressed for the 2014 cohort.
- Unfortunately no oncologist opinion was available from NHS Highland due to locum staff changing over data collection period. Oncology review in NHS Tayside supports the view that there were valid reasons for patients not receiving adjuvant chemotherapy. As was supported at the national meeting, there is a general NOSCAN view that the target for this particular QPI may have been set too high and will not be achieved in future years either.

**Actions required:**

- **None**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>81.5%</b>	44	54	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	<b>79.5%</b>	35	44	0	0%	0	0%	0
<b>Orkney</b>	-	0	0	0	0%	0	0%	0
<b>Shetland</b>	<b>28.6%</b>	2	7	0	0%	0	0%	0
<b>Tayside</b>	<b>60.0%</b>	36	60	0	0%	9	15%	0
<b>NoS</b>	<b>70.9%</b>	<b>117</b>	<b>165</b>	<b>0</b>	<b>0%</b>	<b>9</b>	<b>5.5%</b>	<b>0</b>

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	72.1%	68	<b>81.5%</b>	54	+13.0%
<b>Highland<sup>a</sup></b>	70.7%	41	<b>79.5%</b>	44	+12.6%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	<b>28.6%</b>	7	-
<b>Tayside</b>	17.2%	64	<b>60.0%</b>	60	+248.8%
<b>NoS</b>	<b>51.7%</b>	<b>174</b>	<b>70.9%</b>	<b>165</b>	+37.1%

<sup>a</sup> Highland results include patients from the Western Isles

## QPI 11: Anti-HER2 Positive Therapy

***QPI11: Anti-HER2 Positive Therapy: Patients with HER2 positive intermediate or high risk breast cancer should receive anti-HER2 positive therapy.***

Women with intermediate or high risk-disease who are HER2 positive show benefit when they receive trastuzumab in addition to chemotherapy. However, uptake will be influenced by factors such as patient choice, co-morbidities and fitness for treatment.

Numerator: Number of patients with breast cancer who are between 50 and 70 years of age at diagnosis with HER2 positive (by 3+ on IHC &/or FISH +ve) tumours >10mm (or ≤10mm and node positive) who receive anti-HER2 positive therapy.

Denominator: All patients with breast cancer who are between 50 and 70 years of age at diagnosis with HER2 positive (by 3+ on IHC &/or FISH +ve) tumours >10mm (or ≤10mm and node positive).

Exclusions: Patients with metastatic disease (T<sub>any</sub>N<sub>any</sub>M1).

Target: 90% or above

### QPI 11 Performance against target

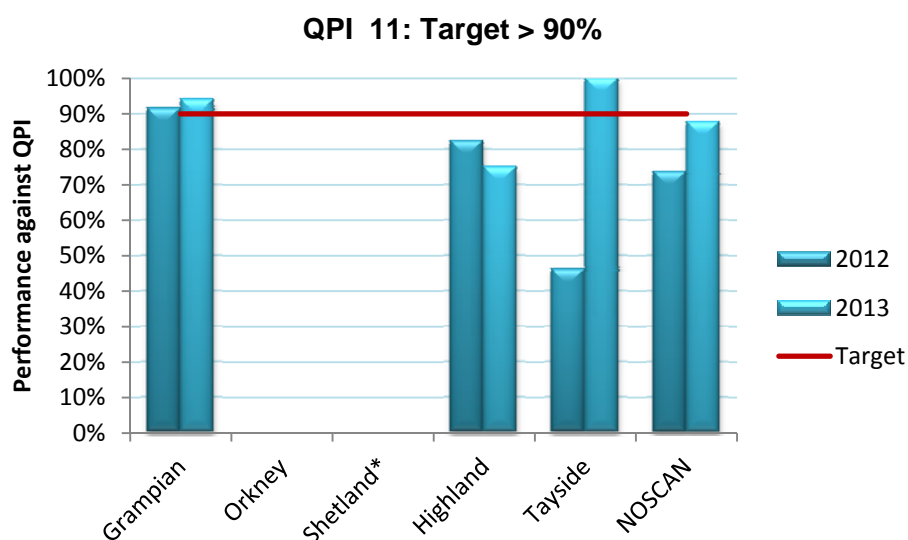
In 2013, 87.8% of patients in the North of Scotland with HER2 positive intermediate or high risk breast cancer received anti-HER2 positive therapy, just below the target rate of 90%. This is an increase compared with the 2012 result of 73.8%.

NHS Grampian and NHS Tayside both exceeded the target rate for this QPI.

- In NHS Shetland one patient refused Herceptin.
- In NHS Highland three patients missed the target. For two of these there was minimal benefit of chemotherapy according to online prediction tools. In the adjuvant setting Herceptin can only be administered after conventional chemotherapy and therefore was not administered either. The 3rd patient refused treatment.
- Unfortunately no oncologist opinion was available from NHS Highland due to locum staff changing over data collection period. Oncology review in NHS Tayside supports the view that there were valid reasons for patients not receiving adjuvant chemotherapy.

### Actions required:

- **None**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	94.1%	16	17	0	0%	0	0%	0
<b>Highland<sup>a</sup></b>	75.0%	9	12	0	0%	0	0%	0
<b>Orkney</b>	-	0	0	0	0%	0	0%	0
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	100%	10	10	0	0%	0	0%	0
<b>NoS</b>	87.8%	36	41	0	0%	0	0%	0

	2012 Performance (%)	2012 Denominator	2013 Performance (%)	2013 Denominator	Change in Performance
<b>Grampian</b>	91.7%	12	94.1%	17	+ 2.6%
<b>Highland<sup>a</sup></b>	82.4%	17	75.0%	12	- 9.0%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland</b>	-	0	-	-	-
<b>Tayside</b>	46.2%	13	100%	10	+ 116.5%
<b>NoS</b>	73.8%	42	87.8%	41	+ 19.0%

<sup>a</sup> Highland results include patients from the Western Isles

## 5. Conclusions

The Quality Performance Indicators programme was developed to drive continuous improvement and ensure equity of care for cancer patients across Scotland. As part of this the North of Scotland is initiating a programme of annual reporting of regional performance against QPIs. This is the first regional Breast cancer QPI comparative performance report to be published and will help to provide a clearer indication of performance and a more formal structure for enabling improvements to be made.

This is also the first time in which QPI results for the North of Scotland have been presented for multiple years. We would not expect to see the effects of changes in services made after the results of the 2012 audit were published; as these will only start affecting patients diagnosed in 2014 and will not have been implemented for the full cohort of patients until 2015.

Overall, results from the second year of Breast Cancer QPI reporting are encouraging. Case ascertainment and data capture is of a high standard overall, with significant improvements in some boards over the last year.

The audit report indicated that QPI targets were met over the North of Scotland for eight of the 11 QPIs. Of the three QPIs where the target was not met, considerable improvements in results have been seen for two of these since 2012 (QPI 10 and QPI 11).

Some actions to monitor services performance against the QPI's have been suggested including support for data collection. The MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action / Improvement Plans in response to the findings presented in the report. Progress against these plans will be monitored by the MCN Advisory Board and any service or clinical issue which the Advisory Board considers not to have been adequately addressed will be escalated to the NHS Board Lead Cancer Clinician and Regional Lead Cancer Clinician.

Additionally, progress will be reported to the Regional Cancer Advisory Forum (RCAF) annually by the NOSCAN Lead Cancer Clinician, as part of the regional audit governance process to enable RCAF to review and monitor regional improvement.

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