

# NOSCAN

North of Scotland  
Cancer Network



**NORTH OF SCOTLAND  
PLANNING GROUP**

**Upper GI Cancer  
Managed Clinical Network**

## **Audit Report**

### **Upper GI Cancer Quality Performance Indicators**

Patients diagnosed during 2014

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The North of Scotland Cancer Network (or NOSCAN), is one of the 3 regional Scottish Cancer Networks, which report to their respective regional NHS Board Planning Groups and for specific workstreams, to the Scottish Cancer Taskforce Group.

The principle role of NOSCAN is to support the delivery, planning, organisation and delivery of regional and national cancer services, and thereby to ensure consistent and high quality cancer care is being provided equitably across the North of Scotland.

[www.noscan.scot.nhs.uk](http://www.noscan.scot.nhs.uk)

## EXECUTIVE SUMMARY

This publication reports the performance of upper GI cancer services in the six NHS Boards in the North of Scotland (NOS) against the Upper GI Cancer Quality Performance Indicators (QPIs) for patients diagnosed during 2014. This is the second year in which these QPIs have been reported in Scotland and performance in 2014 is compared with that in 2013.

- 384 patients diagnosed with upper GI cancer in 2014 were audited in the North of Scotland: 291 with oesophageal cancer and 93 with gastric cancer. This is a slight increase from 2013 (374 patients).
- Overall 2014 case ascertainment was high at 97%, an increase from 95% in 2013, and results were considered to be representative of upper GI cancer services in the region.

### Summary of QPI Results

QPI	QPI Target	Oesophageal		Gastric	
		NOSCAN	Range <sup>b</sup>	NOSCAN	Range <sup>b</sup>
<b>QPI 1: Endoscopy</b> – Proportion of patients with oesophageal or gastric cancer who have a histological diagnosis made following initial endoscopy and biopsy.	<b>90%</b>	82%	76 – 90%	80%	76 – 81%
<b>QPI 2: Radiological Staging</b> – Proportion of patients with oesophageal or gastric cancer who undergo CT abdomen +/- chest +/- pelvis.	<b>90%</b>	96%	95 – 100%	97%	94 – 97%
<b>QPI 3: Multi-Disciplinary Team (MDT) Meeting</b> – Proportion of patients with oesophageal or gastric cancer who are discussed at MDT meeting before definitive treatment.	<b>95%</b>	89%	83 – 93%	88%	65 – 94%
<b>QPI 4: Staging and Treatment Intent</b> – Proportion of patients with oesophageal or gastric cancer who have TNM stage and treatment intent recorded at MDT meeting prior to treatment.	<b>95%</b>	92%	70 – 94%	86%	67 – 95%
<b>QPI 5: Nutritional Assessment</b> – Proportion of patients with oesophageal or gastric cancer who are referred to a dietician within 4 weeks of diagnosis.	<b>85%</b>	70%	22 - 88%	73%	39 – 95%
<b>QPI 6: Appropriate Selection of Surgical Patients</b> – Proportion of patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy who then go on to have surgical resection.	<b>80%</b>	62%	50 – 72%	71%	-
<b>QPI 7: 30/90 Day Mortality Following Surgery</b> – Proportion of patients with oesophageal or gastric cancer who die within 30 or 90 days of surgical resection.					
(i) 30 Days	<b>&lt; 10%</b>	6%	0 – 11%	5%	0 – 17%
(i) 90 Days	<b>&lt; 10%</b>	9.4%	0 – 11%	5%	0 – 17%

<b>QPI 8: Lymph Node Yield</b> – Proportion of patients with gastric cancer who undergo surgical resection where ≥ 15 lymph nodes are resected and pathologically examined.	<b>80%</b>			90%	83 – 100%
<b>QPI 9: Length of Hospital Stay Following Surgery</b> – Proportion of patients undergoing surgical resection for oesophageal or gastric cancer who are discharged within 21 days of surgical procedure.	<b>60%</b>	62%	38 – 71%	81%	33 – 100%
<b>QPI 10: Resection Margins</b> – Proportion of patients with oesophageal or gastric cancer who undergo surgical resection in which surgical margin is clear of tumour.					
(i) Oesophageal	<b>70%</b>	78%	71 – 81%		
(ii) Gastric	<b>90%</b>			90%	83 – 100%
<b>QPI 11: Curative Treatment Rates</b> – Proportion of patients with oesophageal or gastric cancer who undergo curative treatment.	<b>35%</b>	31%	30 – 33%	24%	17 – 39%
<b>QPI 12: 30 Day Mortality Following Oncological Treatment</b> – Proportion of patients with oesophageal or gastric cancer who die within 30 days of oncological treatment for oesophageal or gastric cancer.					
(i) Chemoradiotherapy (curative)	<b>&lt; 10%</b>	3%	0 – 20%	-	-
(ii) Peri-operative chemotherapy (curative)	<b>&lt; 10%</b>	5%	0 – 18%	0%	-
(iii) Chemotherapy (palliative)	<b>&lt; 20%</b>	11%	0 – 19%	6%	0 – 13%
<b>Clinical Trials Access</b> - Proportion of patients with colorectal cancer who are enrolled in an interventional clinical trial or translational research.		All patients with Upper GI Cancer in the North of Scotland			
(i) Interventional Trials	<b>7.5%</b>	7.1%			
(ii) Translational Research	<b>15%</b>	3.0%			

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 had mixed results: the target for 5 of the 11 measured outcomes for oesophageal cancer and 6 out of 12 for gastric cancer have been exceeded, but with some of the others remain unachieved for a second year. However, there is overall good evidence of improvement in performance when compared with patients diagnosed in 2013 (where only 2 of 10 standards were met for oesophageal cancer and 3 for out of 11 for gastric cancer).

Some actions to improve services have been identified. These are

- **MCN to develop a local protocol or adopt an existing protocol specifying minimum number of biopsies to take (6-8) at each endoscopy to guide practice in individual NHS Boards.**
- **All NHS Boards to ensure that specialist nurses are alerted to include all patients on MDT list as early as possible after diagnosis.**
- **All Boards to ensure that the TNM stage and treatment intent is clearly verbalised and documented at MDT.**
- **National Dietetics Quality Performance Indicator Working Group to evaluate and submit draft proposal for the revision of QPI 5. This will be actioned by all networks and NHS Boards.**
- **All NHS Boards to consider neoadjuvant chemotherapy to suit the individual needs for patients.**
- **NOSCAN to improve outcomes associated with low volumes of surgery in surgical centres in the North of Scotland through the recommendations of a SLWG.**

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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 [Quality Improvement Indicators](#) (QPIs) for all cancer types to enable national comparative reporting and drive continuous improvement for patients. In collaboration with the three Regional Cancer Networks ([NoSCAN](#), [SCAN](#) & [WoSCAN](#)) and [Information Services Division](#) (ISD), the first QPIs were published by [Healthcare Improvement Scotland](#) (HIS) in January 2012. [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 Upper GI Cancer QPIs are available from the ISD website<sup>1</sup>.

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. The need for regular reporting of activity and performance (to assure the quality of care delivered) was first set out nationally as a fundamental requirement of a Managed Clinical Network (MCN) in [NHS MEL\(1999\)10](#)<sup>2</sup>. This has since been further restated and reinforced in [HDL\(2002\)69](#)<sup>3</sup>, [HDL \(2007\) 21](#)<sup>4</sup>, and most recently in [CEL 29 \(2012\)](#)<sup>5</sup>.

This report assesses the performance of the North of Scotland (NoS) upper GI cancer services, as measured against the Upper GI Cancer Quality Performance Indicators (QPIs)<sup>6</sup> which were implemented for patients diagnosed on or after 1<sup>st</sup> January 2014, and using clinical audit data for patients diagnosed with oesophageal and gastric cancer in the twelve months from 1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014. Comparisons with the results from 2013, as reported in the ISD Upper GI Cancer QPI report<sup>7</sup>, are also provided to illustrate trends in performance.

## 2. Background

Six NHS Boards across the North of Scotland serve the 1.38 million population<sup>8</sup>. There were 384 patients diagnosed with upper GI cancer in the North of Scotland between 1<sup>st</sup> January and 31<sup>st</sup> December 2014. The configuration of the three Multidisciplinary Teams (MDTs) in the region is set out below.

MDT	Constituent Hospitals
<b>Grampian</b>	Aberdeen Royal Infirmary, Balfour + Gilbert Bain, Dr Gray's Hospital
<b>Highland</b>	Raigmore Hospital, Inverness + Stornoway
<b>Tayside</b>	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 upper GI cancer should be discussed at a Multidisciplinary Team Meeting (customarily referred to as an MDT or MDTM). In the North of Scotland these

were usually convened on a weekly basis as follows: Grampian (Monday afternoon), Tayside (Wednesday morning), and Highland (Friday afternoon).

## 2.1 National Context

Oesophageal cancer is the 8<sup>th</sup> most common types of cancer in Scotland with over 800 cases diagnosed in Scotland each year since 2002<sup>9</sup>. Gastric cancer is less common with approximately 700-800 cases diagnosed each year in Scotland<sup>10</sup>. Incidences of both tumour types are higher in males than in females.

After a prolonged period of increasing incidence, occurrence of oesophageal cancer now seems to be decreasing<sup>11</sup>. In contrast, gastric cancer incidences have decreased significantly since the 1980's<sup>10</sup>, a trend that has continued in the last 10 years with incidences decreasing by 28-30% over this period<sup>11</sup>. This decline is likely to have been affected by:

- a decrease in prevalence of infection with the bacterium *Helicobacter pylori* (an infection which increases the risk of developing stomach cancer) perhaps as a result of improvements in social conditions and widespread use of antibiotics.
- The introduction of refrigeration, as this has reduced the need for potentially carcinogenic food preservatives.

Relative survival for both oesophageal cancer and gastric cancer is increasing<sup>12</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.

**Relative age-standardised survival for oesophageal and gastric cancer in Scotland at 1 year and 5 years showing percentage change from 1983-1987 to 2003-2007<sup>12</sup>.**

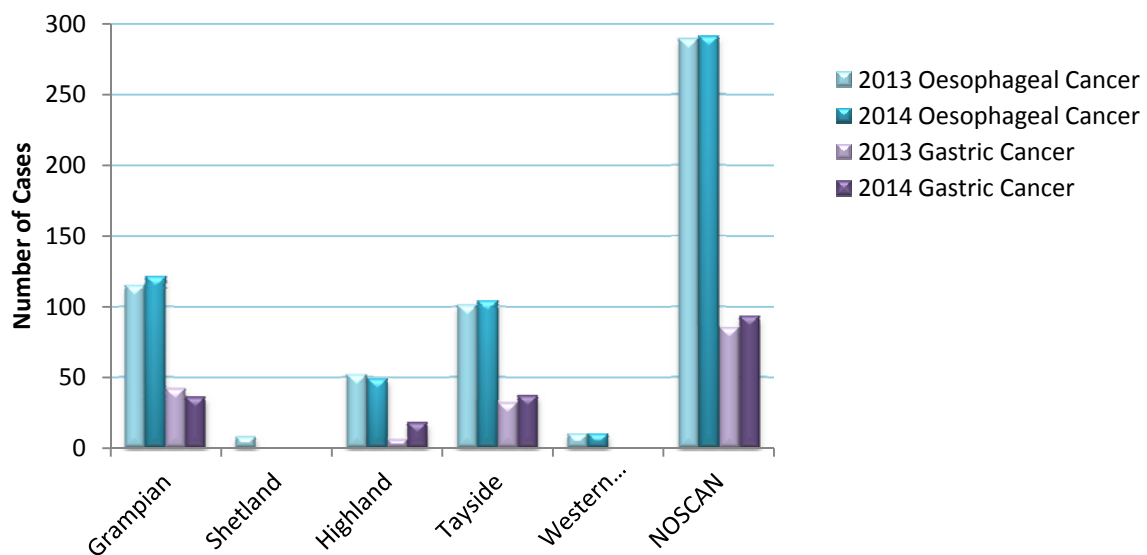
	Relative survival at 1 year (%)		Relative survival at 5 years (%)	
	2003-2007	% change	2003-2007	% change
<b>Oesophageal Cancer</b>				
Male	37.2%	+ 16.3%	10.1%	+ 5.5%
Female	44.0%	+ 18.7%	15.5%	+ 5.4%
<b>Gastric Cancer</b>				
Male	36.5%	+ 10.8%	15.4%	+ 6.1%
Female	42.1%	+ 13.7%	18.0%	+ 6.7%

## 2.2 North of Scotland Context

A total of 384 cases of upper GI cancer were recorded through audit as diagnosed in the North of Scotland between 1<sup>st</sup> January 2014 and 31<sup>st</sup> December 2014: 291 cases of oesophageal cancer and 93 cases of gastric cancer. This was a slight increase compared with 2013, when 374 patients were diagnosed with upper GI cancer. The number of patients diagnosed within each Board is presented below.



	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
<b>Oesophageal Cancer</b>							
Number of Patients	121	49	4	3	104	10	291
% of NoS total	42%	17%	1%	1%	36%	3%	100%
<b>Gastric Cancer</b>							
Number of Patients	36	18	0	1	37	1	93
% of NoS total	39%	19%	0%	1%	40%	1%	100%
<b>Total Upper GI Cancer</b>							
Number of Patients	157	67	4	4	141	11	384
% of NoS total	41%	17%	1%	1%	37%	3%	100%



Number of patients diagnosed with oesophageal and gastric cancer by Board of diagnosis in 2013 and 2014.

### **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 2014 and 31<sup>st</sup> December 2014 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 have 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.

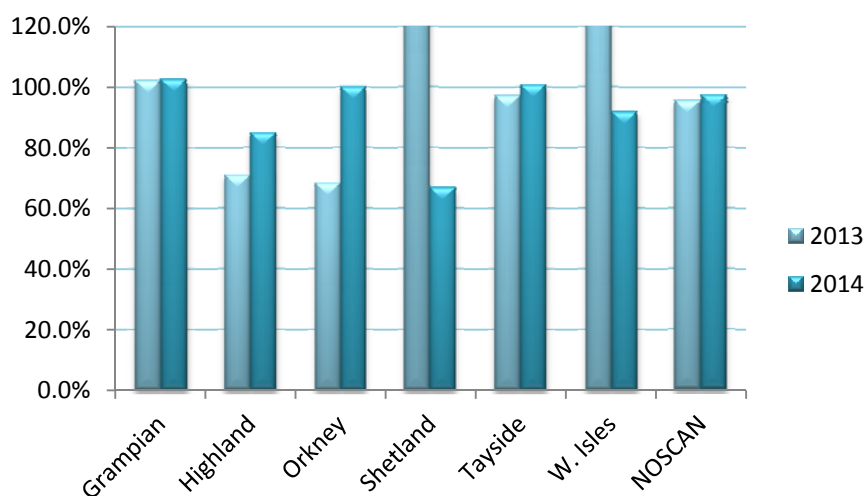
### **4. Results**

#### **4.1 Case Ascertainment**

Audit data completeness can be assessed from case ascertainment, which is the proportion of expected patients that have been identified through audit. Case ascertainment is calculated by comparing the number of new cases identified by 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 2014. 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 2014 in the North of Scotland was high at 97.5%, which indicates excellent data capture through audit. This is an increase from the 2013 figure of 95.5%. Case ascertainment for each Board across the North of Scotland is illustrated below.

Across the Boards there was variation in percentage case ascertainment ranging from 66.7% to 102.6% during 2014. For the three mainland NHS Boards case ascertainment increased from 2013 figures, showing improvement in data capture. Where numbers of patients are much smaller, such as in the island Boards, wider variation in case ascertainment is to be expected and does not reflect any inadequacies in data capture.



**Case ascertainment by NHS Board for patients diagnosed with upper GI cancer January – December 2014 compared with figures from 2013.**

	Grampian	Highland	Orkney	Shetland	Tayside	W. Isles	NOSCAN
<b>Cases from audit</b>	157	67	4	4	141	11	<b>384</b>
<b>ISD Cases annual average (2009-2013)</b>	153	79	4	6	140	12	<b>394</b>
<b>% Case ascertainment</b>	102.6%	84.8%	100.0%	66.7%	100.7%	91.7%	<b>97.5%</b>

Audit data were considered 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 information on the Date of Referral for Nutritional Assessment in some NHS Boards. Due to how it has been recorded to date, this data item has sometimes been difficult for audit staff to capture, with the required data missing from over 30% of oesophageal cancer patients and 50% of gastric cancer patients' records in Highland, and also missing from smaller numbers of patients diagnosed in NHS Western Isles, NHS Grampian and NHS Orkney.

Collectively, the number of patients for which this data was not recorded over the North of Scotland was no more than 9% of patients with oesophageal cancer and 12% of patients with gastric cancer. Comparison with 2013 data shows similar results, with data capture also being very high with the exception of the Date of Referral for Nutritional Assessment.

## **4.2 Performance against Quality Performance Indicators (QPIs)**

Results of the analysis of Upper GI Cancer Quality Performance Indicators are set out in the following sections. Graphs and charts have been provided where this aids interpretation: where appropriate, numbers have also been included to provide context. Data are largely presented by Board of diagnosis. However, surgical focussed QPIs (QPIs 7,8,9 and 10) are reported by hospital of surgery.

Where performance is below the required target, commentary has been included to provide context to the variation. Furthermore, where specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis, these have also been indicated in the accompanying commentary.

## QPI 1: Endoscopy

**QPI 1: Endoscopy: Patients with oesophageal or gastric cancer should undergo endoscopy and biopsy to reach a diagnosis of cancer.**

For diagnosis of oesophageal or gastric cancer the use of endoscopy and biopsy is recommended. However, it may not always be technically possible to undertake biopsy and patient choice may also be a factor.

**Numerator:** Number of patients with oesophageal or gastric cancer who undergo endoscopy who have a histological diagnosis made following initial endoscopy and biopsy.

**Denominator:** All patients with oesophageal or gastric cancer who undergo endoscopy.

**Exclusions:** No Exclusions

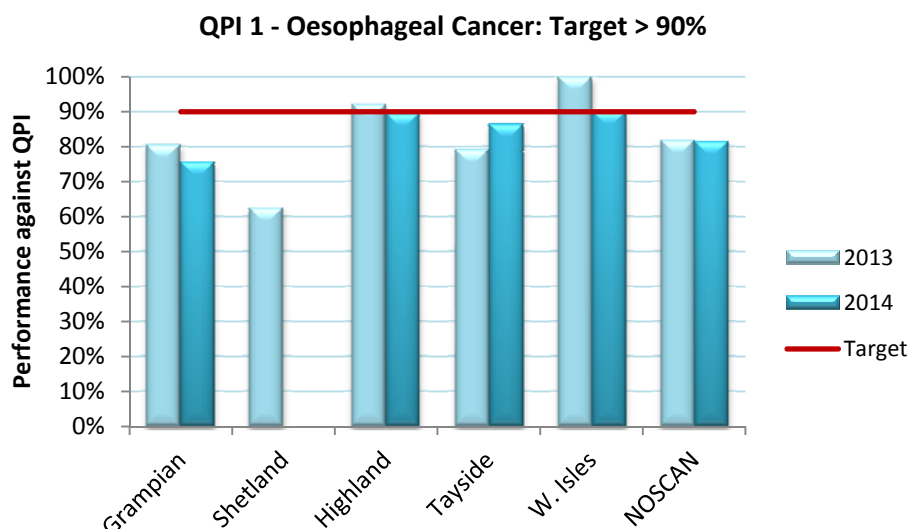
**Target:** 90%

### QPI 1 Performance against target

#### Oesophageal Cancer

Of the 287 oesophageal cancer patients diagnosed in the North of Scotland in 2014 who underwent endoscopy, 234 had a histological diagnosis made following initial endoscopy and biopsy, which equates to a rate of 81.5%, below the target rate of 90%. This is a similar level to the 81.8% recorded in 2013.

NHS Western Isles was the only Board in the North of Scotland to meet the target for this QPI in 2014, with results for NHS Grampian and NHS Highland lower than those for 2013, but higher for patients diagnosed in NHS Tayside.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	75.6%	90	119	0	0%	0	0%	0
Highland	89.6%	43	48	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	86.4%	89	103	0	0%	0	0%	0
W. Isles	90.0%	9	10	0	0%	0	0%	0
NoS	81.5%	234	287	0	0%	0	0%	0

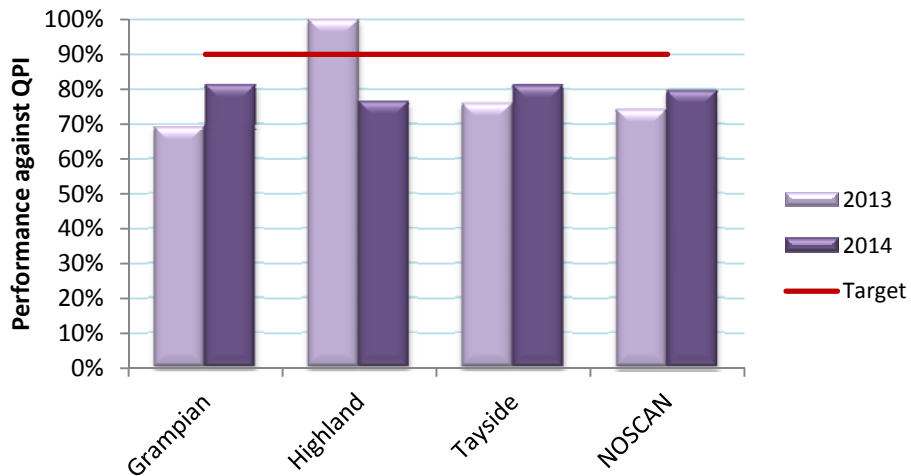
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	80.5%	113	75.6%	119	-4.9%
Highland	92.2%	51	89.6%	48	-2.6%
Orkney*	-	-	-	-	-
Shetland*	62.5%	8	-	-	-
Tayside	79.2%	101	86.4%	103	+7.2%
W Isles	100%	10	90.0%	10	-10.0%
NoS	81.8%	286	81.5%	287	-0.3%

## Gastric cancer

Of the 88 patients diagnosed with gastric cancer in the north of Scotland in 2014 who underwent endoscopy, 70 had a histological diagnosis made following initial endoscopy and biopsy. This equates to a rate of 79.5% which is below the target of 90%. This is an increase compared with the 2013 figure of 74.1%.

No NHS Board within the North of Scotland met the target for this QPI in 2014, although there was an increase in the proportion of patients meeting this QPI in NHS Tayside and NHS Grampian. A decline in performance was noted in NHS Highland, although numbers were small.

**QPI 1 - Gastric Cancer: Target > 90%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	81.3%	26	32	0	0%	0	0%	0
Highland	76.5%	13	17	0	0%	0	0%	0
Orkney	-	0	0	0	0%	0	0%	0
Shetland*	-	-	-	-	-	-	-	-
Tayside	81.1%	30	37	0	0%	0	0%	0
W Isles*	-	-	-	-	-	-	-	-
NoS	79.5%	70	88	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	69.0%	42	81.3%	32	+12.3%
Highland	100%	6	76.5%	17	-23.5%
Orkney	-	0	-	0	-
Shetland*	-	-	-	-	-
Tayside	75.9%	29	81.1%	37	+5.2%
W Isles*	-	-	-	-	-
NoS	74.1%	81	79.5%	88	+5.4%

The reasons for patients not meeting this QPI were reviewed and similar themes emerged from each Network that inflammation, food residue and anticoagulation prevented definite histological diagnosis at initial endoscopy for individual patients.

**Actions required:**

- **MCN to develop a local protocol or adopt an existing protocol specifying minimum number of biopsies to take (6-8) at each endoscopy to guide practice in individual NHS Boards.**



## QPI 2: Radiological Diagnosis

### ***QPI2: Radiological Diagnosis: Patients with oesophageal or gastric cancer should undergo CT staging.***

The primary tumour and its local extent should be defined and the presence or absence of metastatic disease assessed. However, some patients may not be fit enough to undergo investigations and/or treatment, or refuse for factors of patient choice.

**Numerator:** Number of patients with oesophageal or gastric cancer who undergo CT of the abdomen +/- chest +/- pelvis.

**Denominator:** All patients with oesophageal or gastric cancer.

**Exclusions:** No exclusions.

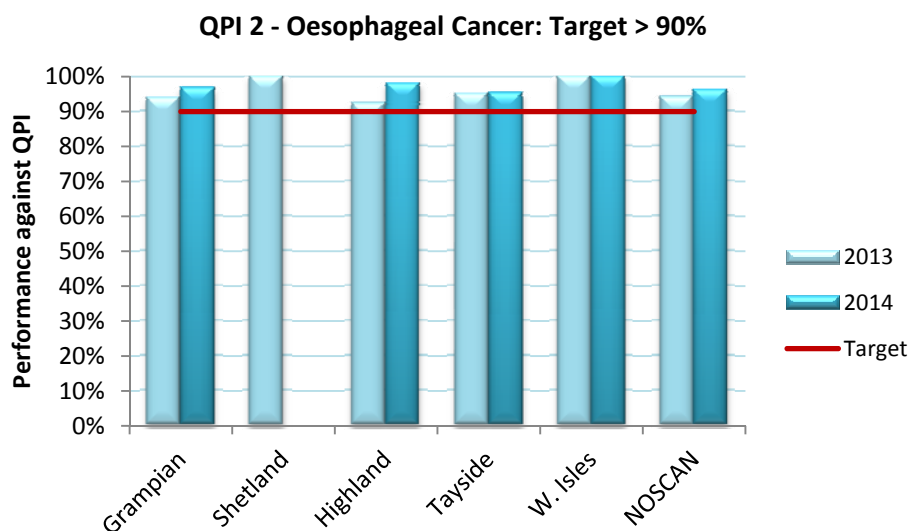
**Target:** 90%

## QPI 2 Performance against target

### Oesophageal Cancer

Overall, in the north of Scotland, 96.2% of patients diagnosed with oesophageal cancer in 2014 received a CT of the abdomen to check for the presence of any metastatic disease, meeting the target rate of 90%. This is an increase from 2013, where the 94.1% of patients met this target. However, the way in which this QPI has been calculated has changed. In 2013 CT required to be recorded as 'contrast enhanced' and CT of the chest was also required. This change in definition may have contributed to the apparent increase in patients meeting this QPI in 2014.

All NHS Boards within the North of Scotland met this QPI in 2014, with results either equal to, or better than those of 2013.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	96.7%	117	121	0	0%	0	0%	0
Highland	98.0%	48	49	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	95.2%	99	104	0	0%	0	0%	0
W. Isles	100%	10	10	0	0%	0	0%	0
NoS	96.2%	280	291	0	0%	0	0%	0

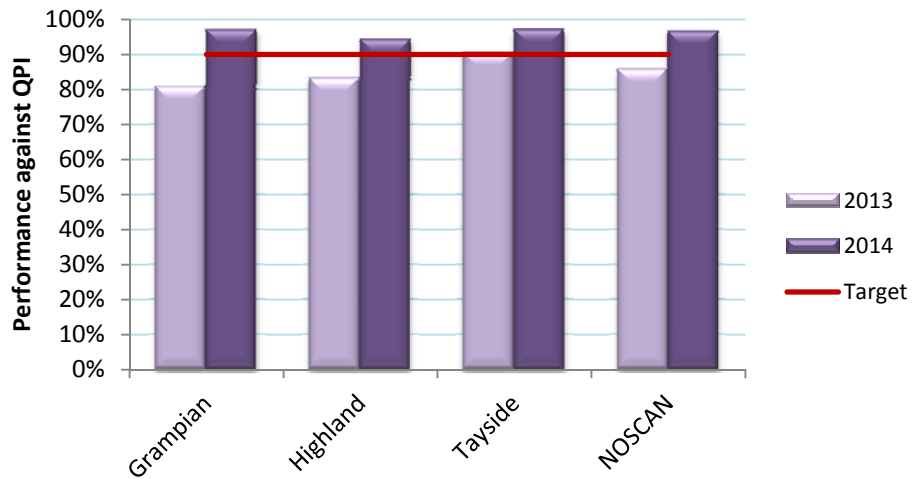
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	93.9%	115	96.7%	121	+2.8%
Highland	92.3%	52	98.0%	49	+5.7%
Orkney*	-	-	-	-	-
Shetland*	100%	8	-	-	-
Tayside	95.0%	101	95.2%	104	+0.2%
W Isles	100%	10	100%	10	+0.0%
NoS	94.1%	289	96.2%	291	+2.1%

## Gastric Cancer

Overall, in the north of Scotland, 96.8% of patients diagnosed with gastric cancer in 2014 received a CT of the abdomen to check for the presence of any metastatic disease. This is an increase from 2013, where the 85.9% met this target, although note the changes to how this QPI has been defined above, which will have contributed to the improvement in results for this QPI.

All NHS Boards in the North of Scotland met the target for this QPI in 2014 with the exception of NHS Shetland, where there were very small numbers of patients. There were improvements in performance across the region where the QPI results were based on more than four patients.

**QPI 2 - Gastric Cancer: Target > 90%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	97.2%	35	36	0	0%	0	0%	0
Highland	94.4%	17	18	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	97.3%	36	37	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	96.8%	90	93	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	81.0%	42	97.2%	36	+16.2%
Highland	83.3%	6	94.4%	18	+11.1%
Orkney*	-	0	-	-	-
Shetland*	-	-	-	-	-
Tayside	90.6%	32	97.3%	37	+6.7%
W Isles*	-	-	-	-	-
NoS	85.9%	85	96.8%	93	+10.9%

All boards in the North of Scotland have improved their radiological diagnosis and met the QPI target. This should be applauded and encouraged.

**Actions required:**

No specific actions identified.

### QPI 3: Multi-Disciplinary Team (MDT) Meeting

***QPI 3: Multi-Disciplinary Team (MDT) Meeting: All patients with oesophageal or gastric cancer.***

Evidence suggests that patients with cancer managed by a multi-disciplinary team have a better outcome. There is also evidence that the multidisciplinary management of patients increases their overall satisfaction with their care.

Discussion prior to definitive treatment decisions being made provides reassurance that patients are being managed appropriately. However, this is sometimes not possible if urgent treatment is required.

Numerator: Number of patients with oesophageal or gastric cancer discussed at the MDT before definitive treatment.

Denominator: All patients with oesophageal or gastric cancer.

Exclusions: Patients who died before first treatment.

Target: 95%

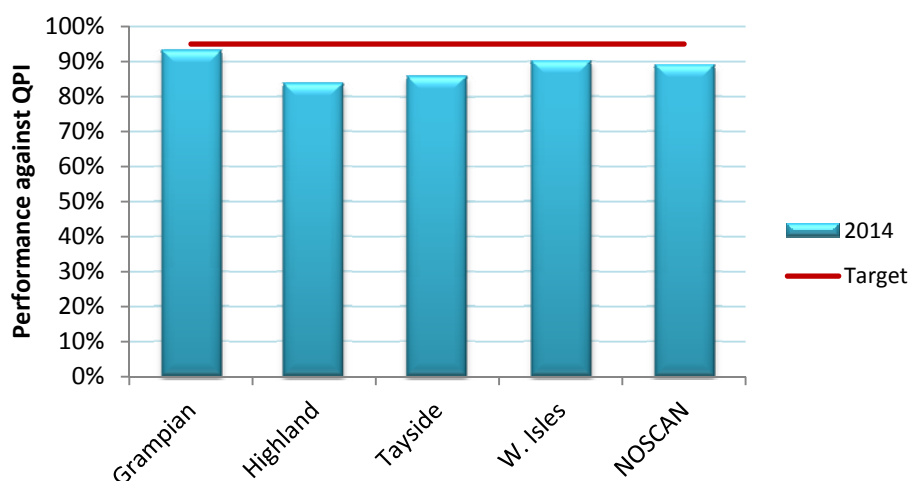
### QPI 3 Performance against target

#### Oesophageal Cancer

250 out of the 281 patient diagnosed with oesophageal cancer in the north of Scotland in 2014 were discussed at the MDT before definitive treatment. At 89.0% this is below the target for this QPI. This is the first year that this data has been reported so no comparisons can be made with previous years.

Two of the six NHS Boards in the North of Scotland met this QPI, NHS Orkney and NHS Shetland. Both of these Boards had very small numbers of patients included within the QPI.

### QPI 3 - Oesophageal Cancer: Target > 95%



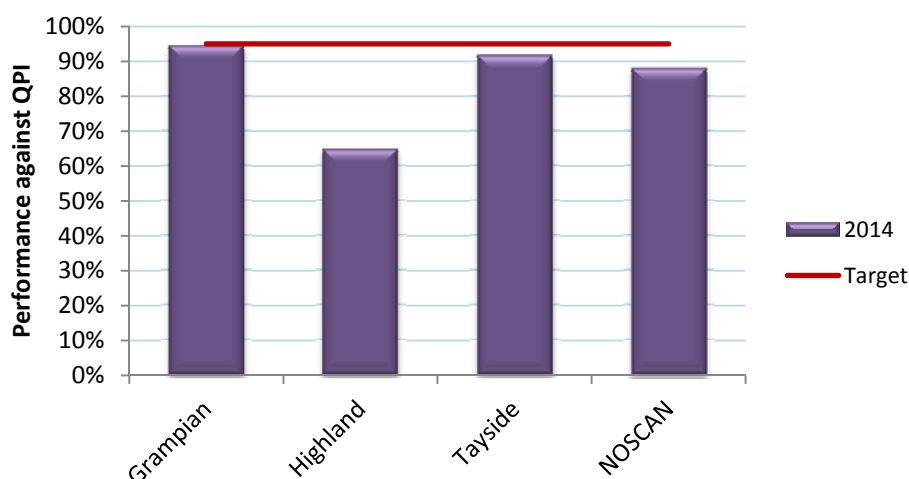
	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	93.2%	110	118	0	0%	0	0%	0
Highland	83.0%	39	47	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	85.9%	85	99	0	0%	0	0%	0
W. Isles	90.0%	9	10	0	0%	0	0%	0
NoS	89.0%	250	281	0	0%	0	0%	0

### Gastric Cancer

Eighty out of the 91 patient diagnosed with gastric cancer in the north of Scotland in 2014 were discussed at the MDT before definitive treatment. At 87.9% this is below the target for this QPI. This is the first year that this data has been reported so no comparisons can be made with previous years.

Only NHS Shetland and NHS Western Isles met this QPI in the North of Scotland. Both of these Boards had very small number of patients included with QPI calculations.

**QPI 3 - Gastric Cancer: Target > 95%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	94.4%	34	36	0	0%	0	0%	0
Highland	64.7%	11	17	1	5.9%	0	0%	0
Orkney	-	0	0	0	0%	0	0%	0
Shetland*	-	-	-	-	-	-	-	-
Tayside	91.7%	33	36	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	87.9%	80	91	1	1.1%	0	0%	0

A number of patients received definitive treatment prior to discussion at MDT. Other patients were not fit for any treatment and were offered Best Supportive Care prior to discussion at MDT. There was agreement that all patients should be registered at the MDT even if not for active treatment. A small number of patients had already required urgent treatment prior to MDT discussion and this was felt to be acceptable providing there was discussion between appropriate specialists. Specialist nurses to be alerted to include patients on MDT list as early as possible after diagnosis.

**Actions required:**

- **All NHS Boards to ensure that specialist nurses are alerted to include all patients on MDT list as early as possible after diagnosis.**

## QPI 4: Staging and Treatment Intent

***QPI 4: Patients with oesophageal or gastric cancer should be staged using the TNM staging system and have statement of treatment intent recorded prior to treatment commencing.***

It is important to discuss and consider treatment intent as patients with incurable disease treated as radical will be poorly served.

Patients with gastric or oesophageal cancer should undergo careful staging to assess the extent of disease and inform treatment decision making. This may involve multiple investigations.

Some patients may not be fit enough to undergo investigations and/or treatment – in these cases an attempt at TNM staging should be undertaken based on the information available.

Numerator: Number of patients with oesophageal or gastric cancer who have TNM stage and treatment intent recorded at MDT meeting prior to treatment.

Denominator: All patients with oesophageal or gastric cancer.

Exclusions: No exclusions.

Target: 95%

## QPI 4 Performance against target

### Oesophageal Cancer

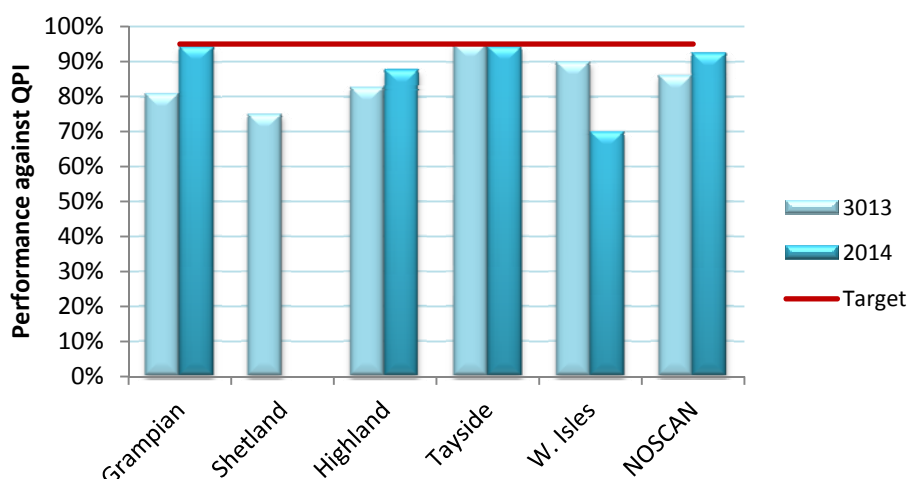
Overall in 2014, 269 out of the 291 patients diagnosed with oesophageal cancer (92.4%) had their stage and treatment intent recorded prior to treatment commencing. This is below the target of 95% but was an increase from 2013 when 86.2% of patients in the north of Scotland had stage and treatment intent recorded before treatment started.

When broken down it can be seen that in 2014, 92.8% of patients had TNM stage recorded at the MDT prior to treatment and 97.3% had treatment intent recorded.

Across the North of Scotland the only Boards to meet this QPI were NHS Shetland and NHS Orkney, both of which had small numbers of patients included within the QPI calculations. There was an increase in performance against this QPI for some, but not all, NHS Boards. Examination of the data shows that in Highland, the failure to meet the QPI target was entirely down to the lack of capture of TNM stage at MDT, with treatment intent being recorded for all patients. However in NHS Grampian and NHS Tayside the lack of recording of both TNM stage and treatment intent at MDT equally contributed to the failure of these Boards to meet the QPI target.



**QPI 4 - Oesophageal Cancer: Target > 95%**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	94.2%	114	121	0	0%	0	0%	0
Highland	87.8%	43	49	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	94.2%	98	104	0	0%	0	0%	0
W. Isles	70.0%	7	10	0	0%	0	0%	0
NoS	92.4%	269	291	0	0%	0	0%	0

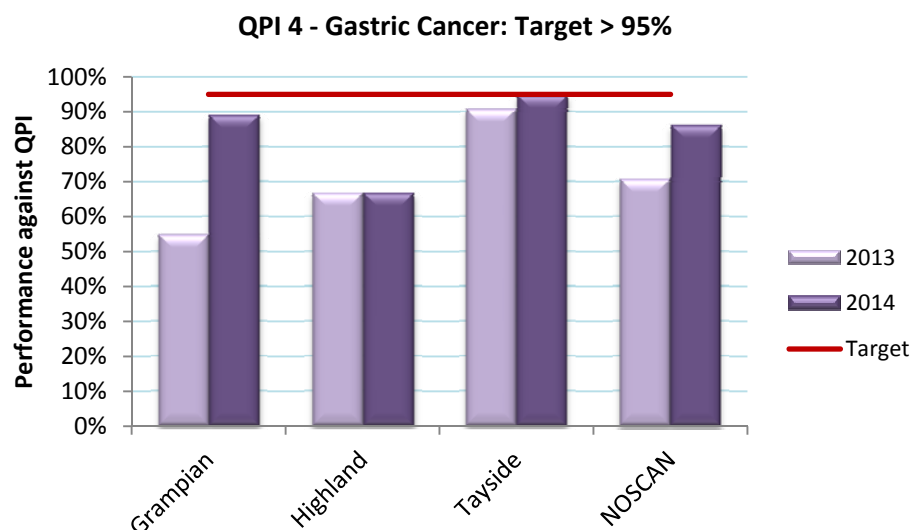
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	80.9%	115	94.2%	121	+13.3%
Highland	82.7%	52	87.8%	49	+5.1%
Orkney*	-	-	-	-	-
Shetland*	75.0%	8	-	-	-
Tayside	95.0%	101	94.2%	104	-0.8%
W Isles	90.0%	10	70.0%	10	-20.0%
NoS	86.2%	289	92.4%	291	+6.2%

## Gastric Cancer

Overall in 2014, 80 out of the 93 patients diagnosed with gastric cancer (86.0%) had their stage and treatment intent recorded prior to treatment commencing. This was an improvement compared with 2013 when 70.6% of patients in the north of Scotland had stage and treatment intent recorded before treatment started.

When broken down it can be seen that in 2014 87.1% of patients had TNM stage recorded at the MDT prior to treatment and 94.6% had treatment intent recorded.

At a NHS Board level only NHS Shetland met this QPI, with results here based on a very small number of patients. However, results were identical or increased for all mainland Boards. In the three mainland Boards both the absence of recording of TNM stage and treatment intent contributed to the failure to meet the QPI target. As with oesophageal cancer, in NHS Highland the data most infrequently recorded was TNM stage.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>88.9%</b>	32	36	0	0%	0	0%	0
<b>Highland</b>	<b>66.7%</b>	12	18	0	0%	0	0%	0
<b>Orkney</b>	-	0	0	0	0%	0	0%	0
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>94.6%</b>	35	37	0	0%	0	0%	0
<b>W. Isles*</b>	-	-	-	-	-	-	-	-
<b>NoS</b>	<b>86.0%</b>	<b>80</b>	<b>93</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
<b>Grampian</b>	54.8%	42	<b>88.9%</b>	36	+34.1%
<b>Highland</b>	66.7%	6	<b>66.7%</b>	18	0.0%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	90.6%	32	<b>94.6%</b>	37	+4.0%
<b>W Isles*</b>	-	-	-	-	-
<b>NoS</b>	<b>70.6%</b>	<b>85</b>	<b>86.0%</b>	<b>93</b>	+15.4%

Performance has improved since last year and was better for oesophageal cancer than gastric cancers. However, this QPI was still not met by any Network. The TNM stage should be clearly verbalised and documented at the MDT.

**Actions Required:**

- **All Boards to ensure that the TNM stage and treatment intent is clearly verbalised and documented at MDT.**

## QPI 5: Nutritional Assessment

***QPI 5: Nutritional Assessment: Patients with oesophageal or gastric cancer should be referred for dietetic assessment where there are concerns about their nutritional status prior to commencing treatment.***

All patients with oesophageal or gastric cancer should be screened using a validated nutritional screening tool to assess nutritional risk. Those at risk of nutritional problems should have access to a state registered dietician to provide appropriate advice.

Poor nutritional status is a risk factor for poor tolerance of treatment whether curative or palliative and can impact greatly on quality of life.

Numerator: Number of patients with oesophageal or gastric cancer referred to a dietitian within 4 weeks of diagnosis.

Denominator: All patients with oesophageal or gastric cancer.

Exclusions: Patients receiving supportive care.

Target: 85%

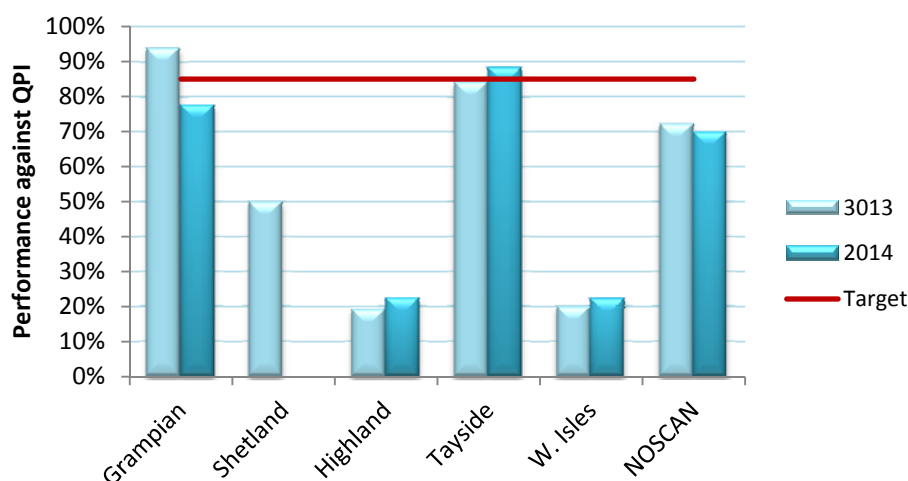
### QPI 5 Performance against target

#### Oesophageal Cancer

Of the 290 patients diagnosed with oesophageal cancer in 2014, 203 of these (70.0%) were referred to a dietitian within 4 weeks of diagnosis. This is below the target of 85% and slightly lower than that for patients diagnosed in 2013, where 72.3% of patients were referred within 4 weeks.

At an NHS Board level NHS Tayside and NHS Shetland met the target for this QPI. NHS Grampian did not meet the target, with performance falling considerably compared with the previous year. NHS Highland and NHS Western Isles results for this QPI were very low, showing a slight improvement from the previous year. The lack of recording of the Date of Referral for Nutritional Assessment contributed to the failure to meet that target in NHS Highland and NHS Western Isles, with data not being recorded for 30.6% of patients measured for this QPI in Highland and a similar proportion for Western Isles patients. Lack of recording of this data may have also contributed to results for NHS Grampian (where data were not available for 5% of patients).

### QPI 5 - Oesophageal Cancer: Target >85%



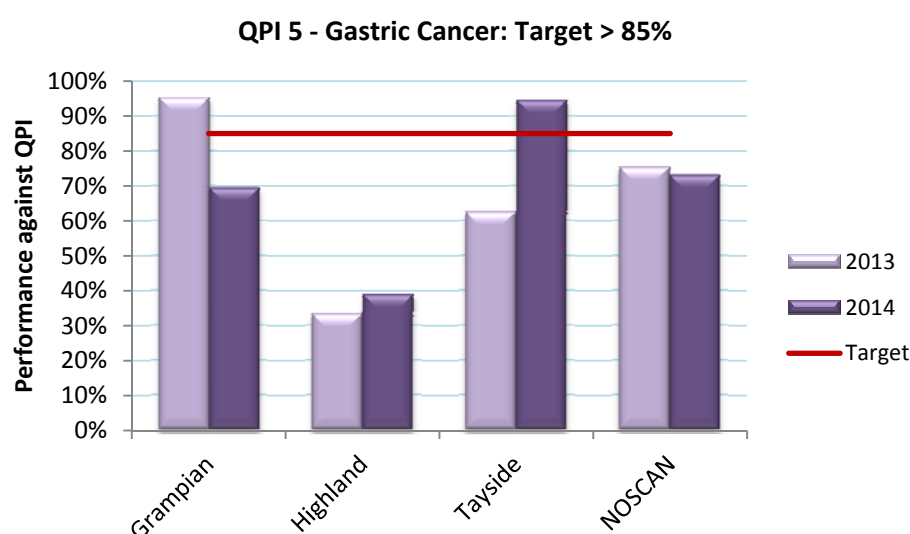
	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	77.7%	94	121	6	5.0%	0	0%	0
Highland	22.4%	11	49	15	30.6%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	88.5%	92	104	0	0%	0	0%	0
W. Isles	22.2%	2	9	3	33.3%	0	0%	4
NoS	70.0%	203	290	26	9.0%	0	0%	4

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	93.9%	115	77.7%	121	-16.2%
Highland	19.2%	52	22.4%	49	+3.2%
Orkney*	-	-	-	-	-
Shetland*	50.0%	8	-	-	-
Tayside	84.2%	101	88.5%	104	+4.3%
W Isles	20.0%	10	22.2%	9	+2.2%
NoS	72.3%	289	70.0%	290	-2.3%

## Gastric Cancer

Of the 93 patients diagnosed with gastric cancer in 2014, 68 of these (73.1%) were referred to a dietitian within 4 weeks of diagnosis. This is below the target of 85% and slightly less than the 2013 result of 75.3%.

At an NHS Board level results were very similar to those for oesophageal cancer. NHS Tayside and NHS Shetland met the target for this QPI. NHS Grampian did not meet the target, with performance falling compared with the previous year. NHS Highland and NHS Western Isles results for this QPI were very low, with Highland showing a slight improvement from the previous year. As for oesophageal cancer, the lack of recording of the Date of Referral for Nutritional Assessment contributed to the failure to meet that target in NHS Highland and NHS Western Isles, with data not being recorded for 50.0% of patients measured for this QPI in Highland.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>69.4%</b>	25	36	1	2.8%	0	0%	0
<b>Highland</b>	<b>38.9%</b>	7	18	9	50.0%	0	0%	0
<b>Orkney</b>	-	0	0	0	0%	0	0%	0
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>94.6%</b>	35	37	0	0%	0	0%	0
<b>W. Isles*</b>	-	-	-	-	-	-	-	-
<b>NoS</b>	<b>73.1%</b>	<b>68</b>	<b>93</b>	<b>11</b>	<b>11.8%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
<b>Grampian</b>	95.2%	42	69.4%	36	-25.8%
<b>Highland</b>	33.3%	6	38.9%	18	+5.6%
<b>Orkney</b>	-	0	-	0	-
<b>Shetland*</b>	-	-	-	-	-
<b>Tayside</b>	62.5%	32	94.6%	27	+32.1%
<b>W Isles*</b>	-	-	-	-	-
<b>NoS</b>	75.3%	85	73.1%	93	-2.2%

Data capture problems were expressed, however most patients are referred to dietetics. It has been agreed at a national level that this QPI should be revised to better reflect the quality of dietetic support of patients with oesophageal and gastric cancer.

#### **Actions Required:**

- **National Dietetics Quality Performance Indicator Working Group to evaluate and submit draft proposal for the revision of QPI 5. This will be actioned by all networks and boards.**

## QPI 6: Appropriate Selection of Surgical Patients

***QPI 6: Appropriate Selection of Surgical Patients: Patients with oesophageal or gastric cancer whose treatment plan is neoadjuvant chemotherapy followed by surgery should progress to surgery following completion of chemotherapy portion of treatment plan.***

Patients with oesophageal or gastric cancer who are suitable for surgical resection should be offered neoadjuvant chemotherapy treatment.

It is optimal management that patients who undergo neoadjuvant chemotherapy proceed to resectional (curative) surgery; various reasons may affect this including initial under-staging of disease.

**Numerator:** Number of patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy who then undergo surgical resection.

**Denominator:** All patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy.

**Exclusions:** No exclusions.

**Target:** 80%

### QPI 6 Performance against target

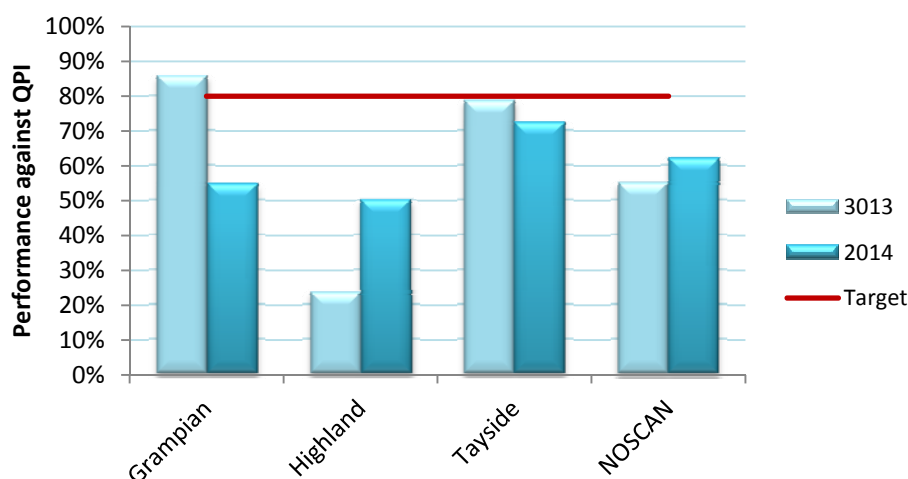
#### Oesophageal Cancer

Forty-two patients with oesophageal cancer received neo-adjuvant chemotherapy. Of these, 26, 61.9%, underwent surgical resection following this chemotherapy, well below the target of 80%. This was, however, an increase compared with the 2013 result of 55.0%.

No NHS Boards met the target in 2014. While some increases and decreases between 2013 and 2014 can be noted, these changes are likely to be due, in part, to the relatively small numbers of patients used to calculate these measures.



### QPI 6 - Oesophageal Cancer: Target >80%



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	54.5%	6	11	0	0%	0	0%	0
Highland	50.0%	5	10	0	0%	0	0%	0
Orkney	-	0	0	0	0%	0	0%	0
Shetland	-	0	0	0	0%	0	0%	0
Tayside	72.2%	13	18	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	61.9%	26	42	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	85.7%	7	54.5%	11	-31.2%
Highland	23.5%	17	50.0%	10	+26.5%
Orkney*	-	-	-	0	-
Shetland	-	0	-	0	-
Tayside	78.6%	14	72.2%	18	-6.4%
W Isles*	-	-	-	-	-
NoS	55.0%	40	61.9%	42	+6.9%

## **Gastric Cancer**

Seven patients diagnosed with gastric cancer in 2014 received neo-adjuvant chemotherapy. Of these, 5, 71.4%, underwent surgical resection following this chemotherapy, below the target of 80%. This is a decrease compared with the 2013 result of 100%.

Results for all NHS Boards were based on very small numbers of patients. As such, comparison of results between Boards is not considered appropriate and not presented within this report.

It was noted that for both oesophageal and gastric cancer that disease progression following the commencement of neoadjuvant chemotherapy made surgery inappropriate in some patients. In addition there were some issues with the coding of neo-adjuvant chemotherapy. All boards experienced low volumes of surgical patients, which may have further affected the results of this QPI. The issue of low surgical volumes is addressed in the actions identified under QPI 7.

### **Actions Required:**

- **All NHS Boards to consider neoadjuvant chemotherapy to suit the individual needs for patients.**

## QPI 7: 30/90 Day Mortality Following Surgery

### *QPI 7: 30/90 Day Mortality Following Surgery – 30 and 90 day mortality following surgical resection for oesophageal or gastric cancer*

Treatment related mortality is a marker of the quality and safety of the whole service provided by the Multi Disciplinary Team (MDT).

Treatment should only be undertaken in individuals that may benefit from treatment, that is, disease specific treatments should not be undertaken in futile situations. This QPI is intended to ensure treatment is given appropriately.

Numerator: Number of patients with oesophageal or gastric cancer who undergo surgical resection who die within 30/90 days of treatment.

Denominator: All patients with oesophageal or gastric cancer who undergo surgical resection.

Exclusions: No Exclusions

Target: < 10%

## QPI 7 Performance against target

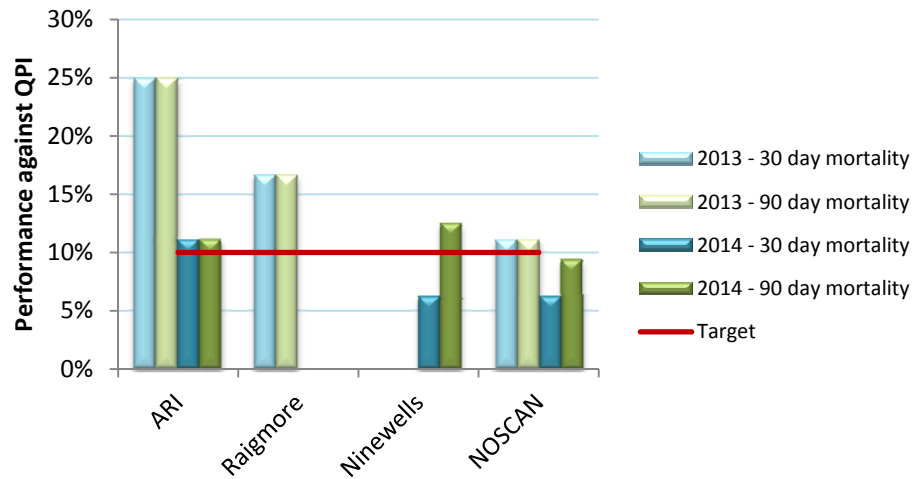
### Oesophageal Cancer

Of the patients diagnosed with oesophageal cancer in the North of Scotland in 2014, 32 underwent surgical resection. Of these the 30 day mortality rate was 6.3%. This is well within the QPI target of less than 10% and is a decrease compared with the 2013 when the 30 day mortality rate for the north of Scotland was 11.1%.

The 90 day mortality rate for these patients was 9.4%. This was a decrease compared with the 2013 rate of 11.1% and just meets the QPI target of less than 10%.

Aberdeen Royal Infirmary did not meet this target for either 30 day mortality or 90 day mortality; although mortality was considerably lower than for patients diagnosed in 2013. Ninewells Hospital met the target for 30 days but not 90 days while Raigmore Hospital met both targets with 0% mortality.

### QPI 7 - Oesophageal Cancer: Target < 10%



### 30 Day Mortality for Oesophageal Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	11.1%	1	9	0	0%	0	0%	0
Raigmore Hospital	0.0%	0	7	0	0%	0	0%	0
Ninewells Hospital	6.3%	1	16	0	0%	0	0%	0
NoS	6.3%	2	32	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	25.0%	8	11.1%	9	-13.9%
Raigmore Hospital	16.7%	6	0.0%	7	-16.7%
Ninewells Hospital	0.0%	13	6.3%	16	+6.3%
NoS	11.1%	27	6.3%	32	-4.8%

### 90 Day Mortality for Oesophageal Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	11.1%	1	9	0	0%	0	0%	0
Raigmore Hospital	0.0%	0	7	0	0%	0	0%	0
Ninewells Hospital	12.5%	2	16	0	0%	0	0%	0
NoS	9.4%	3	32	0	0%	0	0%	0

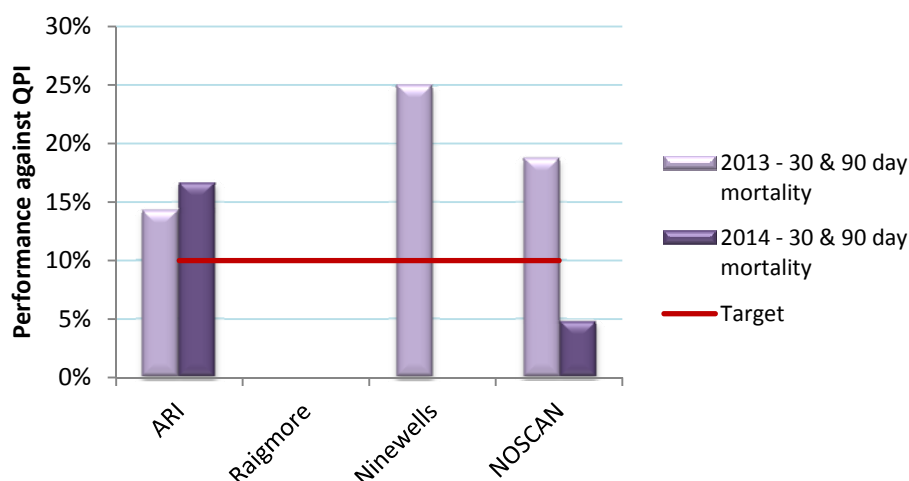
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	25.0%	8	11.1%	9	-13.9%
Raigmore Hospital	16.7%	6	0.0%	6	-16.7%
Ninewells Hospital	0.0%	13	12.5%	16	+12.5%
NoS	11.1%	27	9.4%	30	-1.7%

### Gastric Cancer

Twenty-one of the patients diagnosed with gastric cancer in 2014 underwent surgical resection. Of these the 30 day mortality rate was 4.8%. This meets the QPI target of less than 10% and is a considerable decrease compared with 2013 when the rate for the north of Scotland was 18.8%. Results for 90 day mortality were identical to those for 30 day mortality for all hospitals in both 2013 and 2014.

Raigmore Hospital and Ninewells Hospital met the target with 0% mortality. Aberdeen Royal Infirmary did not meet the target, with slightly higher levels of mortality for patients diagnosed in 2014 compared with 2013.

### QPI 7 - Gastric Cancer: Target < 10%



### 30 and 90 Day Mortality – Gastric Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	16.7%	1	6	0	0%	0	0%	0
Raigmore Hospital	0.0%	0	7	0	0%	0	0%	0
Ninewells Hospital	0.0%	0	8	0	0%	0	0%	0
NoS	4.8%	1	21	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	14.3%	7	16.7%	6	+2.4%
Raigmore Hospital*	-	-	0.0%	7	-
Ninewells Hospital	25.0%	8	0.0%	8	-25.0%
NoS	18.8%	16	4.8%	21	-14.0%

The low volume of surgery in surgical centres in the North of Scotland may have contributed to the results for this QPI. Some issues with data accuracy were also highlighted by Boards.

#### Action Required:

- **NOSCAN to improve outcomes associated with low volumes of surgery in surgical centres in the North of Scotland through the recommendations of a SLWG.**

## QPI 8: Lymph Node Yield

***QPI8: Lymph Node Yield: For patients with gastric cancer undergoing curative resection the number of lymph nodes examined should be maximised.***

Maximising the number of lymph nodes resected and analysed enables reliable staging which influences treatment decision making.

Evidence recommends that at least 15 lymph nodes are resected and examined by a pathologist.

Numerator: Number of patients with gastric cancer who undergo surgical resection where  $\geq 15$  lymph nodes are resected and pathologically examined.

Denominator: All patients with gastric cancer who undergo surgical resection.

Exclusions: No exclusions.

Target: 80%

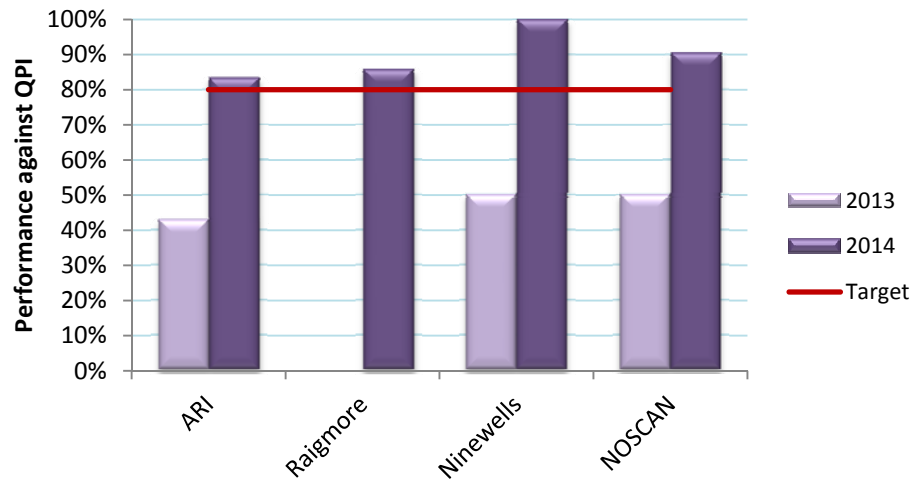
### QPI 8 Performance against target

From a total of 21 patients with gastric cancer who underwent surgical resection, 19 had 15 or more lymph nodes resected and pathologically examined. This equates to 90.5% and is above the target figure of 80%. This is a considerable increase compared with the 2013 result of 50.0% for the North of Scotland.

At a Hospital level all three hospitals undertaking this procedure in the North of Scotland met the QPI target. Results were much improved in Aberdeen Royal Infirmary and Ninewells Hospital compared with figures for patients diagnosed in 2013.

It is noted that the measurability of this QPI was changed following review of the first year's data and the QPI is no longer restricted to patients undergoing surgical resection with curative intent.

### QPI 8 - Gastric Cancer: Target > 80%



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	83.3%	5	6	0	0%	0	0%	0
Raigmore Hospital	85.7%	6	7	0	0%	0	0%	0
Ninewells Hospital	100%	8	8	0	0%	0	0%	0
NoS	90.5%	19	21	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	42.9%	7	83.3%	6	+40.4%
Raigmore Hospital	-	0	85.7%	7	-
Ninewells Hospital	50.0%	8	100%	8	+50.0%
NoS	50.0%	16	90.5%	21	+40.5%

Performance had improved since last year in NOSCAN, which was the only cancer network to meet this QPI this year. In 2014 some patients may not meet the QPI in situations where surgical resection is performed for palliation.

#### Action Required:

No specific actions were identified.



## QPI 9: Length of Hospital Stay Following Surgery

***QPI 9: Length of Hospital Stay Following Surgery: Length of hospital stay following surgery for oesophageal or gastric cancer should be as short as possible.***

Length of hospital stay acts as a surrogate measure for the quality of surgery and post-operative care for patients undergoing surgical resection for oesophagogastric cancer.

This QPI is intended as a surrogate marker to address various issues of quality care including surgery, post-operative complications and access to community services.

**Numerator:** Number of patients undergoing surgical resection for oesophageal or gastric cancer who are discharged within 21 days of surgical procedure.

**Denominator:** All patients undergoing surgical resection for oesophageal or gastric cancer.

**Exclusions:** No Exclusions

**Target:** 60%

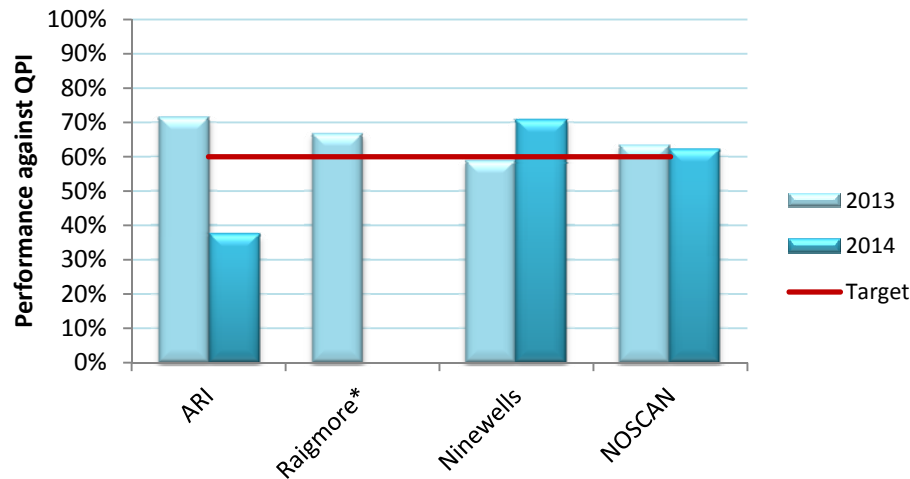
### QPI 9 Performance against target

#### Oesophageal Cancer

Overall in 2014, the majority of oesophageal cancer patients in the North of Scotland were discharged within 21 days of surgical resection (62.1%) and as a region, NOSCAN met the QPI target of 60%. This is a similar result to that for patients diagnosed in 2013 when 63.3% were discharged within 21 days.

At a hospital level, Raigmore Hospital and Ninewells Hospital both met this QPI. However Aberdeen Royal Infirmary did not, with 2014 results (37.5%) being considerably lower than in 2013 (71.4%), although it should be noted that these results are based on small numbers of patients.

### QPI 9 - Oesophageal Cancer: Target > 60%



	Performance (%)	Numerator	Denominator
Aberdeen Royal Infirmary	37.5%	3	8
Raigmore Hospital*	-	-	-
Ninewells Hospital	70.6%	12	17
NoS	62.1%	18	29

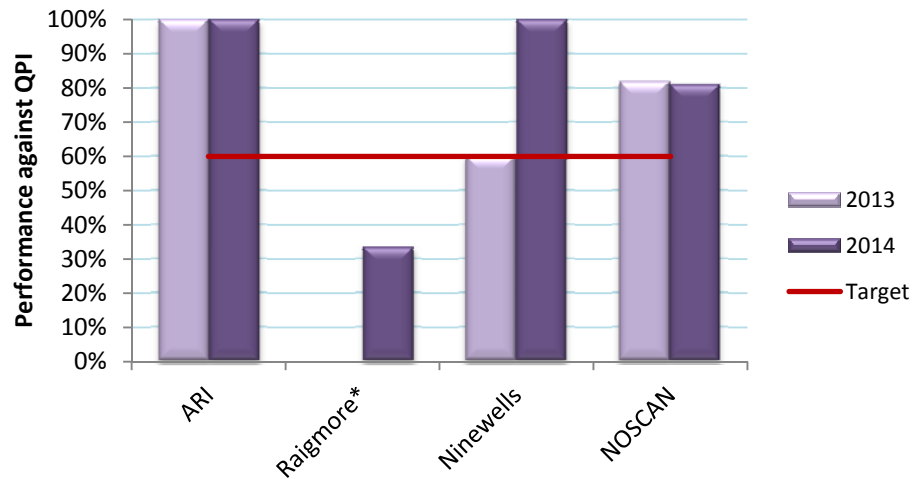
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	71.4%	7	37.5%	8	-33.9%
Raigmore Hospital*	66.7%	6	-	-	-
Ninewells Hospital	58.8%	17	70.6%	17	+11.8%
NoS	63.3%	30	62.1%	29	-1.2%

### Gastric Cancer

Overall, in 2014 the majority of gastric cancer patients in the North of Scotland were discharged within 21 days of surgical resection, 17 out of 21 patients (81.0%), which exceeds the target of 60%. This is a similar level to 2013 when 81.8% of patients were discharged within 21 days.

At a hospital level Raigmore was the only hospital which did not meet this QPI target, however results were only based on a small number of patients. In both Aberdeen Royal Infirmary and Ninewells Hospital all patients undergoing surgical resection for gastric cancers diagnosed in 2014 were discharged within 21 days of surgery.

**QPI 9 - Gastric Cancer: Target > 60%**



	Performance (%)	Numerator	Denominator
Aberdeen Royal Infirmary	100%	6	6
Raigmore Hospital	33.3%	2	6
Ninewells Hospital	100%	9	9
NoS	81.0%	17	21

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	100%	5	100%	6	-33.9%
Raigmore Hospital*	-	-	33.3%	6	-
Ninewells Hospital	60.0%	5	100%	9	+11.8%
NoS	81.8%	11	81.0%	21	-1.2%

This QPI is a surrogate marker for serious complications and was met at Network level.

**Actions Required:**

No specific action required.

## QPI 10: Resection Margins

**QPI10: Resection Margins: Oesophageal and gastric cancers which are surgically resected should be adequately excised.**

Tumour involvement of surgical resection margins is a negative prognostic factor; therefore surgery should aim to ensure resection margins are clear of tumour.

### Specification (i)

**Numerator:** Number of patients with oesophageal cancer who undergo surgical resection in which circumferential and longitudinal surgical margin is clear of tumour.

**Denominator:** All patients with oesophageal cancer who undergo surgical resection.

**Exclusions:** No Exclusions.

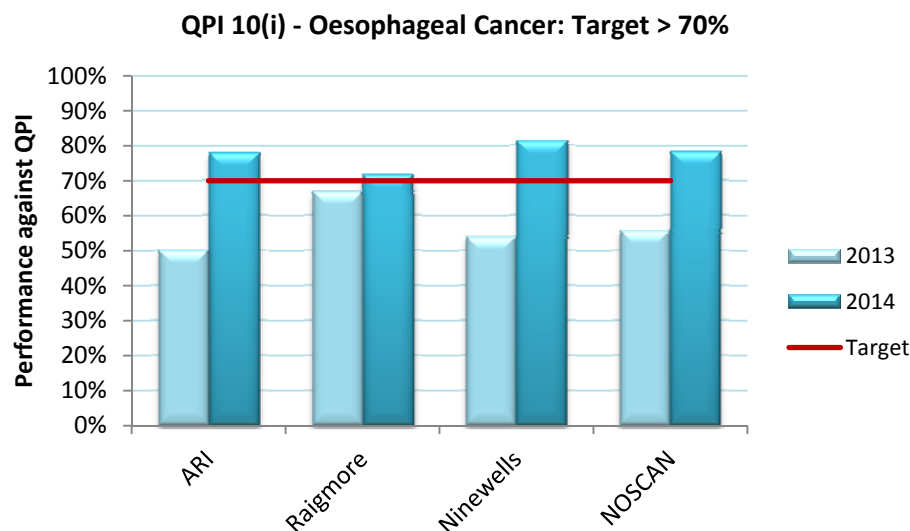
**Target:** 70%

## QPI 10 Performance against target

Over three quarters of patients in the North of Scotland (78.1%) diagnosed with oesophageal cancer in 2014 who underwent surgical resection had both circumferential and longitudinal surgical margins clear of tumour. This is a considerable improvement compared with 2013 when 55.6% of patients had margins clear of tumour, and meets the target of 70%.

When broken down by margin type, the longitudinal margins were clear of tumour in 93.8% of patients while the circumferential margin was clear in 81.3% of patients.

All NHS Boards in the North of Scotland met this QPI, with results improving in all hospitals.



### Circumferential and longitudinal margins clear of tumour

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	77.8%	7	9	0	0%	0	0%	0
Raigmore Hospital	71.4%	5	7	0	0%	0	0%	0
Ninewells Hospital	81.3%	13	16	0	0%	0	0%	0
NoS	78.1%	25	32	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	50.0%	8	77.8%	9	+27.8%
Raigmore Hospital	66.7%	6	71.4%	7	+4.7%
Ninewells Hospital	53.8%	13	81.3%	16	+27.5%
NoS	55.6%	27	78.1%	32	+22.5%

### Circumferential margin clear of tumour

	Performance (%)	Numerator	Denominator
Aberdeen Royal Infirmary	77.8%	7	9
Raigmore Hospital	71.4%	5	7
Ninewells Hospital	87.5%	14	16
NoS	81.3%	26	32

### Longitudinal margin clear of tumour

	Performance (%)	Numerator	Denominator
Aberdeen Royal Infirmary	100%	9	9
Raigmore Hospital	100%	7	7
Ninewells Hospital	87.5%	14	16
NoS	93.8%	30	32

***QPI10: Resection Margins: Oesophageal and gastric cancers which are surgically resected should be adequately excised.***

Tumour involvement of surgical resection margins is a negative prognostic factor; therefore surgery should aim to ensure resection margins are clear of tumour.

**Specification (ii)**

**Numerator:** Number of patients with gastric cancer who undergo surgical resection in which longitudinal surgical margin is clear of tumour.

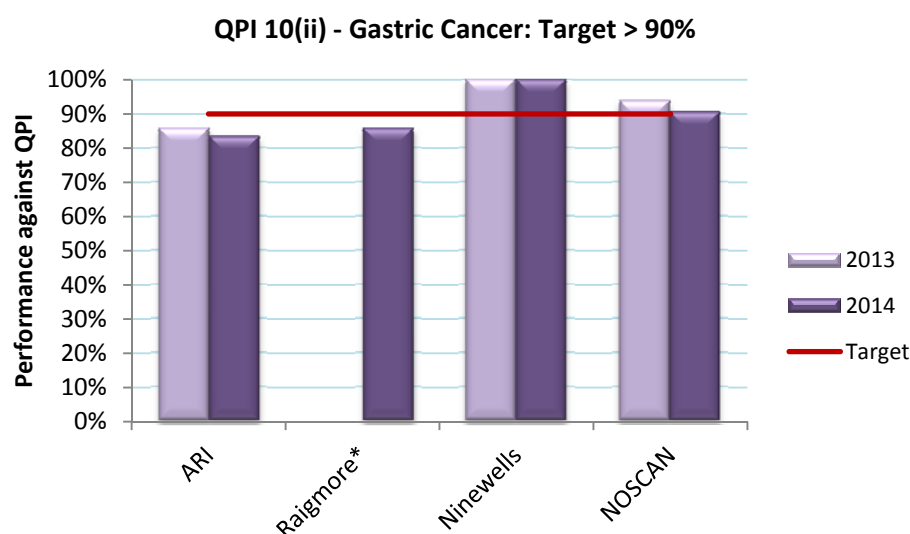
**Denominator:** All patients with gastric cancer who undergo surgical resection.

**Exclusions:** No Exclusions.

**Target:** 90%

90.5% of patients in the North of Scotland diagnosed with gastric cancer in 2014 who underwent surgical resection had longitudinal surgical margins clear of tumour. This is a slight decrease compared with 2013, when 93.8% of had all margins clear of tumour, but just meets the target of 90%.

Only one NHS Board, NHS Tayside, met the QPI (100%). Results were very similar to those for patients diagnosed in 2013.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Aberdeen Royal Infirmary	83.3%	5	6	0	0%	0	0%	0
Raigmore Hospital	85.7%	6	7	0	0%	0	0%	0
Ninewells Hospital	100%	8	8	0	0%	0	0%	0
<b>NoS</b>	<b>90.5%</b>	<b>19</b>	<b>21</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Aberdeen Royal Infirmary	85.7%	7	83.3%	6	-2.4%
Raigmore Hospital*	-	-	85.7%	7	-
Ninewells Hospital	100%	8	100%	8	0.0%
<b>NoS</b>	<b>93.8%</b>	<b>16</b>	<b>90.5%</b>	<b>21</b>	<b>-3.3%</b>

While targets for both oesophageal and gastric cancer have been met, it is possible that outcomes for this QPI may be impacted by the low surgical volumes in centres in the north of Scotland. This issue is being addressed through a SLWG as identified in actions for QPI 7.

**Actions Required:**

No specific action required.

## QPI 11: Curative Treatment Rates

### ***QPI11: Curative Treatment Rates: Patients with oesophageal or gastric cancer should undergo curative treatment whenever possible.***

Curative treatment should be offered to as many patients as possible, as this is proven to have a survival benefit. However, patient choice, fitness and co-morbidities may preclude curative treatment.

Numerator: Number of patients with oesophageal or gastric cancer who undergo curative treatment.

Denominator: All patients with oesophageal or gastric cancer.

Exclusions: No Exclusions.

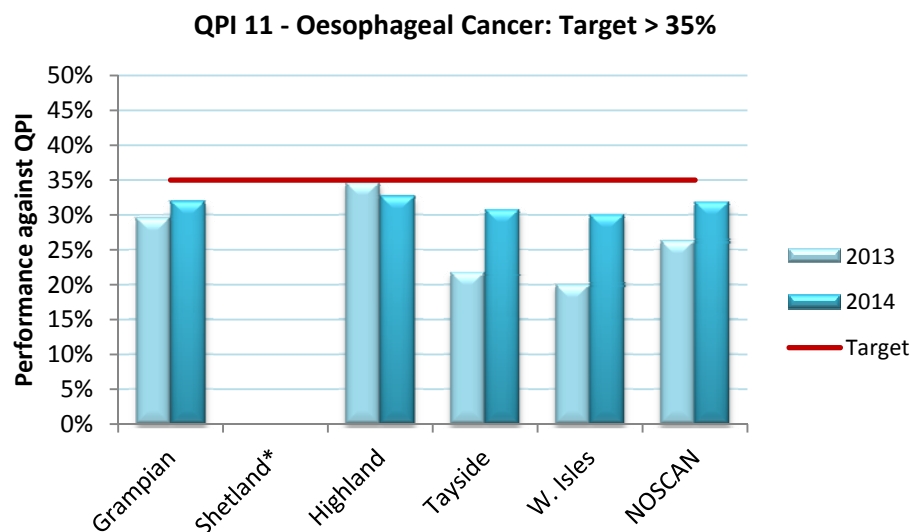
Target: 35%

## QPI 11 Performance against target

### Oesophageal Cancer

31.8% of patients in the North of Scotland diagnosed with oesophageal cancer in 2014 had curative treatment, below the target rate of 35%. However, this is an increase compared with the 2013 result of 26.3%.

Only NHS Orkney met this target in 2014, with some Boards improving performance since 2013 and others showing decreases in the proportion of oesophageal patients undergoing treatment with curative intent.





	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
<b>Grampian</b>	<b>31.9%</b>	38	119	0	0%	0	0%	0
<b>Highland</b>	<b>32.7%</b>	16	49	0	0%	0	0%	0
<b>Orkney*</b>	-	-	-	-	-	-	-	-
<b>Shetland*</b>	-	-	-	-	-	-	-	-
<b>Tayside</b>	<b>30.8%</b>	32	104	0	0%	0	0%	0
<b>W. Isles</b>	<b>30.0%</b>	3	10	0	0%	0	0%	0
<b>NoS</b>	<b>31.8%</b>	<b>92</b>	<b>289</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>

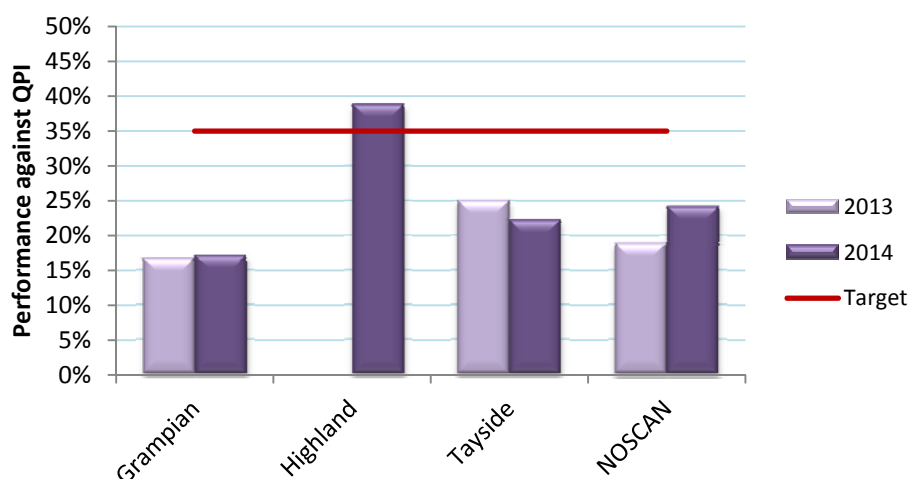
	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
<b>Grampian</b>	29.6%	115	<b>31.9%</b>	119	+2.3%
<b>Highland</b>	34.6%	52	<b>32.7%</b>	49	-1.9%
<b>Orkney*</b>	-	-	-	-	-
<b>Shetland*</b>	0.0%	8	-	-	-
<b>Tayside</b>	21.8%	101	<b>30.8%</b>	104	+9.0%
<b>W Isles</b>	20.0%	10	<b>30.0%</b>	10	+10.0%
<b>NoS</b>	<b>26.3%</b>	<b>289</b>	<b>31.8%</b>	<b>289</b>	+5.5%

## Gastric Cancer

24.2% of patients in the North of Scotland diagnosed with gastric cancer in 2014 had curative treatment, below the target rate of 35%. This is an increase compared with the 2013 result of 18.8%.

In 2014 NHS Highland and NHS Western Isles met this QPI target, with results from individual Boards changing little since 2013.

### QPI 11 - Gastric Cancer: Target > 35%



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	17.1%	6	35	0	0%	0	0%	0
Highland	38.9%	7	18	0	0%	0	0%	0
Orkney	-	0	0	0	0%	0	0%	0
Shetland*	-	-	-	-	-	-	-	-
Tayside	22.2%	8	36	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	24.2%	22	91	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	16.7%	42	17.1%	35	+0.4%
Highland	0.0%	6	38.9%	18	+38.9%
Orkney	-	0	-	0	-
Shetland*	-	-	-	-	-
Tayside	25.0%	32	22.2%	36	-2.8%
W Isles*	-	-	-	-	-
NoS	18.8%	85	24.2%	91	+5.4%

The target for this QPI was felt to be challenging and depends on stage at presentation, patient age and co-morbidities of patients, all out with the control of clinicians.

**Actions Required:**

No specific action required.

## QPI 12: 30 Day Mortality Following Oncological Treatment

### **QPI 12: 30 Day Mortality Following Oncological Treatment: 30 day mortality following oncological treatment for oesophageal or gastric cancer.**

Treatment related mortality is a marker of the quality and safety of the whole service provided by the Multi Disciplinary Team (MDT).

#### **Specification (i)**

**Numerator:** Number of patients with oesophageal or gastric cancer who receive curative oncological treatment who die within 30 days of treatment.

**Denominator:** All patients with oesophageal or gastric cancer who receive curative oncological treatment

**Exclusions:** No Exclusions

**Target:** < 10%

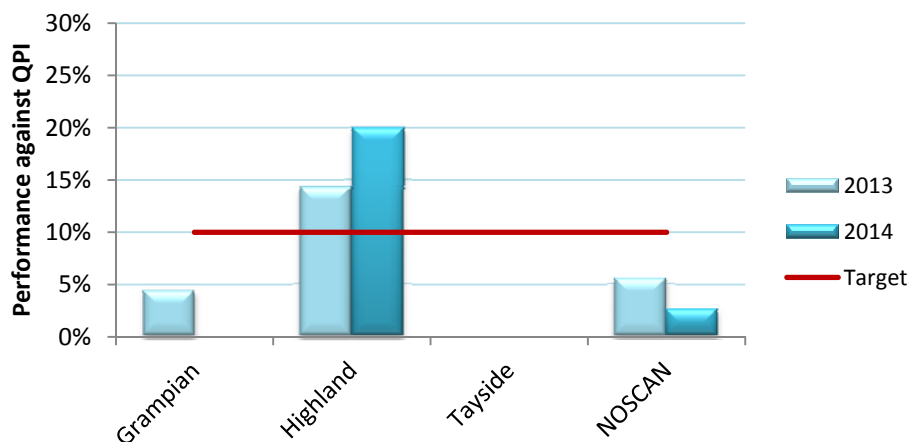
### **QPI 12 Performance against target**

#### **Chemoradiotherapy**

Of the 40 patients diagnosed with **oesophageal cancer** in 2014 who subsequently went on to receive chemoradiotherapy with curative intent, the 30 day mortality rate was 2.5%, comfortably below the QPI target rate of less than 10%. This is a decrease compared with the 2013 result of 5.6%.

At an NHS Board level NHS Highland did not meet this target for the second year in a row, although results are based on a very small number of patients. Levels of mortality were 0% in all other NHS Boards.

**QPI 12(i) - Chemoradiotherapy - Oesophageal Cancer:  
Target < 10%**



### 30 Day Mortality for Chemoradiotherapy – Oesophageal Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	0.0%	0	25	0	0%	0	0%	0
Highland	20.0%	1	5	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	0.0%	0	7	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	2.5%	1	40	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	4.3%	23	0.0%	25	-4.3%
Highland	14.3%	7	20.0%	5	+5.7%
Orkney*	-	0	-	-	-
Shetland*	-	0	-	-	-
Tayside	0.0%	5	0.0%	7	0.0%
W Isles*	-	-	-	-	-
NoS	5.6%	36	2.5%	40	-3.1%

As in 2013, no patients with **gastric cancer** received chemoradiotherapy with curative intent.

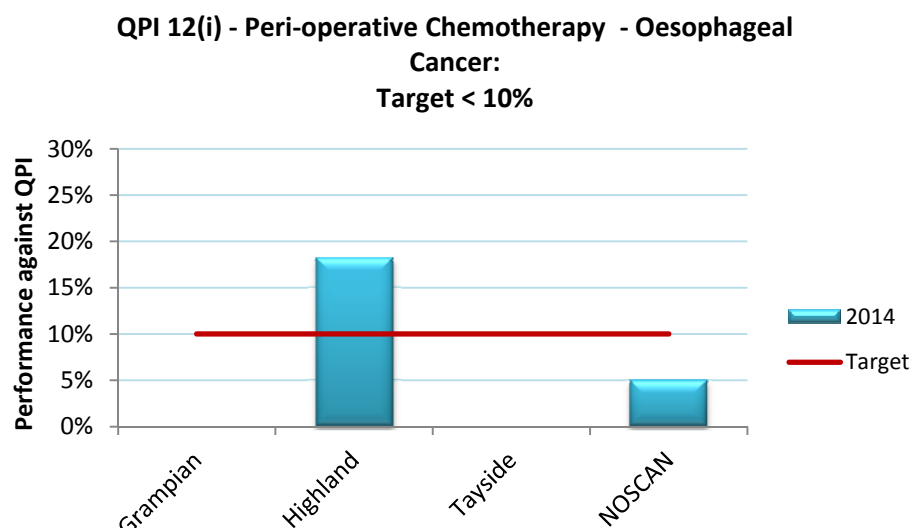
#### Actions Required:

No specific action required.

## Peri-Operative Chemotherapy

Of the 41 patients diagnosed with **oesophageal cancer** in 2014 who subsequently went on to receive peri-operative chemotherapy with curative intent, the 30 day mortality rate was 4.9%, below the QPI target rate of less than 10%. There are no comparable figures for 2013 as this QPI was changed following baseline review.

One NHS Board, NHS Highland, did not meet the target for this QPI. Levels of mortality were 0% in all other NHS Boards.



## 30 Day Mortality for Peri-Operative Chemotherapy – Oesophageal Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	0.0%	0	8	0	0%	0	0%	0
Highland	18.2%	2	11	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland	-	0	0	0	0%	0	0%	0
Tayside	0.0%	0	20	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	4.9%	2	41	0	0%	0	0%	0

Of the 5 patients diagnosed with **gastric cancer** in 2014 that subsequently went on to receive peri-operative chemotherapy with curative intent, the 30 day mortality rate was 0.0%, comfortably below the QPI target rate of less than 10% and the same as 2013.

There were no NHS Boards on which morality figures were based on more than 4 patients so results are not shown. However mortality was 0% for all NHS Boards in the North of Scotland.

**Actions Required:**

No specific action required.

***QPI 12: 30 Day Mortality Following Oncological Treatment: 30 day mortality following oncological treatment for oesophageal or gastric cancer.***

Treatment related mortality is a marker of the quality and safety of the whole service provided by the Multi Disciplinary Team (MDT).

**Specification (ii)**

Numerator: Number of patients with oesophageal or gastric cancer who receive palliative oncological treatment who die within 30 days of treatment.

Denominator: All patients with oesophageal or gastric cancer who receive palliative oncological treatment.

Exclusions: No Exclusions

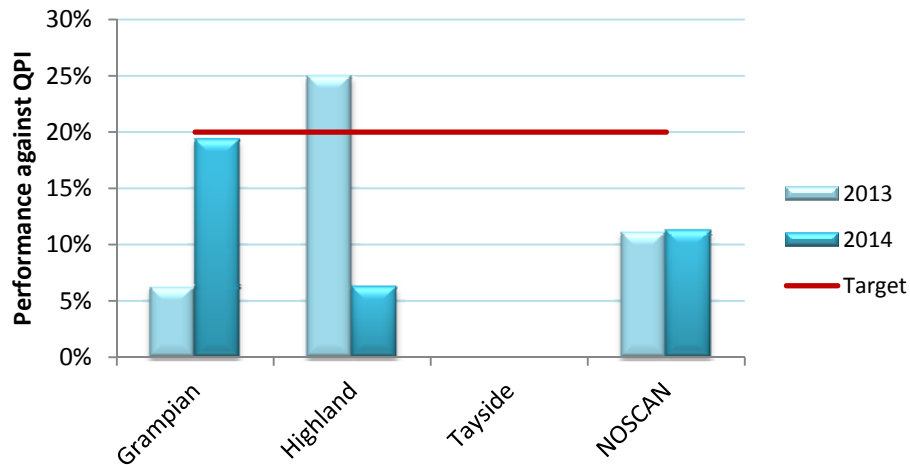
Target: < 20%

**Chemotherapy**

Of the 62 patients diagnosed with **oesophageal cancer** in 2014 who subsequently went on to receive chemotherapy with palliative intent, the 30 day mortality rate was 11.3%, below the QPI target rate of less than 20%. This was very similar to the mortality level for patients diagnosed in 2013 of 11.1%.

At an NHS Board level all Boards in the North of Scotland met this QPI specification in 2014.

**QPI 12(ii) - Oesophageal Cancer: Target < 20%**



**30 Day Mortality for Chemotherapy with Palliative Intent – Oesophageal Cancer**

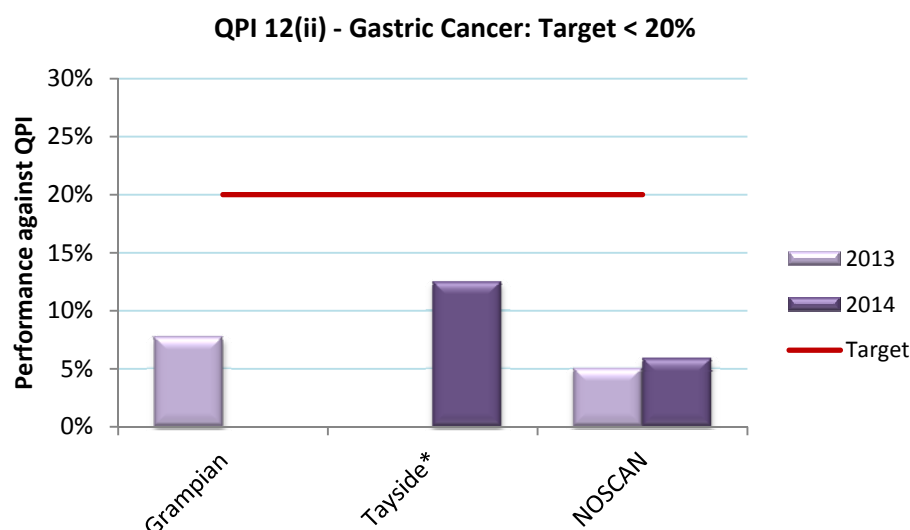
	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	19.4%	6	31	0	0%	0	0%	0
Highland	6.3%	1	16	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland	-	0	0	0	0%	0	0%	0
Tayside	0.0%	0	12	0	0%	0	0%	0
W. Isles*	-	-	-	-	-	-	-	-
NoS	11.3%	7	62	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	6.3%	32	19.4%	31	+13.1%
Highland	25.0%	8	6.3%	16	-18.7%
Orkney*	-	-	-	-	-
Shetland*	-	-	-	0	-
Tayside	0.0%	16	0.0%	12	0.0%
W Isles*	-	-	-	-	-
NoS	11.1%	63	11.3%	62	+0.2%



Of the 17 patients diagnosed with **gastric cancer** in 2014 who subsequently went on to receive chemotherapy with palliative intent, the 30 day mortality rate was 5.9%, comfortably below the QPI target rate of less than 20%. This was a slight increase from results for 2013, where the mortality rate was 5.0%.

All NHS Boards in the North of Scotland met this QPI for patients diagnosed in 2014, as they did for patients diagnosed in 2013.



### 30 Day Mortality for Chemotherapy with Palliative Intent – Gastric Cancer

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	0.0%	0	6	0	0%	0	0%	0
Highland*	-	-	-	-	-	-	-	-
Orkney	-	0	0	0	0%	0	0%	0
Shetland	-	0	0	0	0%	0	0%	0
Tayside	12.5%	1	8	0	0%	0	0%	0
W. Isles	-	0	0	0	0%	0	0%	0
NoS	5.9%	1	17	0	0%	0	0%	0

	2013 Performance (%)	2013 Denominator	2014 Performance (%)	2014 Denominator	Change in Performance
Grampian	7.7%	13	0.0%	6	-7.7%
Highland*	-	-	-	-	-
Orkney	-	0	-	0	-
Shetland*	-	-	-	-	-
Tayside*	-	-	12.5%	8	-
W Isles*	-	-	-	0	-
NoS	5.0%	20	5.9%	17	+0.9%

**Actions Required:**

No specific action required.

## Clinical Trials Access QPI

The ability of patients to readily access a Clinical Trial is a common issue for all cancer types, and in order to further support recruitment through more active comparison and measurement of Board and network performance across the country, a generic QPI was developed as part of the National Programme of cancer quality improvement. Further details on the development and definition of this QPI can be found [here](#).

The QPI is defined as follows.

<i>Clinical Trials Access QPI</i>	
All patients should be considered for participation in available clinical trials, wherever eligible.	
Numerator:	Number of patients with oesophageal or gastric cancer enrolled in an interventional clinical trial of translational research.
Denominator:	All patients with oesophageal or gastric cancer.
Exclusions:	No Exclusions
Target:	Interventional clinical trials – 7.5% Translational research - 15%

Key points during the period audited:

- Approximately 7.1% of patients with upper GI cancer in the North of Scotland were recruited into interventional clinical trials in one of the three cancer centres in the region: this is just below the target of 7.5%.
- Recruitment into translational research was lower, at 3.0% it fell well below the more challenging target of 15%.

These outcomes are not compared with results from 2013 as considerable changes in the way clinical trials are defined between 2013 and 2014 means that results are not comparable.

	Number of patients recruited	ISD Cases annual average (2009-2013)	Percentage of patients recruited
<b>Interventional Clinical Trials</b>	28	394	<b>7.1%</b>
<b>Translational Research</b>	12	394	<b>3.0%</b>

The QPI targets for clinical trials are 7.5% for interventional trials and 15% for translational trials. It should be noted that these targets are particularly ambitious, particularly with the move towards more targeted trials.

Many upper gastrointestinal cancer trials that are open have very select eligibility criteria and will only be available to a small percentage of people diagnosed with this cancer within a region. This is due to the demise of larger general trials and the advent of genetically selective trials that only target small populations of patients. NOSCAN had 5 interventional trials and 4 observational trials open to recruitment during 2014<sup>a</sup> therefore offering trials in a range of different upper gastrointestinal cancer tumour types and levels of treatment. NOSCAN has screened 12 (3.0%) patients for translational studies and 32 (8.6%) patients for interventional trials during the reporting period.

All upper gastrointestinal cancer patients that pass through the cancer centres in NOSCAN are considered for the open trials in upper gastrointestinal cancer. It is not currently possible to open a greater number of trials, to have a greater scope of available trials, due to a lack of clinical and research support to run further trials especially due to the increasing complexity of trials and time burden needed to run them effectively. However a large number of feasibility requests for trials are reviewed by all consultants and if an expression of interest is submitted the changes are high that the site will be selected for running the trial.

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<sup>a</sup> A list of these trials can be found in Appendix 1.

## 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 has implemented a programme of annual reporting of regional performance against QPIs. This is the first regional Upper GI Cancer QPI comparative performance report to be published by NOSCAN and will help to provide a clearer indication of performance and a more formal structure for enabling improvements to be made.

Results for patients diagnosed in 2014 are compared with results from 2013, the first year of QPI reporting<sup>7</sup>. However, it should be noted that we would not expect to see the effects of changes in based on the results of the 2013 analysis at this time; as these will only start affecting patients diagnosed in 2015 and will not have been implemented for the full cohort of patients until 2016. However, results may reflect improvements in QPI definitions, data collection and improvements in service delivery made during 2013 and 2014.

Overall, results from the second year of upper GI QPI reporting are mixed. Case ascertainment and data capture is of a high standard overall, with the single exception of the lack of recording of information on dietetic referrals in some NHS Boards.

The audit report indicated that QPI targets were met over the North of Scotland for 5 of the 11 QPIs for patients with oesophageal cancer and 6 out of 12 QPIs for patients with gastric cancer. In addition, the clinical trial QPI was not met.

Some actions to improve services have been identified. These are

- **MCN to develop a local protocol or adopt an existing protocol specifying minimum number of biopsies to take (6-8) at each endoscopy to guide practice in individual NHS Boards.**
- **All NHS Boards to ensure that specialist nurses are alerted to include all patients on MDT list as early as possible after diagnosis.**
- **All Boards to ensure that the TNM stage and treatment intent is clearly verbalised and documented at MDT.**
- **National Dietetics Quality Performance Indicator Working Group to evaluate and submit draft proposal for the revision of QPI 5. This will be actioned by all networks and boards.**
- **All NHS Boards to consider neoadjuvant chemotherapy to suit the individual needs for patients.**
- **NOSCAN to improve outcomes associated with low volumes of surgery in surgical centres in the North of Scotland through the recommendations of a SLWG.**

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. A blank action plan template can be found in Appendix 2.

**Completed Action Plans should be returned to NOSCANA within two months of publication of this 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 NOSCANA Lead Cancer Clinician, as part of the regional audit governance process to enable RCAF to review and monitor regional improvement.

## 6. References

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## Appendix 1: Open clinical trials for breast cancer that recruited in 2014.

<b>Trial</b>	<b>Principle Investigator</b>	<b>Trial Type</b>
ROCS	Douglas Adamson (Tayside)	Interventional
ST03 FS	Russell Petty (Grampian)	Interventional
FACING	Russell Petty (Grampian)	Interventional
GO2	Russell Petty (Grampian)	Interventional
RTL Advanced Study	Russell Petty (Grampian)	Translational
RTL Peri-operative Study	Russell Petty (Grampian)	Translational
UGI Tumour Bank	Russell Petty (Grampian)	Translational
ST03 sub-imaging trial	Russell Petty (Grampian)	Translational



**Appendix 2: Blank Board Action Plan template**

Completed Action Plans should be returned to NOSCANA within two months of publication of this report.

## Action Plan: Upper GI Cancer

<b>Board:</b>	
<b>Action Plan Lead:</b>	
<b>Date:</b>	

Status key	
1	Action Fully Implemented
2	Action agreed but not yet implemented
3	No action taken (please state reason)

QPI	Action Required	NHS Board Action Taken	Date		Lead	Progress	Status
			Start	End			
	<i>Ensure actions mirror those detailed in Audit Report</i>	<i>Detail specific actions that will be taken by the NHS Board</i>	<i>Insert date</i>	<i>Insert date</i>	<i>Insert name of responsible lead for each action.</i>	<i>Detail actions in progress, changes in practice, problems encountered or reasons why no action has been taken.</i>	<i>Insert no. from key</i>