SCAN
South East Scotland Cancer Network

NHS SCOTLAND

Working regionally to improve cancer services

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

UPPER GI CANCER 2013

COMPARATIVE AUDIT REPORT

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Report Number: SA UGI13/14

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UPPER GI CANCER 2013 COMPARATIVE AUDIT REPORT

Patients diagnosed 1 January 2013 – 31 December 2013

Contents

DOCUMENT HISTORY

Version	Circulation	Date	Comments
Version 1	Peter Lamb, Graeme Couper & Lorna Bruce	29th July 2014	
Version 2	SCAN Upper GI Group	7th August 2014	Action points and comments agreed
Version 3	SCAN Upper GI Group	22nd August 2014	
Version 4	Final report circulated to the Health Board Clinical Governance Groups	19th December 2014	Actions from Upper GI National Meeting and Baseline Review comments added
Version 4W SA UGI13/14	Added to SCAN website	July 2015	Checked for disclosure of sensitive/ personal information

UPPER GI CANCER 2013 COMPARATIVE AUDIT REPORT

Comment by Chair of the SCAN Upper GI Group

SCAN aims to promote the highest standards of cancer care across the region, in keeping with the evidence base and agreed national and regional standards. SCAN also aims to ensure equity of access to cancer services across the region and that the cancer services fully meet the needs of patients.

The development and introduction of national Quality Performance Indicators (QPI) represents a major step forward in this process. Only by collecting accurate and relevant audit data can we identify areas of future development to improve the service. This first report sets out the data for patients diagnosed with Upper GI Cancer in 2013 in the SCAN region and will be presented at the National Upper GI Cancer meeting on 24th October 2014.

In particular it allows us to identify –

- Action points where QPIs have not been achieved and an opportunity to reflect on all aspects of patient care.

- Areas of high quality care that should continue and that could be utilised by other networks.

- To reflect on whether the QPIs are robust and achieving what they set out to achieve. This is important as there is a one year baseline review built into the QPI programme.

I would like to thank Joanne Smith (Lothian Audit Facilitator) all those within SCAN and the represented boards for their hard work in collecting the audit data and preparing this report; Maureen Lamb (Fife), Lynn Smith (Borders), and Martin Keith (Dumfries and Galloway).

Mr Peter Lamb
Chair, SCAN Upper GI Group

ACTION POINTS

QPI	Action required	Person responsible for action	Date for update	Progress
QPI 1	Review of patients who did not have histological diagnosis at first endoscopy.	Mr Lamb/ Dr Church (Lothian) Dr Fletcher (Borders) Mr Apollos (D&G)	SCAN Group Meeting May 2015	
QPI 3	Improved recording of TNM and treatment intent at MDT meeting.	Mr Lamb/ Upper GI MDT (Lothian, Fife, Borders) Mr Apollos (D&G)	SCAN Group Meeting May 2015	
QPI 4	Recommend baseline review to amend this QPI. Suggestion would be that this should measure what proportion of patients had a simple dietetic assessment performed and what proportion of those meeting the criteria for dietetic review were seen.	Mr Lamb (Lothian) Dr Fletcher (Borders) Mr Apollos (D&G) Mr MacMillan (Fife)	24/10/2014 – Baseline Review Meeting Local update at SCAN Group Meeting January 2015	No action taken, however plan for a comprehensive assessment of this QPI after three years of data analysis to inform any future revision of this indicator. Plan for local reviews and discussion of findings at 2015 National Meeting to suggest possible improvements in preparation for 3-year review.
QPI 7	Recommend baseline review of QPI measurability as this currently does not allow for the exclusions of palliative resections		24/10/2014 – Baseline Review Meeting	Action – add detail to QPI to explain that, given the current data definitions, it is not possible to exclude palliative surgical cases. The target tolerance should account for these cases.
QPI 8	Recommend baseline review to implement a robust method for checking SMR01 data		24/10/2014 – Baseline Review Meeting	No action taken. ISD colleagues are progressing work to provide a detailed measurability specification in conjunction with Regions / Boards.
QPI 9	Review of all cases in Lothian which did not meet the target for this QPI	Mr Lamb/ Lothian surgical team	SCAN Group Meeting May 2015	

QPI 10	Further discussion took place at the Upper GI National meeting regarding the aspirational target for this QPI and the need for earlier diagnosis. It was agreed that detailed audit of the variances in treatment types and outcomes is required for presentation at the next National meeting	Mr Lamb/ Dr Wall	SCAN Group Meeting May 2015	

SUMMARY OF QUALITY PERFORMANCE INDICATORS

	Target	Borders	D&G	Fife	Lothian	SCAN
	%	%	%	%	%	%
QPI 1 - Endoscopy						
Oesophageal cancer patients receiving a histological diagnosis following initial endoscopy and biopsy	90	88.5	90.6	91.2	78.9	84.2
Gastric cancer patients receiving a histological diagnosis following initial endoscopy and biopsy	90	76.9	66.7	93.9	75.0	79.4
QPI 2 - Radiological Staging						
Oesophageal cancer patients who undergo contrast enhanced CT of the chest and abdomen +/- pelvis	90	80.8	100.0	95.6	95.4	94.6
Gastric cancer patients who undergo contrast enhanced CT of the chest and abdomen +/- pelvis	90	92.3	84.6	94.1	93.2	92.5
QPI 3 - Staging & Treatment Intent						
Oesophageal cancer patients who have TNM staging and treatment intent recorded prior to treatment	95	53.8	60.6	97.1	84.9	82.1
Gastric cancer patients who have TNM staging and treatment intent recorded prior to treatment	95	46.2	38.5	88.2	67.6	67.9
QPI 4 - Nutritional Assessment						
Oesophageal cancer patients referred to a dietician within 4 weeks of diagnosis	85	50.0	51.5	57.4	41.4	47.3
Gastric cancer patients referred to a dietician within 4 weeks of diagnosis	85	46.2	23.1	61.8	28.4	38.1
QPI 5 - Appropriate Selection of Surgical Patients						
Oesophageal cancer patients who receive neo-adjuvant chemotherapy who then undergo surgical resection	80	100.0	100.0	75.0	83.3	86.4
Gastric cancer patients who receive neo-adjuvant chemotherapy who then undergo surgical resection	80	n/a	100.0	100.0	100.0	100.0
QPI 6(i) - 30 Day Mortality Following Surgery						
Oesophageal cancer patients who undergo surgical resection who die within **30** days of treatment	<10	0.0	0.0	0.0	3.0	1.7
Gastric cancer patients who undergo surgical resection who die within **30** days of treatment	<10	0.0	0.0	0.0	5.0	3.2
QPI 6(ii) - 90 Day Mortality Following Surgery						
Oesophageal cancer patients who undergo surgical resection who die within **90** days of treatment	<10	14.3	0.0	0.0	3.0	3.3
Gastric cancer patients who undergo surgical resection who die within **90** days of treatment	<10	0.0	0.0	20.0	5.0	6.5
QPI 7 - Lymph Node Yield						
Gastric cancer patients who undergo curative surgical resection where ≥15 lymph nodes are resected and pathologically examined	80	0.0	75.0	100.0	75.0	74.2
QPI 8 - Length of Hospital Stay Following Surgery						
Oesophageal cancer patients undergoing surgical resection who are discharged within 21 days of surgery	60	57.1	70.0	80.0	66.7	68.3
Gastric cancer patients undergoing surgical resection who are discharged within 21 days of surgery	60	100.0	100.0	80.0	85.0	87.1
QPI 9(i)- Resection Margins						
Oesophageal cancer patients who undergo surgical resection in which (both) circumferential and longitudinal surgical margin is clear of tumour	70	42.9	50.0	90.0	48.5	55.0

	Target	Borders	D&G	Fife	Lothian	SCAN
	%	%	%	%	%	%
QPI 9(ii) - Resection Margins						
Gastric cancer patients who undergo surgical resection in which longitudinal surgical margin is clear of tumour	90	100.0	100.0	100.0	80.0	87.1
QPI 10 - Curative Treatment Rates						
Oesophageal cancer patients who undergo curative treatment	35	26.9	33.3	29.4	29.6	29.7
Gastric cancer patients who undergo curative treatment	35	15.4	30.8	14.7	27.0	23.1
QPI 11(i) - 30/90 Day Mortality Following Oncological Treatment						
Oesophageal cancer patients who receive curative chemoradiotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Oesophageal cancer patients who receive curative chemoradiotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Oesophageal cancer patients who receive neo-adjuvant chemotherapy who die within **30** days of treatment	<10	0.0	0.0	0.0	0.0	0.0
Oesophageal cancer patients who receive neo-adjuvant chemotherapy who die within **90** days of treatment	<10	0.0	0.0	0.0	3.8	1.9
Oesophageal cancer patients who receive curative adjuvant chemotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
Oesophageal cancer patients who receive curative adjuvant chemotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
Oesophageal cancer patients who receive curative adjuvant radiotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Oesophageal cancer patients who receive curative adjuvant radiotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Gastric cancer patients who receive curative chemoradiotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
Gastric cancer patients who receive curative chemoradiotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
Gastric cancer patients who receive neo-adjuvant chemotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Gastric cancer patients who receive neo-adjuvant chemotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Gastric cancer patients who receive curative adjuvant chemotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Gastric cancer patients who receive curative adjuvant chemotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	0.0	0.0
Gastric cancer patients who receive curative adjuvant radiotherapy who die within **30** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
Gastric cancer patients who receive curative adjuvant radiotherapy who die within **90** days of treatment	<10	n/a	0.0	0.0	n/a	0.0
QPI 11(ii) - 30 Day Mortality Following Oncological Treatment						
Oesophageal cancer patients who receive palliative chemotherapy who die within **30** days of treatment	<20	0.0	11.1	0.0	6.5	5.6
Oesophageal cancer patients who receive palliative radiotherapy who die within **30** days of treatment	<20	0.0	0.0	0.0	3.2	1.9
Gastric cancer patients who receive palliative chemotherapy who die within **30** days of treatment	<20	0.0	n/a	0.0	8.3	6.7
Gastric cancer patients who receive palliative radiotherapy who die within **30** days of treatment	<20	n/a	n/a	0.0	0.0	0.0

Achieved
Failed

INTRODUCTION AND METHODS

Cohort

This report covers patients diagnosed with an Oesophageal or Gastric cancer from 01.01.2013 – 31.12.2013. The results contained within this report have been presented by NHS board of diagnosis, where the QPI relates to surgical outcomes the results have also been presented by hospital of surgery.

Dataset and Definitions

The QPIs have been developed collaboratively with the three Regional Cancer Networks, Information Services Division (ISD), and Healthcare Improvement Scotland. QPIs will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

The overarching aim of the cancer quality work programme is to ensure that activity at NHS board level is focussed on areas most important in terms of improving survival and patient experience whilst reducing variance and ensuring safe, effective and person-centred cancer care.

Following a period of development, public engagement and finalisation, each set of QPIs is published by Healthcare Improvement Scotland[1].

Accompanying datasets and measurability criteria for QPIs are published on the ISD website[2]. NHS boards are required to report against QPIs as part of a mandatory, publicly reported, programme at a national level.

The QPI dataset for Upper GI was implemented from 01/01/2013, and this is the first publication of QPI results for Upper GI cancer within SCAN.

The standard QPI format is shown below:

QPI Title:	Short title of Quality Performance Indicator (for use in reports etc.)	
Description:	Full and clear description of the Quality Performance Indicator.	
Rationale and Evidence:	Description of the evidence base and rationale which underpins this indicator.	
Specifications:	Numerator:	Of all the patients included in the denominator those who meet the criteria set out in the indicator.
	Denominator:	All patients to be included in the measurement of this indicator.
	Exclusions:	Patients who should be excluded from measurement of this indicator.
	Not recorded for numerator:	Include in the denominator for measurement against the target. Present as not recorded only if the patient cannot otherwise be identified as having met/not met the target.
	Not recorded for exclusion:	Include in the denominator for measurement against the target unless there is other definitive evidence that the record should be excluded. Present as not recorded only where the record cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
	Not recorded for denominator:	Exclude from the denominator for measurement against the target. Present as not recorded only where the patient cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
Target:	Statement of the level of performance to be achieved.	

[1] QPI documents are available at www.healthcareimprovementscotland.org
[2] Datasets and measurability documents are available at www.isdscotland.org

Audit Processes
Data was analysed by the audit facilitators in each NHS board according to the measurability document provided by ISD. SCAN data was collated by Joanne Smith, SCAN Audit Facilitator for Upper GI cancer.

Patients were mainly identified through registration at weekly multidisciplinary meetings, and through checks made against pathology listings and GRO death listings. Data capture was dependent on casenote audit and review of various hospitals electronic records systems. Data was recorded in eCase for Borders, Dumfries & Galloway and Fife, Lothian data was recorded in TRAK.

Lead Clinicians and Audit Personnel

SCAN Region	Hospital	Lead Clinician	Audit Support
NHS Borders	Borders General Hospital	Dr Jonathan Fletcher	Lynn Smith
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Mr Jeyakumar Apollos	Martin Keith
NHS Fife	Queen Margaret Hospital Victoria Hospital	Mr Alasdair MacMillan	Maureen Lamb
SCAN & NHS Lothian	St Johns Hospital Royal Infirmary Edinburgh Western General Hospital	Mr Peter Lamb	Joanne Smith
	Edinburgh Cancer Centre	Oncologist: Dr Lucy Wall	

Data Quality
Quality Assurance
All hospitals in mainland Scotland participate in a Quality Assurance (QA) programme provided by the National Services Scotland Information Services Division (ISD). QA of the Upper GI data was carried out in July 2014 and the results show that the SCAN region is performing inline with the Scottish average.

Overall percentage accuracy for recording of QPI upper GI data items[3]

	Borders	D&G	Fife	Lothian	Scotland
Accuracy of data recording (%)	97.0	97.4	95.7	98.8	98.6

Clinical Sign-off
To ensure the quality of the data and the results presented, the process was as follows:

- Individual health board results were reviewed and signed-off locally.
- Collated results were presented and discussed at the Upper GI SCAN Group Meeting on 7th August 2014.
- The final draft of the regional report was circulated to members of the SCAN Upper GI Group on 22nd August 2014 for final comments.
- Data was submitted to ISD on 28th August 2014 for inclusion in the Upper GI National report.
- Collated results for all health boards in Scotland were presented at the Upper GI National Meeting on 24th October 2014

[3] *Data Quality Assurance; Summary Assessment of Upper GI Cancer QPI Dataset – Scotland Summary*, National Services Scotland, 2014, p.2

ESTIMATE OF CASE ASCERTAINMENT

Estimated Case Ascertainment

An estimate of case ascertainment (the percentage of the population with oesophageal or gastric cancer recorded in the audit) is made by comparison with the Scottish Cancer Registry five-year average data from 2008 to 2012. High levels of case ascertainment provide confidence in the completeness of the audit recording and contribute to the reliability of results presented. Levels greater than 100% may be attributable to an increase in incidence. Allowance should be made when reviewing results where numbers are small and variation may be due to chance.

Number of cases recorded in audit: patients diagnosed 01.01.2013 – 31.12.2013

	Borders	D&G	Fife	Lothian	SCAN
Oesophageal cancer	26	33	68	152	279
Gastric cancer	13	13	34	74	134
Total	39	46	102	226	413

Estimate of case ascertainment: calculated using the average of the most recent available five years of Cancer Registry Data

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	39	46	102	226	413
Cancer Registry 5 Year Average	34	42	100	211	388
Case Ascertainment %	114.7	109.5	102.0	107.1	106.4

Source: Scottish Cancer Registry, ISD. Data extracted from ACaDMe 21.07.2013

Note: Case ascertainment is reported by board of diagnosis and has been estimated using a denominator based on the latest (2008-2012) five-year annual average available from the Scottish Cancer Registry.
Death certificate only cases have been excluded. Cases that have been diagnosed in the private sector but received any treatment in NHS hospitals have been included.

Multi-Disciplinary Team Meeting (MDT)

This data has been included for information only. The QPI relating to MDT meetings was developed during 2013 and will only be officially measured for patients diagnosed from 01.01.2014.

Target = 95%

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

Oesophageal cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	0	1	1	2
Target 95%					
Numerator	23	32	66	144	265
Not recorded for numerator	2	0	0	0	2
Denominator	26	33	67	151	277
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**88.5**	**97.0**	**98.5**	**95.4**	**95.7**

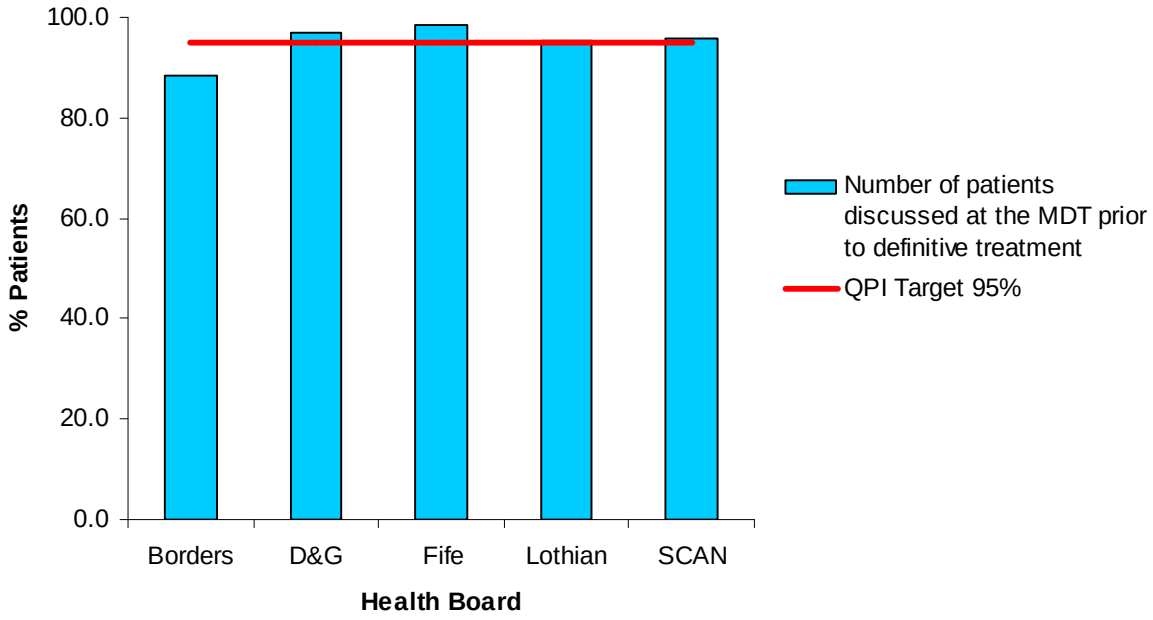
Lothian: There are valid clinical reasons why 6 patients were not discussed at the MDT meeting. One patient has been excluded from this QPI.
Fife: There are valid clinical reasons why 1 patient was not discussed at the MDT meeting. One patient has been excluded from this QPI.
D&G: There are valid clinical reasons why 1 patient was not discussed at the MDT meeting.

Gastric cancer

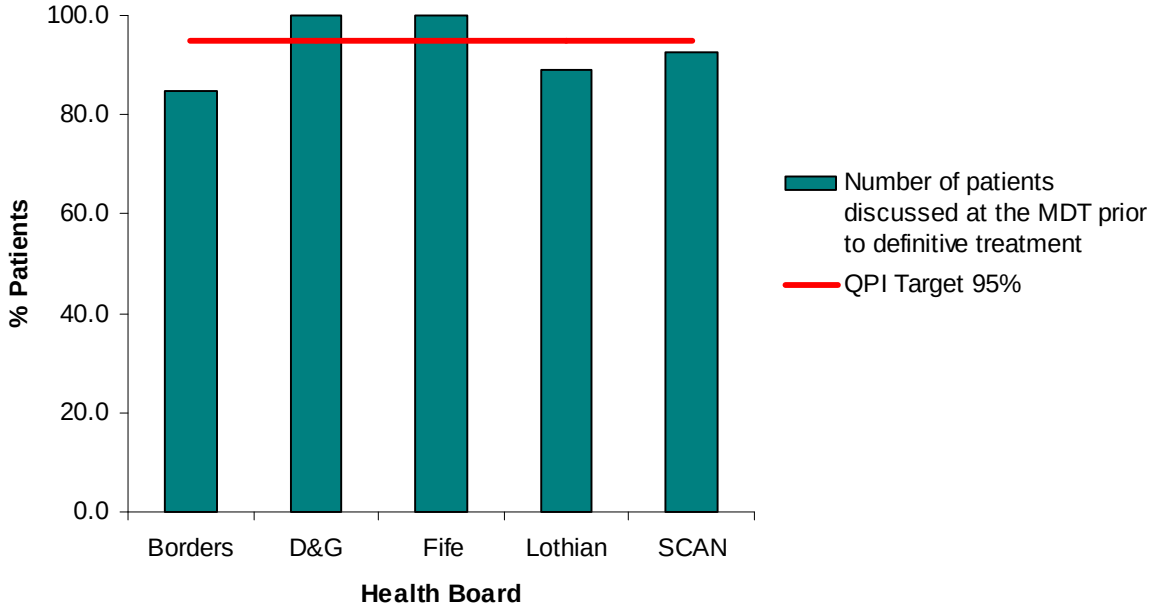
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	0	0	0	0
Target 95%					
Numerator	11	13	34	66	124
Not recorded for numerator	2	0	0	0	2
Denominator	13	13	34	74	134
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**84.6**	**100.0**	**100.0**	**89.2**	**92.5**

Lothian: There are valid clinical reasons why 8 patients were not discussed at the MDT meeting.

Patients Discussed at Upper GI MDT
Oesophageal Cancer 2013



Patients Discussed at Upper GI MDT
Gastric Cancer 2013



Comment: Lothian have reviewed the cases that had not been discussed at the MDT and found that these were predominantly elderly patients admitted through medical specialties for palliative management. There was no evidence that the patients had missed opportunities for treatment. A letter will be sent to medical specialties (Medicine of the Elderly, General Medicine, GI Medicine) in Lothian to remind them that patients should be referred to the Upper GI MDT and the mechanism for referral.
Jonathan Fletcher will be asked to perform a similar review of Borders cases.

DIAGNOSIS AND STAGING

QPI 1 – Endoscopy

Target = 90%

Numerator = Number of patients with oesophageal or gastric cancer who undergo endoscopy and 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

Oesophageal cancer

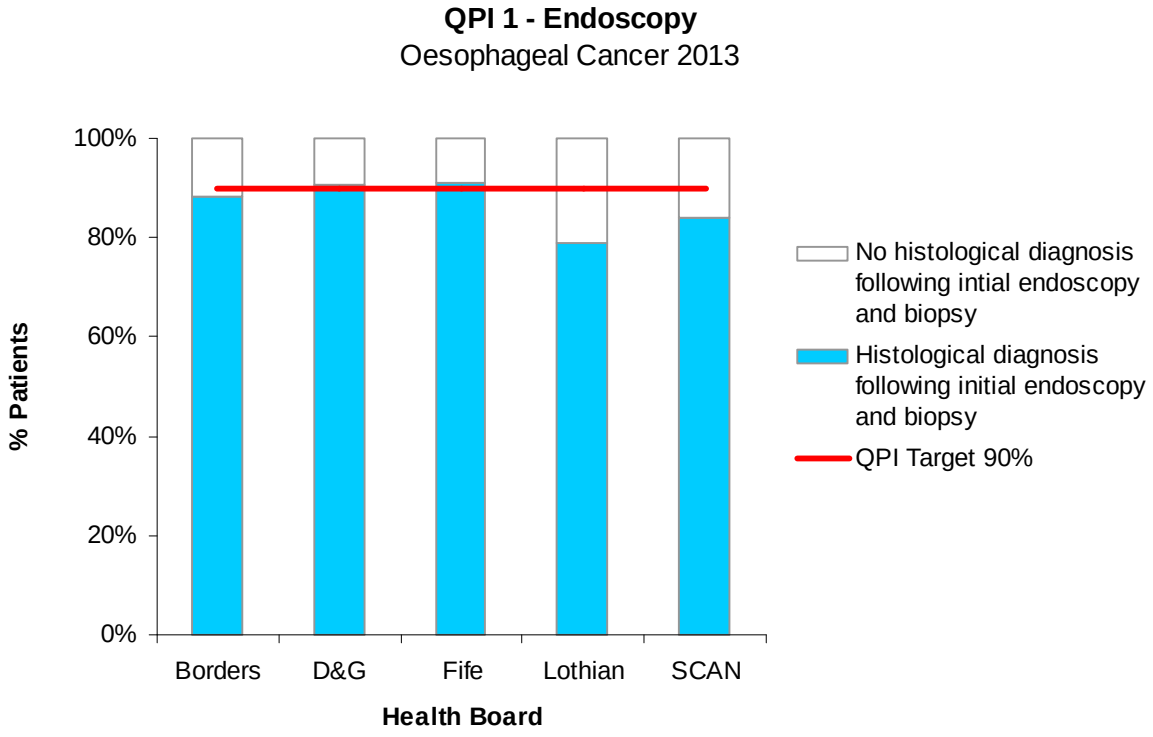
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	1	0	0	1
Target 90%					
Numerator	23	29	62	120	234
Not recorded for numerator	0	0	0	0	0
Denominator	26	32	68	152	278
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**88.5**	**90.6**	**91.2**	**78.9**	**84.2**

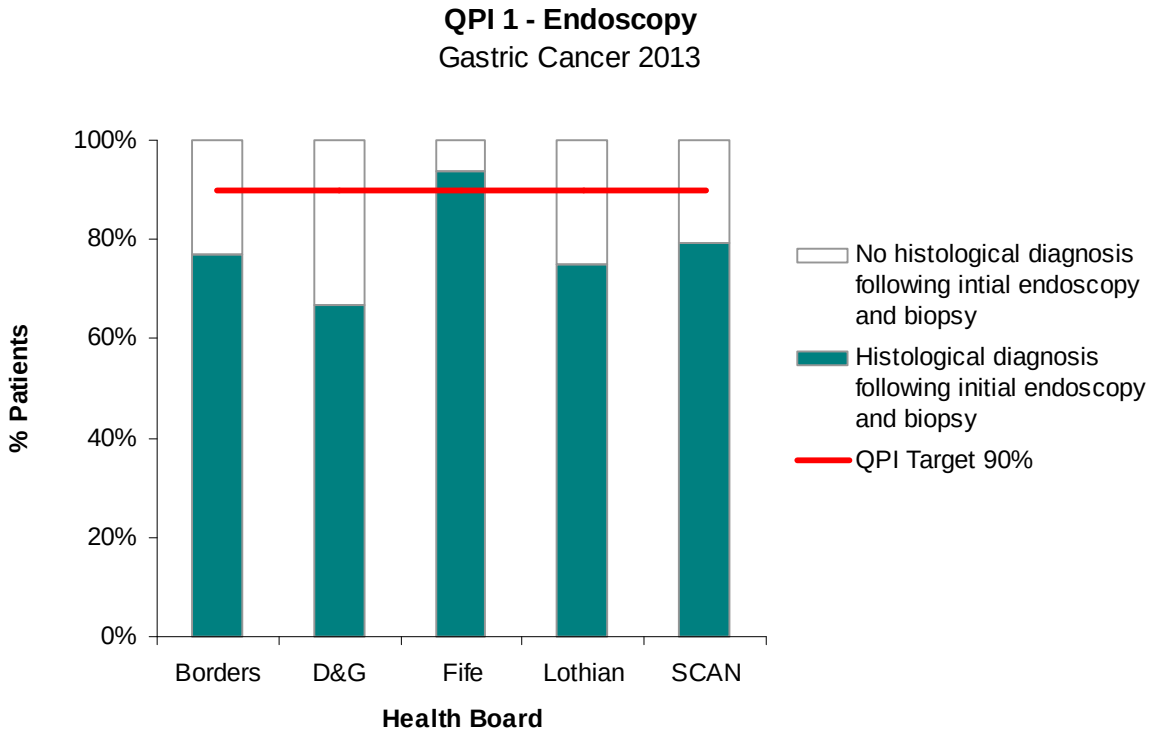
Lothian: 32 patients had histological diagnosis at subsequent endoscopy.
Fife: 5 patients had histological diagnosis as subsequent endoscopy.
Borders: 3 patients had histological diagnosis at subsequent endoscopy.
D&G: 3 patients had histological diagnosis at subsequent endoscopy. One patient did not undergo endoscopy.

Gastric cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	1	1	6	8
Target 90%					
Numerator	10	8	31	51	100
Not recorded for numerator	0	0	0	0	0
Denominator	13	12	33	68	126
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**76.9**	**66.7**	**93.9**	**75.0**	**79.4**

Lothian: 17 had diagnosis at subsequent endoscopy. Six patients did not undergo endoscopy.
Fife: 3 patients had histological diagnosis at subsequent endoscopy. One patient did not undergo endoscopy.
Borders: 3 patients had histological diagnosis at subsequent endoscopy.
D&G: 2 patients had histological diagnosis at subsequent endoscopy. Two patients were unable to undergo biopsy due to clinical condition and one patient did not undergo endoscopy.





Comment: Mr Lamb has asked Dr Church (Lothian Endoscopy Lead) to review the Lothian cases that were not diagnosed on first endoscopy. This is to validate the data and identify whether appropriate biopsy protocols were used and whether any patients had significant delays in diagnosis. The results of this review will be available for the national meeting in October.
Borders and D&G will be asked to perform a similar review.

QPI 2 – Radiological Staging

Target = 90%

Numerator = Number of patients with oesophageal or gastric cancer who undergo contrast enhanced CT of the chest and abdomen +/- pelvis

Denominator = All patients with an oesophageal or gastric cancer diagnosis

Exclusions = No exclusions

Oesophageal cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	0	0	0	0
Target 90%					
Numerator	21	33	65	145	264
Not recorded for numerator	0	0	0	0	0
Denominator	26	33	68	152	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**80.8**	**100.0**	**95.6**	**95.4**	**94.6**

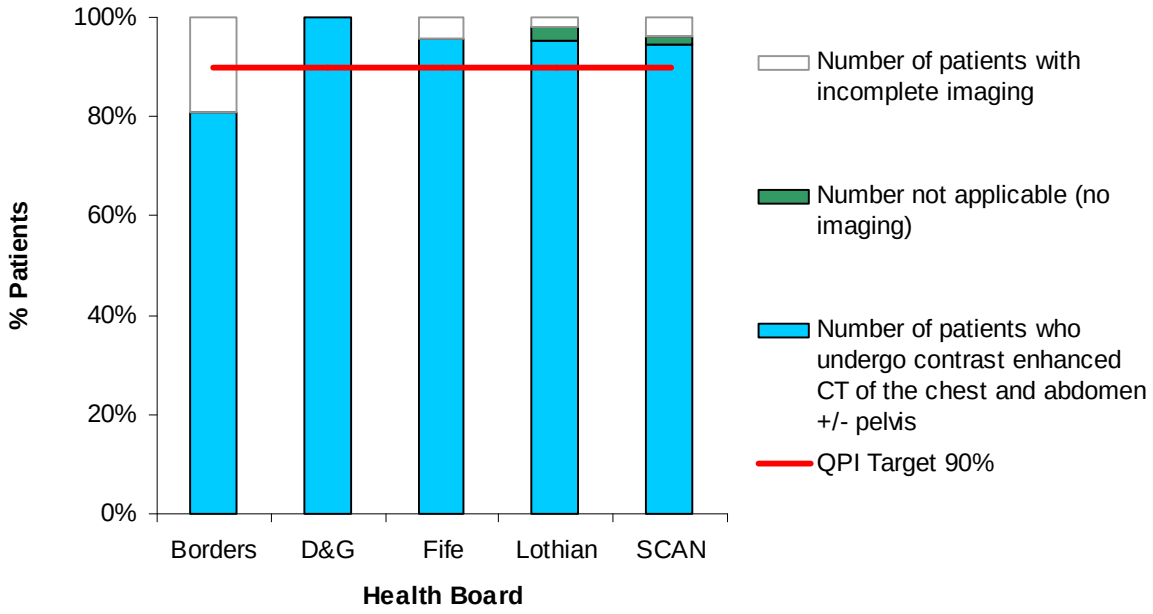
Lothian: 3 patients had incomplete imaging. There are valid clinical reasons why 4 patients did not undergo any imaging
Fife: 1 patient had incomplete imaging. There are valid clinical reasons why 2 patients did not undergo imaging.
Borders: 5 patients had incomplete imaging.

Gastric cancer

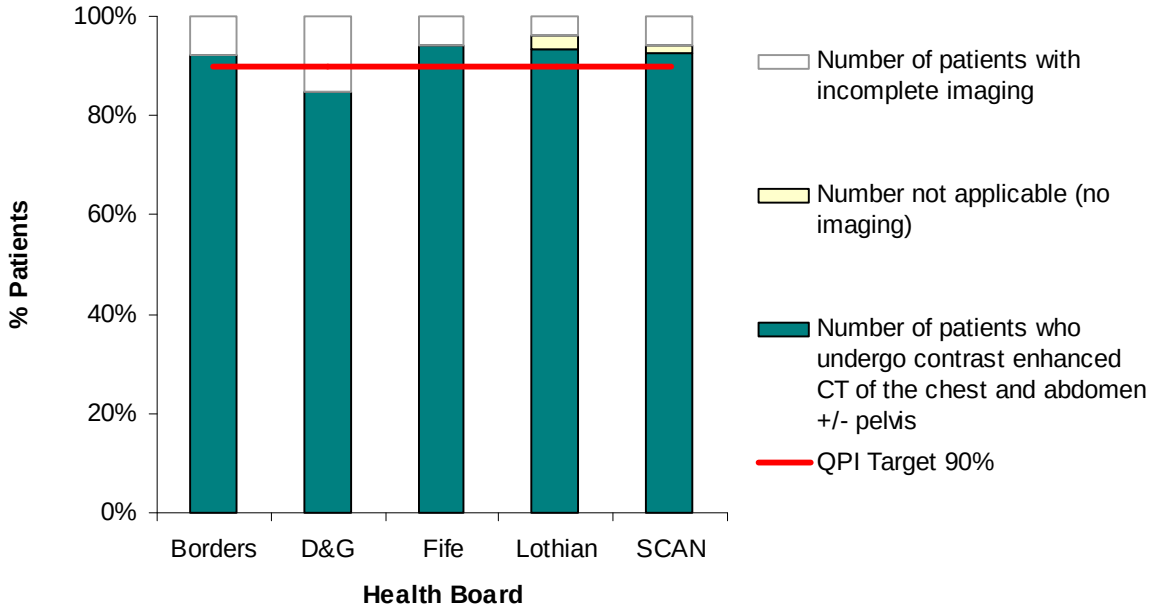
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	0	0	0	0
Target 90%					
Numerator	12	11	32	69	124
Not recorded for numerator	0	0	0	0	0
Denominator	13	13	34	74	134
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**92.3**	**84.6**	**94.1**	**93.2**	**92.5**

Lothian: 3 patients had incomplete imaging. There are valid clinical reasons why 2 patients did not undergo any imaging.
Fife: 1patient had incomplete imaging. There are valid clinical reasons why one patient did not undergo any imaging.
Borders: 1 patient had incomplete imaging.
D&G: 1patient had incomplete imaging. There are valid clinical reasons why one patient did not undergo any imaging.

QPI 2 - Radiological Staging
Oesophageal Cancer 2013



QPI 2 - Radiological Staging
Gastric Cancer 2013



Comment: Overall this QPI was met by SCAN. It is accepted that there will be a small number of patients where full staging would not be appropriate.
Lothian has reviewed the cases that did not have complete staging and the reasons were appropriate e.g. no chest CT in a frail patient with widespread metastatic disease on an abdominal CT scan. Borders did not meet the target for oesophageal cancer and D&G did not meet target for gastric cancer. It is recognised that the numbers are small at these sites but it is recommended that they review these cases.

QPI 3 – Staging and Treatment Intent

Target = 95%

Numerator = Number of patients with oesophageal or gastric cancer who have TNM stage and treatment intent ('radical' or 'palliative') recorded at the MDT meeting prior to treatment

Denominator = All patients with an oesophageal or gastric cancer diagnosis

Exclusions = No exclusions

Oesophageal cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	0	0	0	0
Target 95%					
Numerator	14	20	66	129	229
Not recorded for numerator	0	5 (15.2%)	1 (1.5%)	7 (4.6%)	13 (4.7%)
Denominator	26	33	68	152	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**53.8**	**60.6**	**97.1**	**84.9**	**82.1**

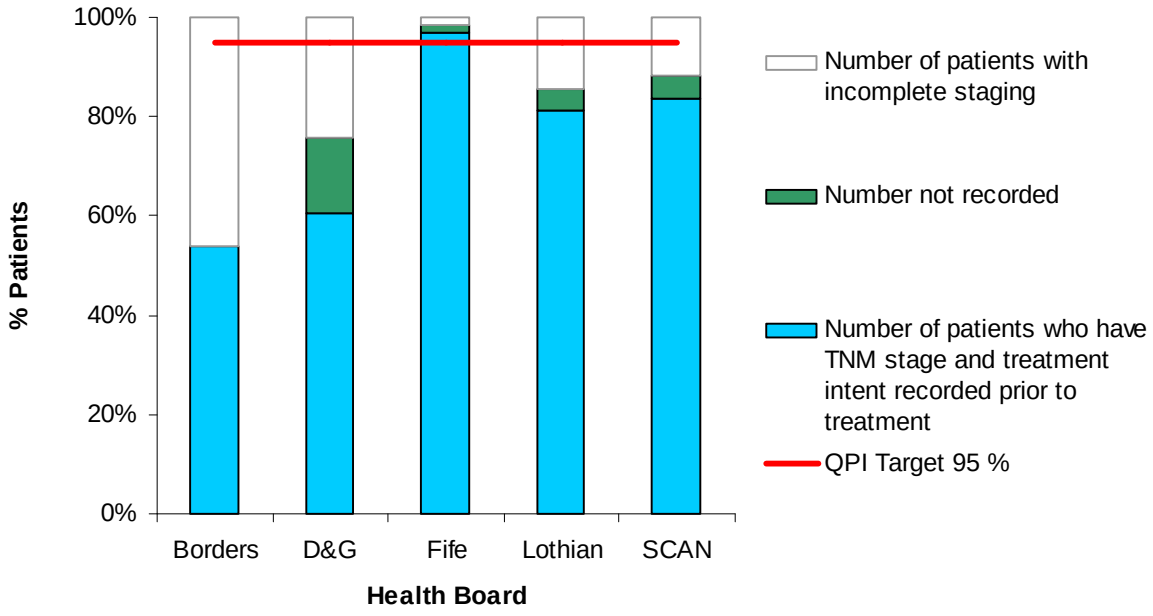
Lothian: 6 'not recorded' were not discussed at the MDT meeting.
Fife: 1 'not recorded' was not discussed at the MDT meeting.
D&G: 5 'not recorded' were not discussed at the MDT meeting.

Gastric cancer

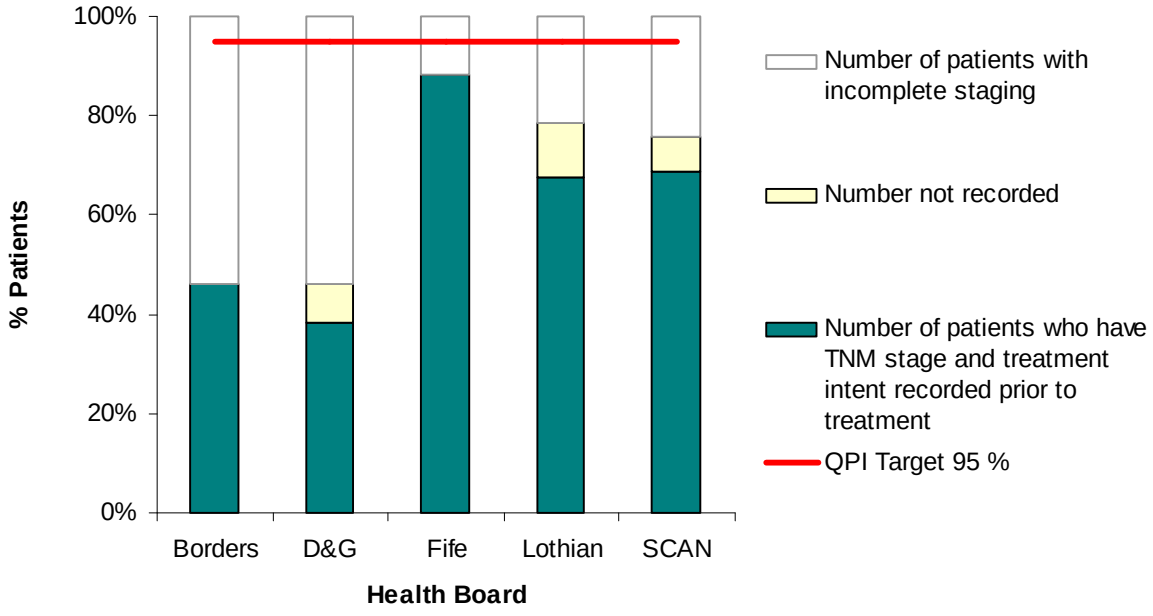
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	0	0	0	0
Target 95%					
Numerator	6	5	30	50	91
Not recorded for numerator	0	1 (7.7%)	0	8 (10.8%)	9 (6.7%)
Denominator	13	13	34	74	134
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**46.2**	**38.5**	**88.2**	**67.6**	**67.9**

Lothian: 8 'not recorded' were not discussed at the MDT meeting.
D&G: 1 'not recorded' was not discussed at the MDT meeting.

QPI 3 - Staging and Treatment Intent
Oesophageal Cancer 2013



QPI 3 - Staging and Treatment Intent
Gastric Cancer 2013



Comment: Overall this target was not met by SCAN. The impression is that this reflects a failure to accurately document the clinical TNM stage and treatment intent at the time of MDT. These fields have since been included on the TRAK MDT for Lothian and there has been some improvement in the first half of 2014 but there is still not consistent documentation of this information.
The clinical stage and treatment intent should be verbalised at the time of MDT discussion and completed on the TRAK outcome form. A reminder will be sent to the MDT members,

Upper GI Surgeons and coordinators completing the TRAK outcomes. This will include outcomes at present for Lothian, Borders, and Fife patients.
Until D&G are part of a SCAN wide MDT for all patients they need to ensure a robust mechanism is in place for recording this data for all patients at their MDT.

QPI 4 – Nutritional Assessment

Target = 85%

Numerator = Number of patients with oesophageal or gastric cancer referred to a dietician within 4 weeks of diagnosis

Denominator = All patients with an oesophageal or gastric cancer diagnosis

Exclusions = No exclusions

Oesophageal cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	0	0	0	0
Target 85%					
Numerator	13	17	39	63	132
Not recorded for numerator	0	0	0	0	0
Denominator	26	33	68	152	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**50.0**	**51.5**	**57.4**	**41.4**	**47.3**

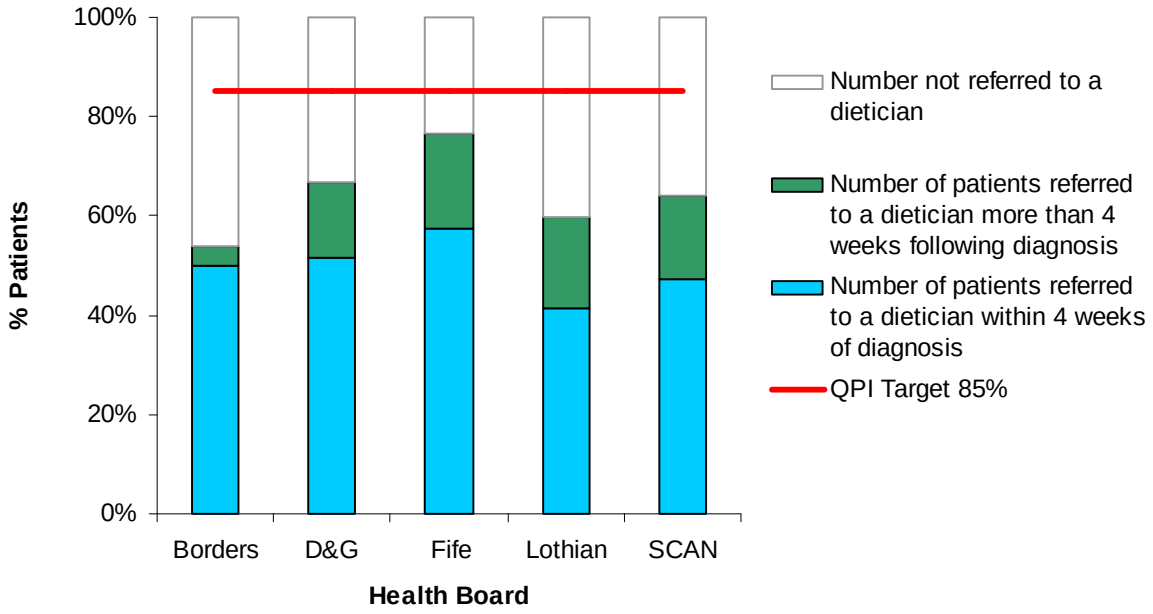
Lothian: 28 patients were referred after 4 weeks. 61 were not referred; it is not possible to comment further on these patients.
Fife: 15 patients were felt not to require dietetic input. 1 patient was already known to the dietetic team.
Borders: 1 Patient was referred after 4 weeks. No further information on the 12 patients who were not referred.
D&G: 5 patients were referred after 4 weeks. No further information on the 11 patients who were not referred.

Gastric cancer

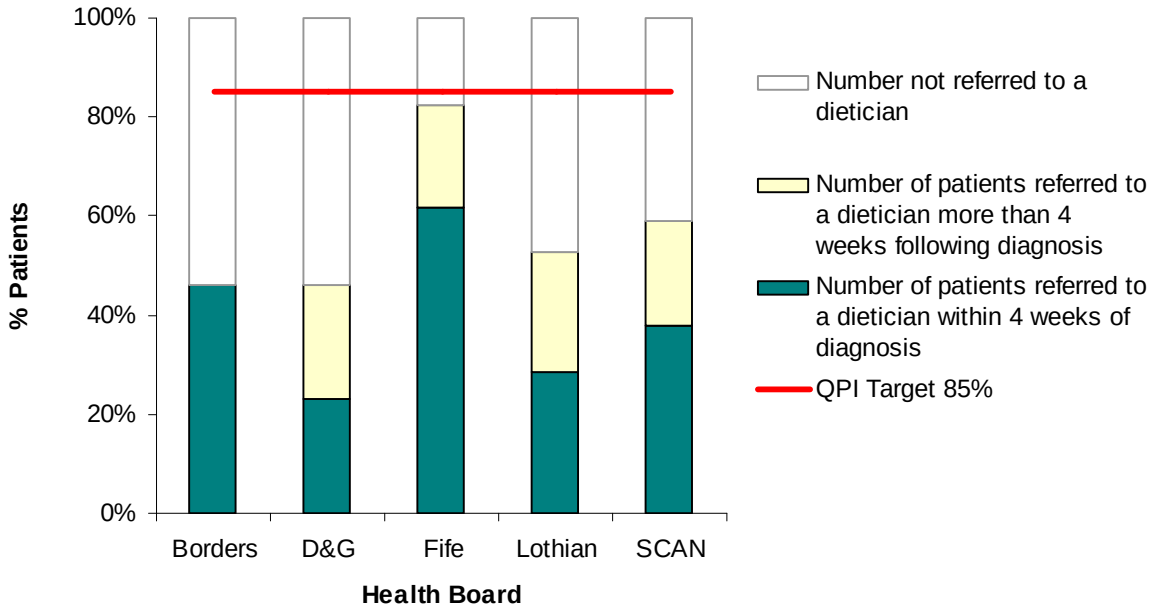
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	0	0	0	0
Target 85%					
Numerator	6	3	21	21	51
Not recorded for numerator	0	0	0	0	0
Denominator	13	13	34	74	134
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**46.2**	**23.1**	**61.8**	**28.4**	**38.1**

Lothian: 18 patients were referred after 4 weeks. 35 were not referred; it is not possible to comment further on these patients.
Fife: 7 patients were referred after 4 weeks. 6 patients were felt not to require dietetic input.
Borders: No further information on the 7 patients who were not referred.
D&G: 3 patients were referred after 4 weeks. No further information on the 7 patients who were not referred.

QPI 4 - Nutritional Assessment
Oesophageal Cancer 2013



QPI 4 - Nutritional Assessment
Gastric Cancer 2013



Comment: This QPI was not met by SCAN. From the documentation it is not clear whether this is because patients did not require formal dietary assessment at the time of diagnosis, whether the recording in case notes is adequate, or whether patients requiring assessment have been unable to have this due to dietetic resources.

SCAN members feel that this QPI is probably not asking the correct question. It might be more appropriate for all patients to have a simple assessment or scoring in clinic to determine whether a formal dietetic assessment is required. The QPI could then be (i) what

proportion of patients had this initial assessment performed and (ii) what proportion of those meeting the criteria for dietetic review were seen.

These QPI results will be discussed further with SCAN members and other networks prior to the national meeting.

SURGICAL OUTCOMES

QPI 5 – Appropriate Selection of Surgical Patients

Target = 80%

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

Oesophageal cancer

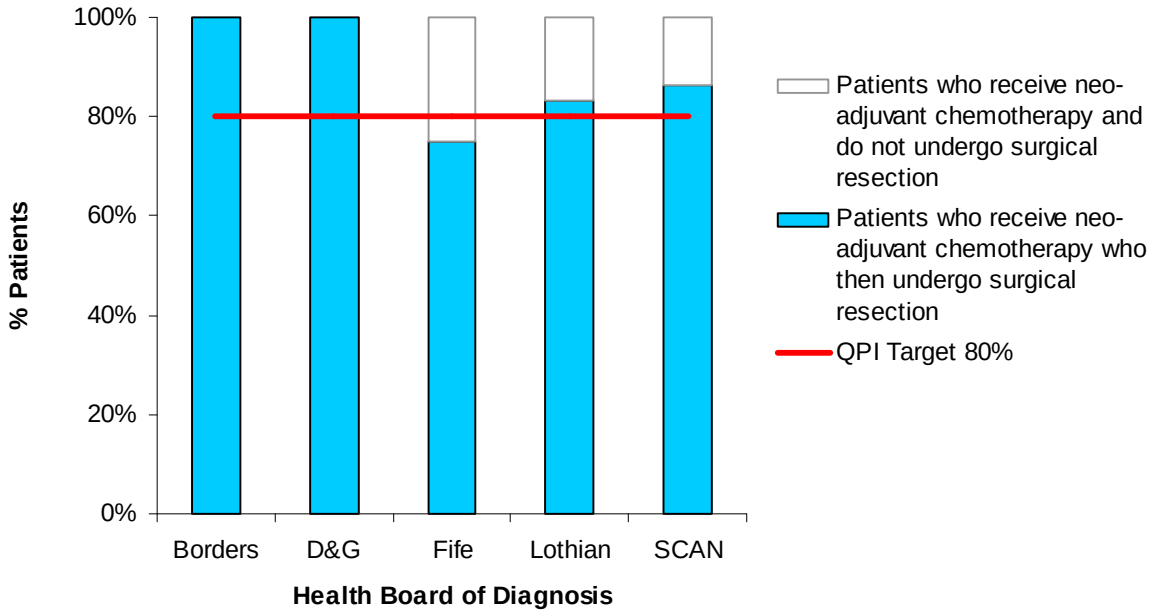
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	20	27	60	128	235
Target 80%					
Numerator	6	6	6	20	38
Not recorded for numerator	0	0	0	0	0
Denominator	6	6	8	24	44
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**75.0**	**83.3**	**86.4**

Lothian: There are valid clinical reasons why 4 patients did not proceed to surgery.
Fife: There are valid clinical reasons why 2 patients did not proceed to surgery.

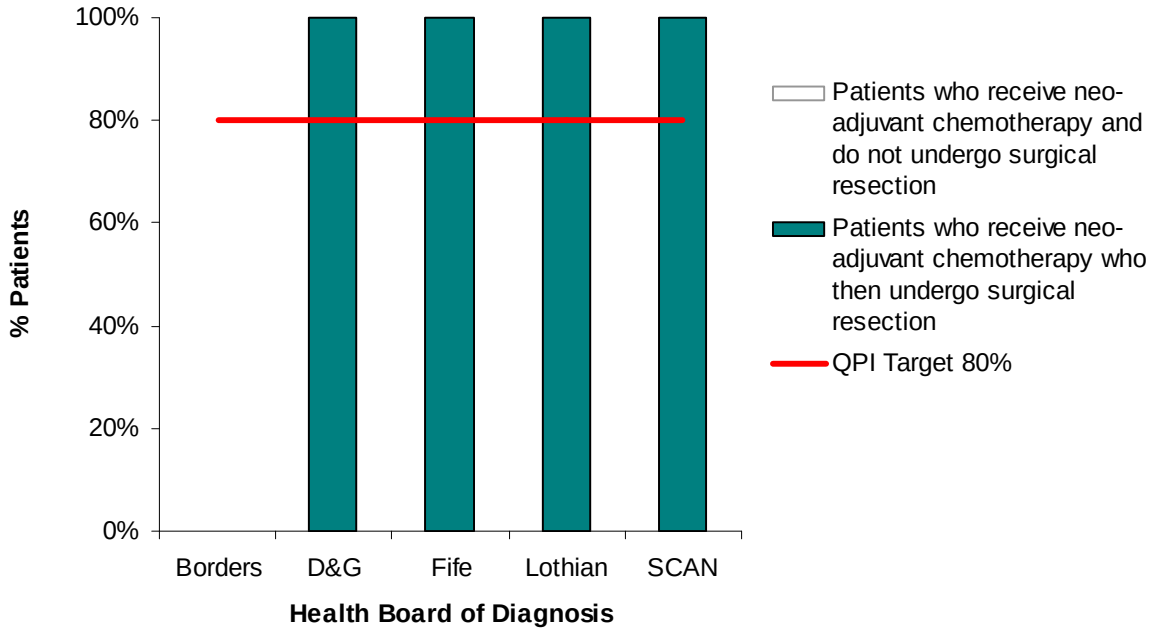
Gastric cancer

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	13	12	33	70	128
Target 80%					
Numerator	0	1	1	4	6
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	1	4	6
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**n/a**	**100.0**	**100.0**	**100.0**	**100.0**

QPI 5 - Appropriate Selection of Surgical Patients
Oesophageal Cancer 2013



QPI 5 - Appropriate Selection of Surgical Patients
Gastric Cancer 2013



Comment: Overall SCAN met this QPI. Any patients who do not proceed to surgical resection will continue to be discussed on an individual basis by the MDT.

QPI 6 – 30/90 Day Mortality Following Surgery

Target = <10%

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

Denominator = All patients with oesophageal or gastric cancer and who undergo surgical resection

Exclusions = No exclusions

Oesophageal cancer – Health board of diagnosis

30-Day Mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	19	23	58	119	219
Target <10%					
Numerator	0	0	0	1	1
Not recorded for numerator	0	0	0	0	0
Denominator	7	10	10	33	60
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**0.0**	**3.0**	**1.7**

90-Day Mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	19	23	58	119	219
Target <10%					
Numerator	1	0	0	1	2
Not recorded for numerator	0	0	0	0	0
Denominator	7	10	10	33	60
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**14.3**	**0.0**	**0.0**	**3.0**	**3.3**

Gastric cancer – Health board of diagnosis

30-Day Mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	11	9	29	54	103
Target <10%					
Numerator	0	0	0	1	1
Not recorded for numerator	0	0	0	0	0
Denominator	2	4	5	20	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**0.0**	**5.0**	**3.2**

90-Day Mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	11	9	29	54	103
Target <10%					
Numerator	0	0	1	1	2
Not recorded for numerator	0	0	0	0	0
Denominator	2	4	5	20	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**20.0**	**5.0**	**6.5**

QPI 6 – 30/90 Day Mortality Following Surgery

The following data for QPI 6 has also been presented by hospital of surgery

Oesophageal cancer – Hospital of surgery

30-Day Mortality

	RIE	SCAN
2013 Cohort	279	279
Ineligible for this QPI	219	219
Target <10%		
Numerator	1	1
Not recorded for numerator	0	0
Denominator	60	60
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**1.7**	**1.7**

90-Day Mortality

	RIE	SCAN
2013 Cohort	279	279
Ineligible for this QPI	219	219
Target <10%		
Numerator	2	2
Not recorded for numerator	0	0
Denominator	60	60
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**3.3**	**3.3**

Gastric cancer – Hospital of surgery

30-Day Mortality

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort	13	87	33	1	134
Ineligible for this QPI	9	65	29	0	103
Target <10%					
Numerator	0	1	1	0	2
Not recorded for numerator	0	0	0	0	0
Denominator	4	22	4	1	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**4.5**	**25.0**	**0.0**	**6.5**

90-Day Mortality

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort	13	87	33	1	134
Ineligible for this QPI	9	65	29	0	103
Target <10%					
Numerator	0	1	1	0	2
Not recorded for numerator	0	0	0	0	0
Denominator	4	22	4	1	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**4.5**	**25.0**	**0.0**	**6.5**

Comment: The QPI for postoperative mortality was met by SCAN. This reflects well on overall MDT working including patient selection, surgery, and postoperative care. All morbidity and mortality will continue to be reviewed in formal M&M meetings within the trusts. A single death in Fife resulted in a higher percentage for gastrectomy due to low numbers. This will be reviewed in context of results over a number of years.

QPI 7 – Lymph Node Yield

Target = 80%

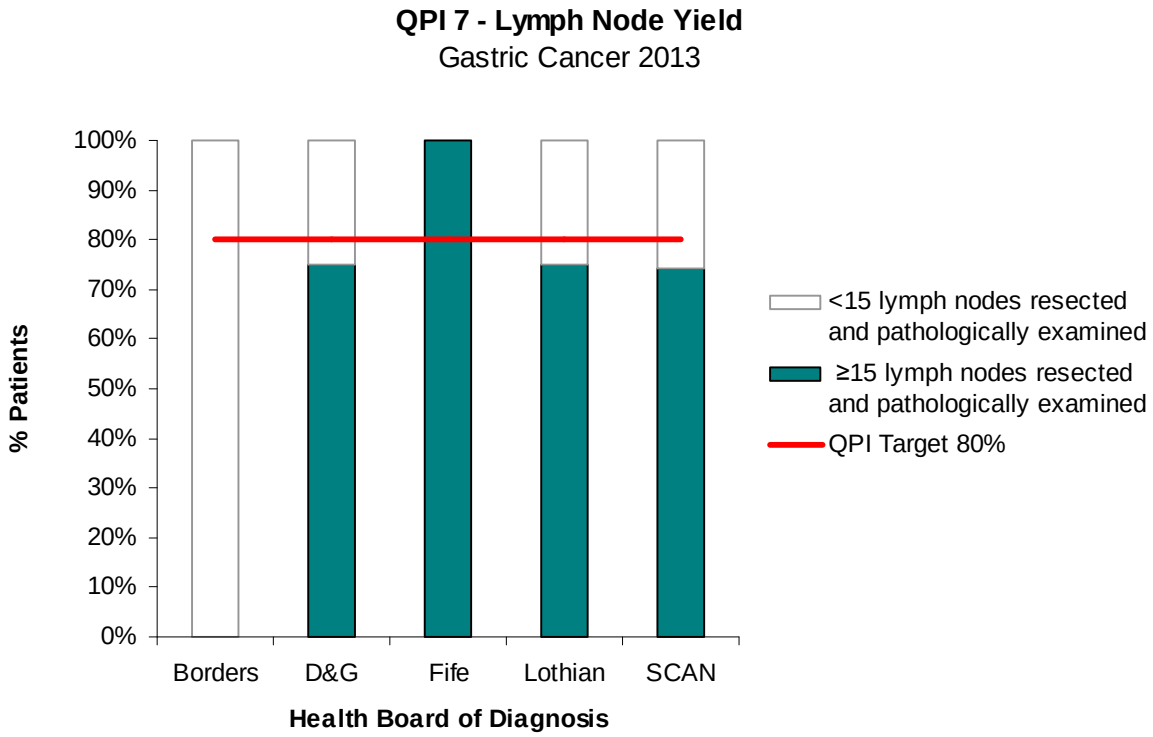
Numerator = Number of patients with gastric cancer who undergo curative surgical resection where ≥15 lymph nodes are resected and pathologically examined

Denominator = All patients with gastric cancer who undergo curative surgical resection

Exclusions = No exclusions

Gastric cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	11	9	29	54	103
Target 80%					
Numerator	0	3	5	15	23
Not recorded for numerator	0	0	0	0	0
Denominator	2	4	5	20	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**75.0**	**100.0**	**75.0**	**74.2**

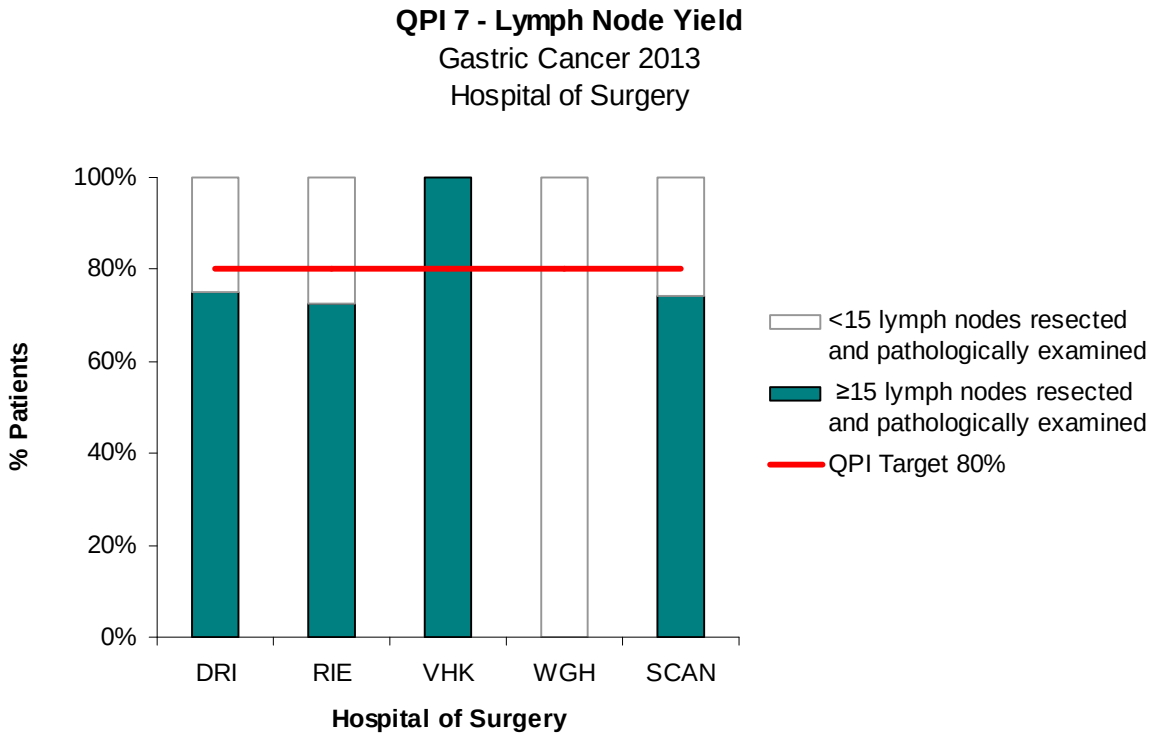


QPI 7 – Lymph Node Yield

The following data for QPI 7 has also been presented by hospital of surgery

Gastric cancer – Hospital of surgery

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort	13	87	33	1	134
Ineligible for this QPI	9	65	29	0	103
Target 80%					
Numerator	3	16	4	0	23
Not recorded for numerator	0	0	0	0	0
Denominator	4	22	4	1	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**75.0**	**72.7**	**100.0**	**0.0**	**74.2**



Comment: The data for this QPI has been based on all patients undergoing gastric resection, including those having a palliative resection or where no nodal dissection has been planned at surgery. Lothian will review cases with <15 nodes, however the results are comparable to England and Wales data from the 2013 AUGIS report (75.6%)[4]. Review of the measurability for this QPI is required as this currently does not allow for the exclusion of palliative resections.

[4] *National Oesophago-Gastric Cancer Audit 2013*, The Royal College of Surgeons of England, 2013, p.46

QPI 8 – Length of Hospital Stay Following Surgery

Target = 60%

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

The following data has been provided by ISD and has been calculated using SMR01[5] returns.

Oesophageal cancer – Hospital of surgery

	RIE	VHK	SCAN
2013 Cohort			
Ineligible for this QPI			
Target 60%			
Numerator	45	1	46
Not recorded for numerator	0	0	0
Denominator	56	2	58
Not recorded for exclusions	0	0	0
Not recorded for denominator	0	0	0
% Performance	**80.4**	**50.0**	**79.3**

Gastric cancer – Hospital of surgery

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort					
Ineligible for this QPI					
Target 60%					
Numerator	3	22	5	0	30
Not recorded for numerator	0	0	0	0	0
Denominator	3	25	5	1	34
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**88.0**	**100.0**	**0.0**	**88.2**

Please note: The numbers of patients shown in the above tables differ from those seen throughout the rest of this report. After further investigation, it was found that the SMR01 data shows patients who had a continuous inpatient stay which ended in 2013 and who underwent surgery during that stay but does not take into account the date of the cancer diagnosis. Therefore this data differs from that collected by audit staff which has been calculated using figures for patients who were diagnosed in 2013 but underwent surgery during 2013-2014. These differences have been highlighted to ISD.

The data which has been collected by audit staff is presented on pages 32-34 of this report.

[5] The Scottish Morbidity Record (SMR01) is an episode-based record relating to all inpatients and day cases discharged from acute hospital admissions in Scotland. A record is formed when a patient is discharged from hospital, changes consultant or is transferred to another hospital or hospital department.

QPI 8 – Length of Hospital Stay Following Surgery

The following data for QPI 8 has also been calculated by audit staff in each health board using the available discharge information. This data has been presented separately by health board of diagnosis and by hospital of surgery.

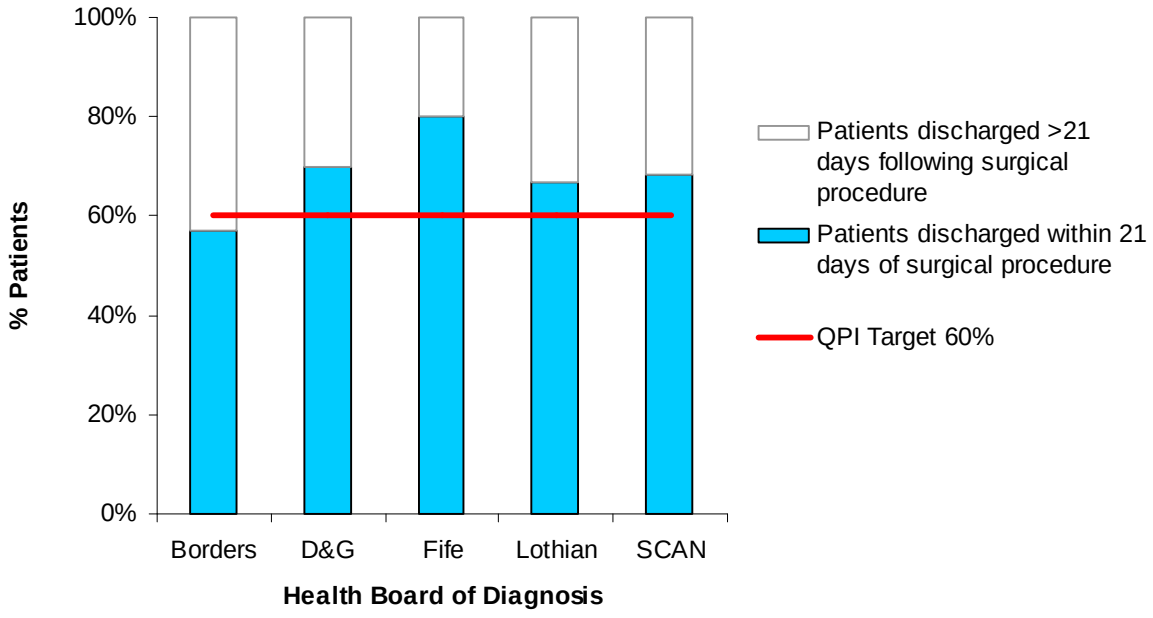
Oesophageal cancer – Health board of diagnosis

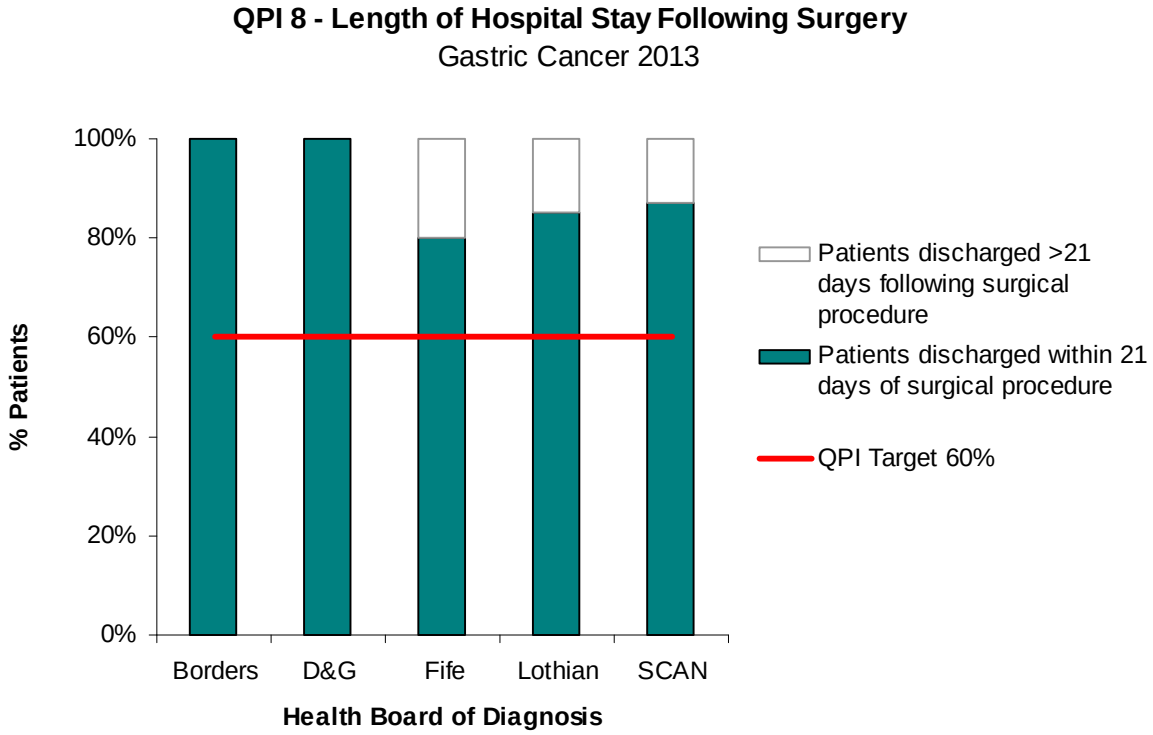
	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	19	23	58	119	219
Target 60%					
Numerator	4	7	8	22	41
Not recorded for numerator	0	0	0	0	0
Denominator	7	10	10	33	60
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**57.1**	**70.0**	**80.0**	**66.7**	**68.3**

Gastric cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	11	9	29	54	103
Target 60%					
Numerator	2	4	4	17	27
Not recorded for numerator	0	0	0	0	0
Denominator	2	4	5	20	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**80.0**	**85.0**	**87.1**

QPI 8 - Length of Hospital Stay Following Surgery
Oesophageal Cancer 2013





QPI 8 – Length of Hospital Stay Following Surgery

The following data for QPI 8 has also been presented by hospital of surgery

Oesophageal cancer – Hospital of surgery

	RIE	SCAN
2013 Cohort	279	279
Ineligible for this QPI	219	219
Target 70%		
Numerator	41	41
Not recorded for numerator	0	0
Denominator	60	60
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**68.3**	**68.3**

Gastric cancer – Hospital of surgery

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort	13	87	33	1	134
Ineligible for this QPI	9	65	29	0	103
Target 60%					
Numerator	4	20	3	0	27
Not recorded for numerator	0	0	0	0	0
Denominator	4	22	4	1	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**90.9**	**75.0**	**0.0**	**87.1**

Comment: Overall SCAN met the QPI for hospital stay. With the introduction of components of enhanced recovery we are actively targeting a reduction in the length of hospital stay.

QPI 9(i) – Resection Margins

Target = 70%

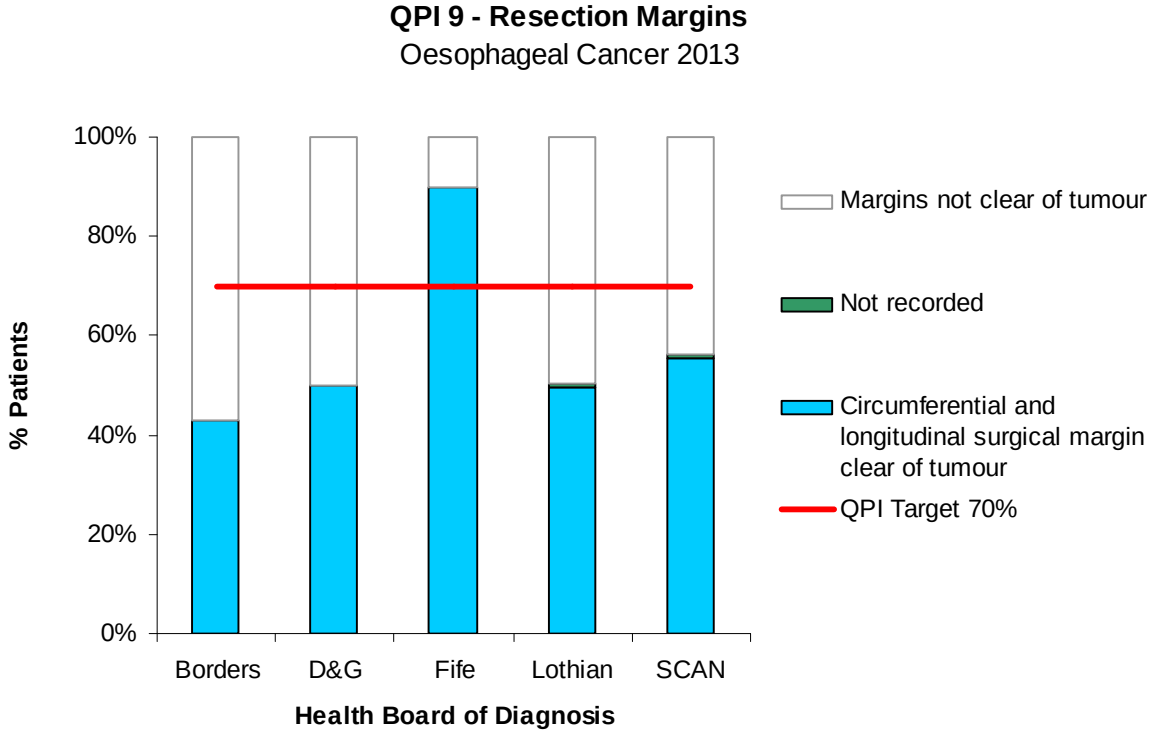
Numerator = Number of patients with oesophageal cancer who undergo surgical resection in which circumferential and longitudinal surgical margin are clear of tumour

Denominator = All patients with oesophageal cancer who undergo surgical resection

Exclusions = No exclusions

Oesophageal cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	19	23	58	119	219
Target 70%					
Numerator	3	5	9	16	33
Not recorded for numerator	0	0	0	1 (3%)	1 (1.7%)
Denominator	7	10	10	33	60
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**42.9**	**50.0**	**90.0**	**48.5**	**55.0**



Comment: All oesophagectomies were performed by Lothian. The 26 cases documented as not having a complete resection have been reviewed. In all cases this relates to the circumferential resection margin. 3 patients had tumour present at the CRM and 23 patients had tumour <1mm from but not involving the CRM. Lothian surgeons will review these cases in detail.

QPI 9(ii) – Resection Margins

Target = 90%

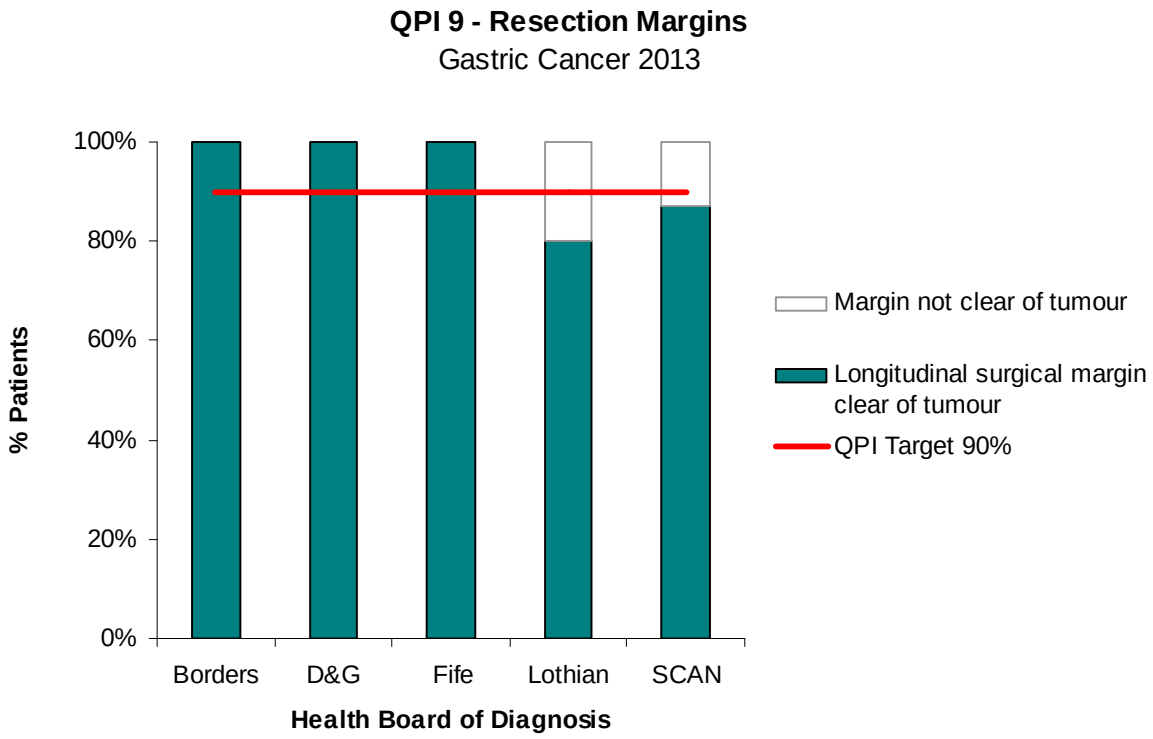
Numerator = Number of patients with gastric cancer who undergo surgical resection in which longitudinal surgical margin is clear of tumour

Denominator = All patients with gastric cancer who undergo surgical resection

Exclusions = No exclusions

Gastric cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	11	9	29	54	103
Target 90%					
Numerator	2	4	5	16	27
Not recorded for numerator	0	0	0	0	0
Denominator	2	4	5	20	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**100.0**	**80.0**	**87.1**



QPI 9 (i) and (ii) – Resection Margins

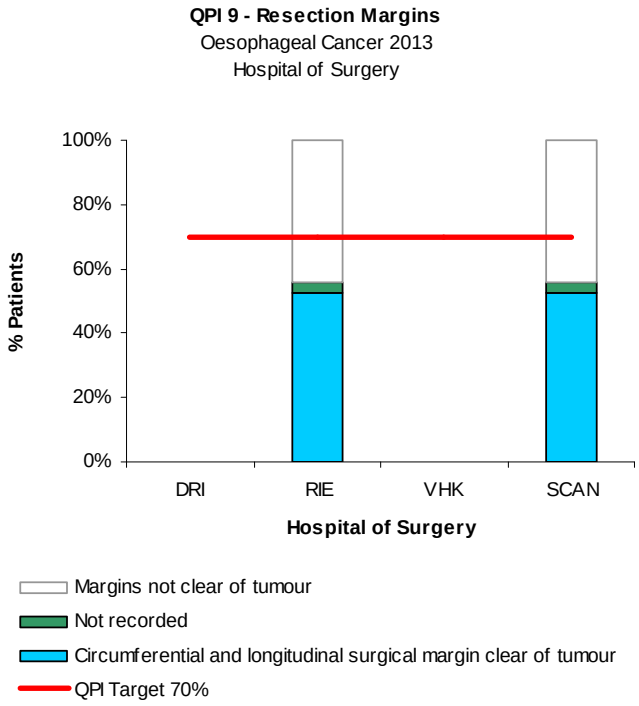
The following data for QPI 9 has also been presented by hospital of surgery

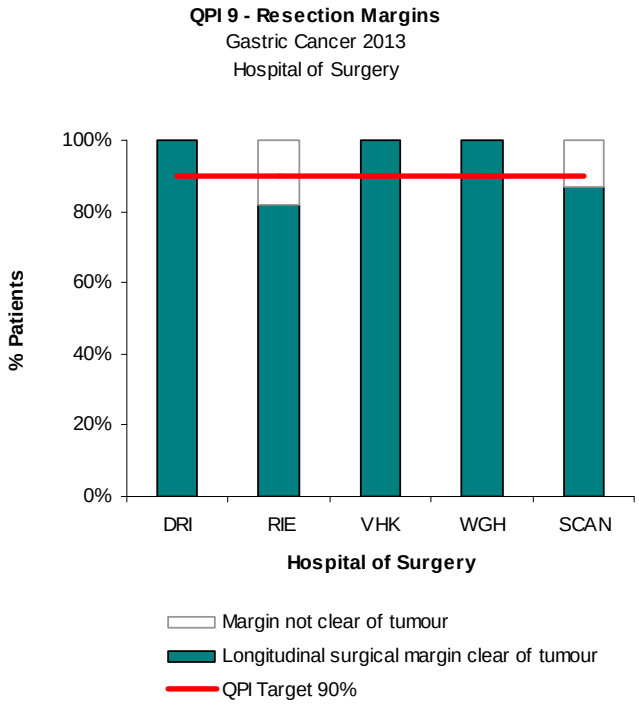
Oesophageal cancer – Hospital of surgery

	RIE	SCAN
2013 Cohort	279	279
Ineligible for this QPI	219	219
Target 70%		
Numerator	33	33
Not recorded for numerator	1 (3%)	1 (1.7%)
Denominator	60	60
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**55.0**	**55.0**

Gastric cancer – Hospital of surgery

	DRI	RIE	VHK	WGH	SCAN
2013 Cohort	13	87	33	1	134
Ineligible for this QPI	9	65	29	0	103
Target 90%					
Numerator	4	18	4	1	27
Not recorded for numerator	0	0	0	0	0
Denominator	4	22	4	1	31
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**81.8**	**100.0**	**100.0**	**87.1**





QPI 10 – Curative Treatment Rates

Target = 35%

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

Denominator = All patients with oesophageal or gastric cancer

Exclusions = No exclusions

Oesophageal cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	0	0	0	0	0
Target 35%					
Numerator	7	11	20	45	83
Not recorded for numerator	0	0	0	0	0
Denominator	26	33	68	152	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**26.9**	**33.3**	**29.4**	**29.6**	**29.7**

Oesophageal cancer curative treatment rates – 2012 audit results

	Borders	D&G	Fife	Lothian	SCAN	Scotland
% Performance	**28.0**	**14.3**	**31.9**	**27.0**	**27.0**	**27.2**

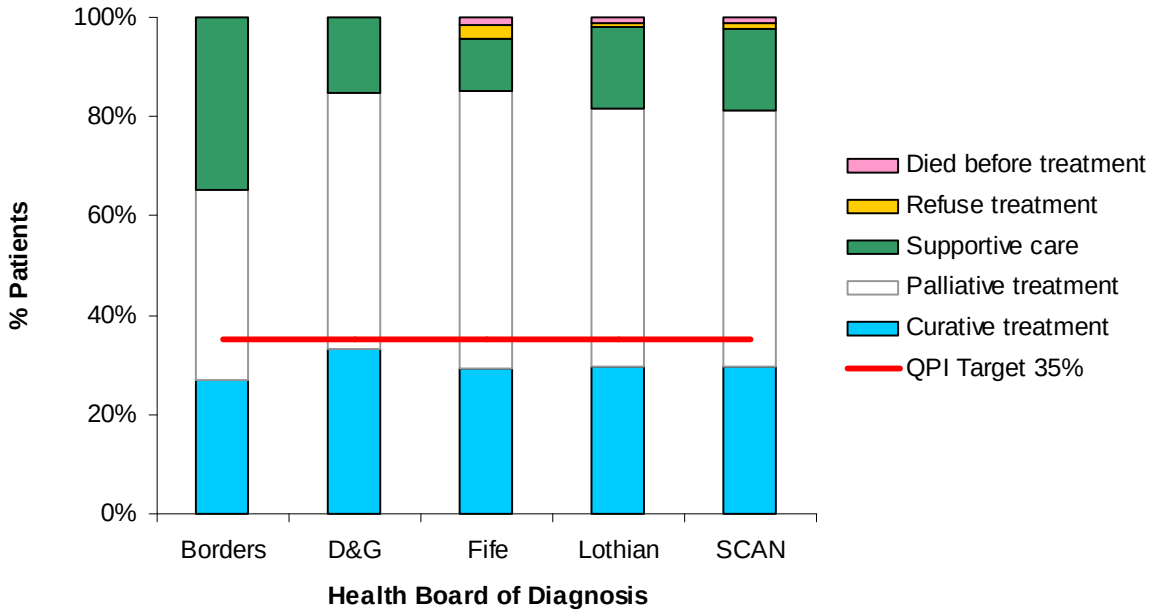
Gastric cancer – Health board of diagnosis

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	0	0	0	0	0
Target 35%					
Numerator	2	4	5	20	31
Not recorded for numerator	0	0	0	0	0
Denominator	13	13	34	74	134
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**15.4**	**30.8**	**14.7**	**27.0**	**23.1**

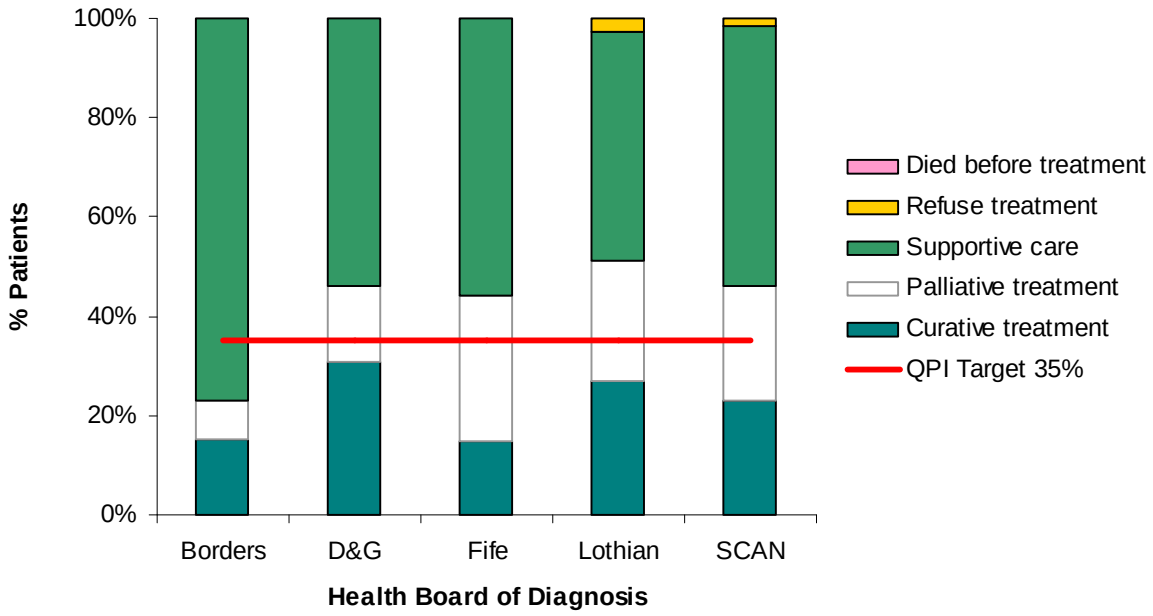
Gastric cancer curative treatment rates – 2012 audit results

	Borders	D&G	Fife	Lothian	SCAN	Scotland
% Performance	**22.2**	**25.0**	**24.1**	**34.1**	**30.5**	**25.3**

QPI 10 - Curative Treatment Rates
Oesophageal Cancer 2013



QPI 10 - Curative Treatment Rates
Gastric Cancer 2013



Comment: The curative treatment rate of 29.7% for oesophageal cancer is comparable with 2012 data. Rates were similar across all health boards.
The curative treatment rates for gastric cancer were lower this year for Fife and Borders. It is noted that these cases are already discussed at the Lothian MDT; Fife and Borders should consider reviewing reasons for non-curative treatment (e.g. fitness, stage of disease).
The target to increase these rates should be through earlier diagnosis. We will compare and discuss these rates at the next OG National Meeting.

ONCOLOGICAL TREATMENT OUTCOMES

QPI 11(i) – 30/90 Day Mortality Following Curative Oncological Treatment

Target = <10%

Numerator = Number of patients with oesophageal or gastric cancer who receive curative oncological treatment who die within 30/90 days of treatment

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

Exclusions = No exclusions
Note: This indicator requires to be reported by treatment modality and intent

Oesophageal cancer – 30-day mortality for curative treatment

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	20	26	56	126	228
Target <10%					
Chemoradiotherapy	n/a	0	0	0	0
Neo-adjuvant chemotherapy	0	0	0	0	0
Adjuvant chemotherapy	n/a	0	0	n/a	0
Adjuvant radiotherapy	n/a	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	12	26	51
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Oesophageal cancer – 90-day mortality for curative treatment

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	20	26	56	126	228
Target <10%					
Chemoradiotherapy	n/a	0	0	0	0
Neo-adjuvant chemotherapy	0	0	0	1	1
Adjuvant chemotherapy	n/a	0	0	n/a	0
Adjuvant radiotherapy	n/a	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	12	26	51
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**0.0**	**3.8**	**1.9**

Lothian: One patient died post-operatively.

Gastric cancer – 30-day mortality for curative treatment

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	13	12	33	70	128
Target <10%					
Chemoradiotherapy	n/a	0	0	n/a	0
Neo-adjuvant chemotherapy	n/a	0	0	0	0
Adjuvant chemotherapy	n/a	0	0	0	0
Adjuvant radiotherapy	n/a	0	0	n/a	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	1	4	6
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**n/a**	**0.0**	**0.0**	**0.0**	**0.0**

Gastric cancer – 90-day mortality for curative treatment

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	13	12	33	70	128
Target <10%					
Chemoradiotherapy	n/a	0	0	n/a	0
Neo-adjuvant chemotherapy	n/a	0	0	0	0
Adjuvant chemotherapy	n/a	0	0	0	0
Adjuvant radiotherapy	n/a	0	0	n/a	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	1	4	6
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**n/a**	**0.0**	**0.0**	**0.0**	**0.0**

QPI 11(ii) – 30 Day Mortality Following Palliative Oncological Treatment

Target = <20%

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
Note: This indicator requires to be reported by treatment modality and intent

Oesophageal cancer – 30-day mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	26	33	68	152	279
Ineligible for this QPI	23	24	57	121	225
Target <20%					
Palliative chemotherapy	0	1	0	2	3
Palliative radiotherapy	0	0	0	1	1
Not recorded for numerator	0	0	0	0	0
Denominator	3	9	11	31	54
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance chemotherapy	**0.0**	**11.1**	**0.0**	**6.5**	**5.6**
% Performance radiotherapy	**0.0**	**0.0**	**0.0**	**3.2**	**1.9**

Gastric cancer – 30-day mortality

	Borders	D&G	Fife	Lothian	SCAN
2013 Cohort	13	13	34	74	134
Ineligible for this QPI	12	13	32	62	119
Target <20%					
Palliative chemotherapy	0	n/a	0	1	1
Palliative radiotherapy	n/a	n/a	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	2	12	15
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance chemotherapy	**0.0**	**n/a**	**0.0**	**8.3**	**6.7**
% Performance radiotherapy	**n/a**	**n/a**	**0.0**	**0.0**	**0.0**

APPENDICES

Appendix I – Glossary

Adjuvant therapy/ treatment
Additional cancer treatment given after the primary treatment to lower the risk that the cancer will come back. Adjuvant therapy may include chemotherapy, radiation therapy, hormone therapy, targeted therapy or biological therapy.

Audit
The measuring and evaluation of care against best practice with a view to improving current practice and care delivery.

Biopsy
Removal of a sample of tissue from the body to assist in diagnosis of a disease.

Case ascertainment
Number of cases recorded as a proportion of those expected using the average of the most recent available five years reported in the Scottish Cancer Registry.

Case-mix
Population of patients with different prognostic factors.

Chemotherapy
The use of drugs that destroy cancer cells, or prevent or slow their growth.

Chemoradiotherapy
Term used to describe chemotherapy and radiotherapy used in combination. This can be adjuvant, neo-adjuvant or concurrent.

Circumferential resection margins
Margins of tissue surrounding a cancer after it has been removed.

Co-morbidity
The condition of having two or more diseases at the same time

Computed Tomography (CT) scan
An X-ray imaging technique used in diagnosis that can reveal many soft tissue structures not shown by conventional radiography. A computer is used to assimilate multiple X-ray images into a two-dimensional cross-sectional image.

Curative Treatment
Treatment which is given with the aim of curing the cancer.

Diagnosis
The process of identifying disease from its signs and symptoms.

Dietetic
The application of principles of nutrition to the selection of food and feeding

Endoscopy
A procedure which uses an endoscope to examine the inside of the body. An endoscope is a thin, tube like instrument with a light and a lens for viewing. It may also have a tool to remove tissue to be checked under a microscope for signs of disease.

Gastric
Having to do with the stomach

GRO Records
General Register Office Records provide official government information on births, marriages and deaths.

Histology/Histological
The study of cells and tissue on the microscopic level.

Longitudinal
Pertaining to a measurement in the direction of the long axis of an object, body or organ.

Lymph nodes
Small bean shaped organs located along the lymphatic system. Nodes filter bacteria or cancer cells that might travel through the lymphatic system.

Malignant
Cancerous. Malignant cells can invade and destroy nearby tissue and spread to other parts of the body.

MDM
The Multi-Disciplinary Meeting of the MDT. See **MDT**.

MDT: Multi-Disciplinary Team
A multi-professional group of people from different disciplines (both healthcare and non-healthcare) who work together to provide care for patients with a particular condition. The composition of multi-disciplinary teams will vary according to many factors. These include: the specific condition, the scale of the service being provided; and geographical/ socio-economic factors in the local area.

Metastatic disease
Spread of cancer away from the primary site to somewhere else, e.g. via the bloodstream or the lymphatic system.

Mortality
Either (i) the condition of being subject to death; or (ii) the death rate, which reflects the number of deaths per unit of population in any specific region, age group, disease or other classification.

Neo-adjuvant chemotherapy
Drug treatment which is given before the treatment of a primary tumour with the aim of improving the results of surgery and preventing the development of metastases.

Oesophagogastric
Pertaining to the oesophagus and the stomach.

Oesophagus/Oesophageal
The muscular membranous tube for the passage of food from the throat to the stomach; the gullet.

Outcome
The end result of care and treatment and/or rehabilitation. In other words, the change in health, functional ability, symptoms or situation of a person which can be used to measure the effectiveness of care and treatment, and/or rehabilitation.

Palliative care
Palliative care is the active total care of patients and their families by a multi-professional team when the patient's disease is no longer responsive to curative treatment.

Palliative Radiotherapy
When it is not possible to cure a cancer, radiotherapy can be given to alleviate symptoms and improve quality of life. Lower doses are given than for curative or radical radiotherapy and generally over a shorter period of time.

Pathological diagnosis
The microscopic examination (histological or cytological) of the specimen by a pathologist to determine the presence of malignancy and the classification of the malignant tumour.

Primary Tumour
Original site of the cancer. The mass of tumour cells at the original site of abnormal tissue growth.

Radical Radiotherapy
Radiotherapy is given with the aim of destroying cancer cells to attain cure.

Radiotherapy
The use of radiation, usually X-rays or gamma rays, to kill tumour cells.

Resection
Surgical removal of a portion of any part of the body.

R0 Resection
Complete removal of all tumour with microscopic examination of resection margins showing no tumour cells

Staging
The process of determining whether cancer has spread. Staging involves clinical, surgical, radiological and pathological assessment

TNM Classification
TNM classification provides a system for staging the extent of cancer. T refers to the size and position of the primary tumour. N refers to the involvement of the lymph nodes. M refers to the presence or absence of distant metastases.

Treatment intent
The reason for which treatment is given, that is, whether the treatment is intended to cure the disease or to alleviate symptoms.

Tumour
An abnormal mass of tissue. A tumour may be either benign (not cancerous) or malignant. Also known as a neoplasm.

Appendix II – Upper GI QPI Baseline Review Comments

QPI Title	Query/Issue	Raised by	Action Proposed
QPI 2 **Radiological Staging**	Should the wording of the QPI be amended to 'adequate radiological staging' to allow for the fact that sufficient staging may not include all modalities stated in the specification as stands.	National Meeting	**Action** – Remove 'contrast enhanced' from the QPI wording. Amend to 'CT of abdomen +/- chest +/- pelvis.
	Does the target adequately reflect that patients with advanced gastric cancer will not undergo CT or further staging?	National Meeting	**No Action** – Target aligns with data from NHS England and Wales.
	Does the target of 90% for this QPI in effect mean that QPI 3 cannot be attained?	National Meeting	As above.
QPI 3 **Staging and Treatment Intent**	We have a few patients failing this QPI due to treatment intent code 94 - they were deceased prior to MDT, therefore should they not be excluded from this QPI? There are another few patients who are intent code 95 -patient refused treatment; would the same not apply to these patients? The tolerance within this target accounts for situations where patients are not fit enough to undergo investigations and/or treatment. As the QPI does not specifically exclude patients who died before MDT or refused treatment perhaps the tolerance within this target also takes into account these patients.	NHS Lanarkshire ISD	**No Action** – The baseline review group felt that non-attainment could be due to MDT documentation issues. Patients who die before treatment should still be discussed at MDT for the purpose of registration. The existing target tolerance accounts for patients who refuse treatment.
	Patients who died before MDT & patients who refused treatment should be excluded.	NOSCAN	As above.
	It would be of interest to look at which element was the most problematic to record at MDT, i.e. whether stage, treatment intent or both.	National Meeting	**Action** – Amend the QPI to include separate specifications for (i) staging and (ii) treatment intent to allow for better audit of why Boards do not meet this QPI. The overall figure will be retained to allow for clear comparison.
QPI 4 **Nutritional Assessment**	In its current format, this QPI does not measure anything useful as it does not take into account the patients need for dietetic referral. It has been proposed by the SCAN Upper GI Group that a more useful measure would be to have a small dietetic assessment completed by clinicians for all patients; this assessment would	SCAN	**No Action** – The baseline review group acknowledged that this QPI might not accurately capture whether those patients that require nutritional assessment are referred to a

QPI Title	Query/Issue	Raised by	Action Proposed
	identify the need for dietetic review. The QPI could then measure how many of those patients who are identified as needing dietetic review were subsequently seen by a dietician.		dietitian. However, the data indicates that access to dietetic advice appears to vary across Scotland. A comprehensive assessment of the merit of this indicator will only be possible after three years of data analysis and will help to inform any future revision of this indicator.
	None of the WoS boards met the target. Feedback suggests lack of dedicated resource/many patients are seen after first treatment commences.	WoSCAN	As above.
QPI 7 **Lymph Node Yield**	The denominator for this QPI states that it should include patients undergoing curative surgical resection, however the measurability for this QPI does not allow for the exclusion of patients who are undergoing palliative resections.	SCAN	**Action** – add sentence to detail that, given the current data definitions, it is not possible to exclude palliative surgical cases. Agreed that the target tolerance accounts should account for these cases.
	Measurability includes palliative partial gastrectomy as the surgical operation code is used to identify the denominator and not the intent of the treatment; this means the palliative patient is included even though the numerator states curative resections only.	WoSCAN	As above.
QPI 8 **Length of Hospital Stay Following Surgery**	A detailed measurability document for this QPI is required. Data needs to be checked against what's available from audit. A rolling Caldicott agreement should be put in place to ensure checking is possible within the constraints of the reporting timeframe.	SCAN	**No Action** – ISD colleagues are progressing work to provide a detailed measurability specification in conjunction with Regions / Boards.
	Appears to be SMR coding issues (not all FV patients were included in report). Was noted in Lanarkshire on dictating discharges that the recorded point of discharge is often at the later assessment which can be between 3 and 7 days from the point of hospital discharge.	WoSCAN	**No Action** – Local coding issues should be further investigated at a Board level.
	Patients with gastric and oesophageal cancers may require different lengths of hospital stay. There was concern that the 21-	National Meeting	**Action** – 2014 patient data will include measurement of patients with

QPI Title	Query/Issue	Raised by	Action Proposed
	day target for gastric cancer may not be sufficiently challenging.		gastric cancers discharged from hospital at 14 and 21 days and the QPI will be reviewed following review and discussion of this additional data.
QPI 9 **Resection Margins**	Measurability is not correct for oesophageal patients. NR for numerator counts any patients with LMARGIN or CMARGIN = 99 as not recorded however if one of these is = 1 this is a positive margin and therefore does not meet target.	WoSCAN	**No Action** – This is an eCASE coding issue and will be addressed by the eCASE Development Team.
	The way involved margins are calculated for this QPI (combining circumferential and longitudinal margins) might not adequately identify cases where the best possible margin of resection has been achieved.	National Meeting	**Action** – Amend QPI specifications and measurability to measure circumferential and longitudinal margins separately for oesophageal cancers given the differing significance of margin positivity. The overall figure will also be measured to allow for clear comparison.
QPI 10 **Curative Treatment Rates**	We have a number of patients failing this QPI and again just wondering why patients are not excluded if they are for supportive care only or deceased? We also have a few patients who have radical radiotherapy as their first treatment and would this not be classed as curative treatment? The QPI does not specifically exclude patients who die or are for supportive care only which is why they are not excluded in the measurability criteria. With regard to patients who have radical radiotherapy as a first treatment the QPI states that radiotherapy alone is an option in patients considered unsuitable for combination therapy but is rarely curative for oesophageal cancer.	NHS Lanarkshire ISD	**No Action** – This QPI is intended as a composite measure of the entire diagnostic and staging pathway, but recognises that the majority of patients will have advanced disease at presentation.
	The SCAN group felt that this was an aspirational target which, along with the need for earlier diagnosis, requires further discussion at the Upper GI National Meeting.	SCAN	**No Action** – Noted, no action required.
	Chemoradiotherapy is stated as being a radical treatment - high dose palliative chemoradiotherapy is given in some cases in Grampian and this is not a radical treatment however for a data recording issue there is no way to distinguish between radical and	NOSCAN	**No Action** – The description of chemoradiotherapy in the data definitions is "curative treatment" therefore palliative chemo-

QPI Title	Query/Issue	Raised by	Action Proposed
	palliative as it is simply recorded as chemoradiotherapy and therefore all cases "assumed" to be radical in the analysis.		radiotherapy should not be recorded using this definition.
QPI 11 **30/90 Day Mortality Following Oncological Treatment**	Where patients are still alive and 30 days have not passed since the treatment end date, should these patients be included or excluded. Seems to be differing practice between regional information teams.	WoSCAN	**Action** – Where 30 days has not elapsed following treatment patients should be excluded from the measurement. Measurability specification will be updated to account for this.
	Mortality data for this category is usually attributable to the surgery not the neo-adjuvant chemotherapy and we wonder what the value of this section is.	NOSCAN National Meeting	**Action** – Amend the QPI to capture 30-day mortality for patients who undergo peri-operative chemotherapy.
	Mortality data for oncological treatments includes small numbers of patients in each category which is not hugely meaningful. It would be more appropriate to look at peri-operative chemotherapy as one category.	National Meeting	**Action** – Amend QPI to measure 30-day mortality following peri-operative chemotherapy (including: neo-adjuvant and adjuvant chemotherapy).
	Adjuvant radiotherapy is not a recognised treatment option for patients with upper GI cancer, and is used only rarely in specific clinical circumstances.	National Meeting	**Action** – Remove adjuvant radiotherapy from this QPI. Where this treatment is used this data can be analysed and reviewed locally.

Appendix III – National Action Points

QPI	Action required	Person responsible for action	Date for update	Progress
QPI 1	All boards agreed to undertake targeted audit to investigate the reasons why patients were not diagnosed at the time of initial endoscopy, to identify whether appropriate biopsy protocols were used and to evaluate any delays in diagnosis.	Mr P Lamb (SCAN) Mr M Forshaw (WoSCAN) Mr S Shimi (NoSCAN)	Upper GI National Meeting November 2015	
QPI 4	All boards have agreed to undertake targeted audit to evaluate whether all patients require a formal dietetic assessment or whether a nutritional screening tool could help to identify those requiring formal dietetic assessment. The results of this audit can be used to inform future discussions on the revision of this QPI.	Mr P Lamb (SCAN) Mr M Forshaw (WoSCAN) Mr S Shimi (NoSCAN)	Upper GI National Meeting November 2015	
QPI 6	It was agreed that data from the past three years should be obtained and further analysis undertaken regarding post-operative mortality across the networks. Given the evidence from the UK and United States for improved outcomes in high volume units each Network should review where surgery is performed.	Mr P Lamb (SCAN) Mr M Forshaw (WoSCAN) Mr S Shimi (NoSCAN)	Upper GI National Meeting November 2015	
QPI 10	It was noted that there is a variation across the Networks in the type of curative treatment used for Oesophageal cancer. The Networks have agreed to undertake targeted audit, to be presented at the next national meeting, to identify the reasons for this variance and any differences in outcome to ensure equity of care across Scotland.	Mr P Lamb (SCAN) Mr M Forshaw (WoSCAN) Mr S Shimi (NoSCAN)	Upper GI National Meeting November 2015	