

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

OESOPHAGO-GASTRIC CANCER 2016

COMPARATIVE AUDIT REPORT

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Patients diagnosed 1 January 2016 – 31 December 2016

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DOCUMENT HISTORY

Version	Circulation	Date	Comments
Version 1	SCAN Upper GI Group	21st August 2017	
Version 2	SCAN Upper GI Group meeting	25 th August 2017	Actions identified. Lead clinician's commentary added
Version 3	Final draft report circulated to SCAN Upper GI Group	27 th September 2017	
Version 4	Final report and action plans circulated to SCAN Upper GI Group and Clinical Governance Groups	20 th October 2017	Assessed for disclosure.
Version 4W	Final report added to the SCAN website	5 th March 2018	

OESOPHAGO-GASTRIC CANCER 2016 COMPARATIVE AUDIT REPORT

COMMENT BY CHAIR OF THE SCAN UPPER GI GROUP

The introduction of oesophagogastric cancer QPIs has led to a significant improvement in the level and quality of audit data with the aim of driving good practice and equity of care. The SCAN audit administrators have worked extremely hard to provide complete and accurate data for the 2016 report.

In many QPIs there has been an improvement in performance driven by key areas of good practice:

1. A SCAN-wide oesophagogastric cancer MDT was implemented in 2016 (including Lothian, Fife, Borders, and Dumfries & Galloway Boards) to ensure equity of care and promote good practice including communication between boards and collection of QPI data.
2. There is ongoing high performance in postoperative and post oncology treatment outcomes reflecting good team work, case selection, and multidisciplinary care of patients.
3. Clinical trial leads Dr Wall (oncology) and Mr Skipworth (surgery) have improved the communication and recording of clinical trials and translational research in SCAN region for OG cancer.

However, there are some QPIs where the results are repeatedly below the target level and represent a challenge for both SCAN and at a national level:

1. QPI 5 – The nutritional QPI has proved difficult, particularly with recording of data – a national short life working group has looked at this and the QPI has been significantly revised for next cycle.
2. QPI 10 – SCAN was noted to have higher levels of CRM positive margins after oesophagectomy in 2013-15. This has been reviewed locally to look at case selection, types of neo-adjuvant therapy, surgery, and pathological assessment. 2016 results show a marked improvement although further work is required to meet the QPI criteria.
3. Failure to meet the curative treatment rate QPI requires a national drive towards earlier diagnosis for oesophagogastric cancer.

We have also been involved in a national QPI review process following completion of the first three year QPI cycle. This has identified many areas of good practice and also some areas for development, and should provide robust data to improve patient care. Importantly, future QPI data must be augmented by a national analysis of survival outcomes.

Mr Peter Lamb

Chair, SCAN Upper GI Group

September 2017

SCAN ACTION POINTS 2015

QPI	Action required	Lead	Progress
QPI 4	The MDM chair should articulate the stage and intent with a verbal summary at the MDM.	Peter Lamb	This has been circulated around chairs of MDT results are improved in 2016 QPI data
QPI 6	Fife to review individual cases	Peter Driscoll	Fife cases have been reviewed and no further action is required.
Clinical Trials QPI	Potential new interventional trial protocols are to be circulated for consideration in SCAN.	Lucy Wall Richard Skipworth	This has been discussed at SCAN and current and proposed trials are now listed and circulated

SCAN ACTION POINTS 2016

No.	Action Required	Person Responsible	Date for Update
QPI 5	SCAN has repeatedly failed to meet the nutritional QPI target. A new QPI has been developed for next cycle. SCAN need to develop protocols for recording MUST scores and documenting referral / review by dietician	Bev Wallace / Louise Graham	Nov 2017
QPI 8	The oesophagectomy cases with less than 15 lymph nodes require review by surgical department and by pathology to ensure standardisation of surgery and pathological assessment.	Peter Lamb / Vikki Save	Feb 2018
QPI 9	We are developing postoperative protocols with ERAS components to optimise postoperative care	Richard Skipworth / Peter Lamb	Feb 2018

OG QPI Attainment Summary 2016		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 1: Endoscopy - Histological diagnosis made within 6 weeks of initial endoscopy and biopsy	Oesophageal	95	N 24 D 24	100%	N 36 D 40	90%	N 72 D 74	97.3%	N 132 D 133	99.2%	N 264 D 271	97.4%
	Gastric	95	N 6 D 6	100%	N 7 D 7	100%	N 20 D 22	90.9%	N 32 D 32	100%	N 65 D 67	97.0%
QPI 2 – Radiological Staging - Formal review removed QPI 2 from year 4 reporting.												
QPI 3: MDT before definitive treatment	Oesophageal	95	N 21 D 23	91.3%	N 38 D 40	95%	N 71 D 74	95.9%	N 131 D 135	97%	N 261 D 272	96.0%
	Gastric	95	N 5 D 6	83.3	N 5 D 7	71.4%	N 22 D 22	100%	N 30 D 35	85.7%	N 62 D 70	88.6%
QPI 4: TNM Staging recorded at MDT prior to treatment	Oesophageal	90	N 22 D 24	91.7%	N 34 D 40	85%	N 72 D 75	96.0%	N 137 D 138	99.3%	N 265 D 277	95.7%
	Gastric	90	N 5 D 6	83.3%	N 6 D 7	85.7%	N 20 D 23	87.0%	N 31 D 35	88.6%	N 62 D 71	87.3%
QPI 4: TNM Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	N 23 D 24	95.8%	N 38 D 40	95%	N 71 D 75	94.7%	N 136 D 138	98.6%	N 268 D 277	96.8%
	Gastric	95	N 5 D 6	83.3%	N 7 D 7	100%	N 23 D 23	100%	N 33 D 35	94.3%	N 68 D 71	95.8%
QPI 5: Nutritional Assessment. Referral to a dietician within 4 weeks of diagnosis	Oesophageal	85	N 23 D 24	95.8%	N 26 D 40	65%	N 38 D 75	50.7%	N 58 D 138	42.0%	N 145 D 277	52.3%
	Gastric	85	N 4 D 6	66.7%	N 4 D 7	57.1%	N 13 D 23	56.5%	N 9 D 35	25.7%	N 30 D 71	42.3%
QPI 6: Appropriate Selection. Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	N 6 D 6	100%	N 6 D 7	85.7%	N 13 D 16	81.3%	N 18 D 21	85.7%	N 43 D 50	86.0%
	Gastric	80	N 0 D 0	-	N 0 D 0	-	N 1 D 1	100%	N 1 D 1	100%	N 2 D 2	100%
QPI 7(i): 30 Day Mortality Following Surgery (Presented by Board of surgery)	Oesophageal	<5	Board of Surgery					N 1 D 69	1.4%	N 1 D 69	1.4%	
	Gastric	<5	Board of Surgery					N 0 D 14	0.0%	N 0 D 14	0.0%	

QPI 7(ii): 90 Day Mortality Following Surgery (Presented by Board of surgery)	Oesophageal	<7.5	Board of Surgery			N 1 1.4%	N 1 1.4%	D 69	D 69				
	Gastric	<7.5	Board of Surgery			N 0 0.0%	N 0 0.0%	D 14	D 14				
QPI 8: Lymph Node Yield - Curative resection where ≥15 lymph nodes are resected and examined. (Presented by Board of surgery)	Oesophageal	90	Board of Surgery			N 58 84.1%	N 58 84.1%	D 69	D 69				
	Gastric	80	Board of Surgery			N 10 83.3%	N 10 83.3%	D 12	D 12				
QPI 9: Hospital Stay. Discharge within 14 days of surgical procedure (Presented by Board of surgery)	Oesophageal	60	Board of Surgery			N 35 56.6%	N 35 56.4%	D 62	D 62				
	Gastric	60	Board of Surgery			N 13 81.8%	N 13 81.3%	D 16	D 16				
QPI 10i: Oesophageal resection margins. Circumferential clear (Presented by Board of surgery)		70	Board of Surgery			N 44 63.8%	N 44 63.8%	D 69	D 69				
QPI 10ii: Longitudinal margins clear (Presented by Board of surgery)	Oesophageal	90	Board of Surgery			N 66 95.7%	N 66 95.7%	D 69	D 69				
	Gastric	90	Board of Surgery			N 14 100%	N 14 100%	D 14	D 14				
QPI 11: Curative Treatment Rates	Oesophageal	35	N 6 25%	N 9 22.2%	N 25 33.3%	N 40 29.0%	N 80 28.9%	D 24	D 40	D 75	D 138	D 277	
	Gastric	35	N 1 16.7%	N 2 28.6%	N 3 13.0%	N 8 22.9%	N 14 19.7%	D 6	D 7	D 23	D 35	D 71	
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal Curative Chemoradiotherapy		<5	N 0 -	N 0 -	N 0 0.0%	N 0 0.0%	N 0 0.0%	N 0 0.0%	D 0	D 4	D 5	
	Oesophageal Peri-operative Chemotherapy		<5	N 0 0.0%	N 0 0.0%	N 0 0.0%	N 0 0.0%	N 0 0.0%	N 0 0.0%	D 6	D 7	D 16	D 20
	Oesophageal Adjuvant Chemotherapy		<5	N 0 -	N 0 -	N 0 0.0%	N 0 -	N 0 0.0%	N 0 -	D 0	D 16	D 0	D 16
	Oesophageal Adjuvant Radiotherapy		<5	N 0 -	N 0 -	N 0 -	N 0 0.0%	N 0 0.0%	N 0 0.0%	D 0	D 0	D 1	D 1
	Gastric Curative Chemoradiotherapy		<5	N 0 -	N 0 -	N 0 -	N 0 -	N 0 -	N 0 -	D 0	D 0	D 0	D 0

	Gastric Peri-operative Chemotherapy	<5	N 0 0.0% D 0	N 0 - D 0	N 0 0.0% D 1	N 0 0.0% D 1	N 0 0.0% D 2
	Gastric Adjuvant Chemotherapy	<5	N 0 - D 0	N 0 - D 0	N 0 - D 0	N 0 - D 0	N 0 - D 0
	Gastric Adjuvant Radiotherapy	<5	N 0 - D 0	N 0 - D 0	N 0 - D 0	N 0 - D 0	N 0 - D 0
	Oesophageal Palliative Chemotherapy	<5	N 0 0.0% D 4	N 0 0.0% D 2	N 0 0.0% D 12	N 1 4.0% D 25	N 1 2.3% D 43
	Oesophageal Palliative Radiotherapy	<5	N 0 0.0% D 3	N 0 0.0% D 3	N 2 11.1% D 18	N 0 0.0% D 14	N 2 5.3% D 38
	Gastric Palliative Chemotherapy	<5	N 0 - D 0	N 0 - D 0	N 0 0.0% D 1	N 0 0.0% D 4	N 0 0.0% D 5
	Gastric Palliative Radiotherapy	<5	N 0 - D 0	N 0 - D 0	N 0 - D 0	N 0 0.0% D 3	N 0 0.0% D 3
Clinical Trial Access QPI	OG Patients enrolled in Interventional Clinical Trials	7.5	N 0 0.0% D 39	N 0 0.0% D 45	N 1 1.0% D 99	N 10 3.7% D 216	N 11 2.8% D 399
	OG Patients enrolled in Translational Research	15	N 11 28.2% D 39	N 11 24.4% D 45	N 27 27.2% D 99	N 56 26.0% D 216	N 105 26.3% D 399

INTRODUCTION AND METHODS

Cohort

This report covers patients diagnosed with an Oesophageal or Gastric cancer from 01.01.2016 – 31.12.2016. The results contained within this report have been presented by NHS board of diagnosis, where the QPI relates to surgical outcomes the results will also be 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.

Accompanying datasets and measurability criteria for QPIs are published on the ISD website¹. 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. A formal 3 year review of the Upper GI Cancer QPIs was undertaken and published on the HIS website in April 2017. The revised QPIs are used to report year 4 data with the existing data fields and using the new measurability. Where new data fields are required, collection and reporting will start in year 5.

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 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 Kirsty Martin, 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	Alistair Johnston
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Mr Jeyakumar Apollos	Laura Allan
NHS Fife	Queen Margaret Hospital Victoria Hospital	Mr Peter Driscoll	Maureen Lamb
SCAN & NHS Lothian	St Johns Hospital Royal Infirmary Edinburgh Western General Hospital	Mr Peter Lamb	Kirsty Martin
	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 Oesophago-Gastric data was carried out in July 2014 and this showed an average of 97.2% data accuracy for SCAN and the average accuracy for Scotland was 98.8% accuracy

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 25th August 2017
- The final draft of the regional report was circulated to members of the SCAN Upper GI Group on 27th September 2017.

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 2011 to 2015. 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 01.01.2016 – 31.12.2016

Tumour Site	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
Oesophageal Cancer	24	80.0	40	85.1%	75	76.5	138	79.8	277	79.6%
Gastric Cancer	6	20.0	7	14.9%	23	23.5	35	20.2	71	20.4%
Total Upper GI Cancers	30	100%	47	100%	98	100%	173	100%	348	100%

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
Number of cases from audit	30	47	98	173	348
Cases from Cancer Registry (2011-2015)	39	45	99	216	399
Case Ascertainment	76.9%	104.4%	98.9	80.0	87.2%

Source: Scottish Cancer Registry, ISD. Data extracted from ACaDMe 01.08.2017

Note: Case ascertainment is reported by board of diagnosis and has been estimated using a denominator based on the latest (2011-2015) 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.

DIAGNOSIS AND STAGING

QPI 1 – Endoscopy

QPI Title: Patients with Oesophageal or Gastric Cancer should undergo endoscopy and biopsy to reach a diagnosis of cancer.

Description: Proportion of patients with oesophageal or gastric cancer who have a histological diagnosis made within 6 weeks of initial endoscopy and biopsy.

Target = 95%

Numerator = Number of patients with oesophageal or gastric cancer who undergo endoscopy and who have a histological diagnosis made within 6 weeks of initial endoscopy and biopsy

Denominator = All patients with oesophageal or gastric cancer who undergo endoscopy

Exclusions = No exclusions

Oesophageal cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	0	0	1	5	6
Numerator	24	36	72	132	264
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	74	133	271
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	90.0	97.3	99.2	97.4

D&G: The target was not met, showing a shortfall of 5% (4 cases); 3 initial endoscopies showed no malignancy. 1 had a previous endoscopy and was referred with different symptoms.

Fife: The target was met.

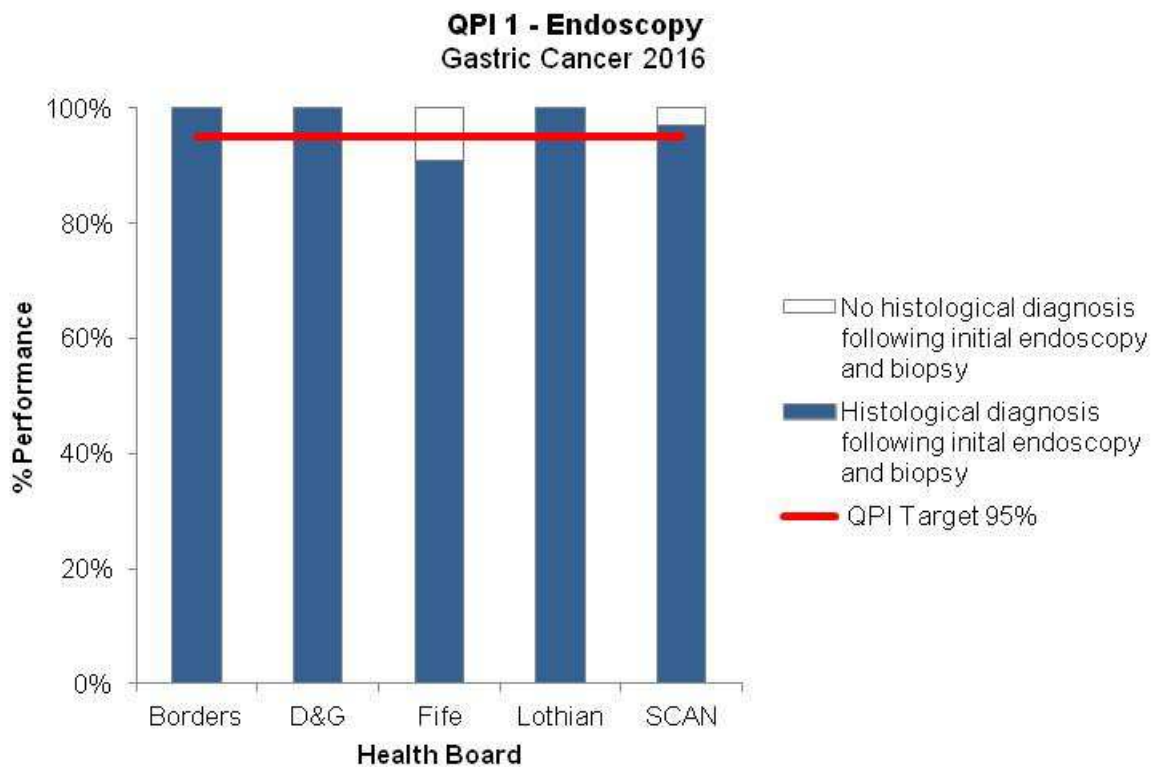
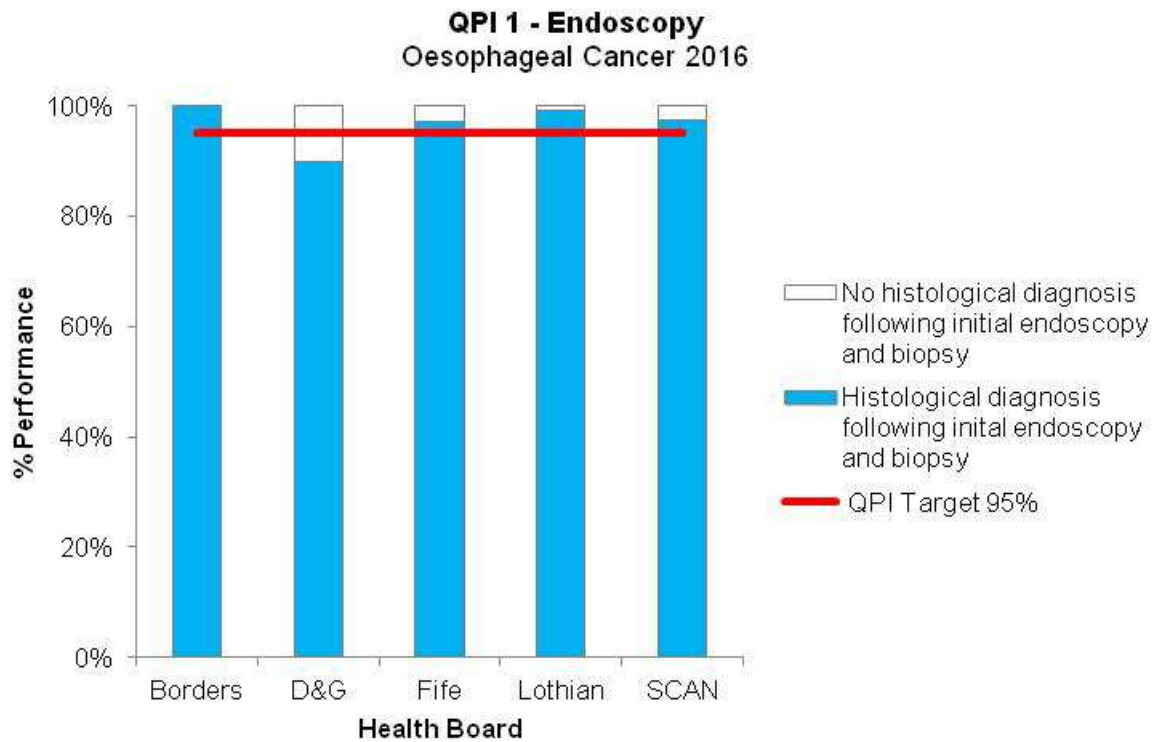
Lothian: The target was met.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	0	0	1	3	4
Numerator	6	7	20	32	65
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	22	32	67
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	100.0	90.9	100.0	97.0

Fife: The target was not met by a shortfall of 4.1% (2 cases). Initial pathology for 1 patient showed no malignancy. 2 patients had endoscopy but no biopsy taken due to valid clinical reasons; did not wish further investigation.

Lothian: The target was met.



Comment:
No action is required.

QPI 3 – Multi-Disciplinary Team Meeting (MDT)

QPI Title: Patients should be discussed by a multidisciplinary team prior to definitive Treatment.

Description: Proportion of patients with oesophageal or gastric cancer who are discussed at MDT meeting before definitive treatment.

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

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	1	0	1	3	5
Numerator	21	38	71	131	261
Not recorded for numerator	0	0	0	0	0
Denominator	23	40	74	135	272
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	91.3	95.0	95.9	97.0	96.0

Borders: The target was not met showing a short fall of 3.7% (2 cases). 2 patients had treatment prior to MDT.

Gastric cancer

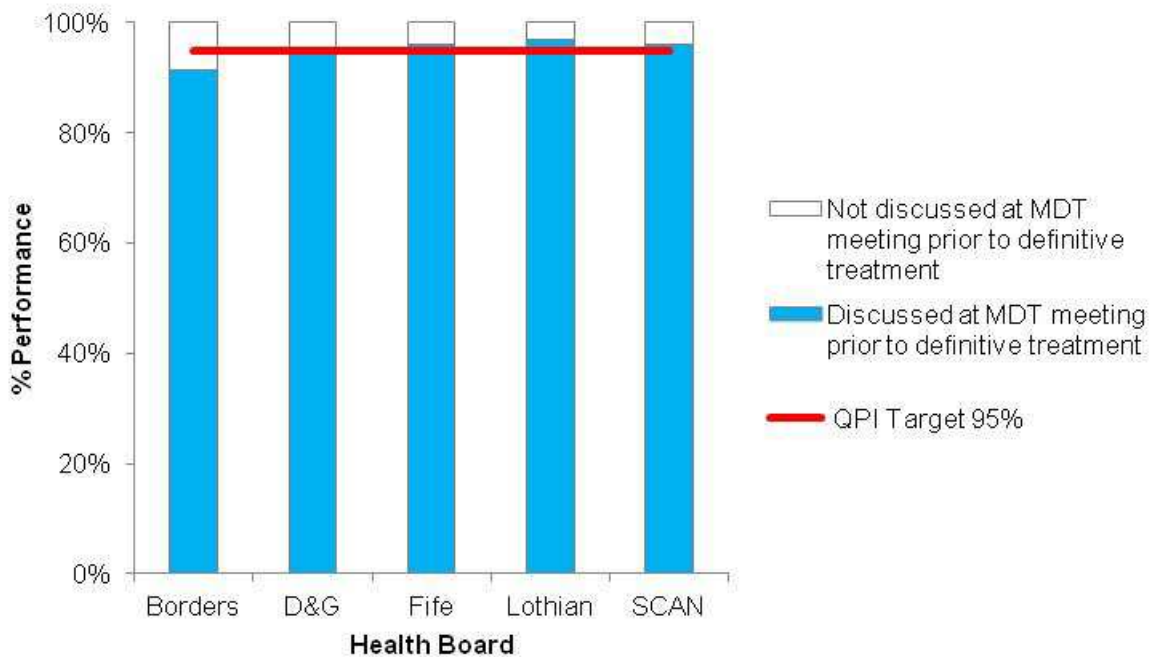
Target 95%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	0	0	1	0	1
Numerator	5	5	22	30	62
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	22	35	70
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	83.3	71.4	100.0	85.7	88.6

Borders: The target was not met showing a shortfall of 11.7% (1 case). This frail patient was not discussed at MDT.

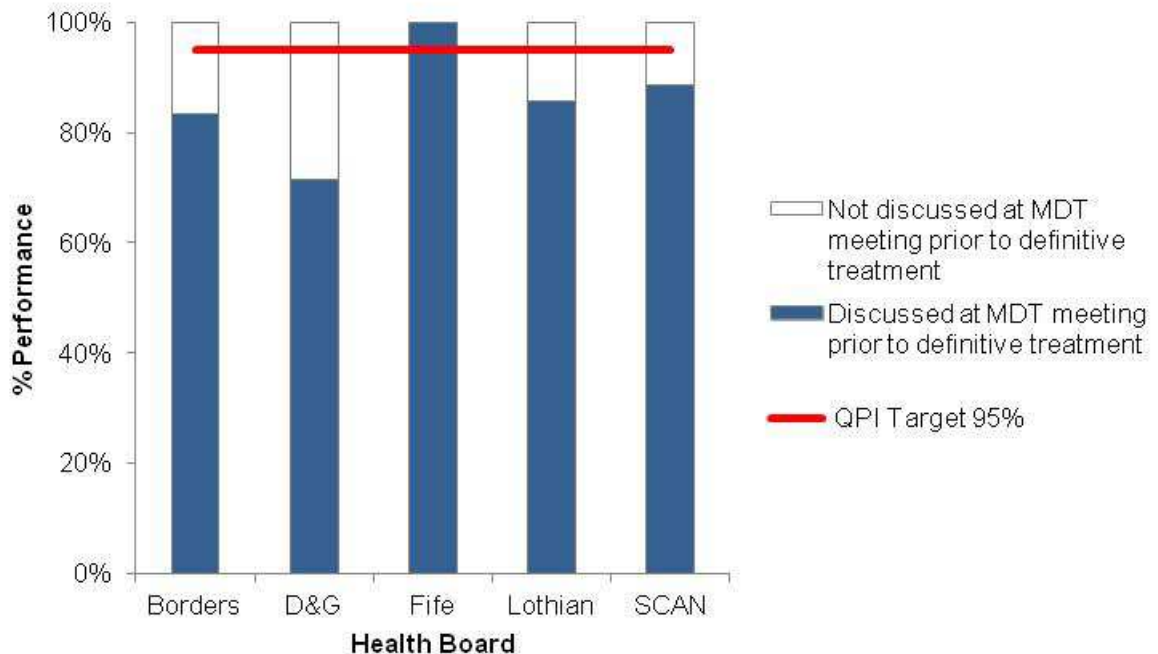
D&G: The target was not met showing a shortfall of 23.6% (2 cases). 1 frail patient had supportive care prior to MDT and 1 patient was managed by another MDT.

Lothian: The target was not met showing a shortfall of 9.3% (5 cases). 4 had treatment prior to MDT and 1 frail patient was not discussed.

QPI 3 - Multi-Disciplinary Team Meeting
Oesophageal Cancer 2016



QPI 3 - Multi-Disciplinary Team Meeting
Gastric Cancer 2016



Comment:

The few patients treated prior to MDT discussion were treated appropriately in view of the MDT. No action is required.

QPI 4 – Staging and Treatment Intent

QPI Title: 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.

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

Note: the specifications of this QPI are separated to ensure clear measurement of patients who have the following recorded at MDT meeting prior to treatment.

Staging Target = 90%

Treatment Intent = 95%

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

Denominator = All patients with an oesophageal or gastric cancer diagnosis

Exclusions = No exclusions

Oesophageal cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	0	0	0	0	0
Numerator	22	33	71	135	261
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	75	138	277
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	91.7	82.5	94.7	97.8	94.2

D&G: The target was not met showing a shortfall of 7.5% (7 cases). All 7 patients did not have staging and / or treatment intent recorded at MDT.

The tables below show the results separately for staging and treatment intent:

Staging recorded (regardless of treatment intent being recorded)

Target 90%	Borders	D&G	Fife	Lothian	SCAN
Numerator	22	34	72	137	265
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	75	138	277
% Performance	91.7	85.0	96.0	99.3	95.7

Treatment Intent recorded (regardless of staging being recorded)

Target 95%	Borders	D&G	Fife	Lothian	SCAN
Numerator	23	38	71	136	268
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	75	138	277
% Performance	95.8	95.0	94.7	98.6	96.8

Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	0	0	0	0	0
Numerator	5	6	20	29	60
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	23	35	71
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	83.3	85.7	87.0	82.9	84.5

Borders: The target was not met showing a shortfall of 6.7% (1 case). This patient was not discussed at MDT.

D&G: The target was not met showing a shortfall of 4.3% (1 case). This patient had no staging or treatment intent recorded at MDM.

Fife: The target was not met showing a shortfall of 3% (3 cases). All 3 did not have TNM staging recorded at MDT.

Lothian: The target was not met showing a shortfall of 7.1% 6 cases. 3 patients underwent surgery prior to MDT so had pathological TNM only, 2 had no treatment intent recorded at MDM and 1 frail patient was not discussed at MDM.

The tables below show the results separately for staging and treatment intent:

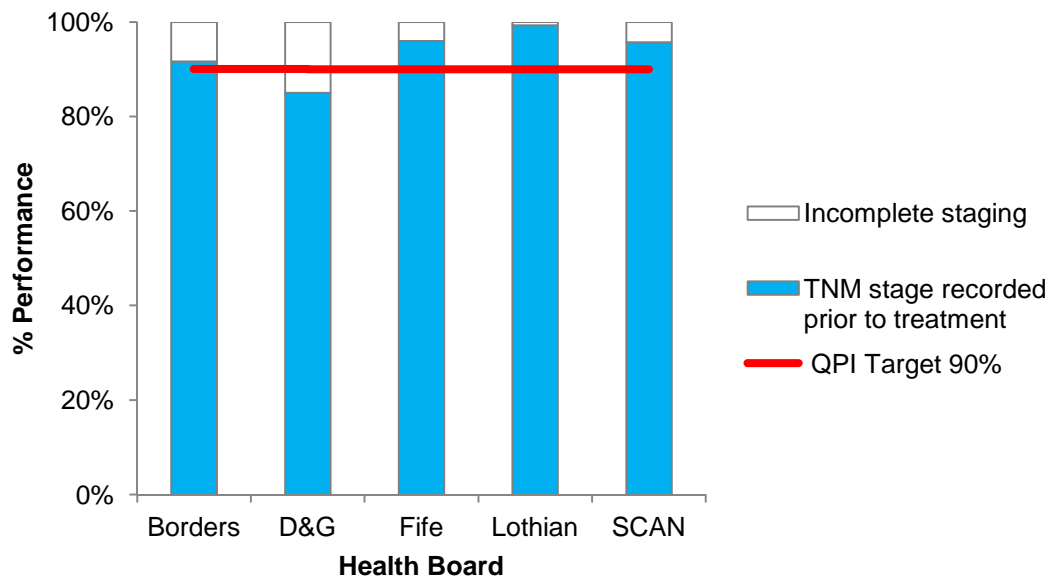
Staging recorded (regardless of treatment intent being recorded)

Target 90%	Borders	D&G	Fife	Lothian	SCAN
Numerator	5	6	20	31	62
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	23	35	71
% Performance	83.3	85.7	87.0	88.6	87.3

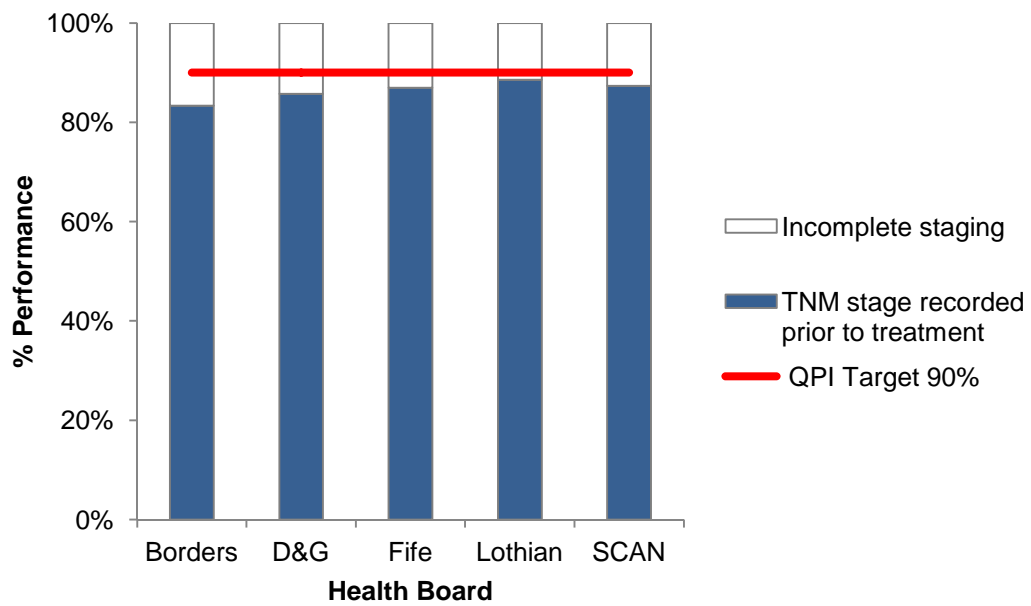
Treatment Intent recorded (regardless of staging being recorded)

Target 95%	Borders	D&G	Fife	Lothian	SCAN
Numerator	5	7	23	33	68
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	23	35	71
% Performance	83.3	100.0	100.0	94.3	95.8

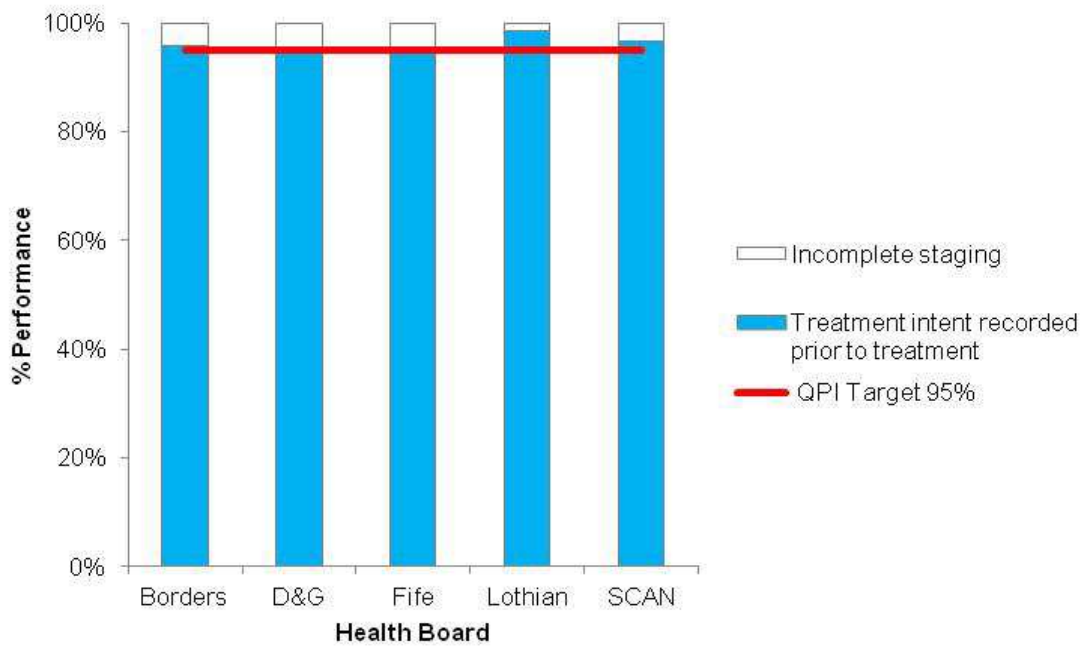
QPI 4 - Staging recorded at MDT prior to treatment
Oesophageal Cancer 2016



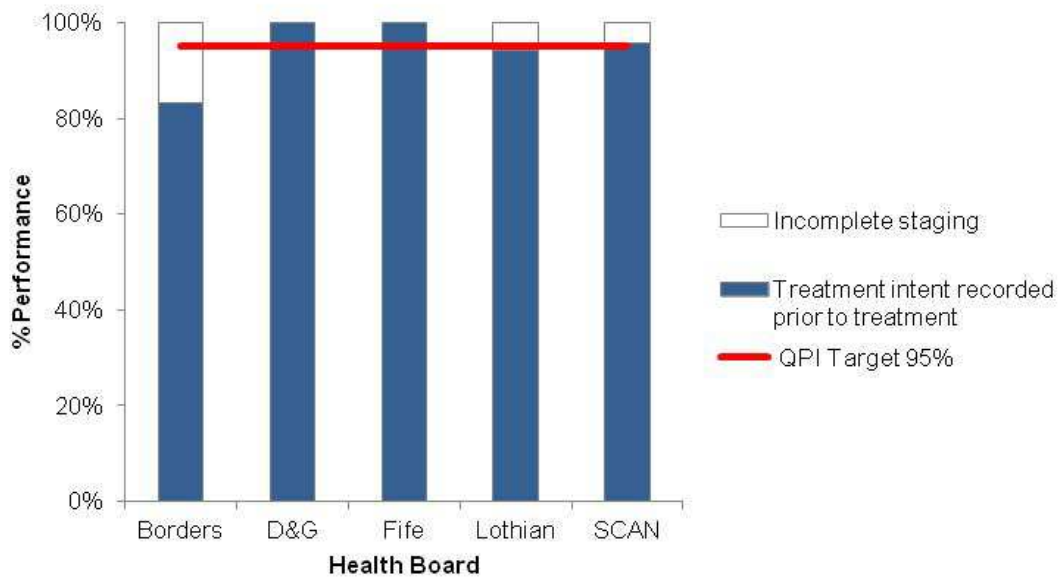
QPI 4 - Staging recorded at MDT prior to treatment
Gastric Cancer 2016



QPI 4 - Treatment Intent recorded at MDT prior to treatment
Oesophageal Cancer 2016



QPI 4 - Treatment Intent recorded at MDT prior to treatment
Gastric Cancer 2016



Comment:

It should be noted that this QPI reflects practice at the Regional SCAN MDM.

Action: The performance is better than 2015. The MDM chair should articulate the stage and intent with a verbal summary at the MDM.

QPI 5 – Nutritional Assessment

QPI Title: Patients with oesophageal or gastric cancer should be referred for dietetic assessment where there are concerns about their nutritional status prior to commencement of treatment.

Description: Proportion of patients with Oesophageal or gastric cancer who are referred to a dietician within 4 weeks of diagnosis.

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

Target 85%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	0	0	0	0	0
Numerator	23	26	38	58	145
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	75	138	277
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	95.8	65.0	50.7	42.0	52.3

D&G: The target was not met showing a shortfall of 20% (14 cases). 7 patients were referred outwith the 28 days and 7 were not referred to a dietician.

Fife: The target was not met showing a shortfall of 34.3% (37 cases). 28 patients were referred outwith 28 days and 9 patients were recorded as not requiring dietetic input.

Lothian: The target was not met showing a shortfall of 43% (80 cases). 52 patients were referred outwith 28 days and 28 were not referred to a dietician.

Gastric cancer

Target 85%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	0	0	0	0	0
Numerator	4	4	13	9	30
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	23	35	71
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	66.7	57.1	56.5	25.7	42.3

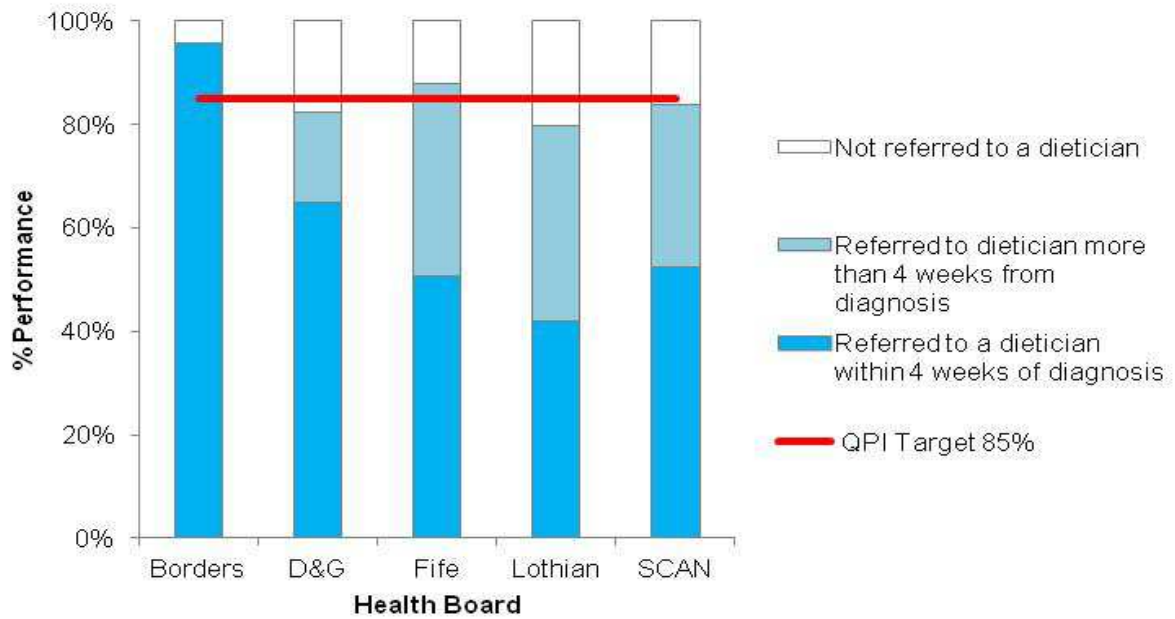
Borders: The target was not met showing a shortfall of 18.3% (2 cases). 1 patient was referred outwith 28 days and 1 was not referred to a dietician.

D&G: The target was not met showing a shortfall of 27.9% (3 cases). 3 patients did not meet criteria, 1 of whom was referred 28 days outwith the 28 day timescale.

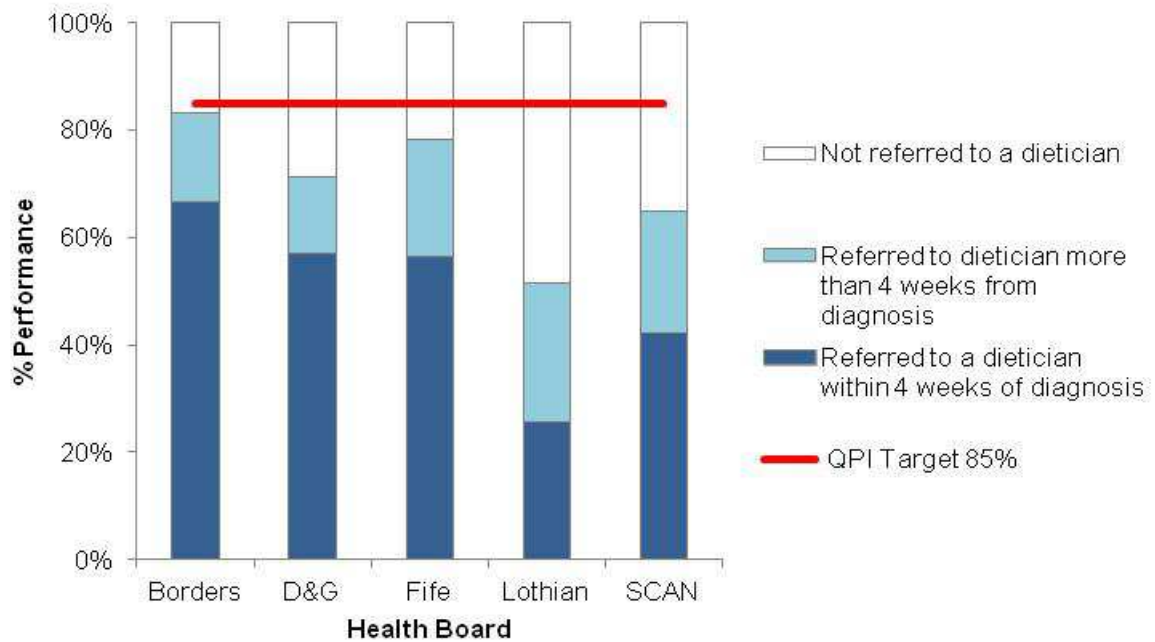
Fife: The target was not met showing a shortfall of 28.5% (10 cases). 5 patients were referred outwith 28 day from diagnosis timescale and 5 patients were recorded as not requiring dietetic input.

Lothian: The target was not met showing a shortfall of 59.3% (26 cases). 17 were not referred to a dietician and 9 patients were referred outwith 28 days.

**QPI 5 - Nutritional Assessment
Oesophageal Cancer 2016**



**QPI 5 - Nutritional Assessment
Gastric Cancer 2016**



Comment:

Action: SCAN has repeatedly failed to meet QPI target. A national short-life working group was convened to evaluate this as a national problem. A new QPI has been developed for next cycle. SCAN need to develop protocols for recording MUST scores and referral / review by dietician.

SURGICAL OUTCOMES

QPI 6 – Appropriate Selection of Surgical Patients

QPI Title: 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.

Description: Proportion of patients with oesophageal or gastric cancer who received neo-adjuvant chemotherapy who then go on to have a surgical resection.

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

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	18	33	59	117	227
Numerator	6	6	13	18	43
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	16	21	50
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	85.7	81.3	85.7	86.0

The target was met by all Health Boards.

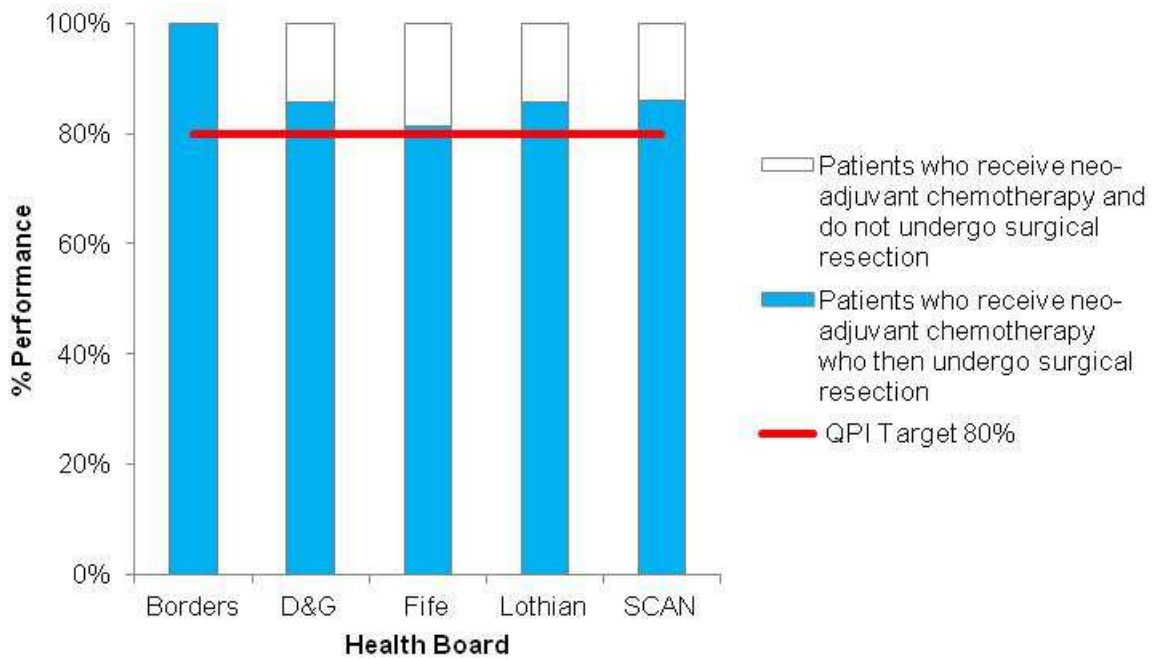
Gastric cancer

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	6	7	22	34	69
Numerator	0	0	1	1	2
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	1	1	2
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	100.0	100.0	100.0

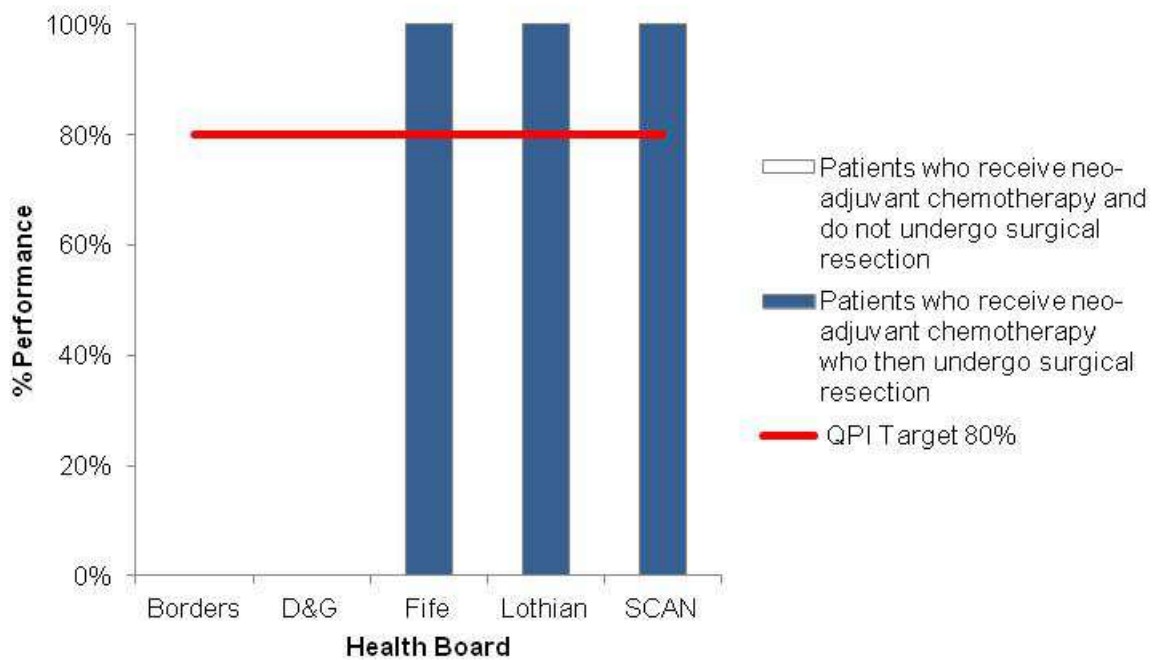
Comment - The target was met by all Health Boards.

It should be noted that this service operates on a regional basis and decisions regarding surgery are made by the regional MDT and not within the individual Health Board.

QPI 6 - Appropriate Selection of Surgical Patients
Oesophageal Cancer 2016



QPI 6 - Appropriate Selection of Surgical Patients
Gastric Cancer 2016



QPI 7 – 30/90 Day Mortality Following Surgery

QPI Title: 30 and 90 day mortality following surgical resection for oesophageal or gastric cancer.

Description: Proportion of patients with oesophageal or gastric cancer who die within 30 or 90 days of surgical resection for oesophageal or gastric cancer.

30 day target = <5%

90 day target = <7.5%

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 by Hospital of Surgery

30 Day Mortality

Target <5%	RIE	SCAN
2016 Cohort	277	277
Ineligible for this QPI	208	208
Numerator	1	1
Not recorded for numerator	0	0
Denominator	69	69
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	1.4	1.4

90 Day Mortality

Target <7.5%	RIE	SCAN
2016 Cohort	277	277
Ineligible for this QPI	208	208
Numerator	1	1
Not recorded for numerator	0	0
Denominator	69	69
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	1.4	1.4

1 patient was less than 90 days post surgery at time of reporting.

Comment - The results are an example of good multidisciplinary practice.

Gastric cancer – Hospital of Surgery

30 Day Mortality

Target <5%	DRI	RIE	VHK	SCAN
2016 Cohort	7	41	23	71
Ineligible for this QPI	5	32	20	57
Numerator	0	0	0	0
Not recorded for numerator	0	0	0	0
Denominator	2	9	3	14
Not recorded for exclusions	0	0	0	0
Not recorded for denominator	0	0	0	0
% Performance	0.0	0.0	0.0	0.0

90 Day Mortality

Target <7.5%	DRI	RIE	VHK	SCAN
2016 Cohort	7	41	23	71
Ineligible for this QPI	5	32	20	57
Numerator	0	0	0	0
Not recorded for numerator	0	0	0	0
Denominator	2	9	3	14
Not recorded for exclusions	0	0	0	0
Not recorded for denominator	0	0	0	0
% Performance	0.0	0.0	0.0	0.0

The minimum target was met.

Comment:

These results compare favourably with international figures.

QPI 8 – Lymph Node Yield

QPI Title: For patients with oesophageal or gastric cancer undergoing curative resection the number of lymph nodes examined should be maximised.

Description: Proportion of patients with oesophageal or gastric cancer who undergo surgical resection where ≥ 15 lymph nodes are resected and pathologically examined.

Target = Oesophageal 90%, Gastric = 80%

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

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

Exclusions = No exclusions

Oesophageal cancer – Health board of diagnosis

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	17	29	54	108	208
Numerator	5	10	20	23	58
Not recorded for numerator	0	0	0	0	0
Denominator	7	11	21	30	69
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	71.4	90.9	95.2	76.6	84.1

Oesophageal cancer – Hospital of surgery

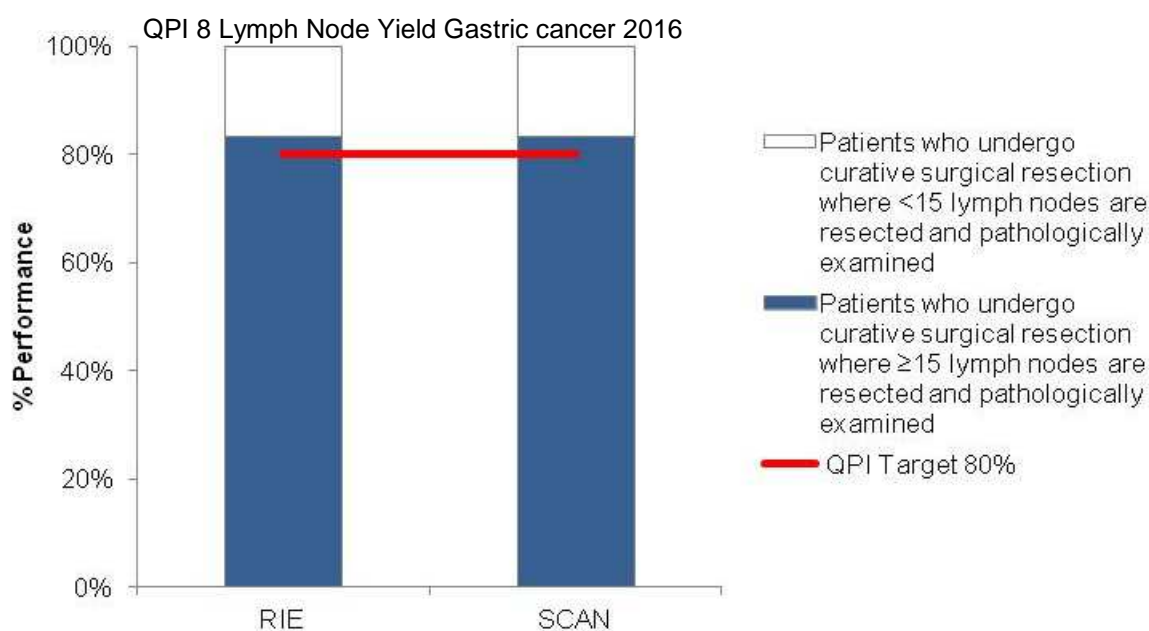
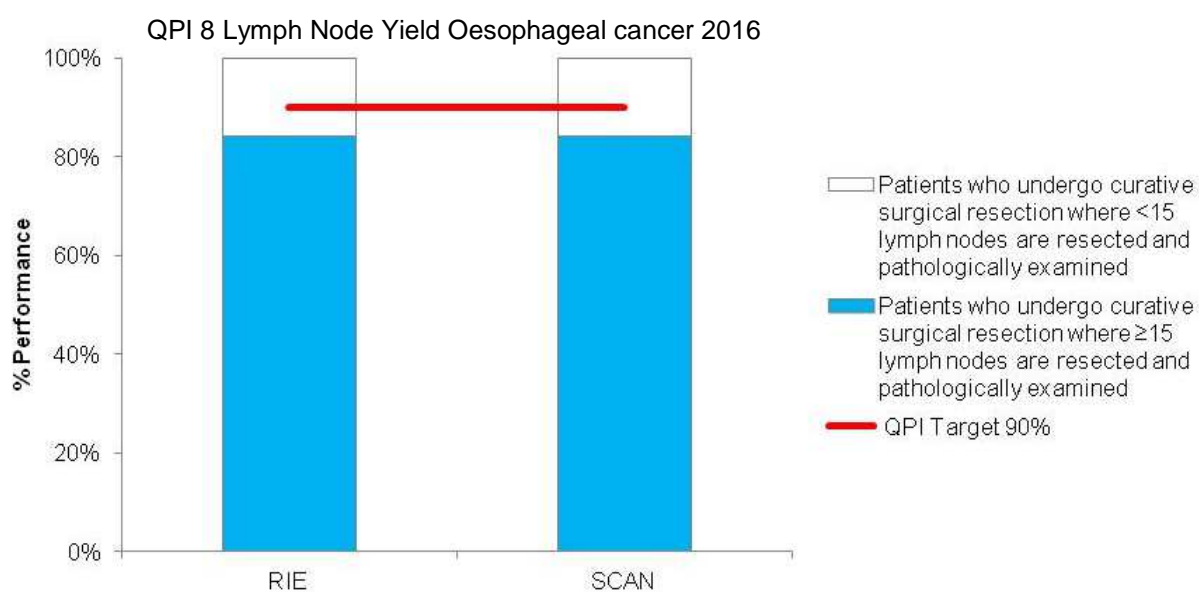
Target 90%	RIE	SCAN
2016 Cohort	277	277
Ineligible for this QPI	208	208
Numerator	58	58
Not recorded for numerator	0	0
Denominator	69	69
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	84.1	84.1

Gastric cancer – Health board of diagnosis

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	5	0	20	27	59
Numerator	1	0	3	6	10
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	3	8	12
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	N/A	100.0	75.0	83.3

Gastric cancer – Hospital of surgery

Target 80%	RIE	SCAN
2016 Cohort	71	71
Ineligible for this QPI	59	59
Numerator	10	10
Not recorded for numerator	0	0
Denominator	12	12
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	83.3	83.3



Action: The gastric cancer cases include palliative patients where no attempt at lymphadenectomy was made. The oesophageal cases require review by surgical department and by pathology to ensure standardisation of surgery and pathological assessment.

QPI 9 – Length of Hospital Stay Following Surgery

QPI Title: Length of hospital stay following surgery for oesophageal or gastric cancer should be as short as possible.

Description: Proportion of patients undergoing surgical resection for oesophageal or gastric cancer who are discharged within 14 days of surgical procedure.

Target = 60%

Numerator = Number of patients undergoing surgical resection for oesophageal or gastric cancer who are discharged within 14 days of surgical procedure

Denominator = All patients undergoing surgical resection for oesophageal or gastric cancer

Exclusions = No exclusions

The following data has been calculated using SMR01² returns.

Oesophageal cancer – Health board of diagnosis

Target 60%	Borders	D&G	Fife	Lothian	SCAN
Numerator	2	7	12	14	35
Not recorded for numerator	0	0	0	0	0
Denominator	5	11	20	26	62
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	40.0	63.6	60.0	53.8	56.4

Oesophageal cancer – Hospital of surgery

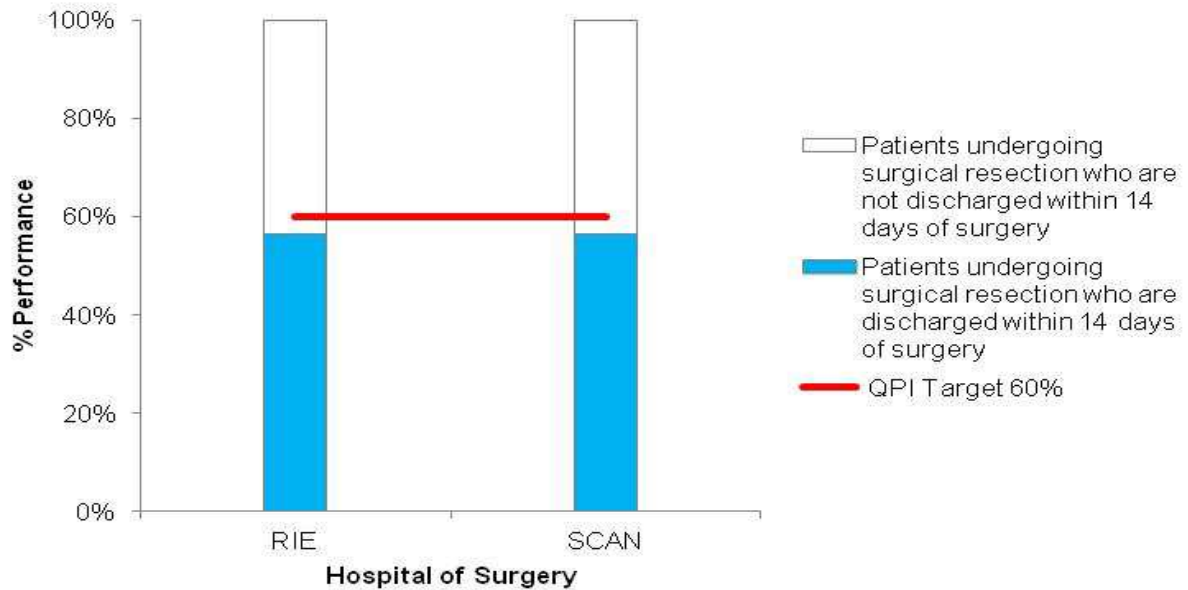
Target 60%	RIE	SCAN
Numerator	35	35
Not recorded for numerator	0	0
Denominator	62	62
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	56.4	56.4

The target was not met with a shortfall of 3.4%.

The median length of stay for patients with oesophageal cancer in 2016 at RIE was 14 days (range 9 – 80 days).

² 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 9 - Length of Hospital Stay
Oesophageal Cancer 2016**



Gastric cancer – Health board of diagnosis

Target 60%	Borders	D&G	Fife	Lothian	SCAN
Numerator	0	4	1	8	13
Not recorded for numerator	0	0	0	0	0
Denominator	0	5	1	10	16
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	80.0	100.0	80.0	81.3

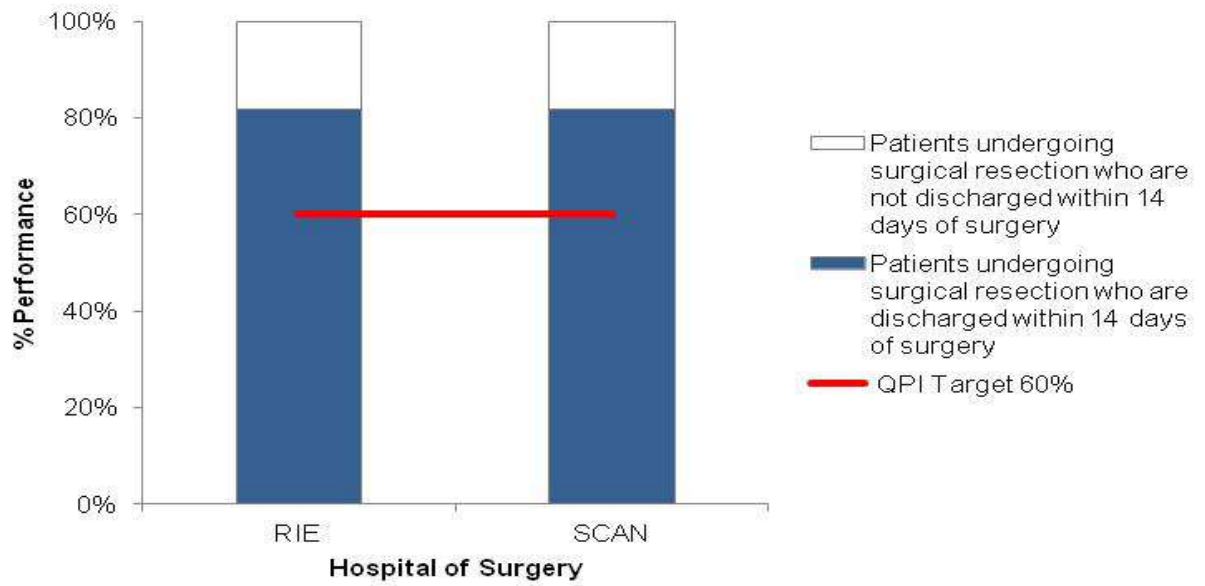
Gastric cancer – Hospital of surgery

Target 60%	RIE	SCAN
Numerator	13	13
Not recorded for numerator	0	0
Denominator	16	16
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	81.3	81.3

The target for Gastric Cancer was met.

The median length of stay for patients with gastric cancer in 2016 for RIE was 10 days (range 7 – 20 days).

QPI 9 - Length of Hospital Stay Gastric Cancer 2016



Comment:

Action: We are developing postoperative protocols with ERAS components to optimise postoperative care

QPI 10(i) – Resection Margins

QPI Title: Oesophageal and gastric cancers which are surgically resected should be adequately excised.

Description: Proportion of patients with oesophageal or gastric cancer who undergo surgical resection in which surgical margin is clear of tumour, i.e. negative surgical margin.

Note: The specifications of this QPI have been separated to ensure clear measurement of both: i) Oesophageal cancer patients who have a clear circumferential margin and ii) Oesophageal and gastric cancer patients who have clear longitudinal margin.

Target = 70%

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

Denominator = All patients with oesophageal cancer who undergo surgical resection

Exclusions = No exclusions

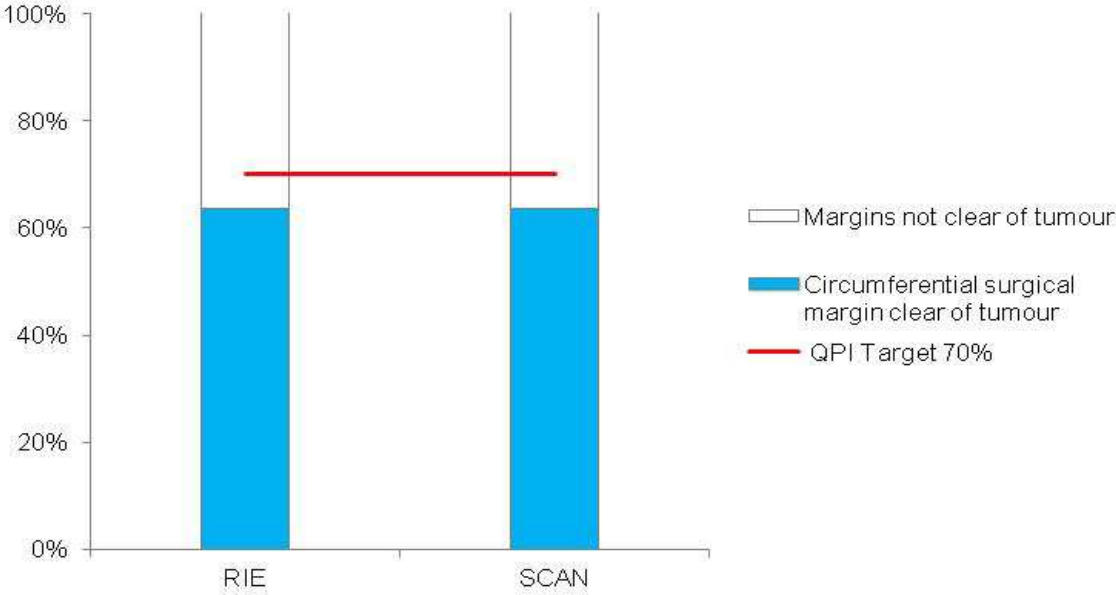
Oesophageal cancer – Health board of diagnosis

Target 70%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	17	29	54	108	208
Numerator	3	5	11	25	44
Not recorded for numerator	0	0	0	0	0
Denominator	7	11	21	30	69
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	42.9	45.5	52.4	83.3	63.8

Oesophageal cancer – Hospital of surgery

Target 70%	RIE	SCAN
2016 Cohort	277	277
Ineligible for this QPI	208	208
Numerator	44	44
Not recorded for numerator	0	0
Denominator	69	69
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	63.8	63.8

QPI 10 - Resection Margins
Oesophageal Cancer 2016



QPI 10(ii) – Resection Margins

Target = 90%

Numerator = Number of patients with oesophageal or 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

Oesophageal Longitudinal margin

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	17	29	54	108	208
Numerator	7	9	20	30	66
Not recorded for numerator	0	0	0	0	0
Denominator	7	11	21	30	69
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	81.8	95.2	100.0	95.7

Oesophageal Longitudinal margin clear (Hospital of Surgery)

Target 90%	RIE	SCAN
2016 Cohort	277	277
Ineligible for this QPI	208	208
Longitudinal margin clear	66	66
Not recorded for numerator	0	0
Denominator	69	69
% Performance	95.7	95.7

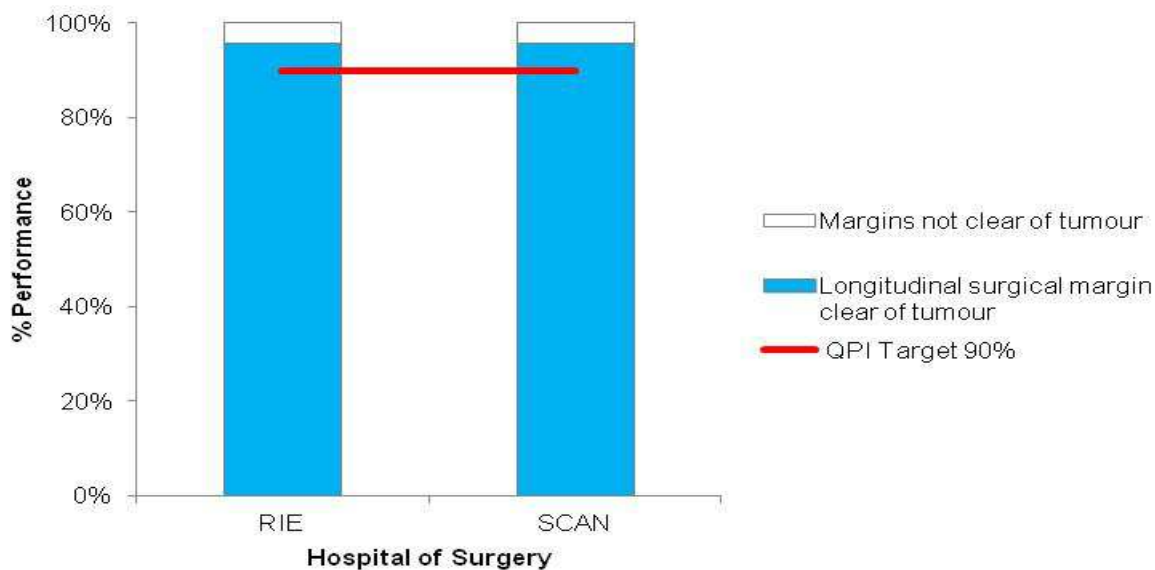
Gastric Longitudinal margin

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	5	5	20	27	57
Numerator	1	2	3	8	14
Not recorded for numerator	0	0	0	0	0
Denominator	1	2	3	8	14
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	100.0	100.0

Gastric Longitudinal margin clear (Hospital of Surgery)

Target 90%	RIE	SCAN
2016 Cohort	71	71
Ineligible for this QPI	57	57
Longitudinal margin clear	14	14
Not recorded for numerator	0	0
Denominator	14	14
% Performance	100.0	100.0

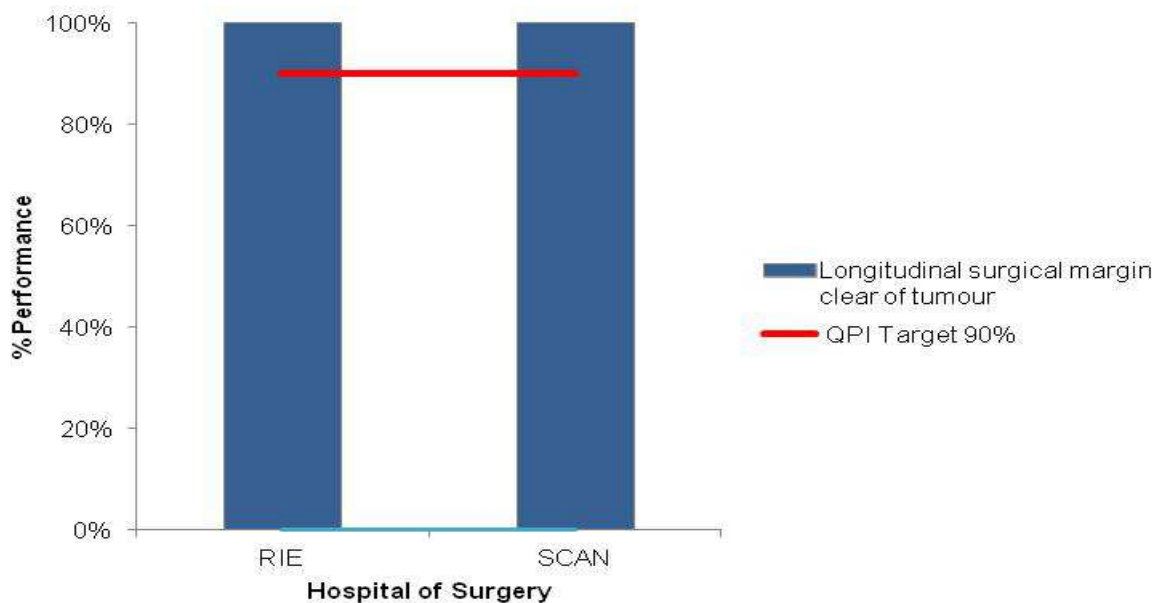
**QPI 10 - Resection Margins
Oesophageal Cancer 2016**



Comment:

Action

**QPI 10 - Resection Margins
Gastric Cancer 2016**



Comment:

Longitudinal margins are good, CRM has improved for oesophageal cancer and will continue to be kept under review

QPI 11 – Curative Treatment Rates

QPI Title: Patients with oesophageal cancer should undergo curative treatment whenever possible.

Description: Proportion of patients with oesophageal or gastric cancer who undergo curative treatment, this includes:

- Neoadjuvant chemoradiotherapy or chemotherapy followed by surgery
- Primary surgery
- Radical chemoradiotherapy; and
- Endoscopic Muscosal Resection.

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

Target 35%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	0	0	0	0	0
Numerator	6	9	25	40	80
Not recorded for numerator	0	0	0	0	0
Denominator	24	40	75	138	277
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	25.0	22.5	33.3	29.0	28.9

Oesophageal cancer curative treatment rates – 2013-15 audit results

Target 35%	Borders	D&G	Fife	Lothian	SCAN	Scotland
% Performance 2013	26.9	33.3	29.4	29.6	29.7	25.4
% Performance 2014	30.0	29.4	23.8	24.7	25.6	27.1
% Performance 2015	22.7	27.3	20.8	26.9	25.1	26.4

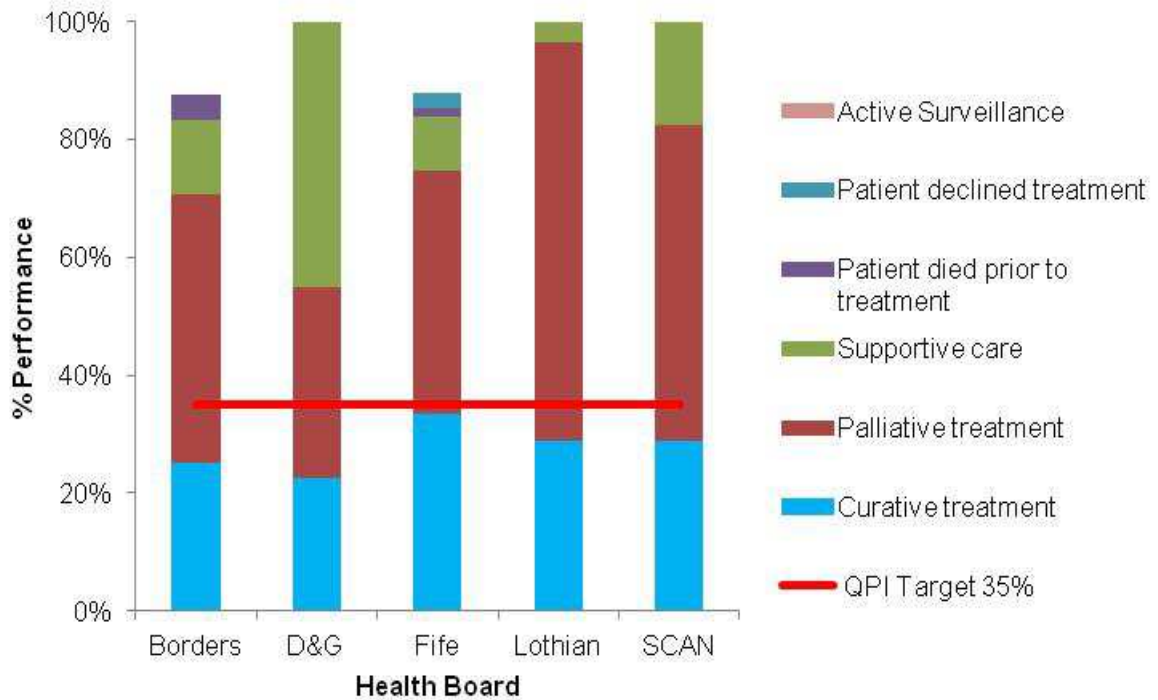
Gastric cancer – Health board of diagnosis

Target 35%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	0	0	0	0	0
Numerator	1	2	3	8	14
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	23	35	71
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	16.7	28.6	13.0	22.9	19.7

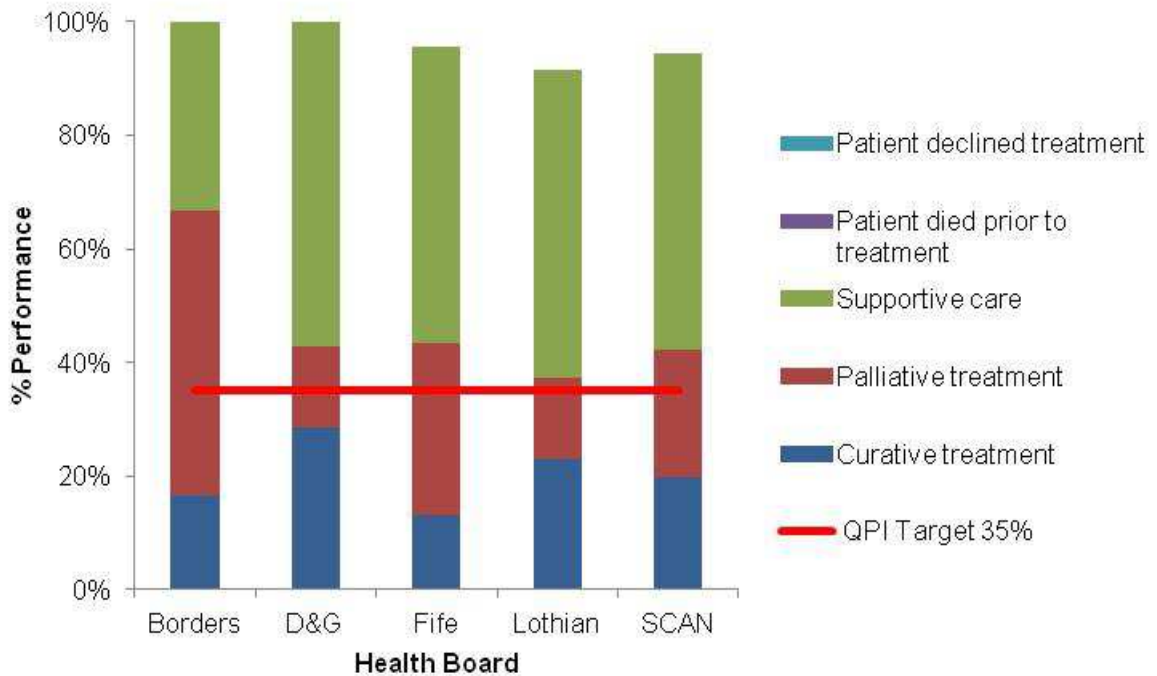
Gastric cancer curative treatment rates – 2013-15 audit results

Target 35%	Borders	D&G	Fife	Lothian	SCAN	Scotland
% Performance 2013	15.4	30.8	14.7	27.0	23.1	21.0
% Performance 2014	9.1	30.8	31.6	25.0	25.2	23.2
% Performance 2015	37.5	22.2	28.6	31.6	30.5	23.3

QPI 11 - Curative Treatment Rates
Oesophageal Cancer 2016



QPI 11 - Curative Treatment Rates
Gastric Cancer 2016



Comment:

2016 show reasonable results for oesophageal cancer but a decrease in levels for gastric cancer. Failure to meet the curative treatment rate QPI requires a national drive towards earlier diagnosis for oesophago-gastric cancer.

ONCOLOGICAL TREATMENT OUTCOMES

QPI 12(i) – 30 Day Mortality Following Curative Oncological Treatment

QPI Title: 30 day mortality following oncological treatment for oesophageal or gastric cancer.

Description: Proportion of patients with oesophageal or gastric cancer who die within 30 days of oncological treatment for oesophageal or gastric cancer.

Target = <5%

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

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

Oesophageal cancer – 30 Day mortality for curative Oncological treatment Chemoradiotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	24	40	74	134	272
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	1	4	5
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	0.0	0.0	0.0

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	18	33	59	118	228
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	6	7	16	20	49
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

Adjuvant Radiotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	24	40	75	137	276
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	0	1	1
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	N/A	0.0	0.0

Gastric cancer – 30 Day mortality for curative Oncological treatment

No gastric cancer patients were treated with chemoradiotherapy, adjuvant chemotherapy or adjuvant radiotherapy in 2016

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	6	7	22	34	69
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	1	1	2
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	0.0	0.0	0.0

No gastric cancer patients were treated with chemoradiotherapy or adjuvant radiotherapy in 2016

QPI 12(ii) – 30 Day Mortality Following Palliative Oncological Treatment

Target = <5%

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 for palliative Oncological treatment

Chemotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	20	38	63	113	234
Numerator	0	0	0	1	1
Not recorded for numerator	0	0	0	0	0
Denominator	4	2	12	25	43
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	4.0	2.3

The minimum target was met by all Boards

Radiotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	24	40	75	138	277
Ineligible for this QPI	21	37	57	124	239
Numerator	0	0	2	0	2
Not recorded for numerator	0	0	0	0	0
Denominator	3	3	18	14	38
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	0.0	11.1	0.0	5.3

Fife: 2 patients died following palliative radiotherapy

Gastric cancer – 30 Day mortality for palliative Oncological treatment

Chemotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	6	7	22	31	66
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	1	4	5
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

Radiotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2016 Cohort	6	7	23	35	71
Ineligible for this QPI	6	7	23	32	68
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	0	3	3
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	N/A	0.0	0.0

Comment

All deaths after treatment have been reviewed and all patients were treated appropriately. No action is required.

CLINICAL TRIALS

Clinical Trials Access

QPI Title: All patients should be considered for participation in available clinical trials, wherever eligible.

Description: Proportion of patients with Upper GI Cancer who are enrolled in an interventional clinical trial or translational research.

Target = 7.5% Interventional Trials/ 15% Translational Research

Numerator = Number of patients with oesophageal or gastric cancer enrolled in a clinical trial

Denominator = All patients with oesophageal or gastric cancer

Exclusions = No exclusions

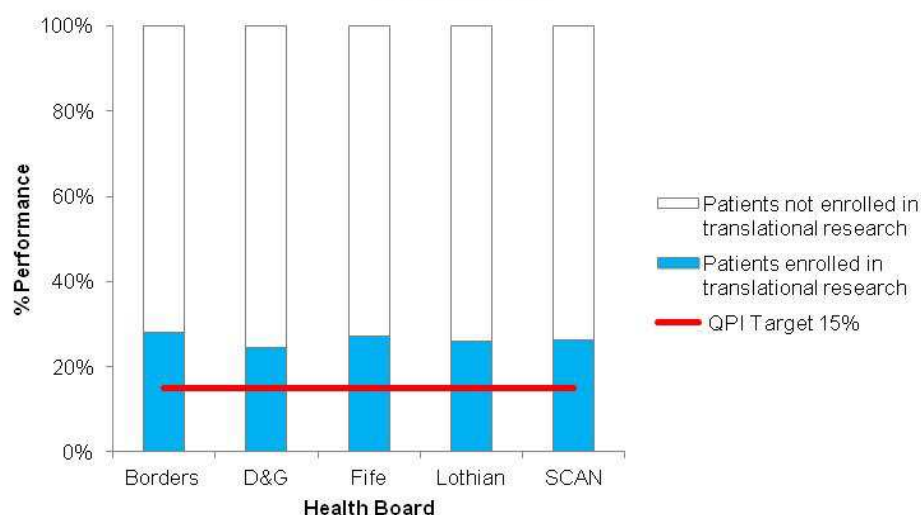
Note: The clinical trials QPI will be measured utilising SCR data and Cancer Registry data (5 year average of case ascertainment)

Interventional Target 7.5%	Borders	D&G	Fife	Lothian	SCAN
Numerator	0	0	1	10	11
Denominator	39	45	99	216	399
% Performance	0.0	0.0	1.0	5.0	2.8%

Translational Target 15%	Borders	D&G	Fife	Lothian	SCAN
Numerator	11	11	27	56	105
Denominator	39	45	99	216	399
% Performance	28.2	24.4	27.2	25.9	26.3

Translational Research in 2016	Numbers recruited
OCCAMS	38
RTL Advanced	10
Cachexia	57

Clinical Trials Access - Translational Research
OG Cancer 2016



Comment: Potential new interventional trial protocols are being circulated for consideration in SCAN. We are currently recruiting to a number of national multicentre randomised trials (ROMIO, NeoAegis, Optimise 2)

KEY CATEGORIES –

Treatment by Clinical Stage of Tumour

Oesophageal

Stage of Tumour (clinical)	Surgery		Oncology		Endoscopic		Other	
		n		n		n		n
Stage IA	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	0	Chemoradiotherapy	0	EMR	1	Supportive Care only	0
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	0	Stent	0	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Trans-hiatal Oesophagectomy	0	Neo-adjuvant Radiotherapy	0	Argon	1	Not recorded	0
	PLOG	0	Adjuvant Radiotherapy	0	Dilatation	0		
					Photodynamic therapy	0		
					Radical Radiotherapy	0		
				Palliative Chemotherapy	0			
				Palliative Radiotherapy	4			
Stage IB	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	1	Chemoradiotherapy	0	EMR	0	Supportive Care only	1
	Left Thoraco-abdominal Oesophagectomy	1	Neo-adjuvant Chemotherapy	0	Stent	1	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
			Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					
Stage IIA	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	6	Chemoradiotherapy	1	EMR	0	Supportive Care only	3
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	10	Stent	4	Patient refused treatment	1
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Trans-hiatal Oesophagectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
	PLOG	1	Adjuvant Radiotherapy	1	Dilatation	0	Active Surveillance	0
	Total Gastrectomy	1	Radical Radiotherapy	5				
	Laparotomy only	1	Palliative Chemotherapy	0				
		Palliative Radiotherapy	3					

	Surgery		Oncology		Endoscopic		Other	
		n		n		n		n
Stage IIB	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	1	Chemoradiotherapy	1	EMR	0	Supportive Care only	0
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	4	Stent	0	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
			Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	1				
			Palliative Chemotherapy	1				
			Palliative Radiotherapy	0				
Stage IIIA	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	12	Chemoradiotherapy	2	EMR	0	Supportive Care only	3
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	15	Stent	10	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	1	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	2
	Total Gastrectomy	1	Neo-adjuvant Radiotherapy	0	Argon	1	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	5				
			Palliative Chemotherapy	2				
		Palliative Radiotherapy	4					
Stage IIIB	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	12	Chemoradiotherapy	0	EMR	0	Supportive Care only	5
	Left Thoraco-abdominal Oesophagectomy	1	Neo-adjuvant Chemotherapy	18	Stent	8	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Total Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	1		
			Radical Radiotherapy	2				
			Palliative Chemotherapy	2				
		Palliative Radiotherapy	1					

Stage IIC	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	3	Chemoradiotherapy	2	EMR	1	Supportive Care only	1
	Left Thoraco-abdominal Oesophagectomy	1	Neo-adjuvant Chemotherapy	5	Stent	8	Patient refused treatment	0
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	1
	Trans-hiatal Oesophagectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	1
	PLOG	1	Adjuvant Radiotherapy	2	Dilatation	0		
			Radical Radiotherapy	1				
			Palliative Chemotherapy	8				
		Palliative Radiotherapy	0					
Stage IV	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	31
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	0	Stent	28	Patient refused treatment	5
	McKeown 3 stage sub total Oesophagectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	2
	Partial Gastrectomy	1	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	2				
			Palliative Chemotherapy	28				
		Palliative Radiotherapy	3					
Unable to stage	Surgery	n	Oncology	n	Endoscopic	N	Other	n
	Right 2 phase sub total Oesophagectomy (Ivor Lewis)	4	Chemoradiotherapy	0	EMR	0	Supportive Care only	11
	Left Thoraco-abdominal Oesophagectomy	0	Neo-adjuvant Chemotherapy	0	Stent	10	Patient refused treatment	1
	McKeown 3 stage sub total Oesophagectomy	2	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
			Neo-adjuvant Radiotherapy	0	Argon	1	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	2				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	3					

Gastric

Stage of Tumour (clinical)	Surgery		Oncology		Endoscopic		Other	
		n		n		n		n
Stage IA	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	2
	Sub total Gastrectomy	0	Neo-adjuvant Chemotherapy	0	Stent	1	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
			Palliative Radiotherapy	0				
Stage IB	Surgery	n	Oncology	n	Endoscopic	N	Other	n
	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	0
	Sub total Gastrectomy	0	Neo-adjuvant Chemotherapy	0	Stent	2	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
Stage IIA	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	1
	Sub total Gastrectomy	1	Neo-adjuvant Chemotherapy	0	Stent	2	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	1	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
	Bypass Procedure/Jejunostomy	0	Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					

Stage IIB	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	2
	Sub total Gastrectomy	0	Neo-adjuvant Chemotherapy	0	Stent	0	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
	Bypass Procedure/Jejunostomy	0	Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					
Stage IIIA	Surgery	n	Oncology	n	Endoscopic	N	Other	n
	Total Gastrectomy	2	Chemoradiotherapy	0	EMR	0	Supportive Care only	1
	Sub total Gastrectomy	0	Neo-adjuvant Chemotherapy	0	Stent	1	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					
Stage IIIB	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	1	Chemoradiotherapy	0	EMR	0	Supportive Care only	0
	Sub total Gastrectomy	1	Neo-adjuvant Chemotherapy	0	Stent	0	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	1
	Wedge/localised gastric resection	2	Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					

Stage IIIc	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	1
	Sub total Gastrectomy	1	Neo-adjuvant Chemotherapy	1	Stent	0	Patient refused treatment	0
	Completion Gastrectomy	1	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					
Stage IV	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	0	Chemoradiotherapy	0	EMR	0	Supportive Care only	29
	Sub total Gastrectomy	0	Neo-adjuvant Chemotherapy	0	Stent	3	Patient refused treatment	1
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	1
	Partial Gastrectomy	0	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
			Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	1				
		Palliative Radiotherapy	0					
Unable to stage	Surgery	n	Oncology	n	Endoscopic	n	Other	n
	Total Gastrectomy	1	Chemoradiotherapy	0	EMR	0	Supportive Care only	14
	Sub total Gastrectomy	2	Neo-adjuvant Chemotherapy	0	Stent	1	Patient refused treatment	0
	Completion Gastrectomy	0	Adjuvant Chemotherapy	0	Laser	0	Patient died before treatment	0
	Partial Gastrectomy	1	Neo-adjuvant Radiotherapy	0	Argon	0	Not recorded	0
	Wedge/localised gastric resection	1	Adjuvant Radiotherapy	0	Dilatation	0		
			Radical Radiotherapy	0				
			Palliative Chemotherapy	0				
		Palliative Radiotherapy	0					

EPIDEMIOLOGY

Number of Cases Based on Site of Origin of Tumour

Tumour Site	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
Oesophageal Cancer	24	80.0	40	85.1	75	76.5	138	79.8	277	79.6%
Gastric Cancer	6	20.0	7	14.9	23	23.5	35	20.2	71	20.4%
Total Upper GI Cancers	30	100%	47	100%	98	100%	173	100%	348	100%

Breakdown of Site of Origin of Tumour

Tumour Site	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
C15.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.1	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.2	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.3	2.0	6.7	4	8.5	2	2.0	7	4.0	15.0	4.3
C15.4	4.0	13.3	6	12.8	16	16.3	21	12.1	47.0	13.5
C15.5	13.0	43.3	16	34.0	49	50.0	62	35.8	140.0	40.2
C15.8	0.0	0.0	9	19.1	5	5.1	13	7.5	27.0	7.8
C15.9	2.0	6.7	1	2.1	0	0.0	15	8.7	18.0	5.2
C16.0	3.0	10.0	4	8.5	3	3.1	20	11.6	30.0	8.6
C16.1	1.0	3.3	0	0.0	1	1.0	6	3.5	8.0	2.3
C16.2	1.0	3.3	2	4.3	4	4.1	1	0.6	8.0	2.3
C16.3	4.0	13.3	2	4.3	6	6.1	12	6.9	24.0	6.9
C16.4	0.0	0.0	1	2.1	0	0.0	2	1.2	3.0	0.9
C16.5	0.0	0.0	0	0.0	2	2.0	3	1.7	5.0	1.4
C16.6	0.0	0.0	0	0.0	0	0.0	1	0.6	1.0	0.3
C16.8	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C16.9	0.0	0.0	2	4.3	10	10.2	10	5.8	22.0	6.3
Total	30.0	100	47.0	100	98.0	100	173.0	100	348.0	100%

Age and Gender Distribution

Oesophageal

Age at Diagnosis	Borders				D&G				Fife				Lothian				SCAN			
	M		F		M		F		M		F		M		F		M		F	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	3.2	1	2.3	3	1.6	1	1.1
45-49	0	0.0	0	0.0	1	3.6	0	0.0	4	7.7	0	0.0	3	3.2	1	2.3	8	4.3	1	1.1
50-54	0	0.0	0	0.0	3	10.7	0	0.0	4	7.7	1	4.3	4	4.3	1	2.3	11	5.9	2	2.2
55-59	1	7.1	2	20.0	2	7.1	0	0.0	5	9.6	2	8.7	9	9.6	3	6.8	17	9.0	7	7.9
60-64	1	7.1	1	10.0	1	3.6	3	25.0	5	9.6	3	13.0	5	5.3	7	15.9	12	6.4	14	15.7
65-69	4	28.6	0	0.0	7	25.0	1	8.3	5	9.6	1	4.3	15	16.0	3	6.8	31	16.5	5	5.6
70-74	1	7.1	3	30.0	7	25.0	1	8.3	9	17.3	2	8.7	18	19.1	6	13.6	35	18.6	12	13.5
75-79	4	28.6	4	40.0	2	7.1	3	25.0	11	21.2	5	21.7	17	18.1	5	11.4	34	18.1	17	19.1
80-84	0	0.0	0	0.0	2	7.1	2	16.7	5	9.6	6	26.1	12	12.8	11	25.0	19	10.1	19	21.3
85+	3	21.4	0	0.0	3	10.7	2	16.7	4	7.7	3	13.0	8	8.5	6	13.6	18	9.6	11	12.4
Total	14	100	10	100	28	100	12	100	52	100	23	100	94	100	44	100	188	100	89	100%

Age at Diagnosis	Borders		D&G		Fife		Lothian	
	M	F	M	F	M	F	M	F
Min	57	58	48	60	45	67	23	43
Max	91	79	89	95	89	86	95	90
Mean	72.5	71.3	69.7	75.3	69	74	70	72.6
Median	72.5	73	69.7	76.7	70	77	70	74

Gastric

Age at Diagnosis	Borders				D&G				Fife				Lothian				SCAN			
	M		F		M		F		M		F		M		F		M		F	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<45	0	0.0	0	0	0	0.0	0	0.0	1	7.7	0	0.0	1	4.8	0	0.0	1	4.8	0	0.0
45-49	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	7.1	0	0.0	1	7.1
50-54	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	7.1	0	0.0	1	7.1
55-59	0	0.0	0	0	0	0.0	0	0.0	3	23.1	0	0.0	2	9.5	1	7.1	2	9.5	1	7.1
60-64	3	60.0	0	0	1	25.0	0	0.0	2	15.4	1	10.0	1	4.8	1	7.1	1	4.8	1	7.1
65-69	0	0.0	0	0	0	0.0	0	0.0	0	0.0	1	10.0	0	0.0	2	14.3	0	0.0	2	14.3
70-74	0	0.0	0	0	2	50.0	0	0.0	1	7.7	0	0.0	3	14.3	1	7.1	3	14.3	1	7.1
75-79	0	0.0	0	0	0	0.0	1	33.3	0	0.0	2	20.0	5	23.8	3	21.4	5	23.8	3	21.4
80-84	1	20.0	1	100	1	25.0	1	33.3	2	15.4	2	20.0	5	23.8	0	0.0	5	23.8	0	0.0
85+	1	20.0	0	0	0	0.0	1	33.3	4	30.8	4	40.0	4	19.0	4	28.6	4	19.0	4	28.6
Total	5	100	1	100	4	100	3	100	13	100	10	100	21	100	14	100	21	100	14	100%

Age at Diagnosis	Borders		D&G		Fife		Lothian	
	M	F	M	F	M	F	M	F
Min	63	83	62	76	71	81	35	48
Max	90	83	80	86	74	82	93	99
Mean	72.6	n/a	71.8	81.3	33	63	75	73
Median	64	n/a	72.4	81.3	93	98	78	72

Appendix 2 Year 1 to 3 Summary

OG QPI Attainment Summary 2013 – 2015			Borders			D&G			Fife			Lothian			SCAN		
	Target %	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	
QPI 1: Endoscopy - Histological diagnosis made following initial endoscopy and biopsy	Oesophageal	90	88.5	96.7	81.8	90.6	94.1	87.9	91.2	96.7	91.4	78.9	85.7	94.1	84.2	90.4	91.7
	Gastric	90	76.9	81.8	100	66.7	100	66.7	93.9	84.2	80.0	75.0	72.7	84.9	79.4	78.7	83.3
QPI 2: Radiological Staging - Contrast enhanced CT	Oesophageal	90	80.8	96.7	100	100	94.1	100	95.6	100	95.8	95.4	98.7	96.2	94.6	98.2	96.8
	Gastric	90	92.3	100	100	84.6	92.3	100	94.1	100	100	93.2	94.1	94.7	92.5	95.5	96.8
QPI 3: MDT before definitive treatment	Oesophageal	95	-	90.0	95.2	-	97.1	97.0	-	98.4	94.3	-	94.5	95.5	-	95.2	95.4
	Gastric	95	-	100	75.0	-	84.6	88.9	-	100	100	-	88.2	83.6	-	91.0	87.0
QPI 4: TNM Staging & Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	53.8	80.0	90.9	60.6	76.5	84.8	97.1	95.2	93.1	84.9	92.7	91.0	82.1	89.9	90.8
	Gastric	95	46.2	54.5	75.0	38.5	53.8	55.6	88.2	100	85.7	67.6	88.2	64.9	67.9	82.9	69.5
QPI 5: Nutritional Assessment. Referral to a dietician within 4 weeks of diagnosis	Oesophageal	85	50.0	80.0	95.5	51.5	58.8	60.6	57.4	42.9	52.8	41.4	34.7	43.6	47.3	44.4	51.9
	Gastric	85	46.2	72.7	62.5	23.1	38.5	55.6	61.8	52.6	42.9	28.4	32.4	31.6	38.1	40.5	38.9
QPI 6: Appropriate Selection. Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	100	80.0	100	100	75.0	100	75.0	90.0	63.6	83.3	95.2	78.9	86.4	90.0	77.8
	Gastric	80	-	-	100	100	-	-	100	66.7	100	100	100	100	100	83.3	100
QPI 7(i): 30 Day Mortality Following Surgery	Oesophageal	<10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.8	1.7	0.0	2.0
	Gastric	<10	0.0	0.0	0.0	0.0	25.0	0.0	0.0	16.7	0.0	5.0	5.9	0.0	3.2	10.7	0.0
QPI 7(ii): 90 Day Mortality Following Surgery	Oesophageal	<10	14.3	14.3	0.0	0.0	16.7	14.3	0.0	0.0	0.0	3.0	0.0	7.7	3.3	3.5	6.1
	Gastric	<10	0.0	0.0	0.0	0.0	25.0	0.0	20.0	16.7	0.0	5.0	11.8	5.6	6.5	14.3	3.4
QPI 8: Lymph Node Yield curative resection where ≥15 lymph nodes are resected and examined	Gastric	80	0.0	100	100	75.0	75.0	50.0	100	50.0	83.3	75.0	70.6	55.6	74.2	67.9	65.5
QPI 9: Hospital Stay. Discharge within 21 days of surgical procedure	Oesophageal	60	57.1	66.7	80.0	70.0	55.6	100	80.0	69.2	93.3	66.7	68.8	93.9	68.3	66.7	93.5
	Gastric	60	100	100	75.0	100	100	100	80.0	100	100	85.0	77.8	94.9	87.1	86.2	93.1
QPI 10i: Gastric resection margins. Circumferential & longitudinal clear		70	42.9	28.6	20.0	50.0	83.3	50.0	90.0	61.5	45.5	48.5	51.6	50.0	55.0	54.4	46.0
QPI 10ii: Gastric resection margins. Longitudinal clear		90	100	100	66.7	100	100	100	100	100	100	80.0	64.7	83.3	87.1	78.6	86.2
QPI 11: Curative Treatment Rates	Oesophageal	35	26.9	30.0	22.7	33.3	29.4	27.3	29.4	23.8	20.8	29.6	24.7	26.9	29.7	25.6	25.1
	Gastric	35	15.4	9.1	37.5	30.8	30.8	22.2	14.7	31.6	28.6	27.0	25.0	31.6	23.1	25.2	30.5
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal Curative Chemoradiotherapy	<10	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.0
	Oesophageal Peri-operative Chemotherapy	<10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Gastric Curative Chemoradiotherapy	<10	-	-	-	0.0	-	-	0.0	-	-	-	-	-	0.0	-	-
	Gastric Peri-operative Chemotherapy	<10	-	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Oesophageal Palliative Chemotherapy	<20	0.0	0.0	0.0	11.1	0.0	0.0	0.0	14.3	18.2	6.5	8.3	0.0	5.6	6.7	4.9
	Oesophageal Palliative Radiotherapy	<20	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	1.9	0.0	0.0
	Gastric Palliative Chemotherapy	<20	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	8.3	11.1	0.0	6.7	7.7	0.0
Gastric Palliative Radiotherapy	<20	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	50.0	0.0	0.0	40.0	
Clinical Trial Access QPI	OG Patients enrolled in Interventional Clinical Trials	7.5	-	0.0	0.0	-	2.4	0.0	-	5.0	0.0	-	5.1	0.0	-	4.3	0.0
	OG Patients enrolled in Translational Research	15	-	0.0	15.4	-	0.0	18.6	-	0.0	11.0	-	2.8	16.5	-	1.5	15.3

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