

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

OESOPHAGO-GASTRIC CANCER 2017

COMPARATIVE AUDIT REPORT

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Patients diagnosed 1 January 2017 – 31 December 2017

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DOCUMENT HISTORY

Version	Circulation	Date	Comments
Version 1	SCAN Upper GI Group meeting	24 th August 2018	Actions identified. Comments added
Version 2	Lead Clinician and Lead Dietician for commentary and comments	5 th September 2018	Lead Clinician's commentary added
Version 3	Final draft report circulated to SCAN Upper GI Group	17 th September 2018	For Final Comments
Version 4	Final report and action plans circulated to SCAN Upper GI Group and Clinical Governance Groups	29 th October 2018	
Version 4W	Final report added to the SCAN website	10 th April 2019	

OESOPHAGO-GASTRIC CANCER 2017 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 2017 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. The proportion of patients with a clear circumferential resection margin after oesophagectomy has improved following a multidisciplinary focus on this QPI.

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 – further multidisciplinary work is required on the revised QPI to develop a robust process for recording MUST score and dietician input.
2. Failure to meet the curative treatment rate QPI requires a national drive towards earlier diagnosis for oesophagogastric cancer. A variation in curative treatment between boards was noted this year for oesophageal cancer. Numbers were small for some boards but it is important this is monitored in 2018.

We have also been involved in a national survival analysis for OG cancer. The additional of survival analysis is an important step forward in improving outcomes for patients with OG cancer.

Mr Peter Lamb
Chair, SCAN Upper GI Group
September 2017

SCAN ACTION POINTS 2017

QPI	Action required	Lead	Date for Update
QPI 4i	MDT chair to ensure that the TMN is documented at the central MDM at the RIE	Peter Lamb	15 th March 2019
QPI 4ii	MDM Chair to ensure that the treatment intent is clearly stated in order for MDM coordinators and audit staff to document accurately.	Peter Lamb	15 th March 2019
QPI 5i	SCAN Dieticians need to put mechanisms in place to ensure MUST scores are calculated and documented in the patient record.	Beverley Wallace	15 th March 2019
QPI 5ii	Mechanisms need put in place to ensure that patients at risk of malnutrition are referred into the dietetics service appropriately	Beverley Wallace	15 th March 2019
	Lothian gastric case with MUST score greater than 2 not seen by a dietician requires review.	Beverley Wallace	15 th March 2019
QPI 13	Action is required in NHS Fife to ensure HER2 status is reported prior to commencing treatment.	Peter Driscoll	15 th March 2019
Trials QPI	Principal investigators should liaise with the SCRN Network Manager to ensure trials are registered on the SCRN database "EDGE".	Richard Skipworth	15 th March 2019

SCAN ACTION POINTS 2016

QPI	Action Required	Person Responsible	Progress
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	Dietetics added to Risk Register due to ongoing issues with lack of staff and staff workload.
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	The cases have been reviewed by the team.
QPI 9	We are developing postoperative protocols with ERAS components to optimise postoperative care	Richard Skipworth / Peter Lamb	Protocols have been written.

SCAN Audit OG Cancers QPI Attainment Summary 2017

OG Cancers QPI Attainment Summary 2017		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 1: Endoscopy - Histological diagnosis made within 6 weeks of initial endoscopy and biopsy	Oesophageal	95	N 25 D 25	100%	N 27 D 28	96.4%	N 63 D 64	98.4%	N 125 D 133	94.0%	N 240 D 250	96.0%
	Gastric	95	N 7 D 7	100%	N 7 D 7	100%	N 29 D 30	96.7%	N 31 D 36	86.1%	N 74 D 80	92.5%
QPI 3: MDT before definitive treatment	Oesophageal	95	N 22 D 24	91.7%	N 28 D 30	93.3%	N 65 D 65	100%	N 129 D 133	97.0%	N 244 D 252	96.8%
	Gastric	95	N 6 D 7	85.7%	N 7 D 8	87.5%	N 29 D 30	96.7%	N 37 D 38	97.4%	N 79 D 83	95.2%
QPI 4: TNM Staging recorded at MDT prior to treatment	Oesophageal	90	N 23 D 25	92.0%	N 29 D 30	96.7%	N 64 D 66	97.0%	N 127 D 137	92.7%	N 243 D 258	94.2%
	Gastric	90	N 4 D 7	57.1%	N 7 D 8	87.5%	N 27 D 31	87.1%	N 35 D 38	92.1%	N 73 D 84	86.9%
QPI 4: TNM Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	N 24 D 25	96.0%	N 30 D 30	100%	N 66 D 66	100%	N 133 D 137	97.1%	N 253 D 258	98.1%
	Gastric	95	N 6 D 7	85.7%	N 8 D 8	100%	N 29 D 31	93.5%	N 36 D 38	94.7%	N 79 D 84	94.0%
QPI 5: Nutritional Assessment: Undergo screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.	Oesophageal	95	N 12 D 25	48.0%	N 8 D 30	26.7%	N 25 D 66	37.9%	N 72 D 137	52.6%	N 117 D 258	45.3%
	Gastric	95	N 2 D 7	28.6%	N 6 D 8	75.0%	N 12 D 29	41.4%	N 18 D 38	47.4%	N 38 D 82	46.3%
QPI 5: Nutritional Assessment: are at high risk of malnutrition (MUST score >2) referred to dietician	Oesophageal	90	N 3 D 3	100%	N 2 D 2	100%	N 2 D 2	100%	N 57 D 60	95.0%	N 64 D 67	95.5%
	Gastric	90	N 1 D 1	100%	N 3 D 3	100%	N 1 D 1	100%	N 9 D 11	81.8%	N 14 D 16	87.5%
QPI 6: Appropriate Selection: Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	N 4 D 4	100%	N 3 D 3	100%	N 3 D 3	100%	N 16 D 18	88.9%	N 26 D 28	92.9%
	Gastric	80	N 0 D 0	-	N 0 D 0	-	N 5 D 5	100%	N 0 D 1	0.0%	N 5 D 6	83.3%
QPI 7 (i): 30 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<5	Board of Surgery						N 1 D 39	2.6%	N 1 D 39	2.6%
	Gastric	<5	N 0 D 0	-	N 0 D 1	0.0%	N 0 D 3	0.0%	N 0 D 16	0.0%	N 0 D 20	0.0%

OG Cancers QPI Attainment Summary 2017		Target %	Borders	D&G	Fife	Lothian	SCAN			
QPI 7 (II): 90 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<7.5	Board of Surgery			N 1 D 37	2.7%	N 1 D 37	2.7%	
	Gastric	<7.5	N 0 D 0	-	N 0 D 1	0.0%	N 0 D 3	0.0%	N 0 D 16	0.0%
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 35 D 39	89.7%	N 35 D 39	89.7%	
	Gastric	80	N 0 D 0	-	N 1 D 1	100%	N 3 D 3	100%	N 13 D 16	81.3%
QPI 9: Hospital of Stay: Discharge within 14 days of surgical procedure (presented by Board of Surgery)	Oesophageal	60	Board Of Surgery			N 32 D 48	66.7%	N 32 D 48	66.7%	
	Gastric	60	N 0 D 0	-	N 1 D 1	100%	N 3 D 3	100%	N 11 D 15	73.3%
QPI 10(I): Oesophageal resection margins. Circumferential clear (presented by Board of Surgery)	Oesophageal	70	Board of Surgery			N 29 D 39	74.4%	N 29 D 39	74.4%	
QPI 10(II): Longitudinal margins clear (presented by Board of Surgery)	Oesophageal	90	Board of Surgery			N 39 D 39	100%	N 39 D 39	100%	
	Gastric	90	N 0 D 0	-	N 1 D 1	100%	N 3 D 3	100%	N 15 D 16	93.8%
QPI 11: Curative Treatment Rates	Oesophageal	35	N 4 D 25	16.0%	N 5 D 30	16.7%	N 8 D 66	12.1%	N 39 D 137	28.5%
	Gastric	35	N 0 D 7	0.0%	N 0 D 8	0.0%	N 10 D 31	32.2%	N 10 D 38	26.3%
QPI 12: Mortality after Oncological Treatment (Oesophageal)	Curative Chemoradiotherapy	30 day	N 0 D 0	-	N 0 D 0	-	N 0 D 0	-	N 0 D 3	0.0%
		90 day	N 0 D 0	-	N 0 D 0	-	N 0 D 0	-	N 0 D 3	0.0%
	Peri-operative Chemotherapy	30 day	N 0 D 4	0.0%	N 0 D 3	0.0%	N 0 D 3	0.0%	N 0 D 15	0.0%
		90 day	N 0 D 4	0.0%	N 0 D 3	0.0%	N 0 D 3	0.0%	N 0 D 15	0.0%

OG Cancers QPI Attainment Summary 2017			Target %	Borders	D&G	Fife	Lothian	SCAN
QPI 12: Mortality after Oncological Treatment (Oesophageal)	Adjuvant Chemotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%
	Downstaging Chemotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%
QPI 12: Mortality after Oncological Treatment (Gastric)	Curative Chemoradiotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -
	Peri-operative Chemotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 0.0% D 5 0.0%	N 0 0.0% D 1 0.0%	N 0 0.0% D 6 0.0%
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 0.0% D 5 0.0%	N 0 0.0% D 1 0.0%	N 0 0.0% D 6 0.0%
	Adjuvant Chemotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 0.0% D 2 0.0%	N 0 - D 0 -	N 0 0.0% D 2 0.0%
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 0.0% D 2 0.0%	N 0 - D 0 -	N 0 0.0% D 2 0.0%
	Downstaging Chemotherapy	30 day	<5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -
		90 day	<7.5	N 0 D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -	N 0 - D 0 -
QPI 12. 30 day Mortality after Palliative Chemotherapy	Oesophageal	<5	N 0 0.0% D 4 0.0%	N 0 0.0% D 5 0.0%	N 0 0.0% D 7 0.0%	N 3 15.8% D 19 15.8%	N 3 8.6% D 35 8.6%	
	Gastric	<5	N 0 0.0% D 1 0.0%	N 0 - D 0 -	N 0 0.0% D 3 0.0%	N 0 0.0% D 2 0.0%	N 0 0.0% D 6 0.0%	
QPI 13 HER2 Status in Advanced Gastric Cancer			90	N 2 100% D 2 100%	N 0 - D 0 -	N 2 50% D 4 50%	N 2 100% D 2 100%	N 6 75.0% D 8 75.0%
Clinical Trial QPI NB: N= patients enrolled in Trials and held on SCR database, D = 5 year average Cancer Trials.			15	N 1 2.7% D 37 2.7%	N 2 4.3% D 46 4.3%	N 9 9.4% D 96 9.4%	N 18 9.68% D 187 9.68%	N 30 8.1% D 366 8.1%

INTRODUCTION AND METHODS

Cohort

This report covers patients diagnosed with an Oesophageal or Gastric cancer from 01/01/2017 to 31/12/2017. The results contained within this report are presented by NHS board of diagnosis, where the QPI relates to surgical outcomes the results are 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 were used to report year 4, 2016 data with the existing data fields and using the new measurability. Where new data fields were required, collection and reporting started in year 5, 2017.

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. SCAN data was recorded in eCase for Lothian, Borders, Dumfries & Galloway and Fife.

Lead Clinicians and Audit Personnel

SCAN Region	Hospital	Lead Clinician	Audit Support
NHS Borders	Borders General Hospital	Mr Jonathon 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 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 24th August 2018.
- The final draft of the regional report was circulated to members of the SCAN Upper GI Group and Clinical Governance Framework on 1/10/2018.

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 2012 to 2016. 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 01/01/2017 – 31/12/2017

	Borders	D&G	Fife	Lothian	SCAN
Oesophageal Cancer	25	30	66	137	258
Gastric Cancer	7	8	31	38	84
Total Upper GI Cancers	32	38	97	175	342

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

Case Ascertainment	Borders	D&G	Fife	Lothian	SCAN
Number of cases from audit	32	38	97	175	342
Cases from Cancer Registry (2012-2016)	37	46	96	187	366
Case Ascertainment	86.5%	82.6%	101.0%	93.6%	93.4%

Source: Scottish Cancer Registry, ISD. Data extracted from ACaDMe 01/08/2018

Note: Case ascertainment is reported by board of diagnosis and has been estimated using a denominator based on the latest (2012-2016) 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

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
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	0	2	2	4	8
Numerator	25	27	63	125	240
Not recorded for numerator	0	0	0	0	0
Denominator	25	28	64	133	250
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	96.4	98.4	94.0	96.0

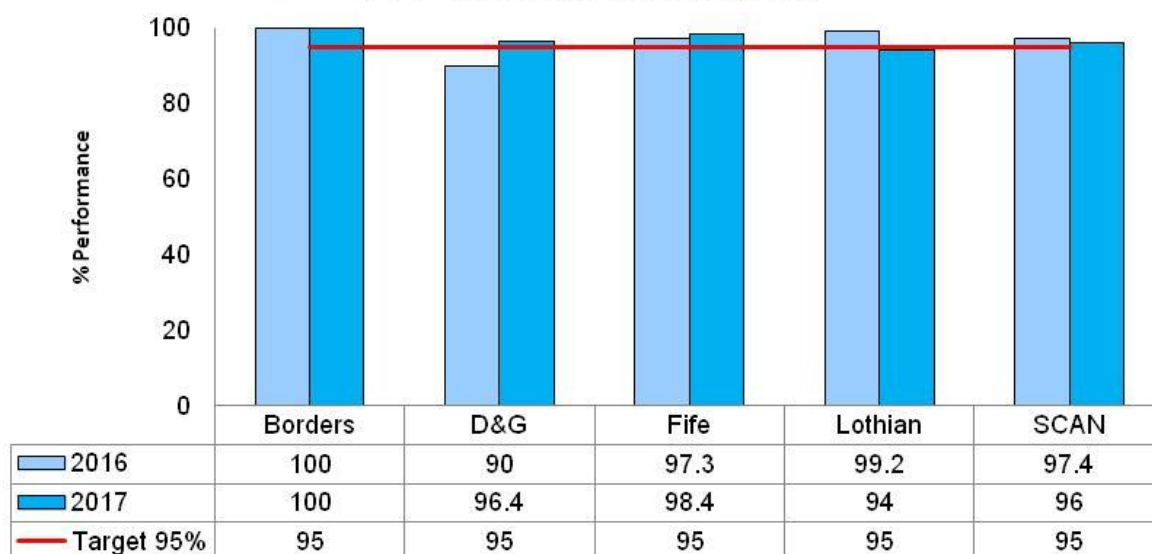
Lothian: The target was not met, showing a shortfall of 1% (8 cases). The majority of these patients were diagnosed on repeat endoscopy but outwith the QPI parameters.

Gastric cancer

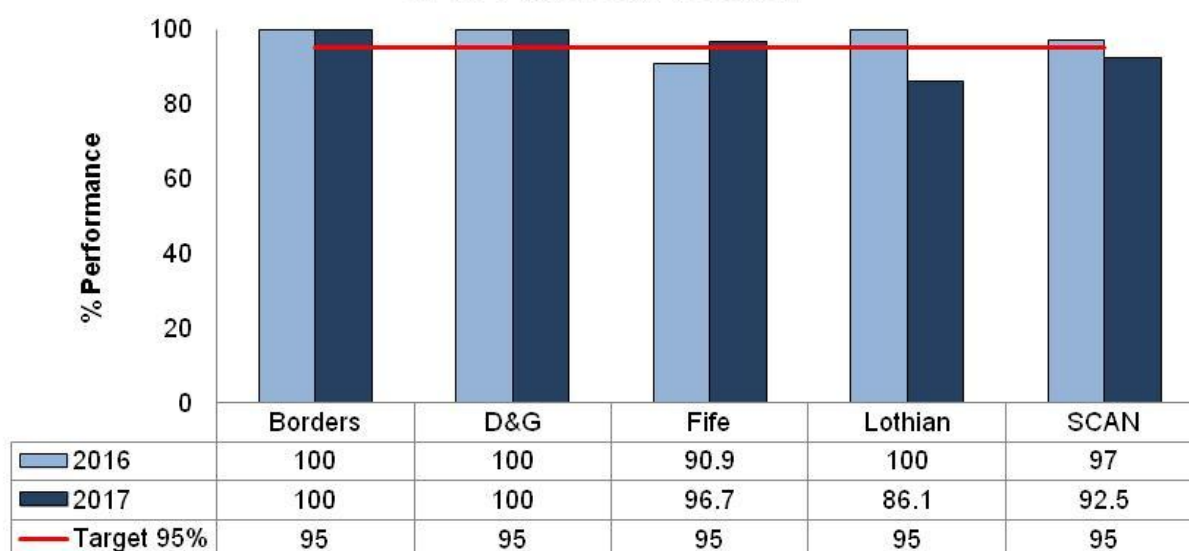
Target 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	1	1	2	4
Numerator	7	7	29	31	74
Not recorded for numerator	0	0	0	0	0
Denominator	7	7	30	36	80
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	100.0	96.7	86.1	92.5

Lothian: The target was not met showing a shortfall of 8.9% (5 cases). 2 patients had no histology (radiological diagnoses), 2 had endoscopies showing only high grade dysplasia prior to surgery and 1 patient was treated endoscopically for a suspicious lesion.

QPI 1 - Endoscopy (Oesophageal)



QPI 1 - Endoscopy (Gastric)

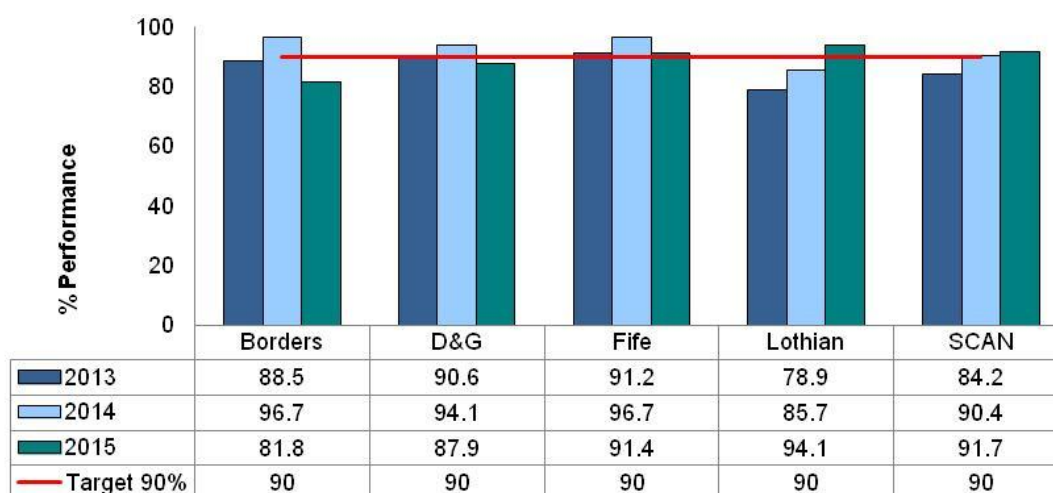


Comment: A retrospective audit on times to endoscopy has been carried out for patients diagnosed in 2016. This showed that there are no major delays from referral to endoscopy for patients in SCAN, with a median time of 14 days and a mean of 21 (range 0-231). Patients who waited more than 90 days have been reviewed.

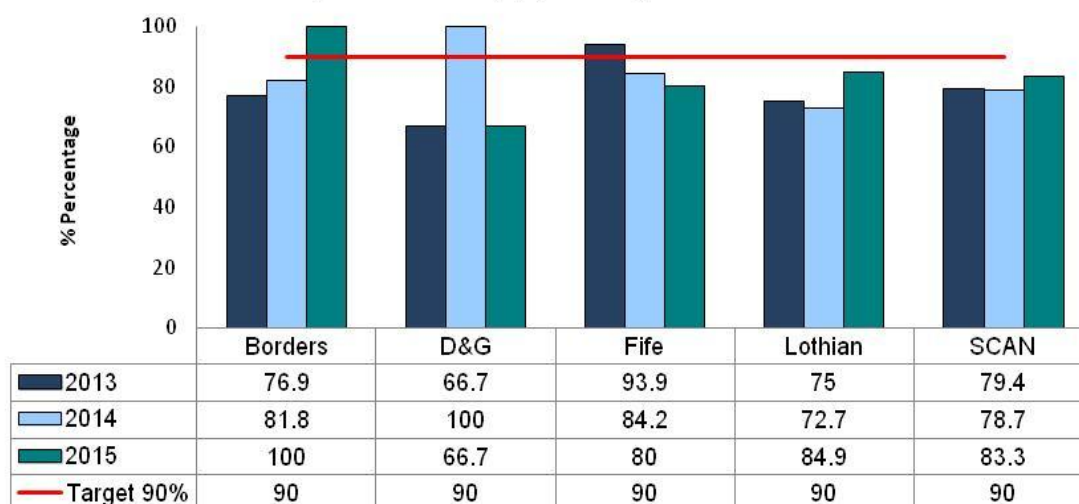
Action: No action has been identified.

Following the formal review after 3 years of data collection, the measurability for QPI 1 was changed for year 4 (2016), when a 6 week timeframe was introduced and the target was increased to 95%. Below are QPI 1 details from the first 3 years.

QPI 1 - Endoscopy (Oesophageal) 2013 - 2015



QPI 1 - Endoscopy (Gastric) 2013 - 2015



QPI 3 – Multi-Disciplinary Team (MDT) Meeting

Target = 95%

Numerator = Number of patients with oesophageal or gastric cancer discussed at the MDT meeting (MDM) 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
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	1	0	1	4	6
Numerator	22	28	65	129	244
Not recorded for numerator	0	0	0	0	0
Denominator	24	30	65	133	252
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	91.7	93.3	100.0	97.0	96.8

Borders: The target was not met with a shortfall of 3.3% (2 cases). 1 patient received a stent prior to MDM and 1 patient was given palliative treatment for mets without being referred to the MDT.

D&G: The target was not met with a shortfall of 1.7% (2 cases). 1 patient was given emergency treatment prior to MDM and 1 was discussed at the MDM post mortem.

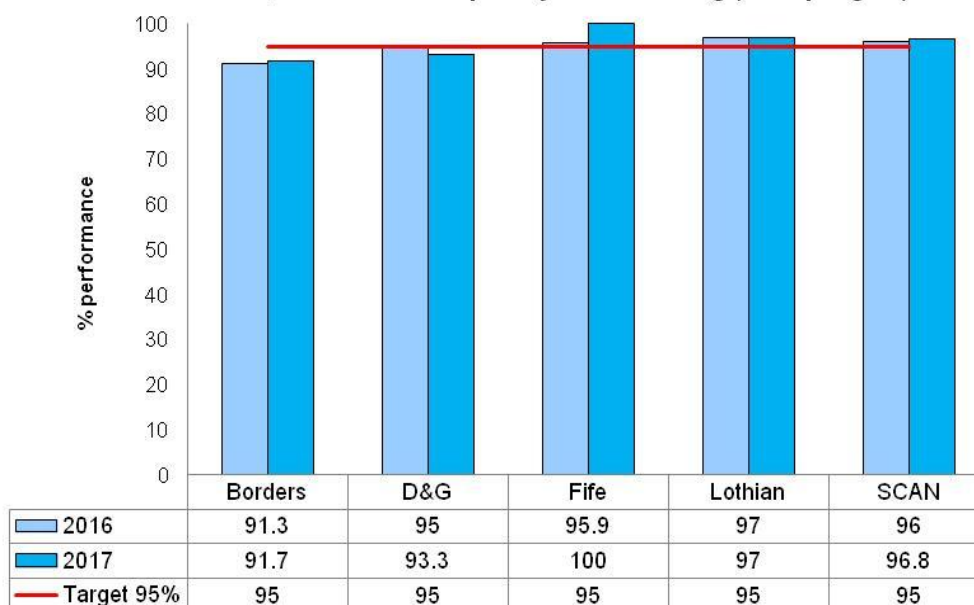
Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	0	1	0	1
Numerator	6	7	29	37	79
Not recorded for numerator	1	0	0	0	1
Denominator	7	8	30	38	83
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	85.7	87.5	96.7	97.4	95.2

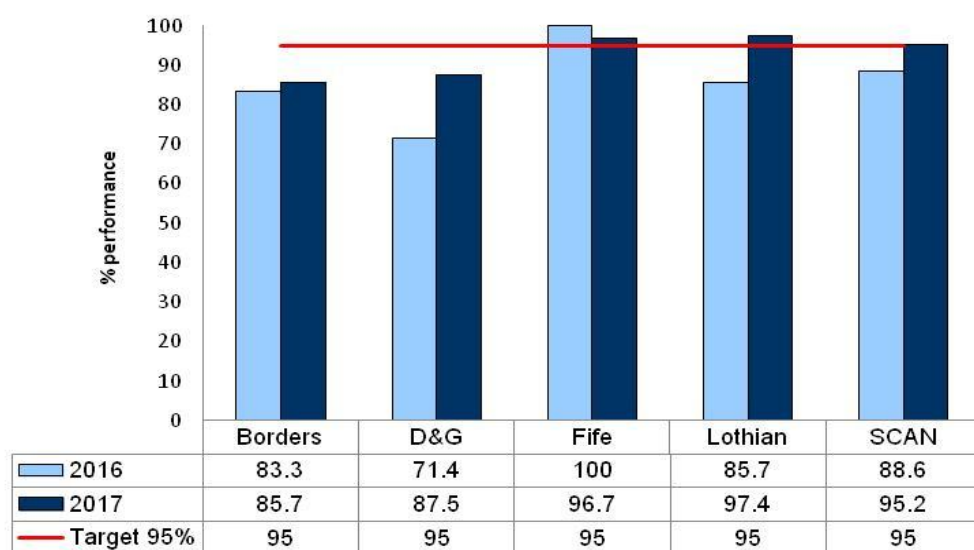
Borders: The target was not met with a shortfall of 9.3% (1 case). The case was referred to the MDT but was not discussed, no further details were available.

D&G: The target was not met with a shortfall of 7.5% (1 case). The patient was referred to the MDT for registration but was not discussed.

QPI 3 - Multi-Disciplinary Team Meeting (Oesophageal)



QPI 3 - Multi-Disciplinary Team (Gastric)

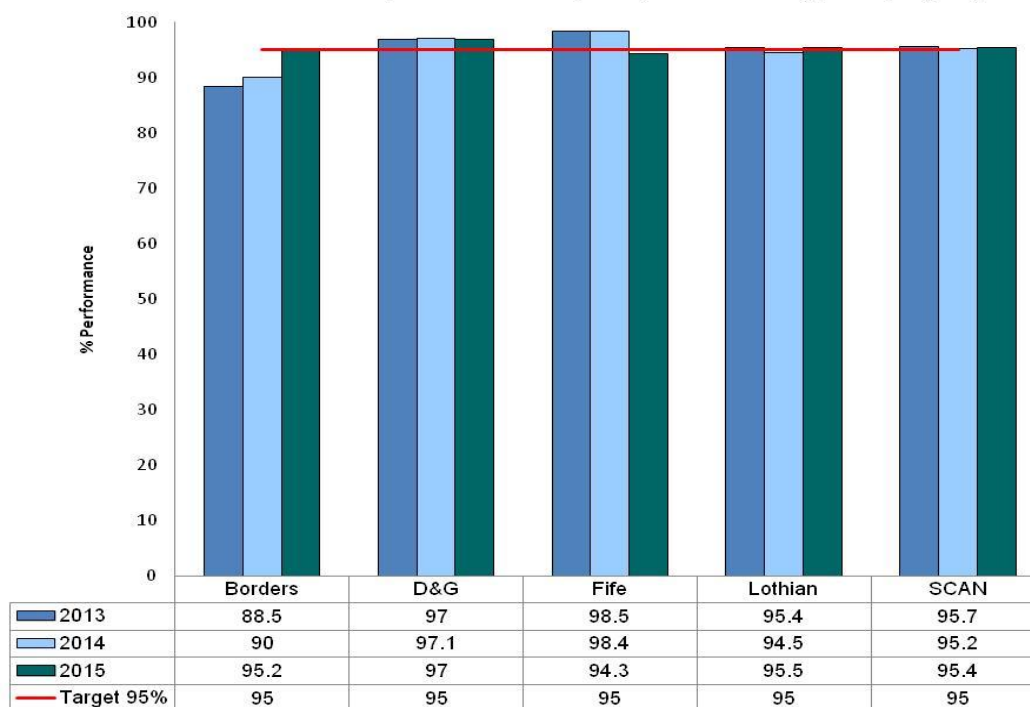


Comment:

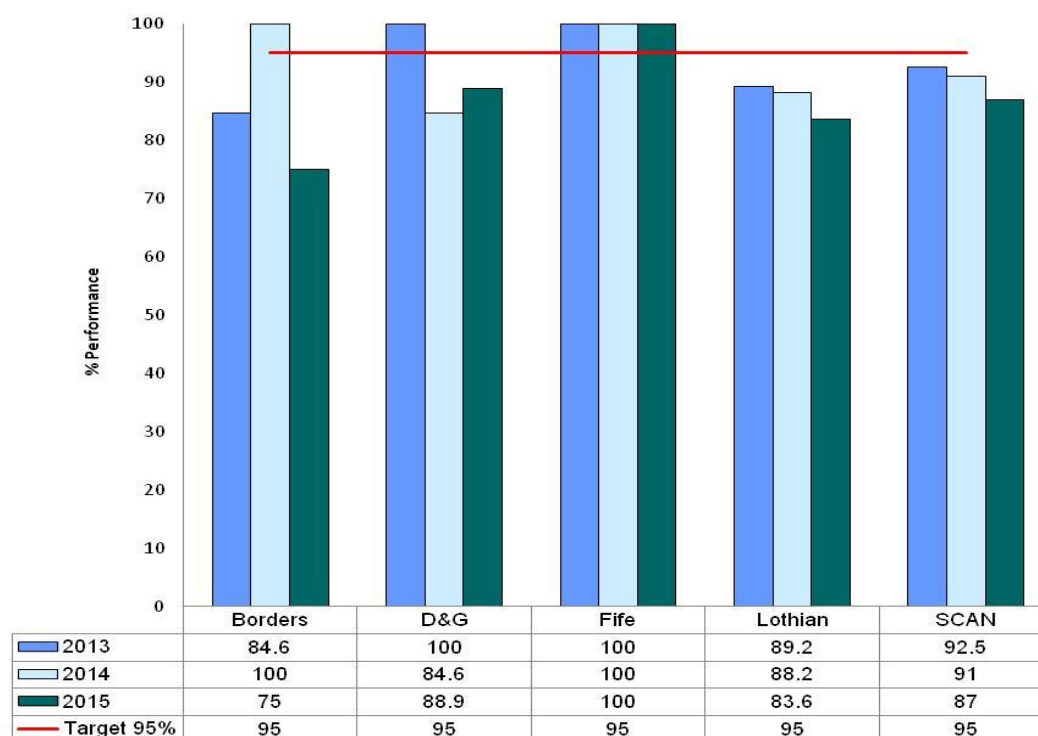
The few patients treated prior to MDT discussion were treated appropriately in view of the MDT and no action has been identified.

After the formal 3 year review the measurability for QPI 3 changed for year 4 (2016). The QPI was previously more complex and included whether TNM and treatment intent were recorded at MDM. Below are the details from the first 3 years of QPI3 results with those requirements.

QPI 3 - Multi-Disciplinary Team Meeting (Oesophageal)



QPI 3 Multi-Disciplinary Team Meeting (Gastric)



QPI 4i – Staging (TNM)

Staging Target = 90%

Numerator = Number of patients with oesophageal or gastric cancer who have TNM stage recorded at the MDT meeting (MDM) 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
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	0	0	0	0	0
Numerator	23	29	64	127	243
Not recorded for numerator	0	0	0	0	0
Denominator	25	30	66	137	258
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	92.0	96.7	97.0	92.7	94.2

The target was met by all Boards.

Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	0	0	0	0
Numerator	4	7	27	35	73
Not recorded for numerator	0	0	0	0	0
Denominator	7	8	31	38	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	57.1	87.5	87.1	92.1	86.9

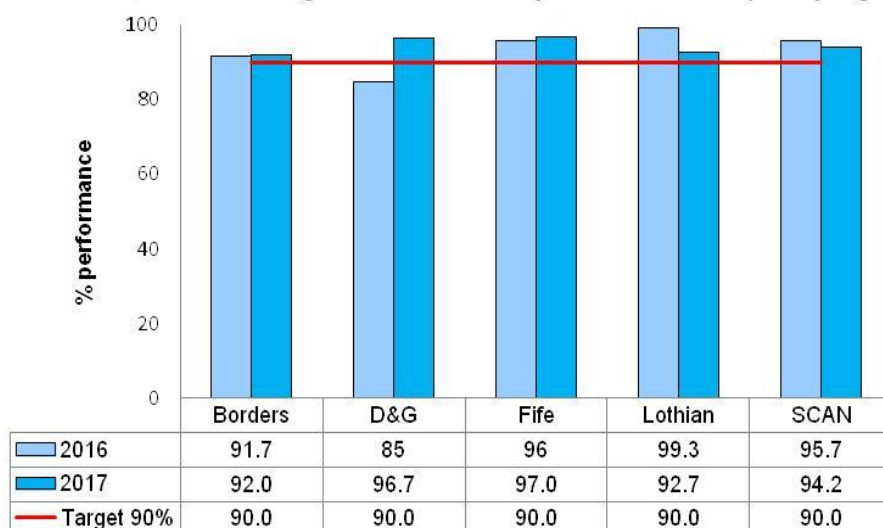
Borders: The target was not met with a shortfall of 32.9% (3 cases). 2 patients had no TNM recorded (1 was discussed at MDM, 1 was not discussed) and 1 patient declined investigations and was given best supportive care.

D&G: The target was not met with a shortfall of 2.5% (1 case). Although the patient was discussed at the MDM, no TNM staging was documented.

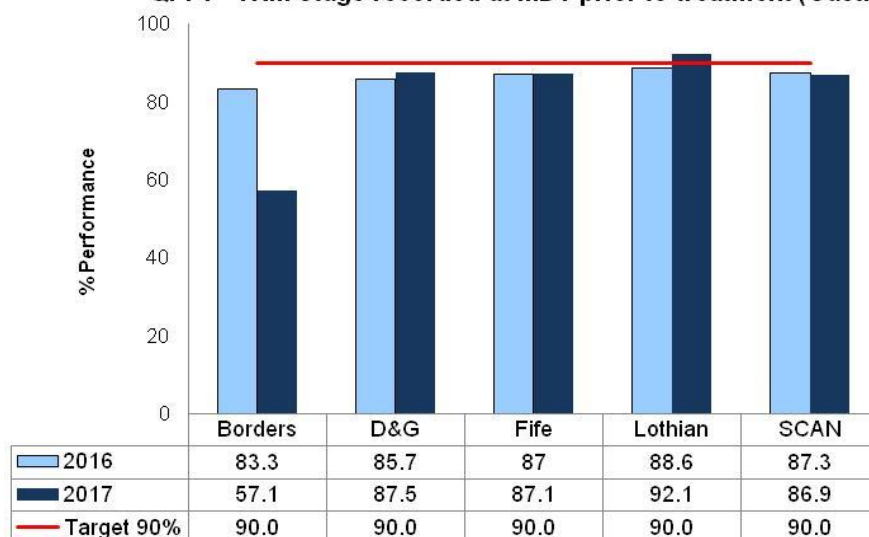
Fife: The target was not met with a shortfall of 2.9% (4 cases). 3 patients were discussed at MDM but no TNM was documented, a further patient without TNM was not discussed at MDM.

Lothian: The target was met.

QPI 4 - TNM Stage recorded at MDT prior to treatment (Oesophageal)



QPI 4 - TNM Stage recorded at MDT prior to treatment (Gastric)



TNM stage and treatment intent were previously part of QPI 3 so comparable data are not available prior to 2016.

Comment: These results reflect current practice at the single central MDT meeting, although only small numbers of patients had no TNM documented this is an important requirement for patient outcomes and should be clearly documented at the MDM.

Action: MDT Chair to ensure TNM is recorded at the MDM.

QPI 4ii – Treatment Intent

Target = 95%

Numerator = Number of patients with oesophageal or gastric cancer who have 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 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	0	0	0	0	0
Numerator	24	30	66	133	253
Not recorded for numerator	0	0	0	0	0
Denominator	25	30	66	137	258
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	96.0	100.0	100.0	97.1	98.1

The target was met by all Boards

Gastric Cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	0	0	0	0
Numerator	6	8	29	36	79
Not recorded for numerator	0	0	0	0	0
Denominator	7	8	31	38	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	85.7	100.0	93.5	94.7	94.0

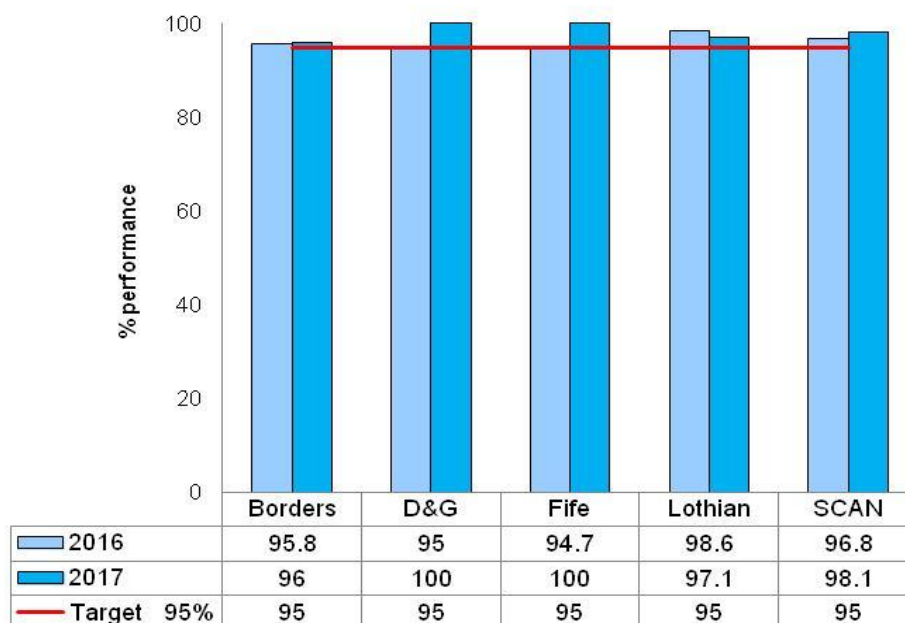
Borders: The target was not met with a shortfall of 9.3% (1 case). The patient was discussed at the MDM but treatment intent was not documented.

D&G: The target was met.

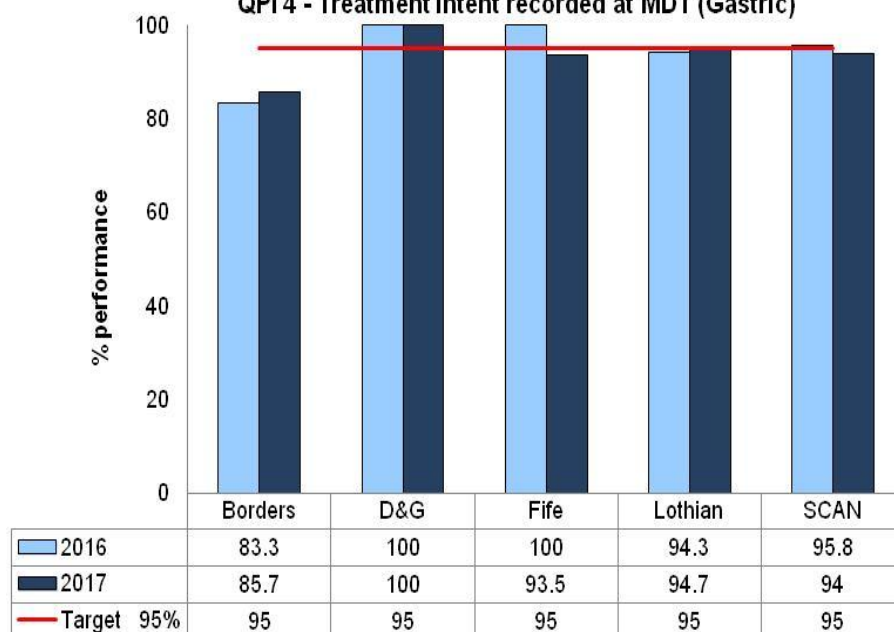
Fife: The target was not met with a shortfall of 1.5% (2 cases). Neither patient had treatment intent recorded at the MDM.

Lothian: The target was not met with a shortfall of 0.3% (2 cases). 1 had best supportive care without treatment intent documented at the MDM and 1 patient had an emergency laparotomy without a treatment intent being recorded at MDM.

QPI 4 - Treatment Intent at MDT (Oesophageal)



QPI 4 - Treatment Intent recorded at MDT (Gastric)



TNM stage and treatment intent were previously part of QPI 3 so comparable data are not available prior to 2016.

Comment: Again, it should be noted that this QPI reflects practice at the Regional SCAN MDM and intent may not have been explicitly indicated at the MDM.

Action: MDM Chair to ensure that the treatment intent is clearly stated in order for MDM coordinators and audit staff to document accurately.

QPI 5i – Nutritional Assessment: Malnutrition Universal Screening Tool (MUST)

Target = 95%

Numerator = Number of patients with oesophageal or gastric cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.

Denominator = All patients with an oesophageal or gastric cancer diagnosis

Exclusions = No exclusions

Oesophageal cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	0	0	0	0	0
Numerator	12	8	25	72	117
Not recorded for numerator	0	0	25	0	25
Denominator	25	30	66	137	258
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	48.0	26.7	37.9	52.6	45.3

Borders: The target was not met by 47% (13 cases). All 13 patients had no MUST score documented, 7 were seen by a dietician, 6 did not see a dietician (2 through patient's choice).

D&G: The target was not met by 68.3% (22 cases). None of the 22 patients had a MUST score documented, 18 patients were seen by a dietician pre-treatment.

Fife: The target was not met by 57.1% (16 cases). None had a MUST score documented pre-treatment, 14 were seen by a dietician after first treatment, 2 patients did not see a dietician through patient choice.

Lothian: The target was not met by 42.4% (65 cases). 34 patients had no MUST score taken but were seen by a dietician, 19 patients had a MUST score taken and were seen by a dietician after first treatment. 12 patients had no MUST score taken and were not seen by a dietician.

SCAN – 114 patients in total were seen by a dietician but were outwith the QPI criteria.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	0	2	0	2
Numerator	2	6	12	18	38
Not recorded for numerator	0	0	11	0	11
Denominator	7	8	29	38	82
Not recorded for exclusions	0	0	0	1	1
Not recorded for denominator	0	0	0	0	0
% Performance	28.6	75.0	41.4	47.4	46.3

Borders: The target was not met by 66.4% (5 cases). None of whom had a MUST score calculated and 4 had no record of having seen a dietician.

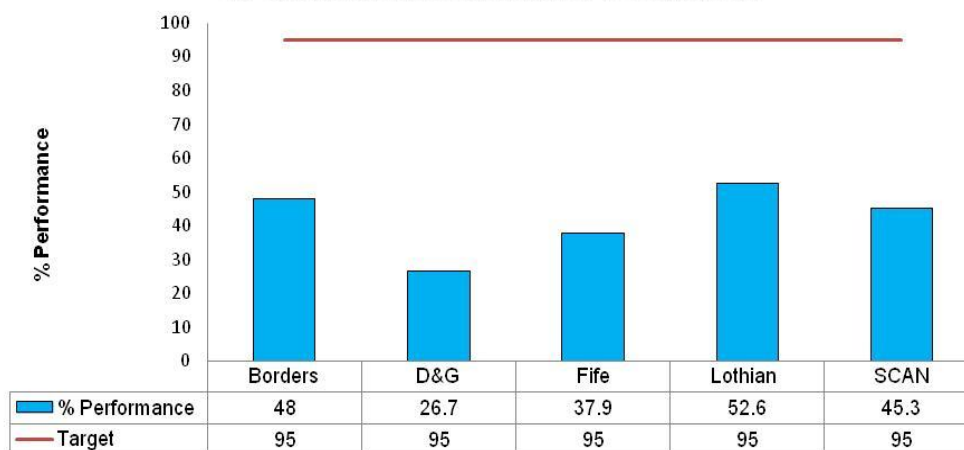
D&G: The target was not met by 20% (2 cases). Neither had a MUST score recorded but 1 patient saw a dietician before treatment.

Fife: The target was not met by 53.6% (17 cases). 9 patients had no MUST score but were seen by a dietician after first treatment, the remaining 8 patients had no MUST score and were not seen by a dietician.

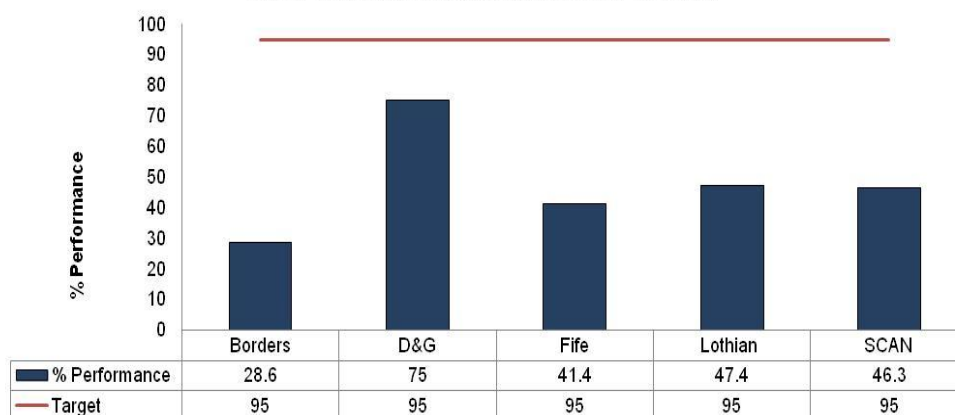
Lothian: The target was not met by 47.6% (20 cases). Of those 20 cases, 18 patients had no MUST score documented (10 of whom were seen by a dietician, 8 were not). The remaining 2 patients were seen by a dietician after first treatment and had MUST score recorded at that point.

SCAN – 24 patients in total were seen by a dietician but were outwith the QPI criteria.

QPI 5i Nutritional Assessment: MUST (Oesophageal)



QPI 5i Nutritional Assessment: MUST (Gastric)



Comment: Documentation of MUST is still not good and MDT referral forms are poorly completed.

Action: SCAN Dieticians need to put mechanisms in place to ensure MUST scores are calculated and documented in the patient record.

QPI 5ii – Nutritional Assessment: Referral to a dietician for patients with a high risk of malnutrition (MUST score ≥ 2)

Target = 90%

Numerator: Patients with high risk of malnutrition (MUST Score ≥ 2) who are referred to a dietician.

Denominator: All patients with MUST Score ≥ 2

No exclusions

Oesophageal cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	22	28	64	77	191
Numerator	3	2	2	57	64
Not recorded for numerator	0	0	0	0	0
Denominator	3	2	2	60	67
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	2	0	60	0	62
% Performance	100.0	100.0	100.0	95.0	95.5

The target was met by all Boards.

Gastric cancer

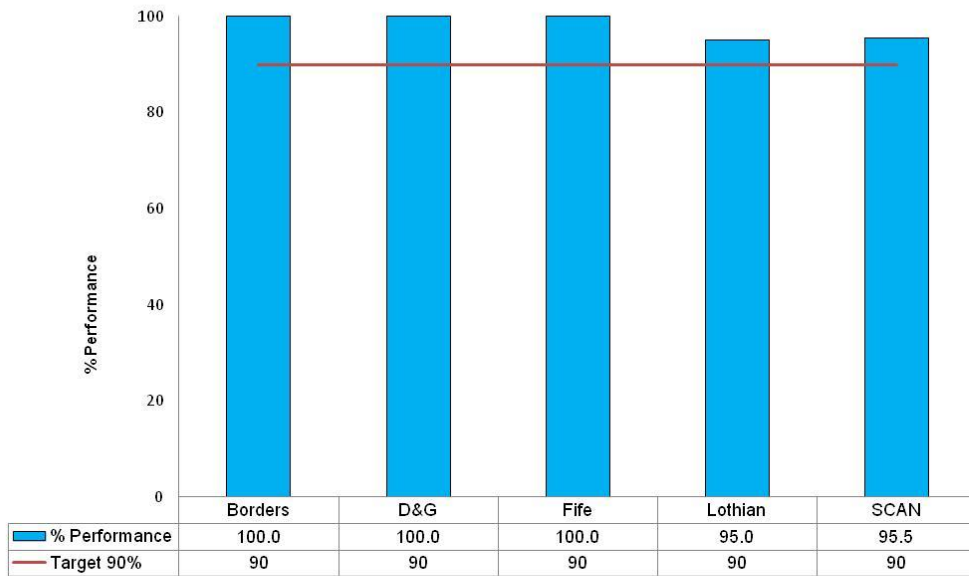
Target 90%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	6	5	30	27	68
Numerator	1	3	1	9	14
Not recorded for numerator	0	0	0	0	0
Denominator	1	3	1	11	16
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	60
% Performance	100.0	100.0	100.0	81.8	87.5

Lothian: The target was not met with a shortfall of 8.2% (2 cases). 1 was for best supportive care and died 6 weeks after diagnosis, there was no further information on the second case which requires review by the Lothian dieticians.

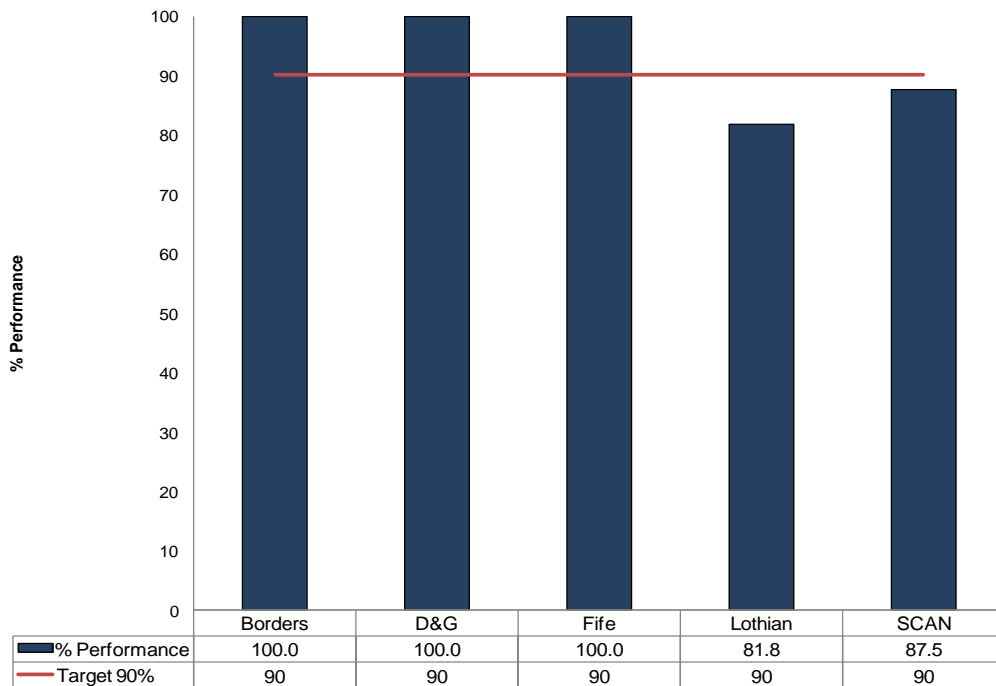
Comment: Although the majority of high risk patients do get seen by dieticians, documentation of MUST is still not good and MDT referral forms are poorly completed.

Action: Mechanisms need put in place to ensure that patients at risk of malnutrition are referred into the dietetics service appropriately.

QPI 5 (ii) - MUST score ≥ 2 Referred to a Dietician (Oesophageal)



QPI 5 (ii) - MUST Score ≥ 2 Referred to a Dietician (Gastric)



SURGICAL OUTCOMES

QPI 6 – Appropriate Selection of Surgical Patients

Target = 80%

Numerator = Number of patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy or chemoradiotherapy who then undergo surgical resection

Denominator = All patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy or chemoradiotherapy.

Exclusions = No exclusions

Oesophageal cancer

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	21	27	63	119	230
Numerator	4	3	3	16	26
Not recorded for numerator	0	0	0	0	0
Denominator	4	3	3	18	28
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	88.9	92.9

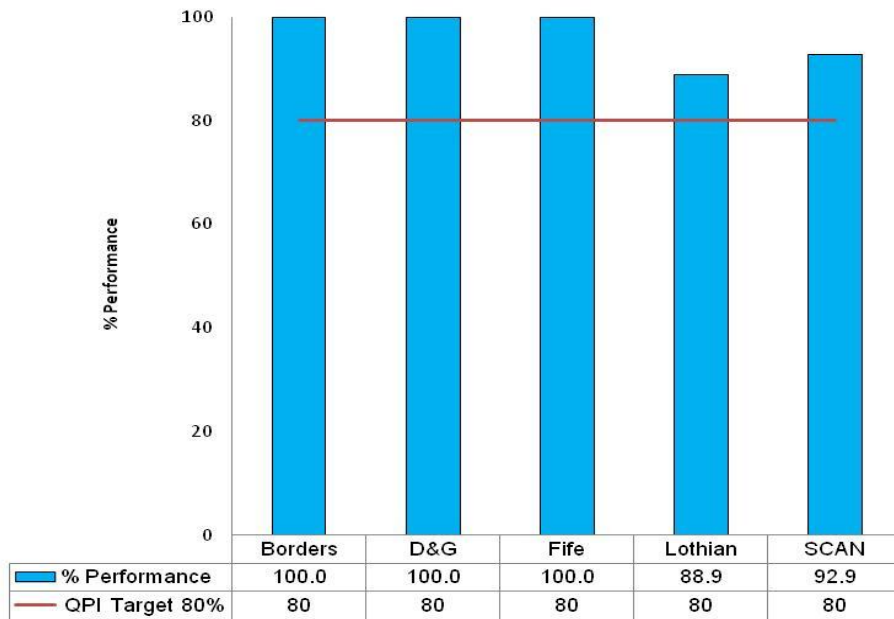
The target was met by all Health Boards.

Gastric cancer

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	7	8	26	37	78
Numerator	0	0	5	0	5
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	5	1	6
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	0.0	83.3

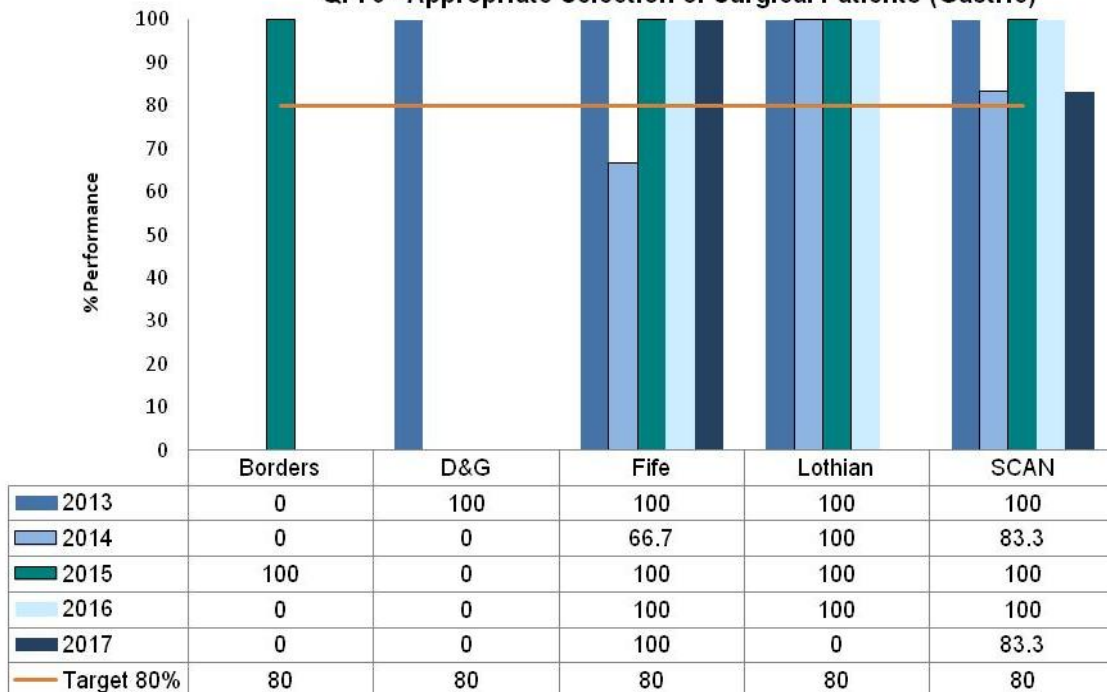
The target was met by all Health Boards.

QPI 6 - Appropriate Selection of Surgical Patients (Oesophageal)

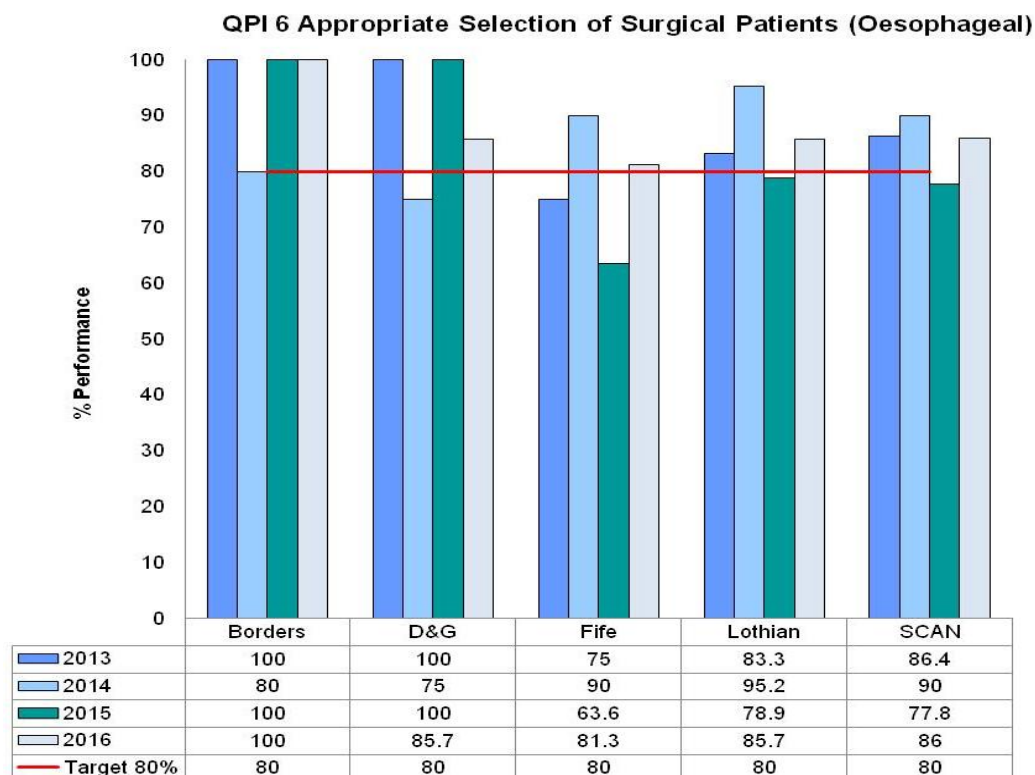


Following 3 year formal review QPI 6 was updated, for year 5. The QPI was amended to include patients who received chemoradiotherapy. The results are directly comparable for years 1-5, for the gastric cohort as there were no gastric cancer patients in SCAN who received chemoradiotherapy in 2017.

QPI 6 - Appropriate Selection of Surgical Patients (Gastric)



Below are the details from the first 4 years of results for QPI 6 for Oesophageal cancer.



QPI 7 – 30/90 Day Mortality Following Surgery

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 and 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
2017 Cohort	258	258
Ineligible for this QPI	219	219
Numerator	1	1
Not recorded for numerator	0	0
Denominator	39	39
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	2.6	2.6

90 Day Mortality

Target < 7.5%	RIE	SCAN
2017 Cohort	258	258
Ineligible for this QPI	221	221
Numerator	1	1
Not recorded for numerator	0	0
Denominator	37	37
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	2.7	2.7

2 patients were less than 90 days post surgery at time of reporting so are not included in the denominator.

Gastric cancer by Hospital of Surgery

30 Day Mortality

Target <5%	DGRI	Fife VHK	RIE	SCAN
2017 Cohort	8	31	45	84
Ineligible for this QPI	7	28	29	64
Numerator	0	0	0	0
Not recorded for numerator	0	0	0	0
Denominator	1	3	16	20
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%	DGRI	Fife VHK	RIE	SCAN
2017 Cohort	8	31	45	84
Ineligible for this QPI	7	28	29	64
Numerator	0	0	0	0
Not recorded for numerator	0	0	0	0
Denominator	1	3	16	20
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

QPI 8 – Lymph Node Yield

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 – Hospital of surgery

Target 90%	RIE	SCAN
2017 Cohort	258	258
Ineligible for this QPI	219	219
Numerator	35	35
Not recorded for numerator	0	0
Denominator	39	39
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	89.7	89.7

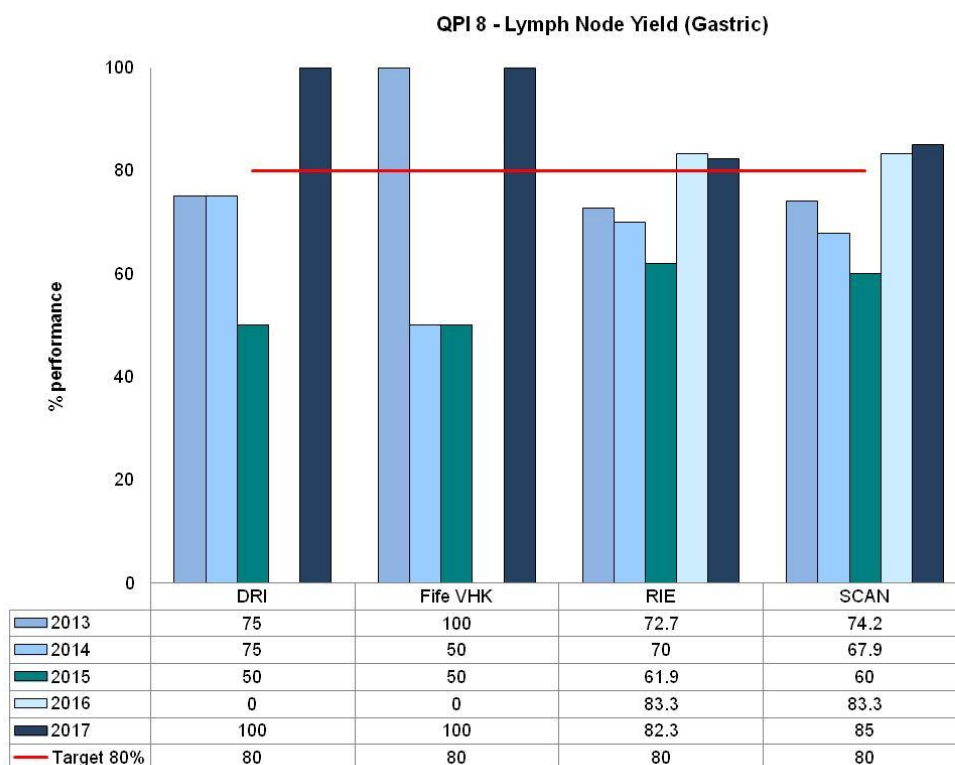
SCAN: The target was not met showing a shortfall of 0.3% (4 cases). 3 were post treatment, 1 with a complete pathological response and lymph nodes can be harder to find in this context. The remaining case was an early stage lesion.

Gastric cancer – Hospital of surgery

Target 80%	DGRI	Fife VHK	RIE	SCAN
2017 Cohort	8	31	45	84
Ineligible for this QPI	7	28	29	64
Numerator	1	3	13	17
Not recorded for numerator	0	0	0	0
Denominator	1	3	16	20
Not recorded for exclusions	0	0	0	0
Not recorded for denominator	0	0	0	0
% Performance	100.0	100.0	81.3	85.0

The target was met in all Health Boards.

Following formal review, QPI 8 was updated in 2016 to include results for oesophageal cancers with a target of 90%, previously QPI was reported for gastric cancer only and results are shown for gastric for all 5 years below with the unchanged target of 80%.



Action: It is worthwhile monitoring this figure, in case there is a downward trend, especially in the context of changes in neoadjuvant treatment protocols which seem to be resulting more commonly, in a tumour response when lymph nodes can be harder to find. We do have the option of using fat clearing techniques, in the future, to find more nodes if we get to that stage, but no action is required at this point.

QPI 9 – Length of Hospital Stay Following Surgery

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 – Hospital of surgery

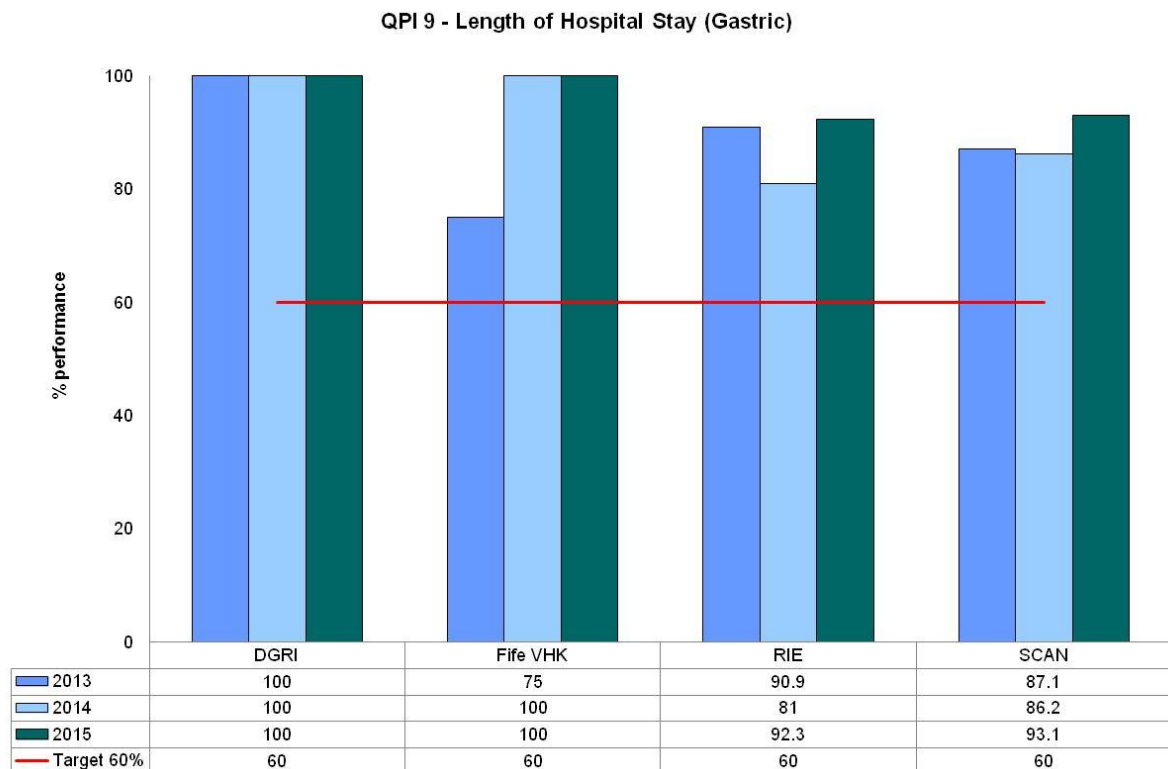
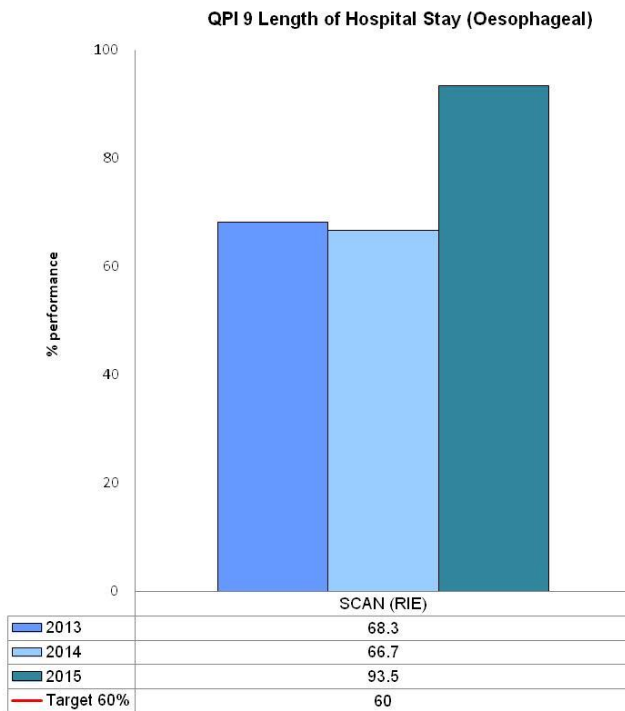
Target 60%	RIE	SCAN
Numerator	32	32
Not recorded for numerator	0	0
Denominator	48	48
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	66.7	66.7

Gastric cancer – Hospital of surgery

Target 60%	DGRI	Fife VHK	RIE	SCAN
Numerator	1	3	11	15
Not recorded for numerator	0	0	0	0
Denominator	1	3	15	19
Not recorded for exclusions	0	0	0	0
Not recorded for denominator	0	0	0	0
% Performance	100.0	100.0	73.3%	78.9%

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.

Following formal review, QPI 9 was updated in 2016. The time in days was changed from 21 to 14. Below are QPI 9 details from 3 years of collection measuring 21 days.



QPI 10i – Resection Margins

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 – Hospital of surgery

Target 70%	RIE	SCAN
2017 Cohort	258	258
Ineligible for this QPI	219	219
Numerator	29	29
Not recorded for numerator	0	0
Denominator	39	30
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	74.4	74.4

QPI 10ii – Resection Margin

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

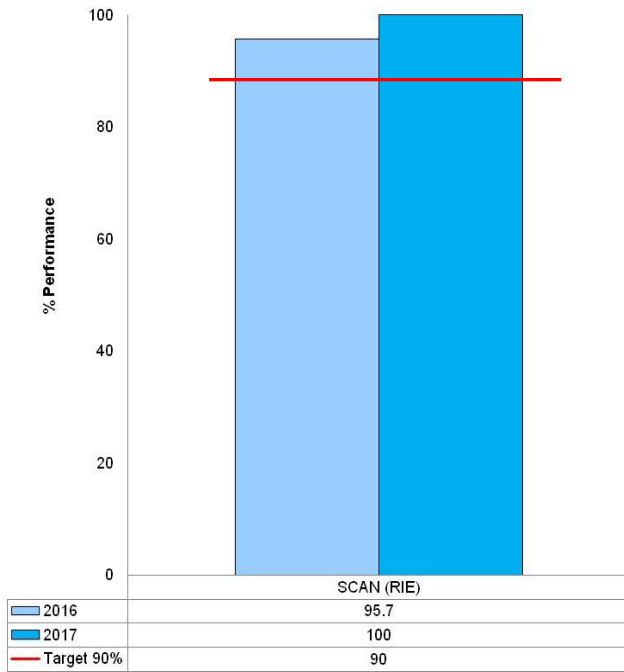
Oesophageal Longitudinal margin clear (Hospital of Surgery)

Target 90%	RIE	SCAN
2017 Cohort	258	258
Ineligible for this QPI	219	219
Longitudinal margin clear	39	39
Not recorded for numerator	0	0
Denominator	39	39
% Performance	100.0	100.0

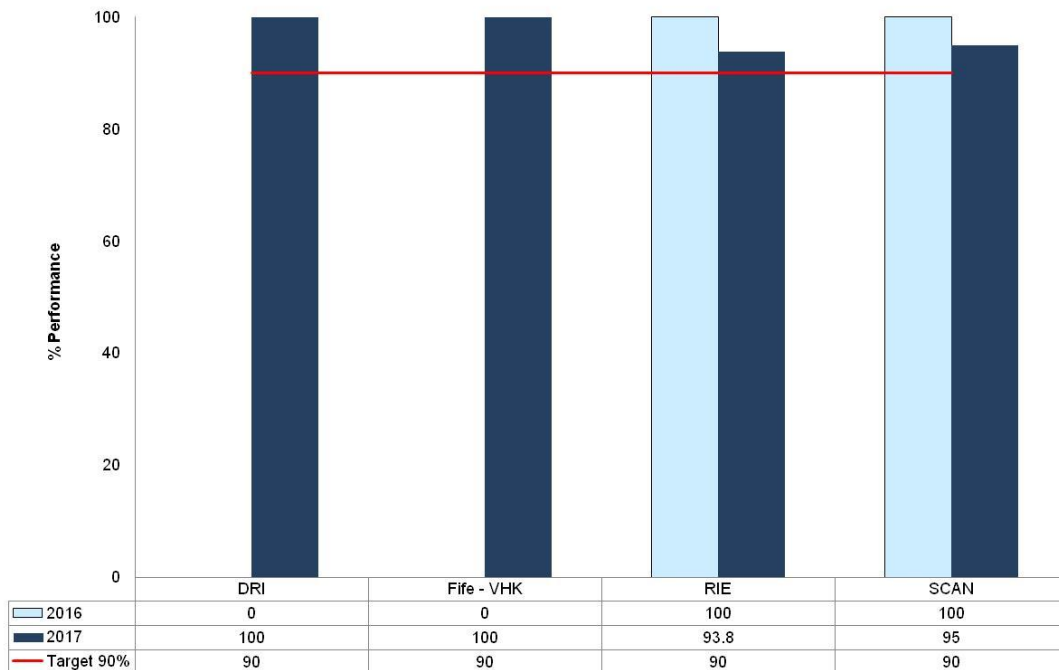
Gastric Longitudinal margin clear (Hospital of Surgery)

Target 90%	DRI	Fife VHK	RIE	SCAN
2017 Cohort	8	31	45	84
Ineligible for this QPI	7	29	28	64
Longitudinal margin clear	1	3	15	19
Not recorded for numerator	0	0	0	0
Denominator	1	3	16	20
% Performance	100.0	100.0	93.8	95.0

QPI 10 - Resection Margins Oesophageal Longitudinal Margin



QPI 10 - Resection Margins Gastric Longitudinal Margin



Following formal review, QPI 10 was updated in 2016. The oesophageal cancer circumferential and longitudinal resection margins were previously reported combined. Below are the QPI percentage performance for 3 years of collection with the 70% target.

Oesophageal resection margins - previous performance

Year	RIE (SCAN)
2013	55.0%
2014	53.6%
2015	44.9%

QPI 11 – 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

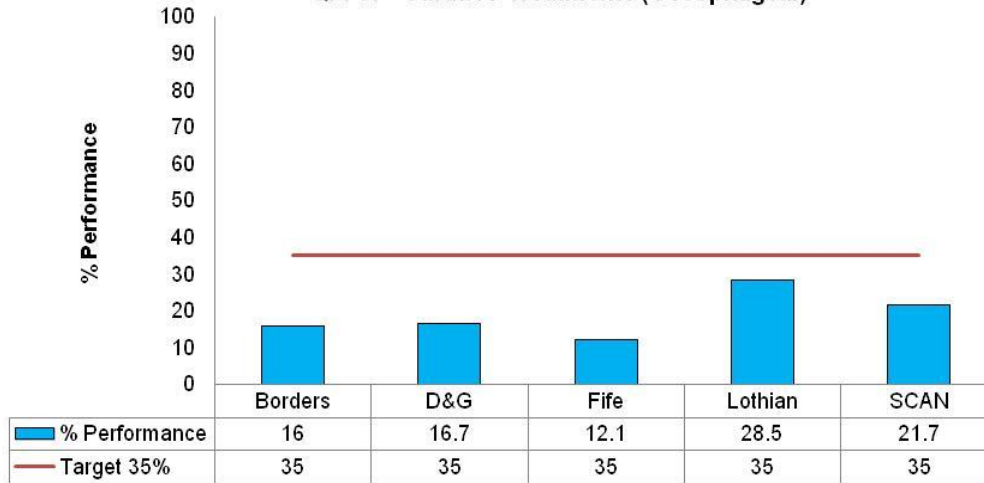
Oesophageal cancer – Health board of diagnosis

Target 35%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	0	0	0	0	0
Numerator	4	5	8	39	56
Not recorded for numerator	0	0	0	0	0
Denominator	25	30	66	137	258
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	16.0	16.7	12.1	28.5	21.7

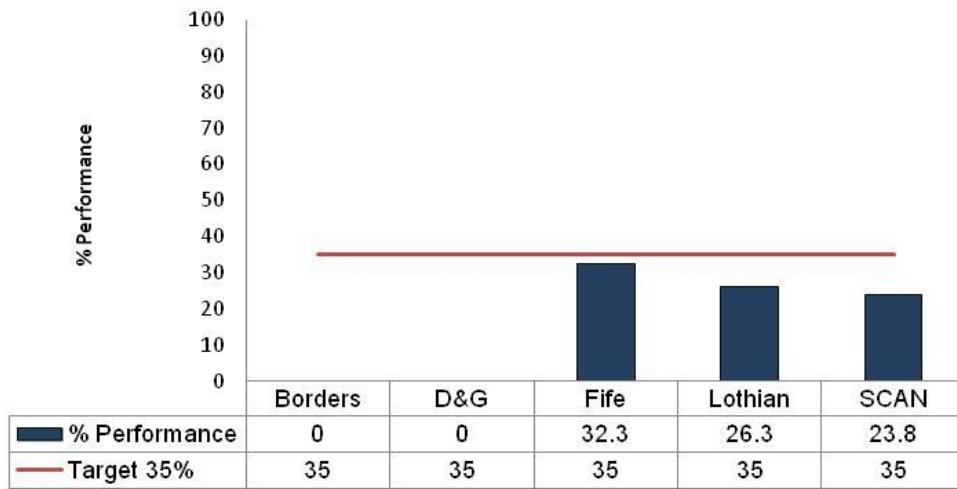
Gastric cancer – Health board of diagnosis

Target 35%	Borders	D&G	Fife VHK	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	0	0	0	0	0
Numerator	0	0	10	10	20
Not recorded for numerator	0	0	0	0	0
Denominator	7	8	31	38	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	0.0	32.3	26.3	23.8

QPI 11 - Curative Treatments (Oesophageal)

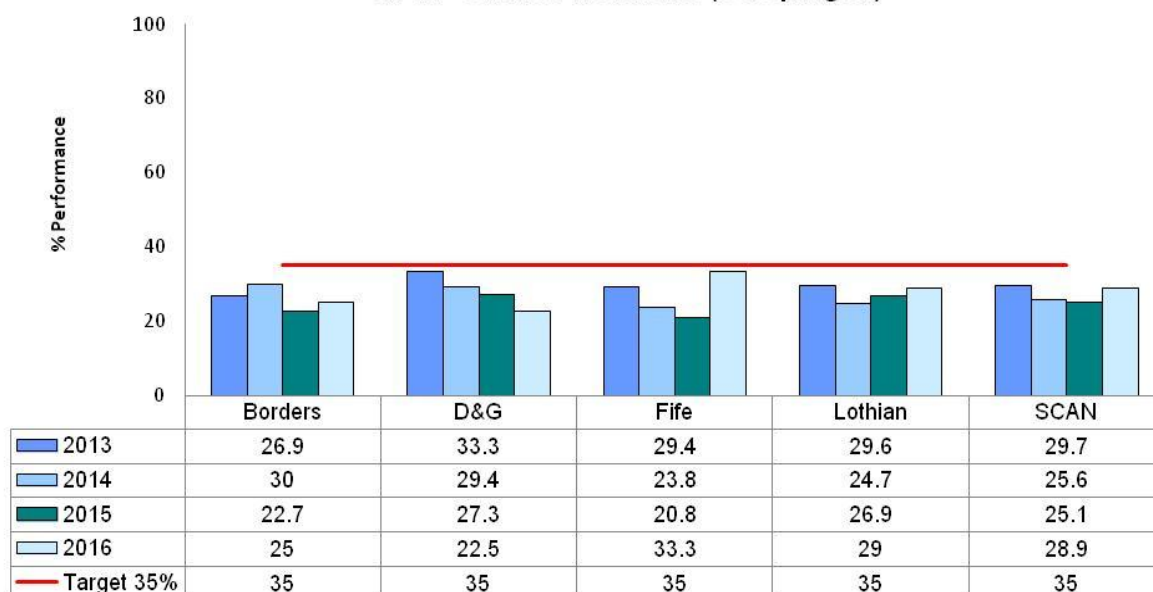


QPI 11 - Curative Treatments (Gastric)

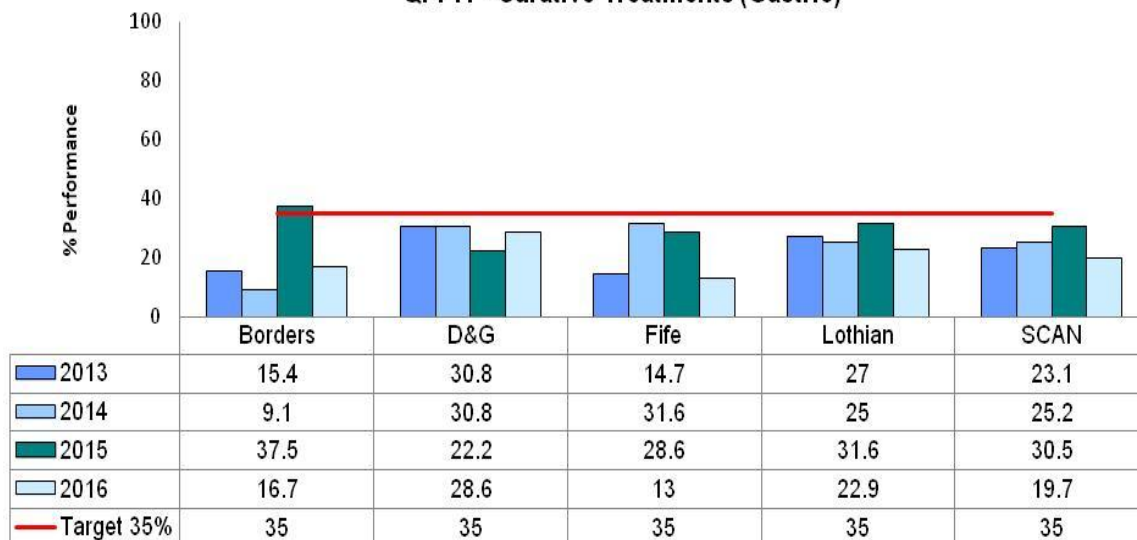


Following formal review, QPI 11 was updated in Year 5, 2017. The curative treatment now includes neoadjuvant chemotherapy and neoadjuvant chemoradiotherapy and additional oesophagectomy and gastrectomy procedures. Below are the QPI details for the first 4 years of analysis.

QP 11 - Curative Treatments (Oesophageal)



QPI 11 - Curative Treatments (Gastric)



QPI 12i – 30 and 90 Day Mortality Following Curative Oncological Treatment

Target <5%

Numerator = Number of patients with oesophageal or gastric cancer who receive curative oncological treatment who die within 30 or 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 Oncological treatment Radical Chemoradiotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	136	257
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

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	21	27	63	122	233
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	4	3	3	15	25
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

Neo-adjuvant Chemoradiotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	134	255
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

Adjuvant Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	136	257
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 neoadjuvant chemoradiotherapy, radical chemoradiotherapy, or downstaging chemotherapy in 2017.

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	7	8	26	37	78
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	5	1	6
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

Adjuvant Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	7	8	29	38	82
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	2	0	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	N/A	0.0

QPI 12i – 90 Day Mortality Following Curative Oncological Treatment

Target < 7.5%

Numerator = Number of patients with oesophageal or gastric cancer who receive curative oncological treatment who die within 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 – 90 Day mortality for curative Oncological treatment Radical Chemoradiotherapy

Target <7.5%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	136	257
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

Peri-operative Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	21	27	63	122	233
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	4	3	3	15	25
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

Neo-adjuvant Chemoradiotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	134	255
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

Adjuvant Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	25	30	66	136	257
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 – 90 Day mortality for curative Oncological treatment

Peri-operative Chemotherapy

Target <7.5%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	7	8	26	37	78
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	5	1	6
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

Adjuvant Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	7	8	29	38	82
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	2	0	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 neoadjuvant chemoradiotherapy, radical chemoradiotherapy, or downstaging chemotherapy in 2017.

QPI 12ii – 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
2017 Cohort	25	30	66	137	258
Ineligible for this QPI	21	25	59	118	223
Numerator	0	0	0	3	3
Not recorded for numerator	0	0	0	0	0
Denominator	4	5	7	19	35
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	15.8	8.6

Gastric cancer – 30 Day mortality for palliative Oncological treatment

Chemotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	6	8	28	36	78
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	3	2	6
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	N/A	0.0	0.0	0.0

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

QPI 13 – HER2 for Decision Making in Advanced Gastric and Gastro-oesophageal Junction Cancer

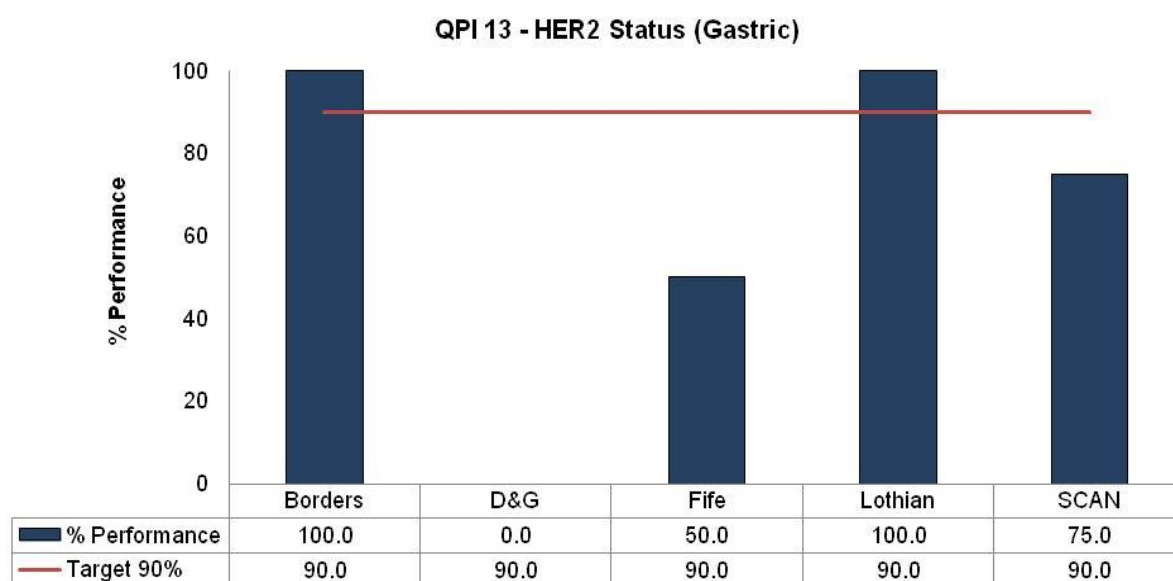
Target = 90%

Numerator = Number of patients with metastatic gastric or gastro-oesophageal junction adenocarcinoma undergoing first line palliative chemotherapy as their initial treatment for whom the HER2 status is reported prior to commencing treatment.

Denominator = All patients with metastatic gastric or gastro-oesophageal junction adenocarcinoma undergoing first line palliative chemotherapy as their initial treatment.

Exclusions = No exclusions

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2017 Cohort	7	8	31	38	84
Ineligible for this QPI	5	8	27	36	76
Numerator	2	0	2	2	6
Not recorded for numerator	0	0	0	0	0
Denominator	2	0	4	2	8
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	N/A	50.0	100.0	75.0



Fife: The target was not met by 50% (2 cases).

Action: Action is required in NHS Fife to ensure HER2 status is reported prior to commencing treatment.

Clinical Trials QPI

Target = 15%

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

Denominator = All patients with oesophageal or gastric cancer

Exclusions = No exclusions

Note: The clinical trials QPI is measured using SCR N data and Cancer Registry data (5 year average of case ascertainment)

Clinical Trials	Borders	D&G	Fife	Lothian	SCAN
Numerator	1	2	9	19	31
Denominator	37	46	96	187	366
% Performance	2.7	4.3	9.4	10.1	8.5

Open Trials 2017	Numbers consented
An analysis of Relative Telomere Length (RTL) during chemotherapy in patients with advanced Gastro-oesophageal adenocarcinoma	2
CANC – 4472 (KEYNOTE – 062)	4
MENAC (Cachexia)	4
MK-3475-590 with chemo vs placebo with chemo in Esophageal carcinoma (KEYNOTE-590)	2
Neo-AEGIS	1
OCCAMS	13
Predicting treatment response to radiotherapy for bone cancer	2
Paracetamol and strong opioids (Paso)	1
TOFFEE	1
Total	31

Trials not currently registered with SCR N	Numbers from Clinician
EOTB	25
Muscle Wasting in Cancer patients	18
ROMIO	4

A New study will become available for patients diagnosed in 2018: GI-ACP 2018

Comment: Some trials (particularly surgical trials) are not currently registered on the EDGE database (where data for this QPI is taken from). In order to ensure the EDGE database is complete and up to date principal investigators should liaise with the SCR N Network Manager.

Action: Principal investigators should liaise with the SCR N Network Manager to ensure trials are registered on the SCR N database “EDGE”.

Key Categories

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	25	78.1	30	78.9	66	68.0	137	78.3	258	75.4
Gastric Cancer	7	21.9	8	21.1	31	32.0	38	21.7	84	24.6
Total Upper GI Cancers	32	100%	38	100%	97	100%	175	100%	342	100%

Breakdown of Site of Origin of Tumour

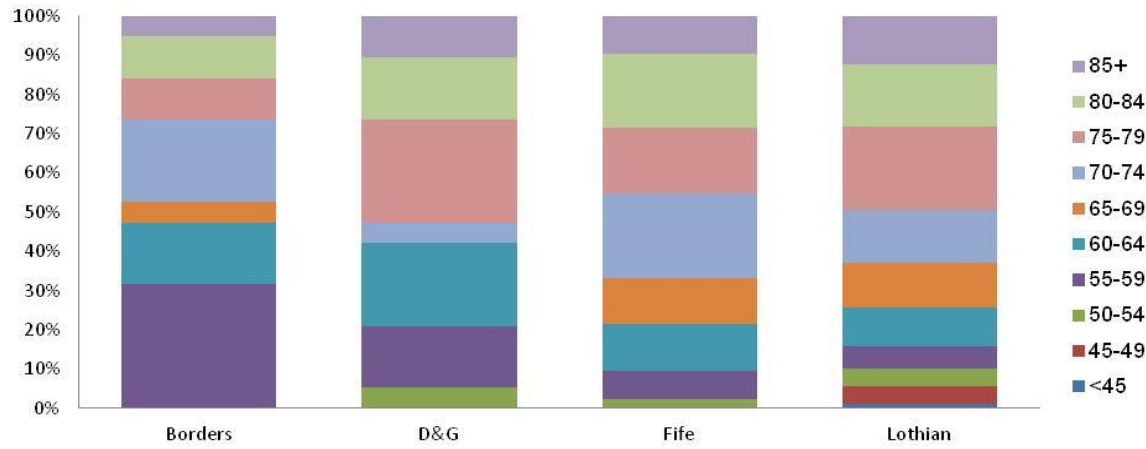
Tumour Site	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
C15.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.1	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.2	0.0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
C15.3	4.0	12.5	2	5.3	8	8.2	1	0.6	15.0	4.4
C15.4	3.0	9.4	6	15.8	17	17.5	26	14.9	52.0	15.2
C15.5	16.0	50.0	14	36.8	33	34.0	75	42.9	138.0	40.4
C15.8	1.0	3.1	6	15.8	2	2.1	14	8.0	23.0	6.7
C15.9	1.0	3.1	1	2.6	0	0.0	4	2.3	6.0	1.8
C16.0	0.0	0.0	1	2.6	6	6.2	17	9.7	24.0	7.0
C16.1	0.0	0.0	0	0.0	4	4.1	3	1.7	7.0	2.0
C16.2	4.0	12.5	2	5.3	9	9.3	8	4.6	23.0	6.7
C16.3	3.0	9.4	3	7.9	8	8.2	19	10.9	33.0	9.6
C16.4	0.0	0.0	0	0.0	3	3.1	1	0.6	4.0	1.2
C16.5	0.0	0.0	0	0.0	2	2.1	2	1.1	4.0	1.2
C16.6	0.0	0.0	0	0.0	2	2.1	2	1.1	4.0	1.2
C16.8	0.0	0.0	1	2.6	1	1.0	0	0.0	2.0	0.6
C16.9	0.0	0.0	2	5.3	2	2.1	3	1.7	7.0	2.0
Total	32.0	100%	38.0	100%	97.0	100%	175.0	100%	342.0	100%

Age and Gender Distribution Oesophageal

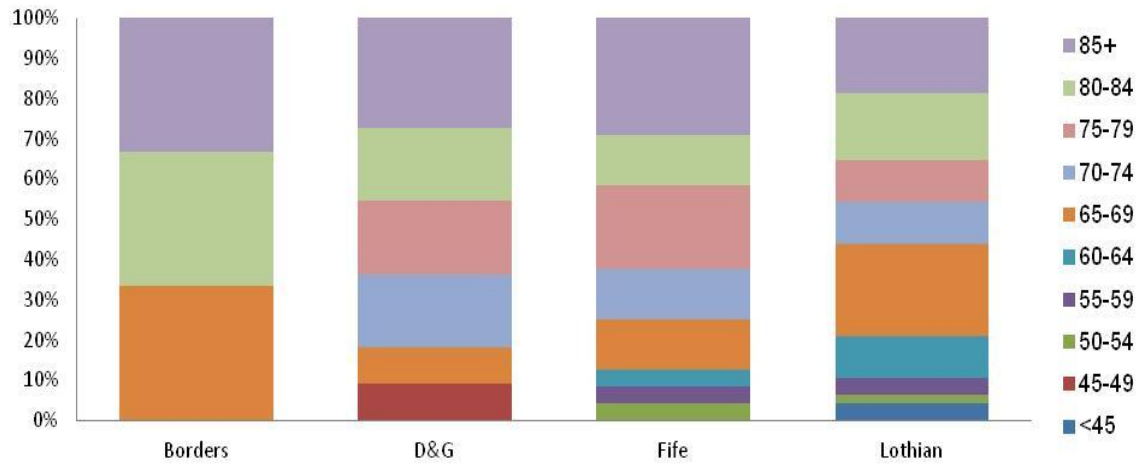
Age at Diagnosis	Borders				D&G				Fife				Lothian				SCAN			
	M		F		M		F		M		F		M		F		M		F	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	2	4.2	1	0.6	2	2.2
45-49	0	0.0	0	0.0	0	0.0	1	9.1	0	0.0	0	0.0	4	4.5	0	0.0	4	2.4	1	1.1
50-54	0	0.0	0	0.0	1	5.3	0	0.0	1	4.2	1	4.2	4	4.5	1	2.1	6	3.6	2	2.2
55-59	6	31.6	0	0.0	3	15.8	0	0.0	3	4.2	1	4.2	5	5.6	2	4.2	17	10.1	3	3.4
60-64	3	15.8	0	0.0	4	21.1	0	0.0	5	4.2	1	4.2	9	10.1	5	10.4	21	12.4	6	6.7
65-69	1	5.3	2	33.3	0	0.0	1	9.1	5	12.5	3	12.5	10	11.2	11	22.9	16	9.5	17	19.1
70-74	4	21.1	0	0.0	1	5.3	2	18.2	9	12.5	3	12.5	12	13.5	5	10.4	26	15.4	10	11.2
75-79	2	10.5	0	0.0	5	26.3	2	18.2	7	20.8	5	20.8	19	21.3	5	10.4	33	19.5	12	13.5
80-84	2	10.5	2	33.3	3	15.8	2	18.2	8	12.5	3	12.5	14	15.7	8	16.7	27	16.0	15	16.9
85+	1	5.3	2	33.3	2	10.5	3	27.3	4	29.2	7	29.2	11	12.4	9	18.8	18	10.7	21	23.6
Total	19	100%	6	100%	19	100%	11	100%	42	100%	24	100%	89	100%	48	100%	169	100%	89	100%

Age at Diagnosis	Borders		D&G		Fife		Lothian	
	M	F	M	F	M	F	M	F
Min	55	68	52	49	54	54	39	32
Max	86	94	87	94	85	94	95	98
Mean	67	81	71	77	73	77	72	73
Median	65	82	75	77	73	78	74	72

Age of Male patients (Oesophageal)



Age of Female patients (Oesophageal)

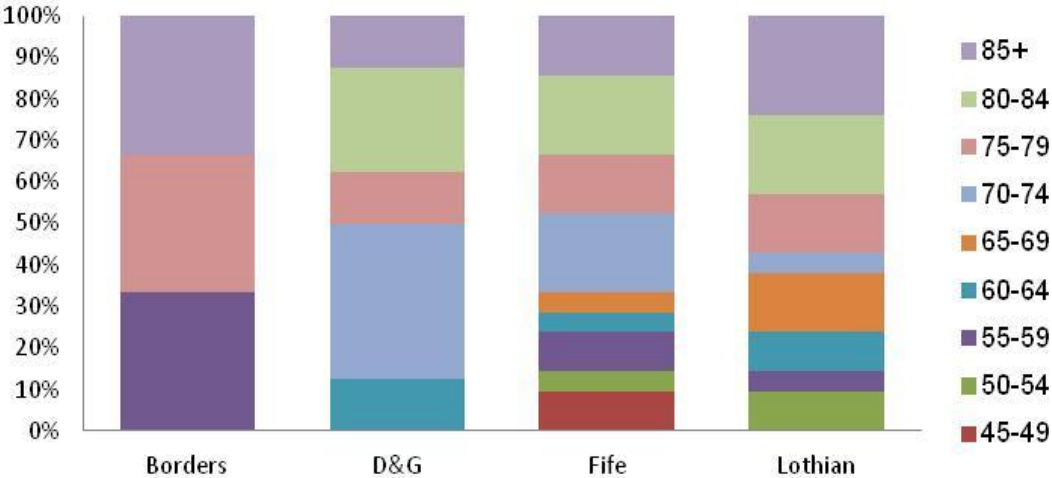


Gastric

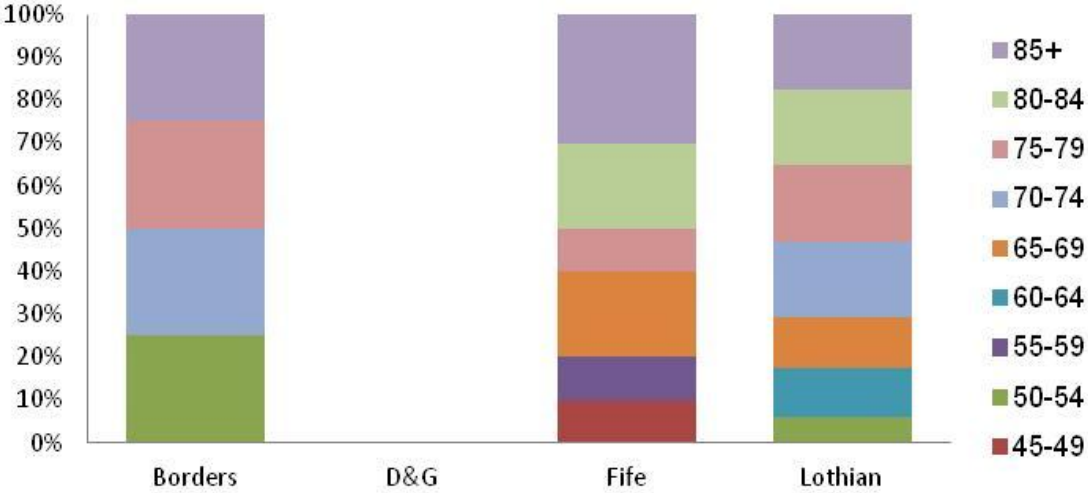
Age at Diagnosis	Borders				D&G				Fife				Lothian				SCAN			
	M		F		M		F		M		F		M		F		M		F	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45-49	0	0.0	0	0.0	0	0.0	0	0.0	2	9.5	1	10.0	0	0.0	0	0.0	2	3.8	1	3.2
50-54	0	0.0	1	25.0	0	0.0	0	0.0	1	4.8	0	0.0	2	9.5	1	5.9	3	5.7	2	6.5
55-59	1	33.3	0	0.0	0	0.0	0	0.0	2	9.5	1	10.0	1	4.8	0	0.0	4	7.5	1	3.2
60-64	0	0.0	0	0.0	1	12.5	0	0.0	1	4.8	0	0.0	2	9.5	2	11.8	4	7.5	2	6.5
65-69	0	0.0	0	0.0	0	0.0	0	0.0	1	4.8	2	20.0	3	14.3	2	11.8	4	7.5	4	12.9
70-74	0	0.0	1	25.0	3	37.5	0	0.0	4	19.0	0	0.0	1	4.8	3	17.6	8	15.1	4	12.9
75-79	1	33.3	1	25.0	1	12.5	0	0.0	3	14.3	1	10.0	3	14.3	3	17.6	8	15.1	5	16.1
80-84	0	0.0	0	0.0	2	25.0	0	0.0	4	19.0	2	20.0	4	19.0	3	17.6	10	18.9	5	16.1
85+	1	33.3	1	25.0	1	12.5	0	0.0	3	14.3	3	30.0	5	23.8	3	17.6	10	18.9	7	22.6
Total	3	100%	4	100%	8	100%	0	0.0	21	100%	10	100%	21	100%	17	100%	53	100%	31	100%

Age at Diagnosis	Borders		D&G		Fife		Lothian	
	M	F	M	F	M	F	M	F
Min	59	51	60	0	32	41	50	50
Max	90	87	87	0	92	95	93	90
Mean	75	72	75.6	0	71	75	75	74
Median	76	72	75.5	0	73	79	76	76

Age of Male patients (Gastric)



Age of Female patients (Gastric)



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%

OG QPI Attainment Summary 2016		Target %	Borders	D&G	Fife	Lothian	SCAN					
QPI 7(ii): 90 Day Mortality Following Surgery (Presented by Board of surgery)	Oesophageal	<7.5	Board of Surgery		N 1 D 69	1.4%	N 1 D 69	1.4%				
	Gastric	<7.5	Board of Surgery		N 0 D 14	0.0%	N 0 D 14	0.0%				
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 D 69	84.1%	N 58 D 69	84.1%				
	Gastric	80	Board of Surgery		N 10 D 12	83.3%	N 10 D 12	83.3%				
QPI 9: Hospital Stay. Discharge within 14 days of surgical procedure (Presented by Board of surgery)	Oesophageal	60	Board of Surgery		N 35 D 62	56.6%	N 35 D 62	56.4%				
	Gastric	60	Board of Surgery		N 13 D 16	81.8%	N 13 D 16	81.3%				
QPI 10i: Oesophageal resection margins. Circumferential clear (Presented by Board of surgery)		70	Board of Surgery		N 44 D 69	63.8%	N 44 D 69	63.8%				
QPI 10ii: Longitudinal margins clear (Presented by Board of surgery)	Oesophageal	90	Board of Surgery		N 66 D 69	95.7%	N 66 D 69	95.7%				
	Gastric	90	Board of Surgery		N 14 D 14	100%	N 14 D 14	100%				
QPI 11: Curative Treatment Rates	Oesophageal	35	N 6 D 24	25%	N 9 D 40	22.2%	N 25 D 75	33.3%	N 40 D 138	29.0%	N 80 D 277	28.9%
	Gastric	35	N 1 D 6	16.7%	N 2 D 7	28.6%	N 3 D 23	13.0%	N 8 D 35	22.9%	N 14 D 71	19.7%

OG QPI Attainment Summary 2016		Target %	Borders	D&G	Fife	Lothian	SCAN
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal Curative Chemoradiotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 4 0.0%	N 0 0.0% D 5 0.0%
	Oesophageal Peri-operative Chemotherapy	<5	N 0 0.0% D 6 0.0%	N 0 0.0% D 7 0.0%	N 0 0.0% D 16 0.0%	N 0 0.0% D 20 0.0%	N 0 0.0% D 49 0.0%
	Oesophageal Adjuvant Chemotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 0.0% D 16 0.0%	N 0 D 0 -	N 0 0.0% D 16 0.0%
	Oesophageal Adjuvant Radiotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%
	Gastric Curative Chemoradiotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 D 0 -	N 0 D 0 -	N 0 D 0 -
Gastric Peri-operative Chemotherapy	Gastric Peri-operative Chemotherapy	<5	N 0 0.0% D 0 0.0%	N 0 D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 1 0.0%	N 0 0.0% D 2 0.0%
	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 0.0%	N 0 0.0% D 2 0.0%	N 0 0.0% D 12 0.0%	N 1 4.0% D 25 4.0%	N 1 2.3% D 43 2.3%
	Oesophageal Palliative Radiotherapy	<5	N 0 0.0% D 3 0.0%	N 0 0.0% D 3 0.0%	N 2 11.1% D 18 11.1%	N 0 0.0% D 14 0.0%	N 2 5.3% D 38 5.3%
	Gastric Palliative Chemotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 0.0% D 1 0.0%	N 0 0.0% D 4 0.0%	N 0 0.0% D 5 0.0%
	Gastric Palliative Radiotherapy	<5	N 0 D 0 -	N 0 D 0 -	N 0 D 0 -	N 0 0.0% D 3 0.0%	N 0 0.0% D 3 0.0%
Clinical Trial Access QPI	OG Patients enrolled in Interventional Clinical Trials	7.5	N 0 0.0% D 39 0.0%	N 0 0.0% D 45 0.0%	N 1 1.0% D 99 1.0%	N 10 3.7% D 216 3.7%	N 11 2.8% D 399 2.8%
	OG Patients enrolled in Translational Research	15	N 11 28.2% D 39 28.2%	N 11 24.4% D 45 24.4%	N 27 27.2% D 99 27.2%	N 56 26.0% D 216 26.0%	N 105 26.3% D 399 26.3%