SOUTH EAST SCOTLAND CANCER NETWORK
PROSPECTIVE CANCER AUDIT

OESOPHAGO-GASTRIC CANCER 2019

COMPARATIVE AUDIT REPORT

Mr Peter Lamb
SCAN Lead Upper GI Cancer Clinician

Dr Jonathon Fletcher, Consultant Physician, NHS Borders
Mr Jeyakumar Apollos, Consultant Surgeon, NHS Dumfries & Galloway
Mr Peter Driscoll, Consultant Surgeon, NHS Fife
Dr Lucy Wall, Consultant Oncologist, Edinburgh Cancer Centre

Kirsty Martin
SCAN Upper GI Cancer Audit Facilitator

Maureen Lamb, Upper GI Cancer Audit Facilitator, Fife
Alistair Johnston, Upper GI Cancer Audit Facilitator, Borders
Martin Keith, Senior Cancer Information Officer, NHS Dumfries & Galloway

Report number: SA UGI09/20W

OESOPHAGO-GASTRIC CANCER 2019 COMPARATIVE AUDIT REPORT

Patients diagnosed 1st January 2019 – 31st December 2019

Contents

DOCUMENT HISTORY

Version	Circulation	Date	Comments
Version 1	SCAN Upper GI Group meeting	04/09/2020	Actions agreed
Version 2	Lead Clinician for commentary and comments	11/09/2020	Commentary added
Version 3	Final draft report circulated to SCAN Upper GI Group	05/10/2020	SCAN group approval and sign off
Version 4	Final report and action plans circulated to SCAN Upper GI Group and Clinical Governance Groups	21/10/2020	To be checked for disclosive information prior to publishing on website
Version 4W	Final report added to the SCAN website	2022	

OESOPHAGO-GASTRIC CANCER 2019 COMPARATIVE AUDIT REPORT

COMMENT BY CHAIR OF THE SCAN UPPER GI GROUP

The introduction of oesophagogastric cancer QPIs has led to improvement in the level and quality of audit data with the aim of driving good practice and equity of care. The SCAN audit team have worked extremely hard to provide complete and accurate data for the 2019 report.

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

1. The SCAN-wide oesophagogastric cancer MDT (including Lothian, Fife, Borders, and Dumfries & Galloway Boards) continues 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. QPI 5 – The nutritional QPI has not yet been met but there has been significant improvement from previous years following targeted work by all the boards.

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. Failure to meet the curative treatment rate QPI reflects national results and requires a national drive towards earlier diagnosis for oesophagogastric cancer.

<div align="right">

Pete Lamb
October 2020

</div>

SCAN Actions 2019

No Actions identified

SCAN Action from previous report 2018

QPI	Action required	Lead	Progress
4	MDM Chair to ensure that the treatment intent is clearly stated in order for MDM coordinators and audit staff to document accurately. *To be re-audited through QPI process.*	Pete lamb	Complete
Trials	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 SCRN Network Manager to ensure trials are registered on the SCRN database "EDGE". To be re-audited through QPI process.	Richard Skipworth / Dorothy Boyle	Complete

OG QPI Attainment Summary - 2019		Target %	Borders			D&G			Fife			Lothian			SCAN		
QPI 1: Endoscopy - Histological diagnosis made within 6 weeks of initial endoscopy and biopsy	Oesophageal	95	N	19	100%	N	37	94.9%	N	63	94.0%	N	136	95.8%	N	255	95.5%
			D	19		D	39		D	67		D	142		D	267	
	Gastric	95	N	9	81.8%	N	6	100%	N	22	91.7%	N	31	86.1%	N	68	88.3%
			D	11		D	6		D	24		D	36		D	77	
QPI 3: MDT before definitive treatment	Oesophageal	95	N	18	94.7%	N	37	90.2%	N	67	100%	N	138	93.2%	N	260	94.5%
			D	19		D	41		D	67		D	148		D	275	
	Gastric	95	N	11	91.7%	N	7	87.5%	N	24	96.0%	N	37	94.9%	N	79	94.0%
			D	12		D	8		D	25		D	39		D	84	
QPI 4i: TNM Staging recorded at MDT prior to treatment	Oesophageal	90	N	19	100%	N	39	95.1%	N	68	97.1%	N	138	92.6%	N	264	94.6%
			D	19		D	41		D	70		D	149		D	279	
	Gastric	90	N	9	75.0%	N	8	100%	N	24	96.0%	N	35	89.7%	N	76	90.5%
			D	12		D	8		D	25		D	39		D	84	
QPI 4ii: TNM Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	N	18	94.7%	N	39	95.1%	N	70	100%	N	140	94.0%	N	267	95.7%
			D	19		D	41		D	70		D	149		D	279	
	Gastric	95	N	11	91.7%	N	7	87.5%	N	25	100%	N	35	89.7%	N	78	92.9%
			D	12		D	8		D	25		D	39		D	84	
QPI 5i: Nutritional Assessment: Undergo screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.	Oesophageal	95	N	18	94.7%	N	37	90.2%	N	64	91.4%	N	111	74.5%	N	230	82.4%
			D	19		D	41		D	70		D	149		D	279	
	Gastric	95	N	11	91.7%	N	6	75.0%	N	20	80.0%	N	32	82.1%	N	69	82.1%
			D	12		D	8		D	25		D	39		D	84	
QPI 5ii: Nutritional Assessment: are at high risk of malnutrition (MUST score >2) referred to dietician	Oesophageal	90	N	13	100%	N	23	100%	N	25	100%	N	77	96.3%	N	138	97.9%
			D	13		D	23		D	25		D	80		D	141	
	Gastric	90	N	8	88.9%	N	3	100%	N	12	100%	N	16	84.2%	N	39	90.7%
			D	9		D	3		D	12		D	19		D	43	
QPI 6: Appropriate Selection: Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	N	4	100%	N	7	100%	N	11	84.6%	N	22	81.5%	N	44	86.3%
			D	4		D	7		D	13		D	27		D	51	
	Gastric	80	N	1	100%	N	1	100.0%	N	2	66.7%	N	4	100.0%	N	8	88.9%
			D	1		D	1		D	3		D	4		D	9	
QPI 7i: 30 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<5	Board of Surgery									N	1	2.1%	N	1	2.1%
												D	48		D	48	
	Gastric	<5	Board of Surgery									N	0	0.0%	N	0	0.0%
												D	14		D	14	

OG QPI Attainment Summary - 2019		Target %	Borders	D&G	Fife	Lothian	SCAN
QPI 7ii: 90 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<7.5	Board of Surgery			N 1 / D 45 — 2.2%	N 1 / D 45 — 2.2%
	Gastric	<7.5	Board of Surgery			N 1 / D 14 — 7.1%	N 1 / D 14 — 7.1%
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 41 / D 48 — 85.4%	N 41 / D 48 — 85.4%
	Gastric	80	Board of Surgery			N 11 / D 14 — 78.6%	N 11 / D 14 — 78.6%
QPI 9: Hospital of Stay: Discharge within 14 days of surgical procedure (presented by Board of Surgery)	Oesophageal	60	Board Of Surgery			N 29 / D 46 — 63.0%	N 29 / D 46 — 63.0%
	Gastric	60	Board of Surgery			N 10 / D 12 — 83.3%	N 10 / D 12 — 83.3%
QPI 10i: Oesophageal clear circumferential resection margins (presented by Board of Surgery)	Oesophageal	70	Board of Surgery			N 37 / D 48 — 77.1%	N 37 / D 48 — 77.1%
QPI 10ii: Longitudinal margins clear (presented by Board of Surgery)	Oesophageal	90	Board of Surgery			N 45 / D 48 — 93.8%	N 45 / D 48 — 93.8%
	Gastric	90	Board of Surgery			N 14 / D 14 — 100%	N 14 / D 14 — 100%
QPI 11: Curative Treatment Rates	Oesophageal	35	N 4 / D 19 — 21.1%	N 9 / D 41 — 22.0%	N 16 / D 70 — 22.9%	N 38 / D 149 — 25.5%	N 67 / D 279 — 24.0%
	Gastric	35	N 3 / D 9 — 33.3%	N 2 / D 8 — 25.0%	N 3 / D 25 — 12.0%	N 9 / D 39 — 23.1%	N 17 / D 81 — 21.0%
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal curative Chemoradiotherapy	<5	N 0 / D 0 — -	N 0 / D 2 — 0.0%	N 0 / D 2 — 0.0%	N 0 / D 0 — 0.0%	N 0 / D 4 — 0.0%
	Oesophageal Peri-operative Chemotherapy	<5	N 0 / D 4 — 0.0%	N 0 / D 7 — 0.0%	N 0 / D 12 — 0.0%	N 0 / D 23 — 0.0%	N 0 / D 46 — 0.0%
	Oesophageal Adjuvant Chemotherapy	<5	N 0 / D 3 — 0.0%	N 0 / D 3 — 0.0%	N 0 / D 1 — 0.0%	N 0 / D 1 — 0.0%	N 0 / D 8 — 0.0%
	Oesophageal Downstaging Chemotherapy	<5	N 0 / D 0 — -	N 0 / D 0 — -	N 0 / D 0 — -	N 0 / D 0 — -	N 0 / D 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	<5	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	1		D	1		D	3		D	4		D	9	
	Gastric Adjuvant Chemotherapy	<5	N	0	0.0%	N	0	-	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	1		D	0		D	1		D	2		D	4	
	Gastric Downstaging Chemotherapy	<5	N	0	-	N	0	-	N	0	-	N	0	-	N	0	-
			D	0		D	0		D	0		D	0		D	0	
QPI 12: 90 day Mortality after Oncological Treatment	Oesophageal Curative Chemoradiotherapy	<7.5	N	0	-	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	0		D	2		D	2		D	0		D	4	
	Oesophageal Peri-operative Chemotherapy	<7.5	N	0	0.0%	N	1	16.7%	N	0	0.0%	N	2	8.7%	N	3	6.7%
			D	4		D	6		D	12		D	23		D	45	
	Oesophageal Adjuvant Chemotherapy	<7.5	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	3		D	3		D	1		D	1		D	8	
	Oesophageal Downstaging chemotherapy	<7.5	N	0	-	N	0	-	N	0	-	N	0	-	N	0	-
			D	0		D	0		D	0		D	0		D	0	
	Gastric Curative Chemoradiotherapy	<7.5	N	0	-	N	0	-	N	0	-	N	0	-	N	0	-
			D	0		D	0		D	0		D	0		D	0	
	Gastric Peri-operative Chemotherapy	<7.5	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	1		D	1		D	3		D	4		D	9	
	Gastric Adjuvant Chemotherapy	<7.5	N	0	0.0%	N	0	-	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	1		D	0		D	1		D	2		D	4	
	Gastric Downstaging Chemotherapy	<7.5	N	0	-	N	0	-	N	0	-	N	0	-	N	0	-
			D	0		D	0		D	0		D	0		D	0	
QPI12ii: 30 day Mortality after Oncological Treatment	Oesophageal Palliative Chemotherapy	<5	N	0	0.0%	N	0	0.0%	N	2	15.4%	N	0	0.0%	N	2	3.9%
			D	3		D	7		D	13		D	28		D	51	
	Gastric Palliative Chemotherapy	<5	N	0	-	N	0	0.0%	N	0	0.0%	N	0	0.0%	N	0	0.0%
			D	0		D	1		D	5		D	3		D	9	
QPI 13 HER2 Status in Advanced Gastric Cancer		90	N	0	-	N	1	100%	N	3	100%	N	2	100%	N	6	100%
			D	0		D	1		D	3		D	2		D	6	
Clinical Trial QPI : N= patients consented to Trials and held on SCRN database, D = 5 year average from Cancer Registry Incidence		15	N	10	27.0%	N	10	22.2%	N	17	17.9%	N	53	29.6%	N	90	25.3%
			D	37		D	45		D	95		D	179		D	356	

INTRODUCTION AND METHODS

Cohort

This report covers patients diagnosed with an Oesophageal or Gastric cancer from 01/01/2019 to 31/12/2019. 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, Public Health Scotland (PHS), 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 PHS website[1]. 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 first 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 second 3 year formal review for the Upper GI cancer QPIs commenced in autumn 2019. Due to Covid-19 there has been a delay in publication of the review. The revised QPIs will be used to report Year 8, 2020 data with the existing data fields and using the new measurability. Where new data fields were required, collection and reporting will start in year 9, 2021.

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.PHSscotland.org

Audit Processes

Data was analysed by the audit facilitators in each NHS board according to the measurability document provided by PHS. 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	Jenny Bruce / Martin Keith
NHS Fife	Queen Margaret Hospital Victoria Hospital	Mr Peter Driscoll	Maureen Lamb
SCAN & NHS Lothian	St John's 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 Public Health Scotland (PHS). QA of the Oesophago-Gastric data was carried out in February 2020 and this showed an average of 98.1% data accuracy for SCAN and the average accuracy for Scotland was 97.5%.

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 4th September 2020.
- The final draft of the regional report was circulated to members of the SCAN Upper GI Group and Clinical Governance Framework on 21/10/2020.   .

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 2014 to 2018. 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 01/01/2019 – 31/12/2019

	Borders	D&G	Fife	Lothian	SCAN
Oesophageal Cancer	19	41	70	149	279
Gastric Cancer	12	8	25	39	84
Total OG Cancers	31	49	95	188	363

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	31	49	95	188	363
Cases from Cancer Registry (2014-2018)	37	45	95	179	355
Case Ascertainment	83.8%	108.9%	100.0%	105.0%	102.3%

Source: Scottish Cancer Registry. Data extracted from ACaDMe 01/08/2020.

Note: Case ascertainment is reported by board of diagnosis and has been estimated using a denominator based on the latest (2014-2018) 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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	0	2	3	7	12
Numerator	19	37	63	136	255
Not recorded for numerator	0	0	0	0	0
Denominator	19	39	67	142	267
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**94.9**	**94.0**	**95.8**	**95.5**

The target was met in SCAN.

D&G: The target was not met. showing a shortfall of 0.1% (2 cases). 1 patient was diagnosed at second endoscopy and 1 was diagnosed at third endoscopy.
Fife: The target was not met showing a shortfall of 1% (4 cases). 3 patients who underwent endoscopy had negative pathology and clinical diagnoses were made. 1 patient's second endoscopy was not diagnostic and a clinical diagnosis was made.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	1	2	1	3	7
Numerator	9	6	22	31	68
Not recorded for numerator	0	0	0	0	0
Denominator	11	6	24	36	77
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**81.8**	**100.0**	**91.7**	**86.1**	**88.3**

Borders: The target was not met showing a shortfall of 13.2% (2 cases). Both had clinical diagnoses only; 1 had negative pathology on first endoscopy and 1 had multiple endoscopies with negative pathologies.
Fife: The target was not met showing a shortfall of 3.3% (2 cases). Both had clinical diagnoses only; 2 patients had endoscopy which showed negative pathology.
Lothian: The target was not met showing a shortfall of 8.9% (5 cases). All 5 underwent endoscopy where the initial pathology was not diagnostic and clinical diagnoses were made prior to treatment.

QPI 1 - Endoscopy (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2016	100	90	97.3	99.2	97.4
2017	100	96.4	98.4	94	96
2018	91.2	96.2	93.7	86.6	90.1
2019	100	94.9	94	95.8	95.5
Target 95%	95	95	95	95	95

QPI 1 - Endoscopy (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2016	100	100	90.9	100	97
2017	100	100	96.7	86.1	92.5
2018	100	81.8	89.5	85.7	87.8
2019	81.8	100	91.7	86.1	88.3
Target 95%	95	95	95	95	95
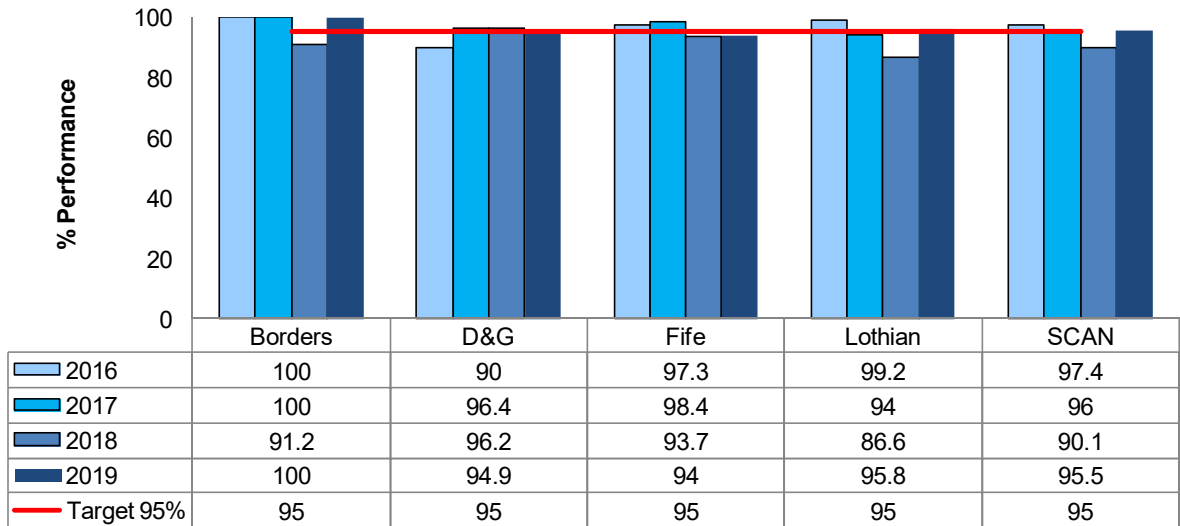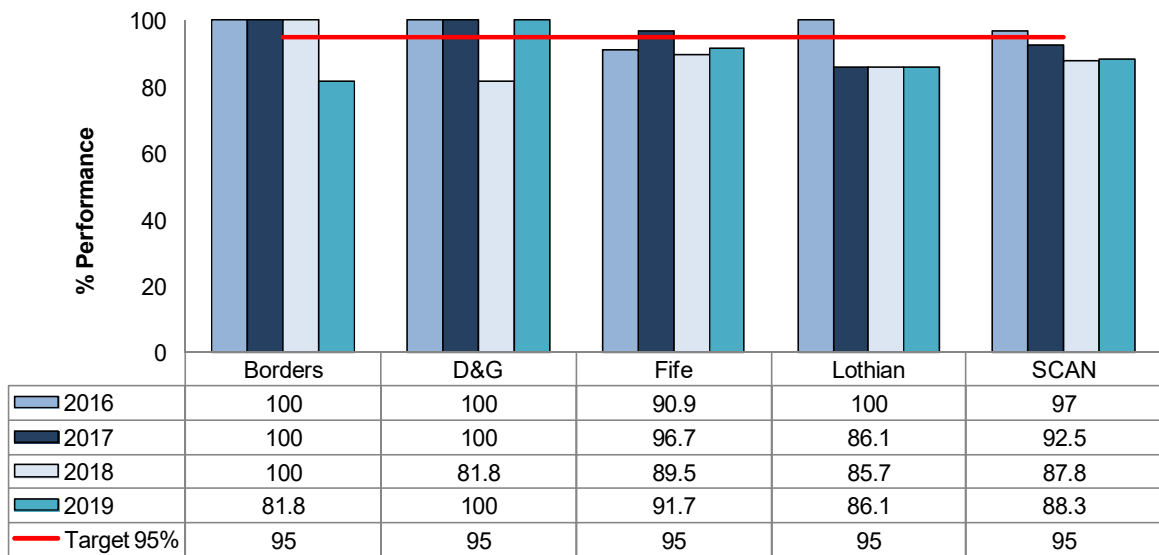
Following the formal review after 3 years of data collection, the measurability for QPI 1 was changed for year 4 (2016), when a 6 week timeframe was introduced and the target was increased to 95%. Below are QPI 1 details from the first 3 years.

QPI 1 - Endoscopy (Oesophageal) 2013 - 2015

	Borders	D&G	Fife	Lothian	SCAN
2013	88.5	90.6	91.2	78.9	84.2
2014	96.7	94.1	96.7	85.7	90.4
2015	81.8	87.9	91.4	94.1	91.7
Target 90%	90	90	90	90	90
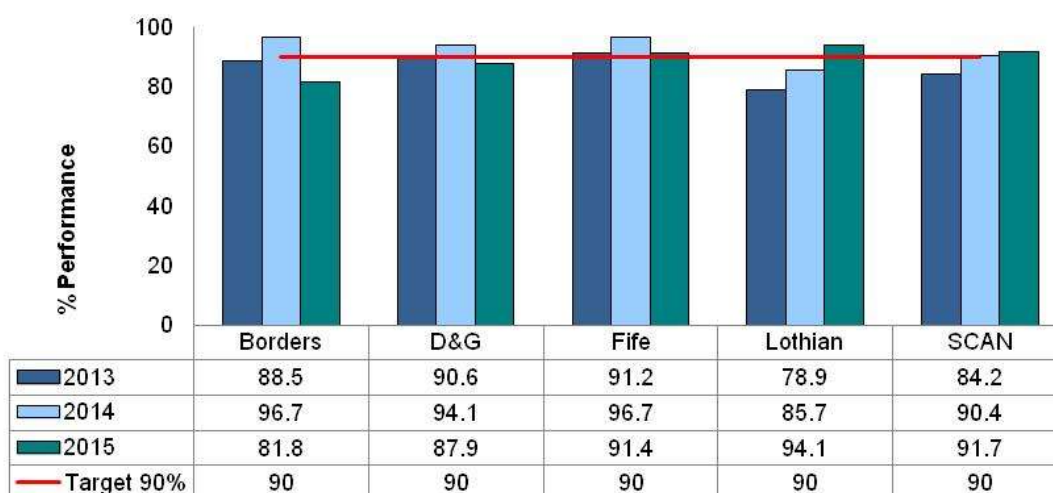
QPI 1 - Endoscopy (Gastric) 2013 - 2015

	Borders	D&G	Fife	Lothian	SCAN
2013	76.9	66.7	93.9	75	79.4
2014	81.8	100	84.2	72.7	78.7
2015	100	66.7	80	84.9	83.3
Target 90%	90	90	90	90	90
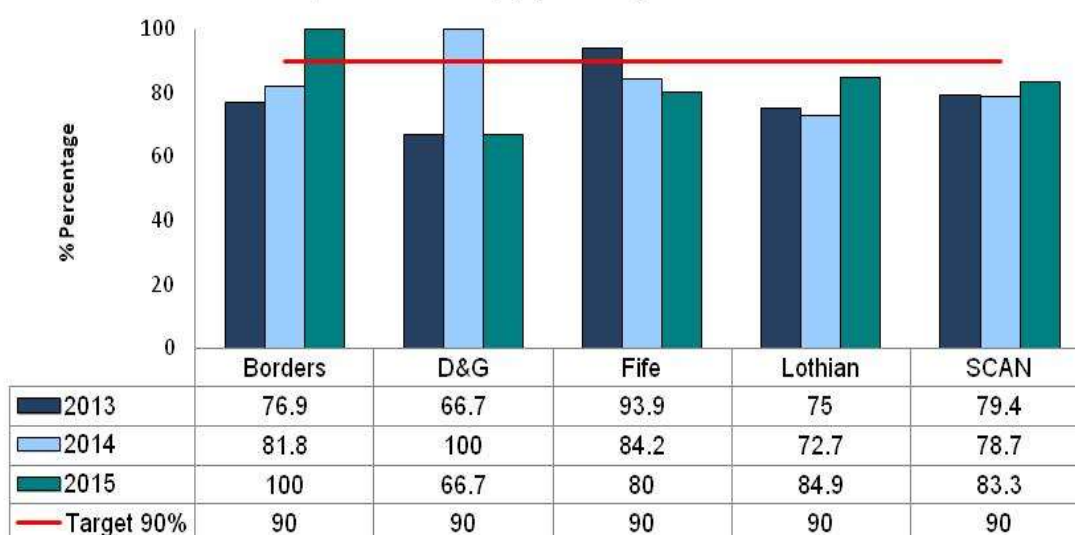
QPI 3 – Multi-Disciplinary Team (MDT) Meeting

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	0	0	3	1	4
Numerator	18	37	67	138	260
Not recorded for numerator	0	0	0	0	0
Denominator	19	41	67	148	275
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**94.7**	**90.2**	**100.0**	**93.2**	**94.5**

Borders: The target was not met showing a shortfall 0.3% (1 case). This patient received a stent insertion 1 day prior to MDT where the treatment plan was confirmed.
D&G: The target was not met showing a shortfall 4.8% (4 cases). 2 patients had radiological diagnoses and received best supportive care (BSC) and were not discussed at MDT. 2 received endoscopic treatment prior to MDT.
Lothian: The target was not met showing a shortfall of 1.8% (10 cases). 6 patients received stent insertion prior to MDT, 3 were frail and elderly and were for BSC, 1 was an emergency admission and died prior to MDT.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	0	0	0	0	0
Numerator	11	7	24	37	79
Not recorded for numerator	0	0	0	0	0
Denominator	12	8	25	39	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**91.7**	**87.5**	**96.0**	**94.9**	**94.0**

Borders: The target was not met showing a shortfall 3.3% (1 case). The patient died the day after an acute admission and was not discussed at MDT.
D&G: The target was not met showing a shortfall 7.5% (1 case). 1 patient had a radiological diagnosis, received BSC and was not discussed at MDT
Lothian: The target was not met showing a shortfall of 0.1% (2 cases). Both patients received a stent insertion prior to MDT.

QPI 3 - Multi-Disciplinary Team (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2016	91.3	95	95.9	97	96
2017	91.7	93.3	100	97	96.8
2018	87.5	100	94.9	95.5	94.8
2019	94.7	90.2	100	93.2	94.5
Target 95	95	95	95	95	95
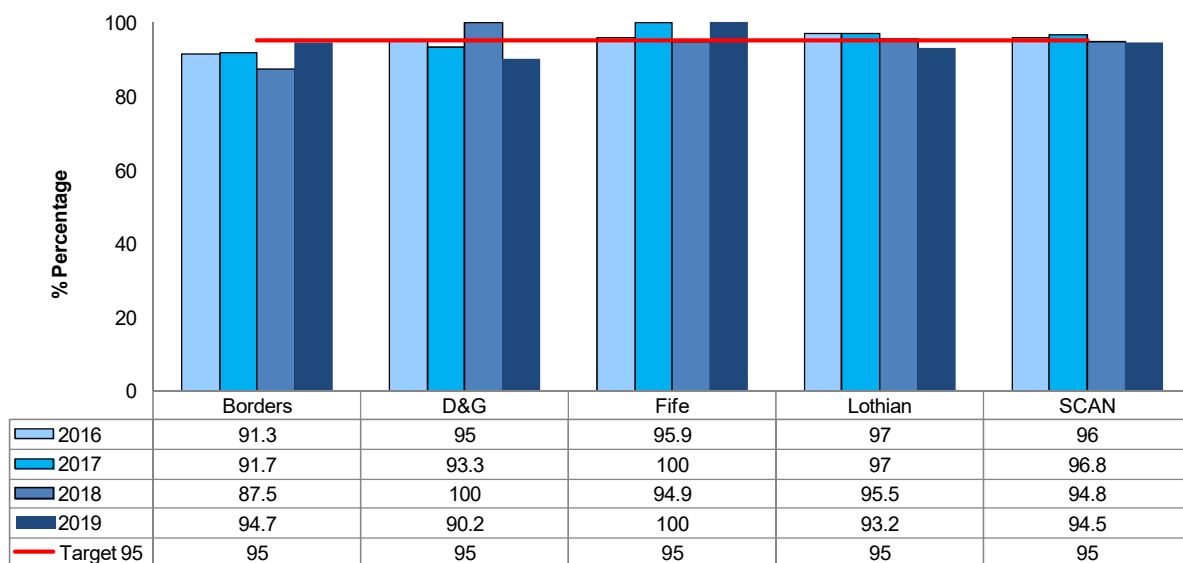
QPI 3 - Multi-Disciplinary Team (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2016	83.3	71.4	100	85.7	88.6
2017	85.7	87.5	96.7	97.4	95.2
2018	62.5	100.0	94.7	91.9	90.7
2019	91.7	87.5	96.0	94.9	94.0
Taget 95	95	95	95	95	95
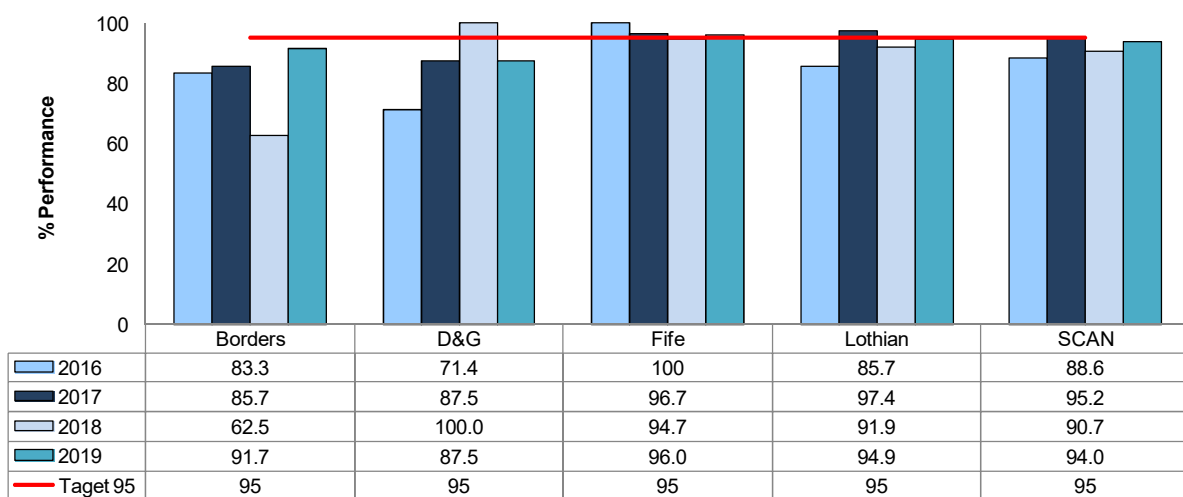
After the formal 3 year review the measurability for QPI 3 changed for year 4 (2016). The QPI was previously more complex and included whether TNM and treatment intent were recorded at MDM. Below are the details from the first 3 years of QPI3 results with those requirements.

QPI 3 - Multi-Disciplinary Team Meeting (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2013	88.5	97	98.5	95.4	95.7
2014	90	97.1	98.4	94.5	95.2
2015	95.2	97	94.3	95.5	95.4
Target 95%	95	95	95	95	95
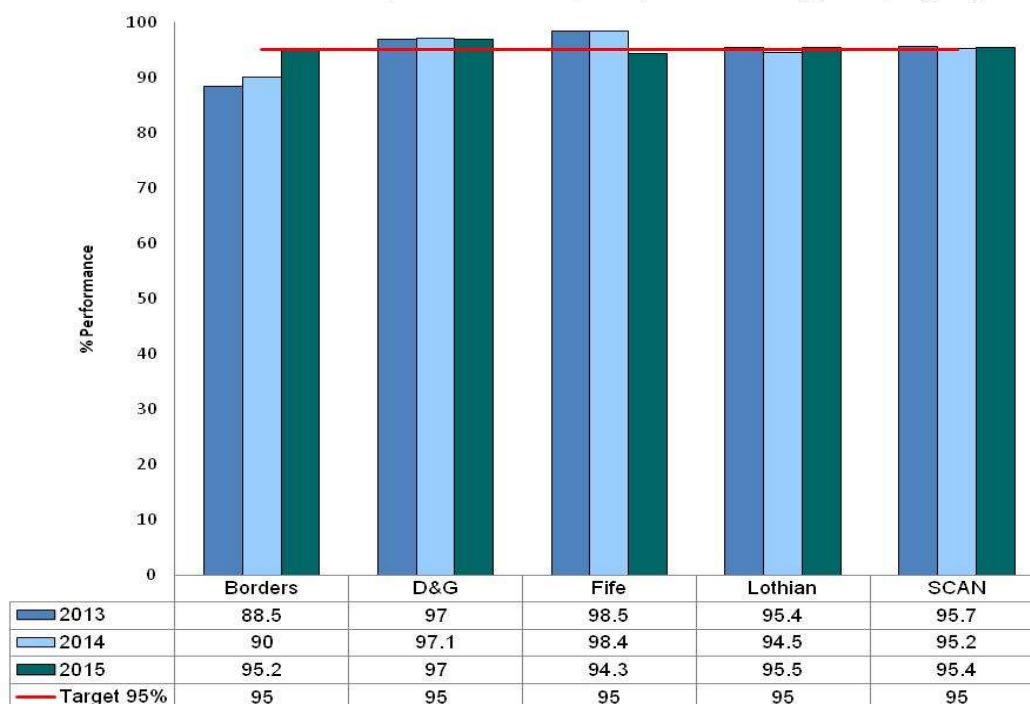
QPI 3 Multi-Disciplinary Team Meeting (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2013	84.6	100	100	89.2	92.5
2014	100	84.6	100	88.2	91
2015	75	88.9	100	83.6	87
Target 95%	95	95	95	95	95
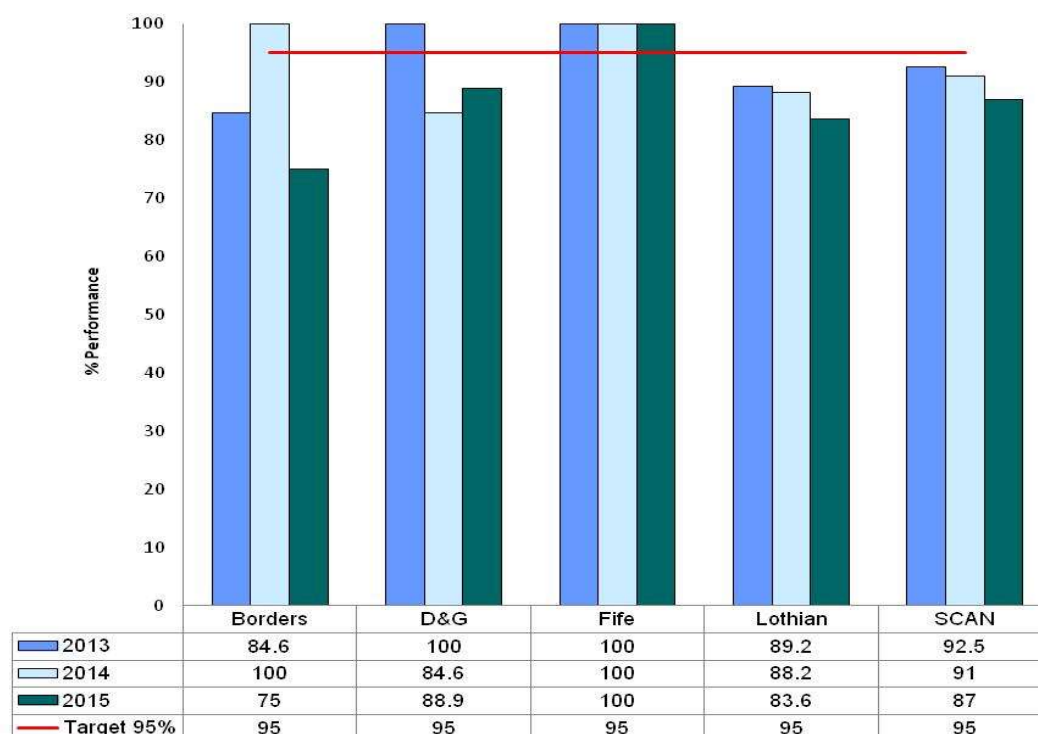
QPI 4i – Staging (TNM)

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	0	0	0	0	0
Numerator	19	39	68	138	264
Not recorded for numerator	0	0	0	0	0
Denominator	19	41	70	149	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**95.1**	**97.1**	**92.6**	**94.6**

The target was met in SCAN

Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	0	0	0	0	0
Numerator	9	8	24	35	76
Not recorded for numerator	0	0	0	0	0
Denominator	12	8	25	39	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**75.0**	**100.0**	**96.0**	**89.7**	**90.5**

The target was met in SCAN.

Borders: The target was not met showing a shortfall of 15% (3 cases). All 3 patients had no TNM recorded at MDT.
Lothian: The target was not met with a shortfall of 5.3% (4 cases). None had TNM recorded; 2 were discussed at Cancer of Unknown Primary (CUP) MDT, 1 was an incidental diagnosis at surgery and 1 patient was discussed at MDT and was for BSC.

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

	Borders	D&G	Fife	Lothian	SCAN
2016	91.7	85	96	99.3	95.7
2017	92.0	96.7	97.0	92.7	94.2
2018	85.3	92.3	100.0	89.1	92.0
2019	100.0	95.1	97.1	92.6	94.6
Target 90%	90.0	90.0	90.0	90.0	90.0
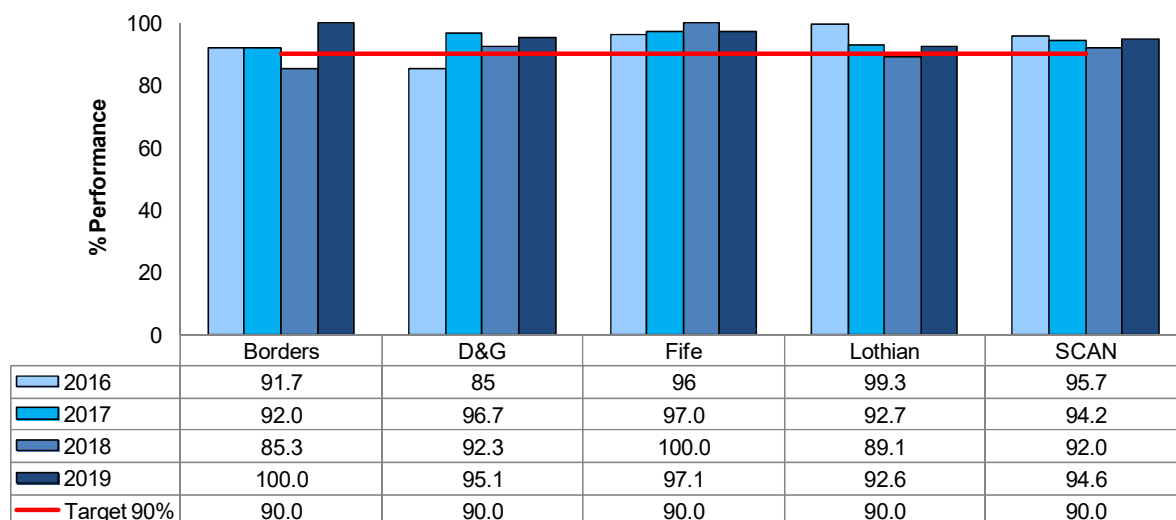
QPI 4 - TNM Stage recorded at MDT prior to treatment (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2016	83.3	85.7	87	88.6	87.3
2017	57.1	87.5	87.1	92.1	86.9
2018	66.7	100.0	100.0	81.1	86.8
2019	75.0	100.0	96.0	89.7	90.5
Target 90%	90.0	90.0	90.0	90.0	90.0
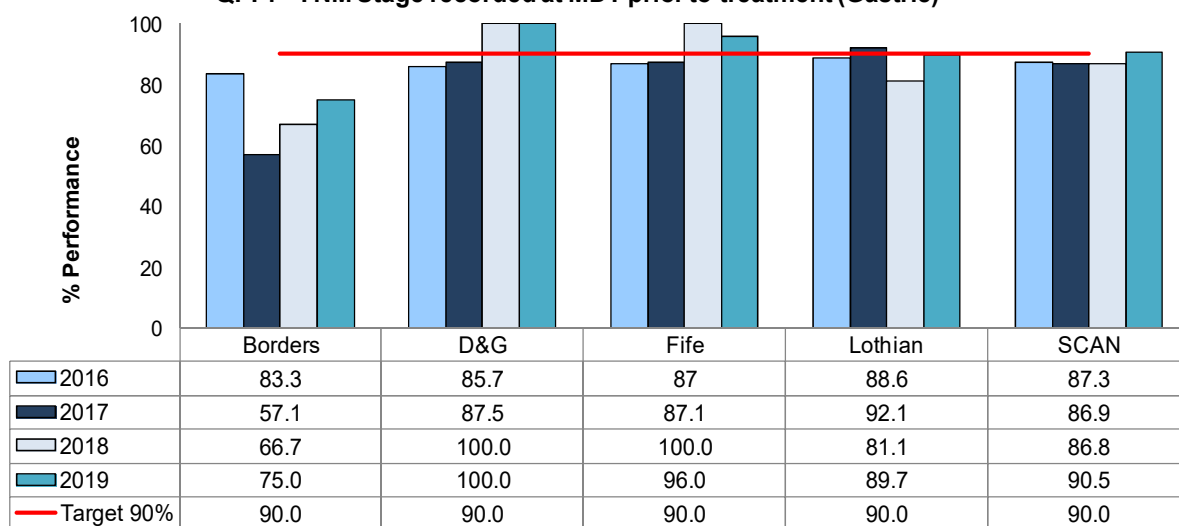
QPI 4ii – Treatment Intent

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
2018 Cohort	19	41	70	149	279
Ineligible for this QPI	0	0	0	0	0
Numerator	18	39	70	140	267
Not recorded for numerator	0	0	0	0	0
Denominator	19	41	70	149	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**94.7**	**95.1**	**100.0**	**94.0**	**95.7**

The target was met in SCAN.

Borders: The target was not met showing a shortfall of 0.3% (1 case). This patient had no treatment intent recorded at MDT and received Argon plasma coagulation (APC).
Lothian: The target was not met showing a shortfall of 1% (9 cases). 3 frail and elderly patients were not discussed at MDT. 2 discussed at MDT were for BSC only. 2 were acute admissions; 1 of whom died prior to MDT and the other was discussed at MDT and received radical chemotherapy and surgery. 1 patient received a stent insertion.

Gastric Cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	0	0	0	0	0
Numerator	11	7	25	35	78
Not recorded for numerator	0	0	0	0	0
Denominator	12	8	25	39	84
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**91.7**	**87.5**	**100.0**	**89.7**	**92.9**

Borders: The target was not met showing a shortfall of 3.3% (1 case). 1 patient died 1 day following admission and prior to MDT.
D&G: The target was not met showing a shortfall of 7.5% (1 case). 1 patient was not discussed at MDT.
Lothian: The target was not met showing a shortfall 5.3% (4 cases). 3 were discussed at the OG MDT; 1 was diagnosed at surgery, 1 received APC, 1 received BSC. The last patient was discussed at CUP MDT and had a stent insertion.

QPI 4 - Treatment Intent recorded at MDT (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2016	95.8	95	94.7	98.6	96.8
2017	96	100	100	97.1	98.1
2018	88.2	92.3	98.7	80.3	87.7
2019	94.7	95.1	100	94	95.7
Target 95%	95	95	95	95	95
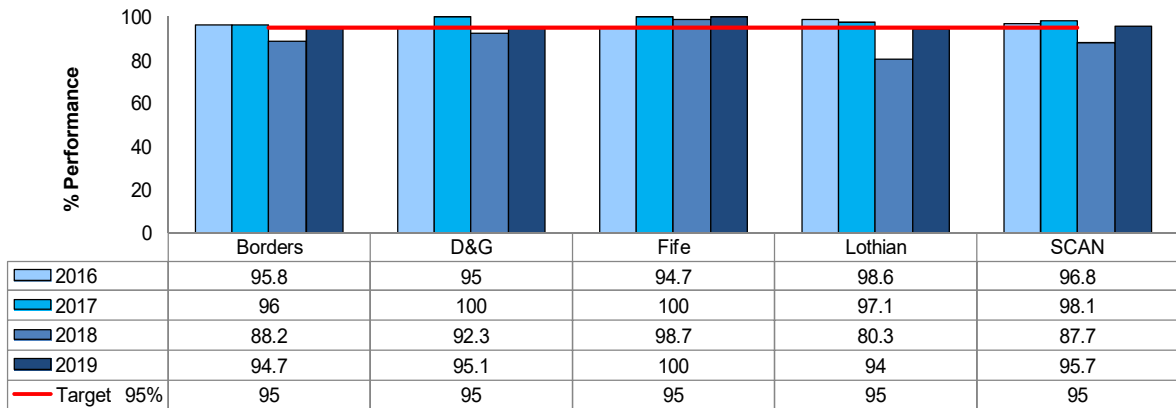
QPI 4 - Treatment Intent recorded at MDT (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2016	83.3	100	100	94.3	95.8
2017	85.7	100	93.5	94.7	94
2018	55.6	100	100	83.8	86.8
2019	91.7	87.5	100	89.7	92.9
Target 95%	95	95	95	95	95
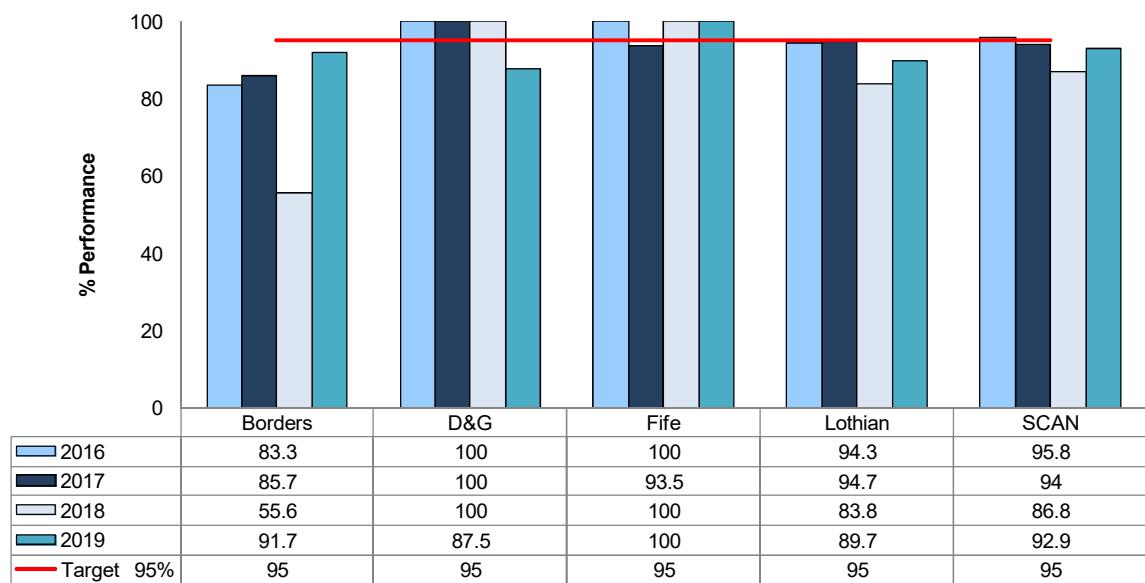
TNM stage and treatment intent were previously part of QPI 3 so comparable data are not available prior to 2016.

Comment: Although the target was not met for the gastric patients there were no clinical concerns identified. These patients often have widespread metastatic disease and management would not change if TNM was explicitly documented in the patient record.

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	0	0	0	0	0
Numerator	18	37	64	111	230
Not recorded for numerator	0	0	0	0	0
Denominator	19	41	70	149	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**94.7**	**90.2**	**91.4**	**74.5**	**82.4**

Borders: The target was not met showing a shortfall of 0.3% (1 case). 1 had MUST score after first treatment.
D&G: The target was not met showing a shortfall of 4.8% (4 cases). 1 had MUST after first treatment and 3 had no MUST score.
Fife: The target was not met showing a shortfall of 3.6% (6 cases).   3 had no date of MUST score recorded and 3 died before being seen by a dietician.
Lothian: The target was not met showing a shortfall of 20.5% (38 cases). 28 patients had MUST score after first treatment and 10 had no MUST score.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	0	0	0	0	0
Numerator	11	6	20	32	69
Not recorded for numerator	0	1	0	0	1
Denominator	12	8	25	39	84
Not recorded for exclusions	0	0	0	0	1
Not recorded for denominator	0	0	0	0	0
% Performance	**91.7**	**75.0**	**80.0**	**82.1**	**82.1**

Borders: The target was not met by 3.3% (1 case). 1 patient had a MUST recorded after treatment.
D&G: The target was not met showing a shortfall of 20% (2 cases). 1 had no MUST score and 1 had no MUST score date.
Fife: The target was not met showing a shortfall of 15% (5 cases). 3 had no MUST score date and 2 had MUST score after first treatment.
Lothian: The target was not met showing a shortfall of 12.9% (7 cases). 5 had MUST score after first treatment and 2 patients had no MUST score.

QPI 5i Nutritional Assesment: MUST (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2017	48	26.7	37.9	52.6	45.3
2018	70.6	38.5	94.9	61.3	69.9
2019	94.7	90.2	91.4	74.5	82.4
Target 95	95	95	95	95	95
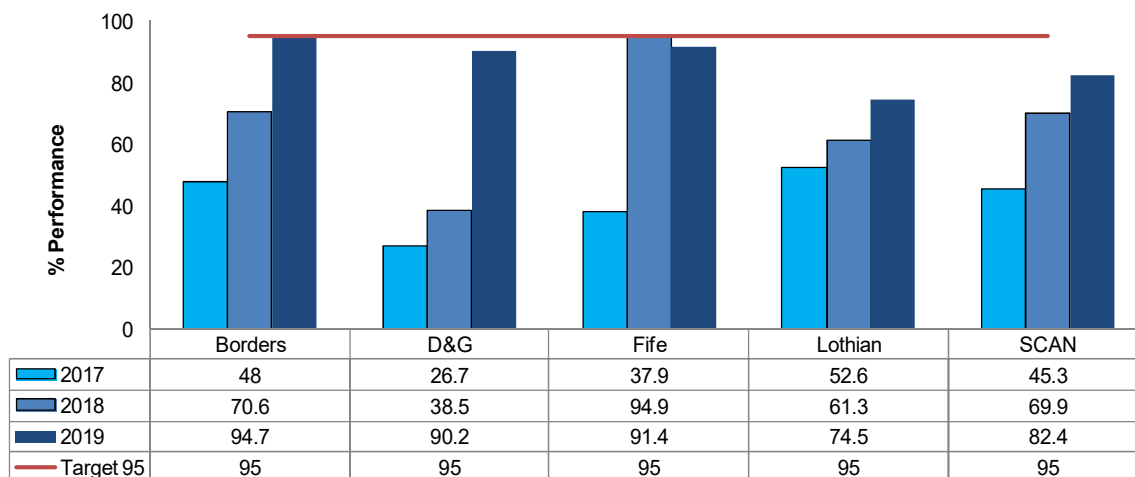
QPI 5i Nutritional Assessment: MUST (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2017	28.6	75	41.4	47.4	46.3
2018	55.6	36.4	100	45.9	59.2
2019	91.7	75	80	82.1	82.1
Target 95	95	95	95	95	95
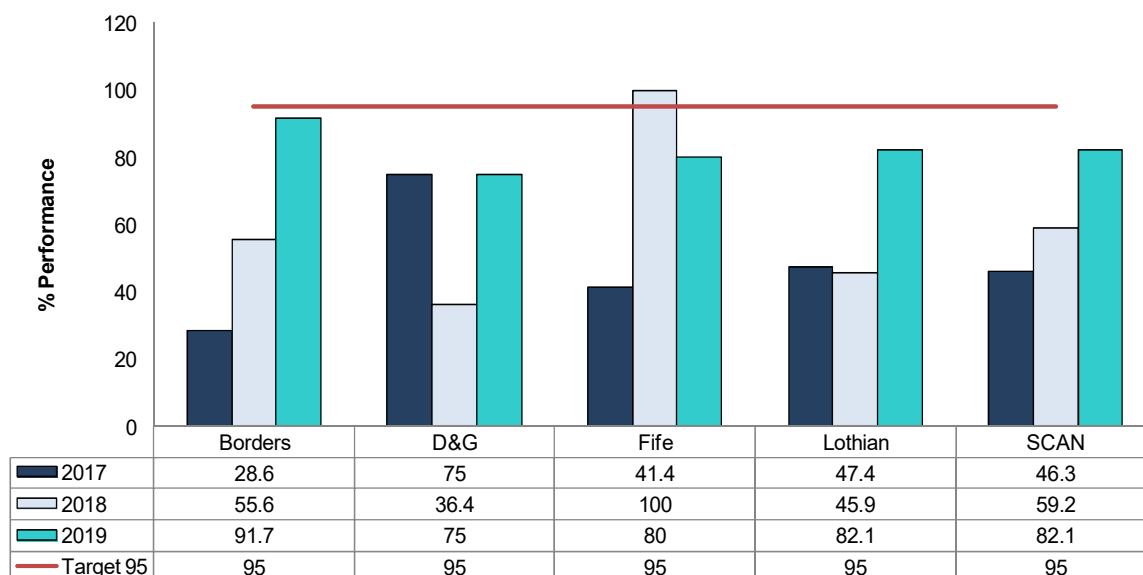
Comment: This remains a problematic QPI but improvement is seen year on year. Timing issues sometimes present for patients on the periphery of MDT and palliative pathways. There is now a process in clinics to get MUST recorded, so this should improve in future.

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	6	18	45	69	138
Numerator	13	23	25	77	138
Not recorded for numerator	0	0	0	0	0
Denominator	13	23	25	80	141
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	1	1	7	1	10
% Performance	**100.0**	**100.0**	**100.0**	**96.3**	**97.9**

The target was met in SCAN

Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	3	5	10	20	38
Numerator	8	3	12	16	39
Not recorded for numerator	0	0	0	0	0
Denominator	9	3	12	19	43
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	1	3	0	0
% Performance	**88.9**	**100.0**	**100.0**	**84.2**	**90.7**

The target was met in SCAN.

Borders: The target was not met showing a shortfall of 1.1% (1 case). The patient was not referred to a dietician.
Lothian: The target was not met showing a shortfall of 5.8% (3 patients). All 3 patients were not referred to a dietician.

Small numbers produce large percentage changes and no actions have been identified.

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

	Borders	D&G	Fife	Lothian	SCAN
2017	100	100	100	95	95.5
2018	100	100	100	98.2	99.2
2019	100	100	100	96.3	97.9
Target 90	90	90	90	90	90
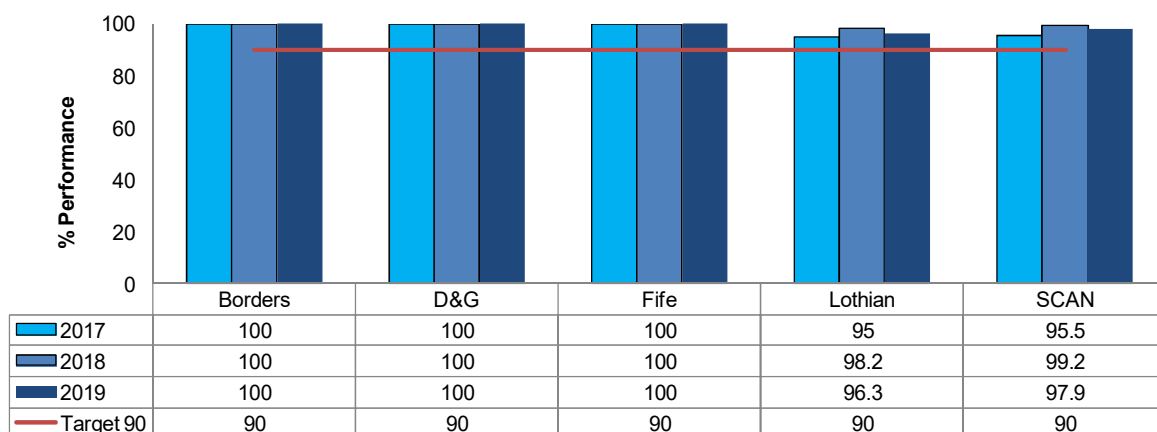
QPI 5 (ii) - MUST Score ≥ 2 Referred to a Dietician (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2017	100	100	100	81.8	87.5
2018	100	100	100	100	100
2019	88.9	100	100	84.2	90.7
Target 90	90	90	90	90	90
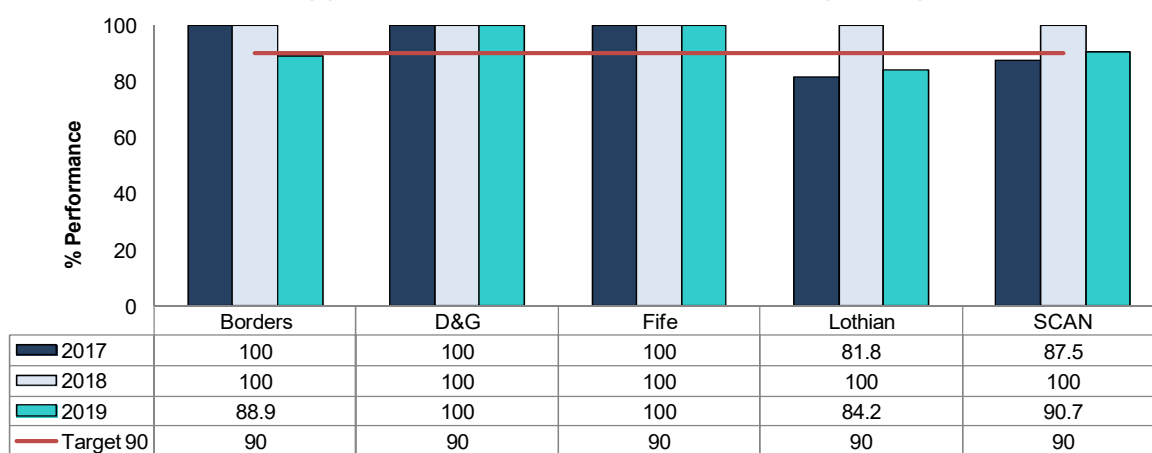
SURGICAL OUTCOMES

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	8	34	57	123	228
Numerator	4	7	11	22	44
Not recorded for numerator	0	0	0	0	0
Denominator	4	7	13	27	51
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**84.6**	**81.5**	**86.3**

The target was met in SCAN.

Gastric cancer

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	11	7	22	35	75
Numerator	1	1	2	4	8
Not recorded for numerator	0	0	0	0	0
Denominator	1	1	3	4	9
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**66.7**	**100.0**	**88.9**

The target was met in SCAN.

All surgical patients have been reviewed.

Comment: This is a good result, at RIE practice ensures that patients and clinicians have the same view on treatment choices.

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 (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2017	100	100	100	88.9	92.9
2018	80	80	90	89.5	87.2
2019	100	100	84.6	81.5	86.3
Target 80	80	80	80	80	80
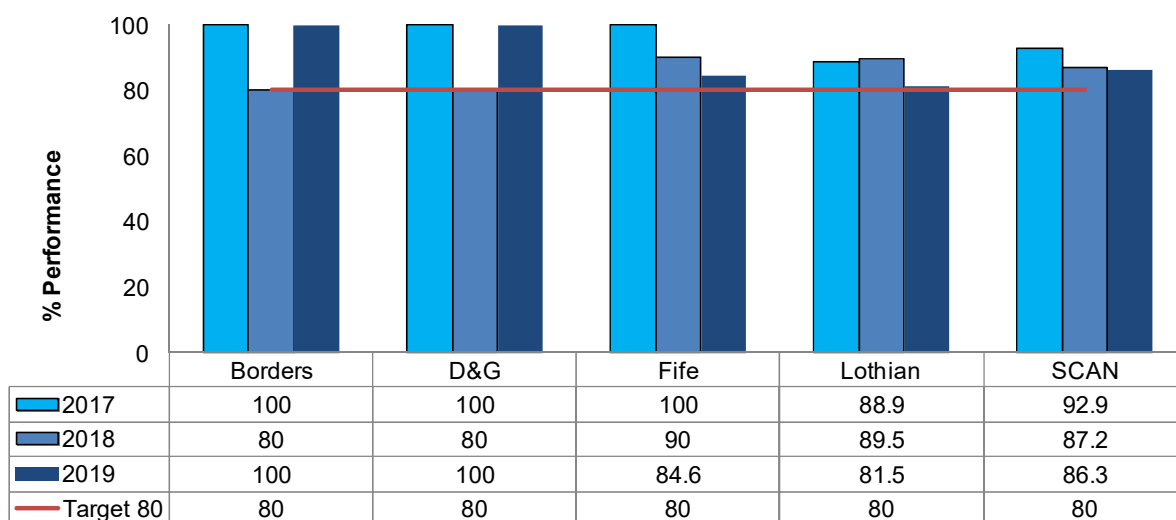
QPI 6 - Appropriate Selection of Surgical Patients (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2013	0	100	100	100	100
2014	0	0	66.7	100	83.3
2015	100	0	100	100	100
2016	0	0	100	100	100
2017	0	0	100	0	83.3
2018	50	100	100	100	80
2019	100	100	66.7	100	88.9
Target 80%	80	80	80	80	80

QPI 6 - Appropriate Selection of Surgical Patients (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2013	100	100	75	83.3	86.4
2014	80	75	90	95.2	90
2015	100	100	63.6	78.9	77.8
2016	100	85.7	81.3	85.7	86
2017	100	100	100	88.9	92.9
Target 80%	80	80	80	80	80
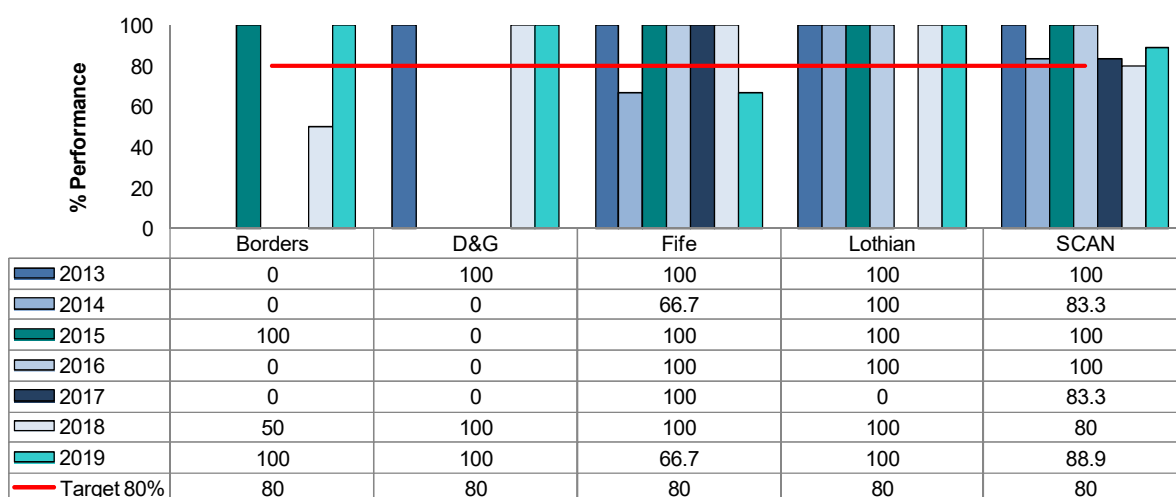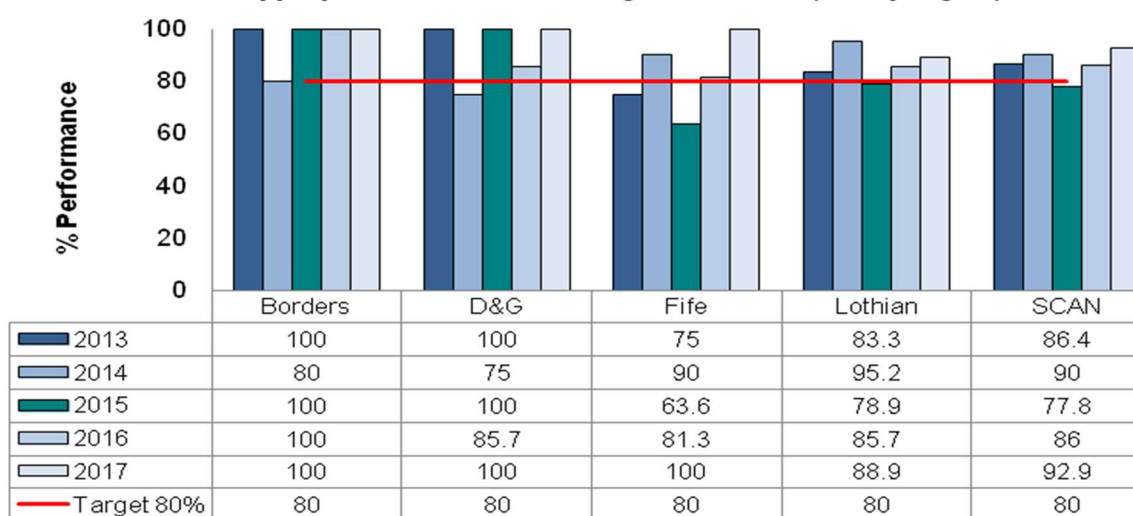
QPI 7 – 30/90 Day Mortality Following Surgery

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 (no exclusions).

Oesophageal cancer by Hospital of Surgery
30 Day Mortality

Target < 5%	RIE	SCAN
2019 Cohort	279	279
Ineligible for this QPI	231	231
Numerator	1	1
Not recorded for numerator	0	0
Denominator	48	48
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	2.1	2.1

90 Day Mortality

Target < 7.5%	RIE	SCAN
2019 Cohort	279	279
Ineligible for this QPI	234	234
Numerator	1	1
Not recorded for numerator	0	0
Denominator	45	45
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	2.2	2.2

3 patients were less than 90 days post-surgery at time of reporting.

Gastric cancer by Hospital of Surgery
30 Day Mortality

Target <5%	RIE	SCAN
2019 Cohort	84	84
Ineligible for this QPI	70	70
Numerator	0	0
Not recorded for numerator	0	0
Denominator	14	14
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	0.0	0.0

90 Day Mortality **Target <7.5%**	RIE	SCAN
2019 Cohort	84	84
Ineligible for this QPI	70	70
Numerator	1	1
Not recorded for numerator	0	0
Denominator	14	14
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**7.1**	**7.1**

All surgical deaths have been reviewed.

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
2019 Cohort	279	276
Ineligible for this QPI	231	231
Numerator	41	41
Not recorded for numerator	0	0
Denominator	48	48
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**85.4**	**85.4**

Gastric cancer – Hospital of surgery

Target 80%	RIE	SCAN
2019 Cohort	84	84
Ineligible for this QPI	70	70
Numerator	11	11
Not recorded for numerator	0	0
Denominator	14	14
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**78.6**	**78.6**

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%.

QPI 8 - Lymph Node Yield (Oesophageal)

	SCAN (RIE)
2017	89.7
2018	90.5
2019	85.4
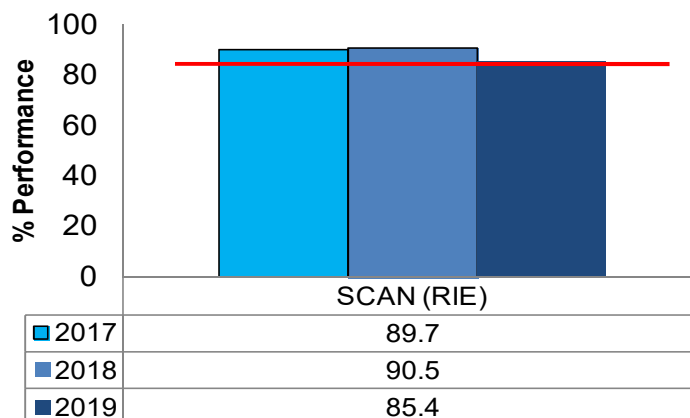
QPI 8 - Lymph Node Yield (Gastric)

	DGRI	Fife VHK	RIE	SCAN
2013	75	100	72.7	74.2
2014	75.0	50.0	70.0	67.9
2015	50	50	52	51.7
2016	0	0	83.3	83.3
2017	100	100	81.3	85
2018	100	0	64.3	66.7
2019	0	0	78.6	78.6
Target 80%	80	80	80	80
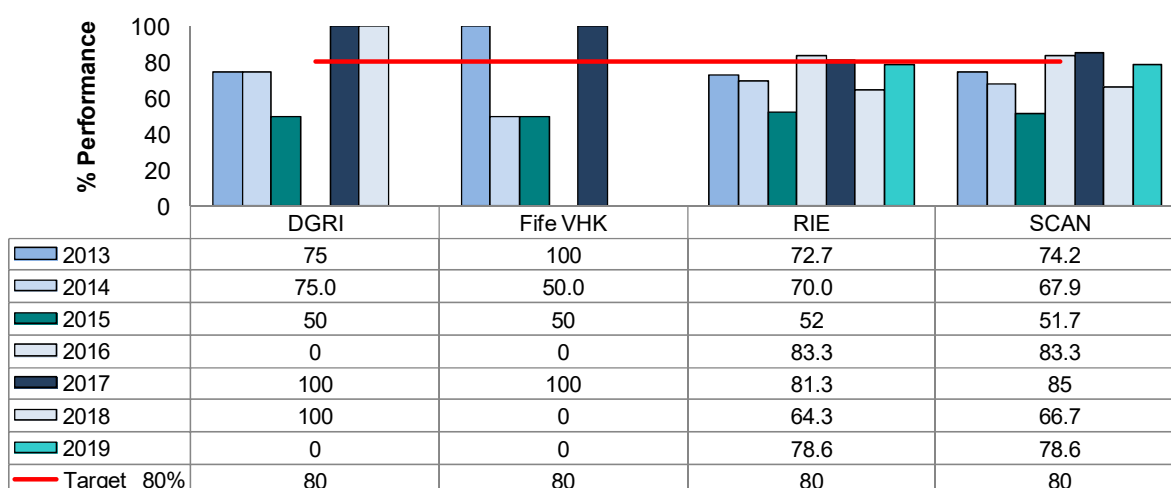
Comment: After FLOX chemo with a good response, lymph nodes are harder to identify. All cases have been reviewed and we will monitor this in future reports.

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 SMR01 returns rather than data collected through QPI audit.

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.

Oesophageal cancer – Hospital of surgery

Target 60%	RIE	SCAN
Numerator	29	29
Not recorded for numerator	0	0
Denominator	46	46
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	**63.0**	**63.0**

SCAN median was 13 days (range 8-86)

Gastric cancer – Hospital of surgery

Target 60%	RIE	SCAN
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**

SCAN median was 9 days (range 7-18)

The target was met in SCAN for both oesophageal and gastric cancers

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 9 Length of Hospital Stay (Oesophageal)

	SCAN (RIE)
2016	56.4
2017	66.7
2018	73.5
2019	63
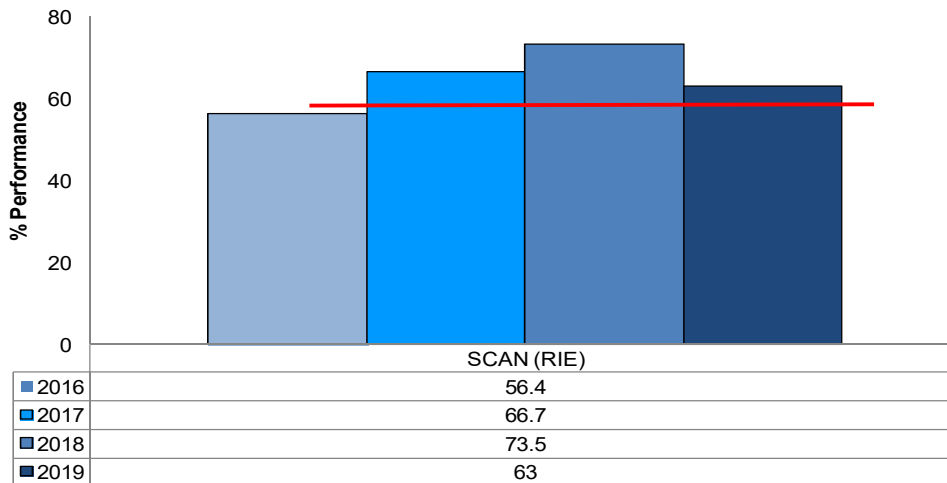
QPI 9 - Length of Hospital of Stay (Gastric)

	DGRI	Fife VHK	RIE	SCAN
2016	0	0	81.8	81.30%
2017	100	100	73.3	78.90%
2018	100	0	94.7	97.35%
2019	0	0	83.3	83.30%
Target 60%	60	60	60	60
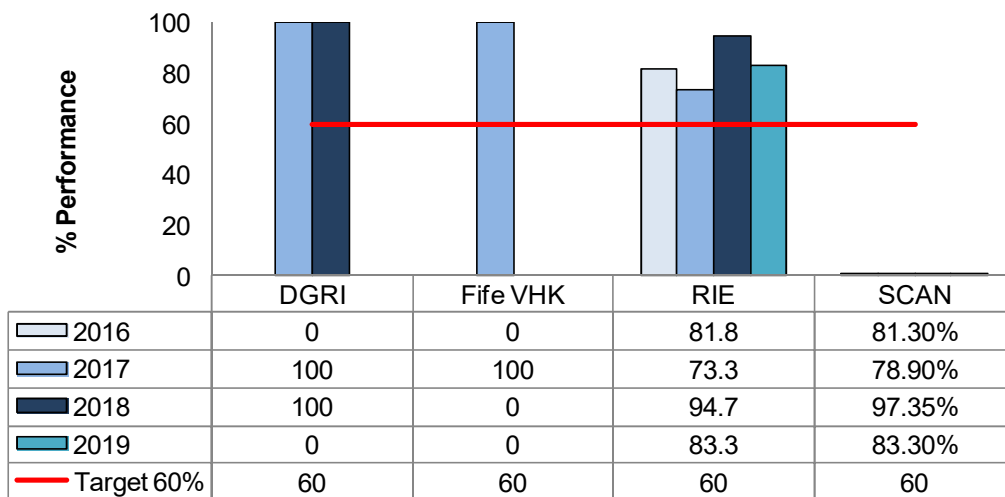
QPI 9 - Length of Hospital Stay (Gastric)

	DGRI	Fife VHK	RIE	SCAN
2013	100	75	90.9	87.1
2014	100	100	81	86.2
2015	100	100	92.3	93.1
Target 60%	60	60	60	60
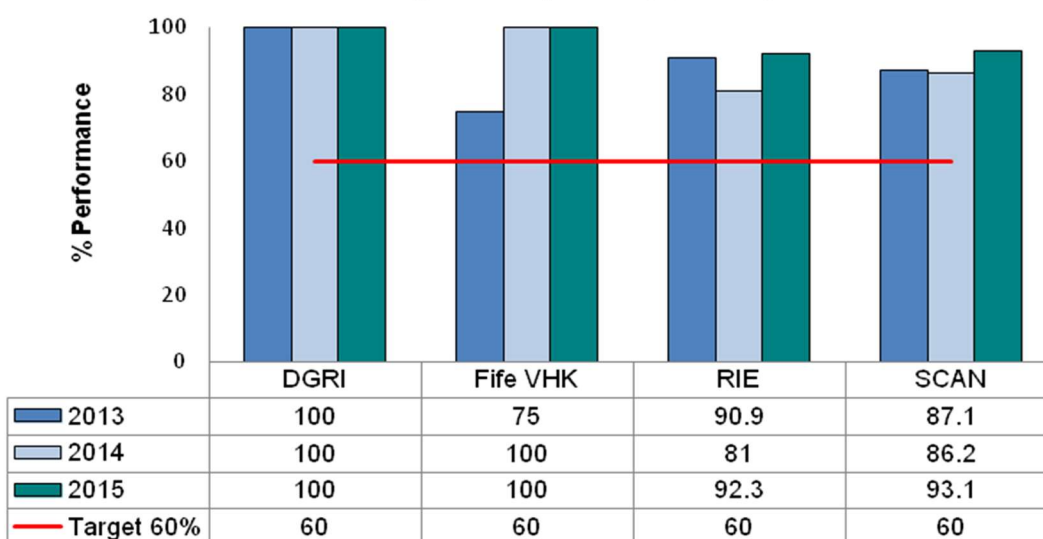
QPI 10i – Circumferential Resection Margins

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
2019 Cohort	279	279
Ineligible for this QPI	231	231
Numerator	37	37
Not recorded for numerator	0	0
Denominator	48	48
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	77.1	77.1

QPI 10ii – Longitudinal 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 (Hospital of Surgery)

Target 90%	RIE	SCAN
2019 Cohort	279	279
Ineligible for this QPI	231	231
Numerator	45	45
Not recorded for numerator	1	1
Denominator	48	48
% Performance	93.8	93.8

Gastric Longitudinal margin (Hospital of Surgery)

Target 90%	RIE	SCAN
2019 Cohort	84	84
Ineligible for this QPI	70	70
Numerator	14	14
Not recorded for numerator	0	0
Denominator	14	14
% Performance	100.0	100.0

The target was met in SCAN

Comment: These are good results. CRM margins have progressively improved markedly and the pathology service continues to be very good.

QPI 10i Patients with Circumferential Margin Clear (Oesophageal)

	SCAN (RIE)
2017	74.4
2018	73.8
2019	77.1
Target 70%	70
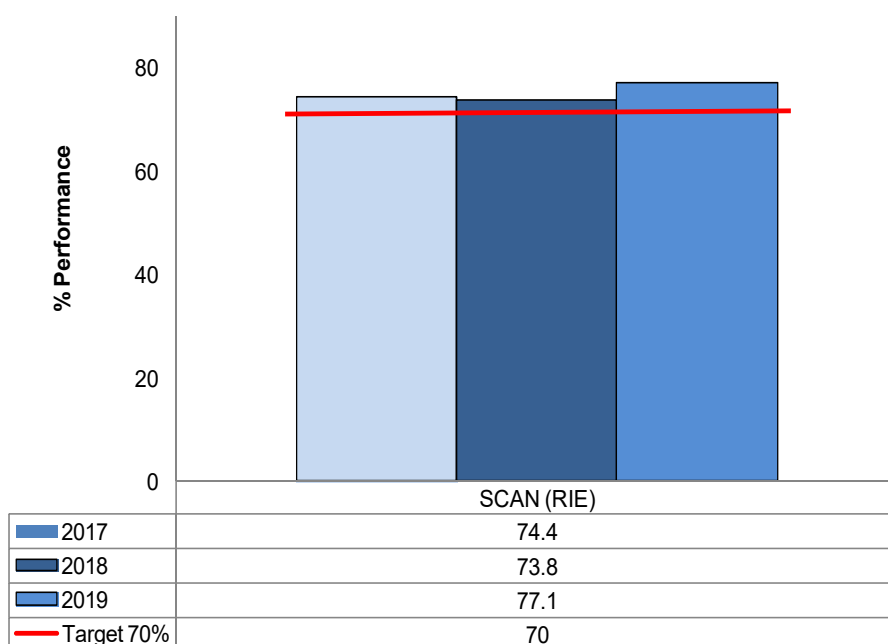
QPI 10ii - Resection Margins Gastric Longitudinal Margin

	DRI	Fife - VHK	RIE	SCAN
2016	0	0	100	100
2017	100	100	93.8	95
2018	100	100	0	100
2019	0	0	100	100
Target 90%	90	90	90	90
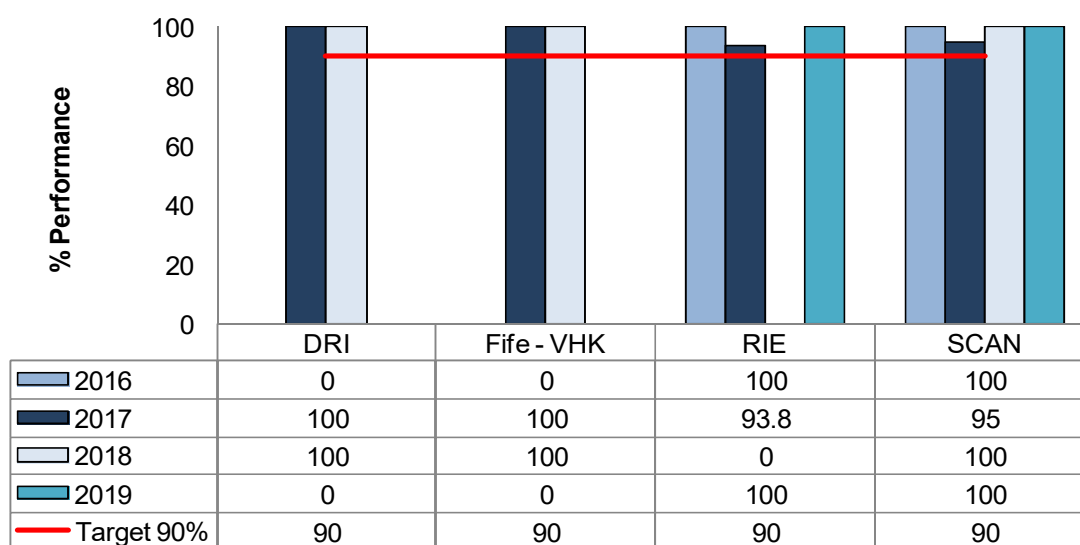
Following formal review, QPI 10 was updated in 2016. The oesophageal cancer circumferential and longitudinal resection margins were previously reported combined. Below are the QPI percentage performances for 3 years of collection with the 70% target.

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	0	0	0	0	0
Numerator	4	9	16	38	67
Not recorded for numerator	0	0	0	0	0
Denominator	19	41	70	149	279
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**21.1**	**22.0**	**22.9**	**25.5**	**24.0**

Gastric cancer – Health board of diagnosis

Target 35%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	3	0	0	0	3
Numerator	3	2	3	9	17
Not recorded for numerator	0	0	0	0	0
Denominator	9	8	25	39	81
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**33.3**	**25.0**	**12.0**	**23.1**	**21.0**

QPI 11 - Curative Treatments (Oesophageal)

% Performance

	Borders	D&G	Fife	Lothian	SCAN
2017	16	16.7	12.1	28.5	21.7
2018	23.5	23.1	24.1	25.5	24.6
2019	21.1	22	22.9	24.5	23.5
Target 35%	35	35	35	35	35

QPI 11 - Curative Treatments (Gastric)

% Performance

	Borders	D&G	Fife	Lothian	SCAN
2017	0	0	32.3	26.3	23.8
2018	22.2	18.2	21.1	24.3	22.4
2019	33.3	25	12	23.1	21
Target 35%	35	35	35	35	35
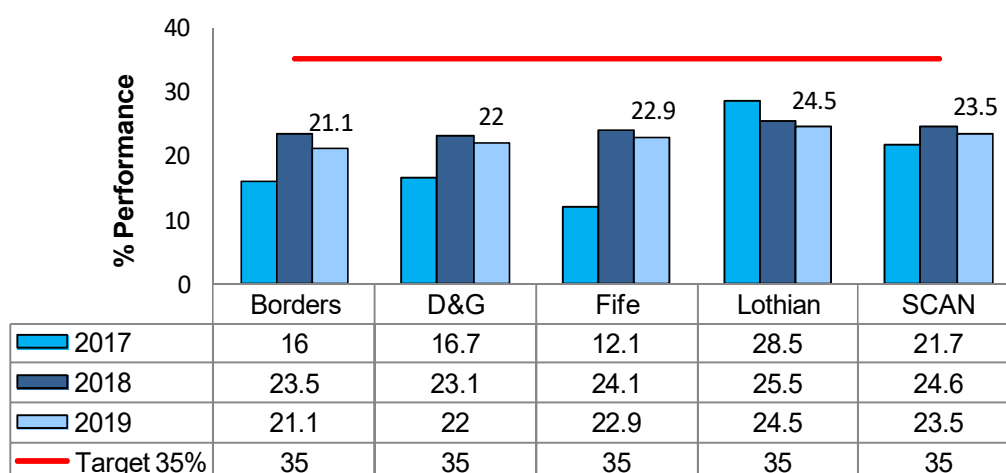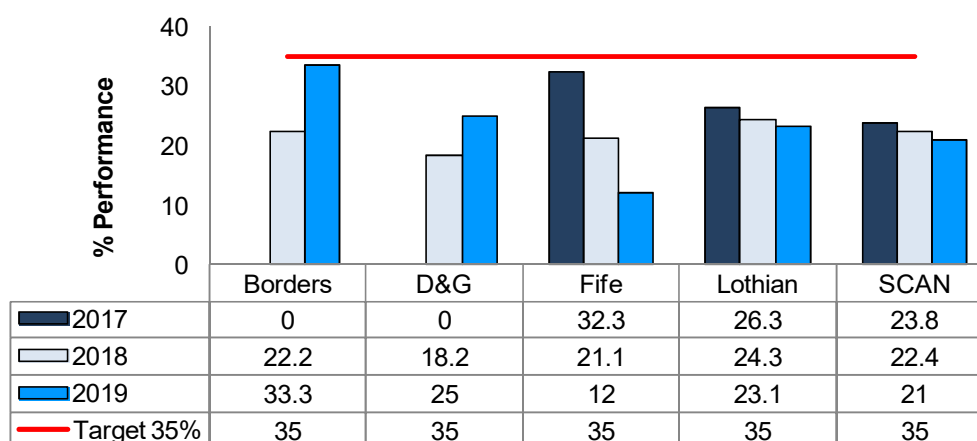
Following formal review, QPI 11 was updated in Year 5, 2017. The curative treatment now includes neoadjuvant chemotherapy and neoadjuvant chemoradiotherapy and additional oesophagectomy and gastrectomy procedures.

Below are the QPI details for the first 4 years of analysis.

QP 11 - Curative Treatments (Oesophageal)

	Borders	D&G	Fife	Lothian	SCAN
2013	26.9	33.3	29.4	29.6	29.7
2014	30	29.4	23.8	24.7	25.6
2015	22.7	27.3	20.8	26.9	25.1
2016	25	22.5	33.3	29	28.9
Target 35%	35	35	35	35	35

QPI 11 - Curative Treatments (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2013	15.4	30.8	14.7	27	23.1
2014	9.1	30.8	31.6	25	25.2
2015	37.5	22.2	28.6	31.6	30.5
2016	16.7	28.6	13	22.9	19.7
Target 35%	35	35	35	35	35
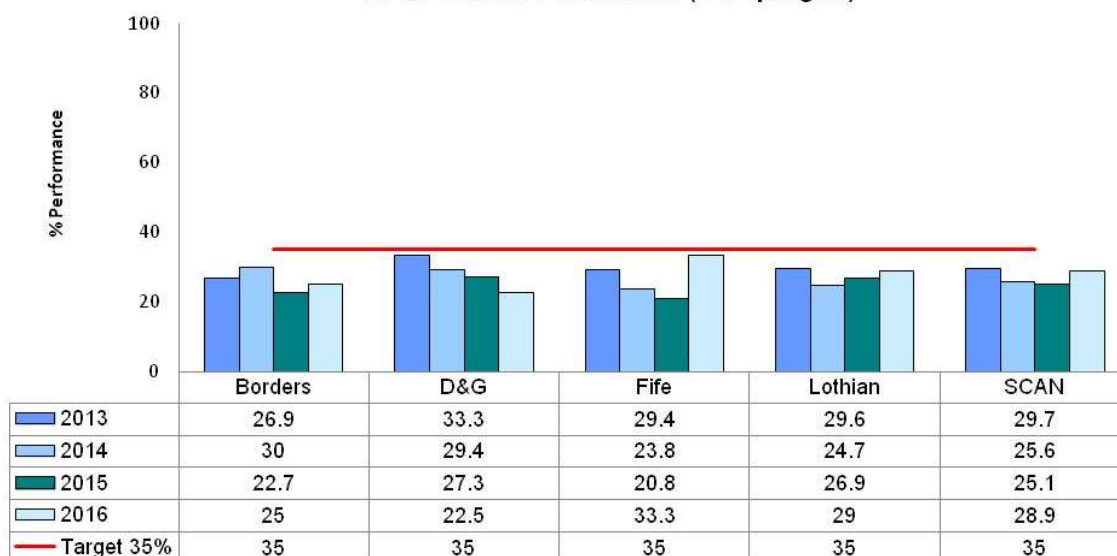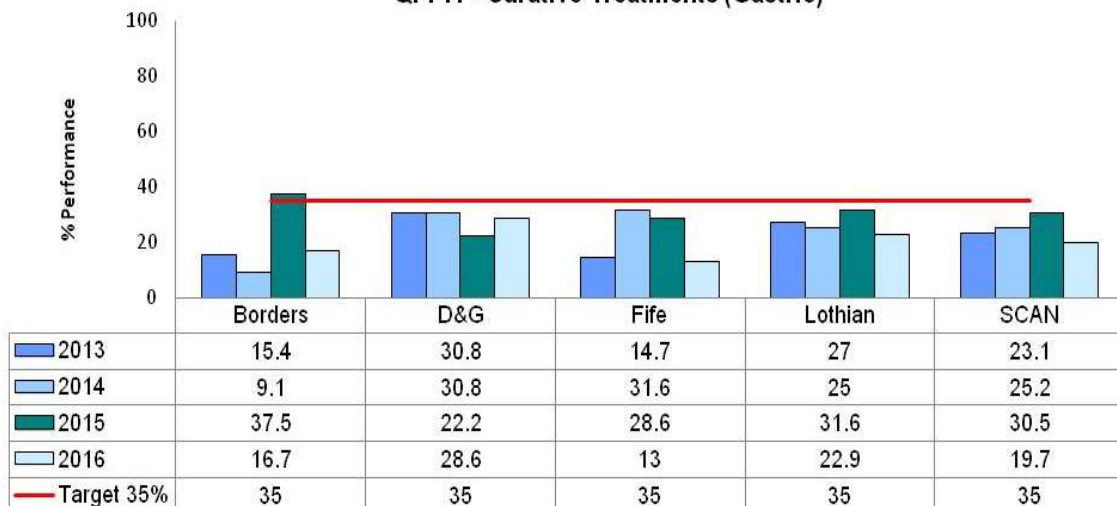
Comment: This QPI remains aspirational, but it's important to continue to report because there is a problem with a lack of early diagnosis that needs highlighted. Lower numbers than in England, but very good case ascertainment may affect this.

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	19	39	68	149	275
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	2	2	0	4
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**N/A**	**0.0**	**0.0**	**N/A**	**0.0**

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	15	34	58	126	233
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	4	7	12	23	46
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
2018 Cohort	19	41	70	149	279
Ineligible for this QPI	19	41	69	145	274
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**

Adjuvant Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2018 Cohort	19	41	70	149	279
Ineligible for this QPI	16	38	69	148	271
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	3	3	1	1	8
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**

Gastric cancer – 30 Day mortality for curative Oncological treatment

No gastric cancer patients were treated with neoadjuvant chemoradiotherapy, radical chemoradiotherapy, or downstaging chemotherapy in 2019.

Peri-operative Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	11	7	22	35	75
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	1	3	4	9
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 Chemotherapy

Target <5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	11	8	24	37	80
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	1	2	4
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**

The target was met in SCAN

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	19	39	68	149	275
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	2	2	0	4
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	0.0	0.0	N/A	0.0

Peri-operative Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	15	35	58	126	234
Numerator	0	1	0	2	3
Not recorded for numerator	0	0	0	0	0
Denominator	4	6	12	23	45
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	16.7	0.0	8.7	6.7

Neo-adjuvant Chemoradiotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	19	41	69	145	274
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

Adjuvant Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	16	38	69	148	271
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	3	3	1	1	8
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**

Gastric cancer – 90 Day mortality for curative Oncological treatment

Peri-operative Chemotherapy

Target <7.5%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	11	7	22	35	75
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	1	3	4	9
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 Chemotherapy

Target <7.5 %	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	11	8	24	37	80
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	1	2	4
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**

No gastric cancer patients were treated with neoadjuvant chemoradiotherapy, radical chemoradiotherapy or downstaging chemotherapy in 2019.

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
2019 Cohort	19	41	70	149	279
Ineligible for this QPI	16	34	57	121	228
Numerator	0	0	2	0	2
Not recorded for numerator	0	0	0	0	0
Denominator	3	7	13	28	51
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0.0**	**0.0**	**15.4**	**0.0**	**3.9**

Gastric cancer – 30 Day mortality for palliative Oncological treatment

Chemotherapy

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	12	8	25	39	84
Ineligible for this QPI	12	7	20	36	75
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	5	3	9
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**N/A**	**0.0**	**0.0**	**0.0**	**0.0**

QPI 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
2019 Cohort	12	49	25	39	125
Ineligible for this QPI	12	48	22	37	119
Numerator	0	1	3	2	6
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	3	2	6
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	2	0	0	0	0
% Performance	N/A	100.0	100.0	100.0	100.0

The target was met in SCAN

QPI 13 - HER2 Status (Gastric)

	Borders	D&G	Fife	Lothian	SCAN
2017	100	0	50	100	75
2018	0	100	100	100	100
2019	0	100	100	100	100
Target 90%	90	90	90	90	90
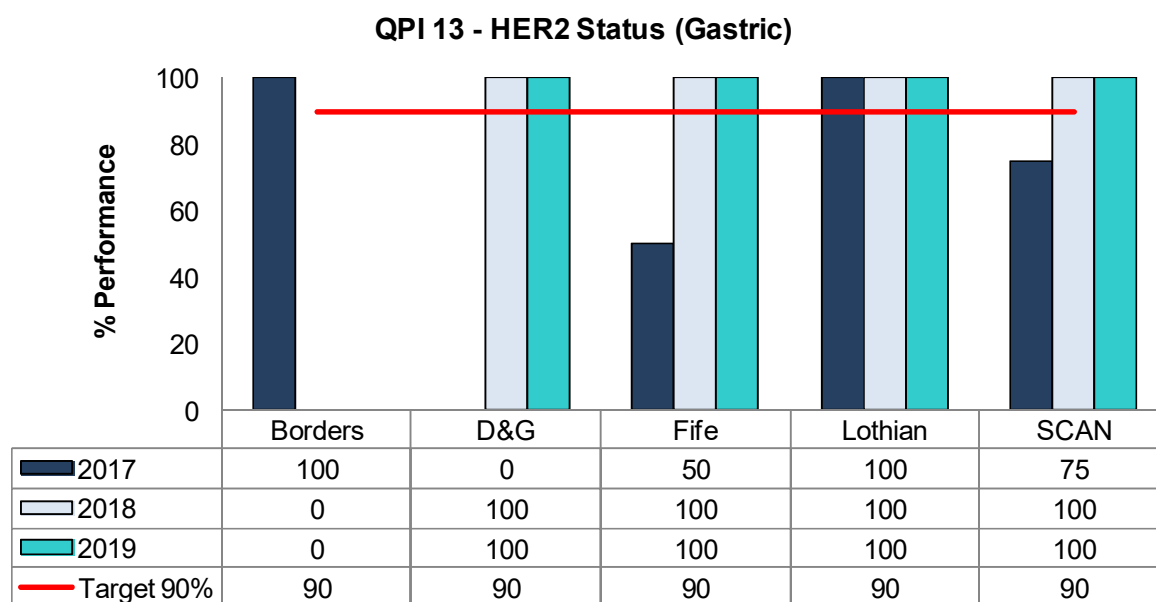
Comment: This QPI does not show all patients and is being revised in the Formal Review.

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 SCRN data and Cancer Registry data
(5 year average of case ascertainment)

Clinical Trials	Borders	D&G	Fife	Lothian	SCAN
Numerator	10	10	17	53	90
Denominator	37	45	95	179	356
% Performance	**27.0**	**22.2**	**17.9**	**29.6**	**25.3**

The target was met in SCAN

Patients in Trials not currently held on EDGE database	Patient numbers as reported by principle investigator)
GI-ACP UGI Participants 2019	26
Net-2 Study	1

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	19	61.3	41	83.7	70	73.7	149	79.3	279	76.9
Gastric Gancer	12	38.7	8	16.3	25	26.3	39	20.7	84	23.1
Total Upper GI Cancers	31	100%	49	100%	95	100%	188	100%	363	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	1	2.0	0	0.0	8	4.3	9.0	2.5
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	0.0	0.0	5	10.2	1	1.1	0	0.0	6.0	1.7
C15.4	5.0	16.1	7	14.3	10	10.5	33	17.6	55.0	15.2
C15.5	10.0	32.3	20	40.8	51	53.7	78	41.5	159.0	43.8
C15.8	3.0	9.7	1	2.0	3	3.2	13	6.9	20.0	5.5
C15.9	1.0	3.2	0	0.0	0	0.0	8	4.3	9.0	2.5
C16.0	0.0	0.0	7	14.3	5	5.3	9	4.8	21.0	5.8
C16.1	1.0	3.2	0	0.0	0	0.0	1	0.5	2.0	0.6
C16.2	2.0	6.5	0	0.0	10	10.5	9	4.8	21.0	5.8
C16.3	4.0	12.9	6	12.2	6	6.3	15	8.0	31.0	8.5
C16.4	2.0	6.5	0	0.0	5	5.3	3	1.6	10.0	2.8
C16.5	0.0	0.0	0	0.0	2	2.1	5	2.7	7.0	1.9
C16.6	1.0	3.2	0	0.0	1	1.1	2	1.1	4.0	1.1
C16.8	0.0	0.0	0	0.0	0	0.0	1	0.5	1.0	0.3
C16.9	2.0	6.5	2	4.1	1	1.1	3	1.6	8.0	2.2
Total	31.0	100%	49.0	100%	95.0	100%	188.0	100%	363.0	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	1	3.8	0	0.0	1	2.1	0	0.0	1	0.9	1	2.3	3	1.6	1	1.1
45-49	1	7.7	0	0.0	0	0.0	0	0.0	1	2.1	2	8.7	2	1.9	2	4.7	4	2.1	4	4.6
50-54	1	7.7	0	0.0	2	7.7	0	0.0	3	6.4	1	4.3	6	5.7	1	2.3	12	6.3	2	2.3
55-59	1	7.7	0	0.0	3	11.5	0	0.0	6	12.8	1	4.3	7	6.6	4	9.3	17	8.9	5	5.7
60-64	0	0.0	2	33.3	5	19.2	1	6.7	5	10.6	3	13.0	14	13.2	4	9.3	24	12.5	10	11.5
65-69	3	23.1	0	0.0	4	15.4	5	33.3	3	6.4	4	17.4	18	17.0	7	16.3	28	14.6	16	18.4
70-74	2	15.4	1	16.7	1	3.8	1	6.7	8	17.0	3	13.0	28	26.4	3	7.0	39	20.3	8	9.2
75-79	3	23.1	0	0.0	5	19.2	4	26.7	9	19.1	2	8.7	16	15.1	3	7.0	33	17.2	9	10.3
80-84	2	15.4	1	16.7	3	11.5	3	20.0	5	10.6	2	8.7	8	7.5	6	14.0	18	9.4	12	13.8
85+	0	0.0	2	33.3	2	7.7	1	6.7	6	12.8	5	21.7	6	5.7	12	27.9	14	7.3	20	23.0
Total	13	100%	6	100%	26	100%	15	100%	47	100%	23	100%	106	100%	43	100%	192	100%	87	100%

Age at Diagnosis	Borders		D&G		Fife		Lothian	
	M	F	M	F	M	F	M	F
Min	49	62	40	64	63	45	44	37
Max	81	85	93	87	94	94	94	95
Mean	69	74	68.4	74.2	72	71	70	73
Median	70	76	68.5	75	72	71	70	72

Age of Males Patients (Oesophageal)

Legend: 85+, 80-84, 75-79, 70-74, 65-69, 60-64, 55-59, 50-54, 45-49, <45

Categories: Borders, D&G, Fife, Lothian

Age of Females (Oesophageal)

Legend: 85+, 80-84, 75-79, 70-74, 65-69, 60-64, 55-59, 50-54, 45-49, <45

Categories: Borders, D&G, Fife, Lothian
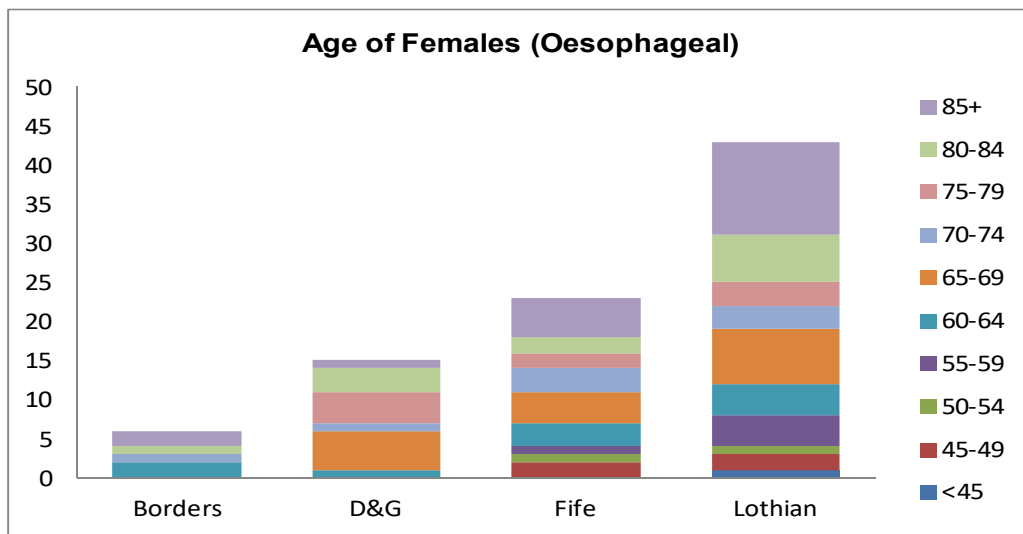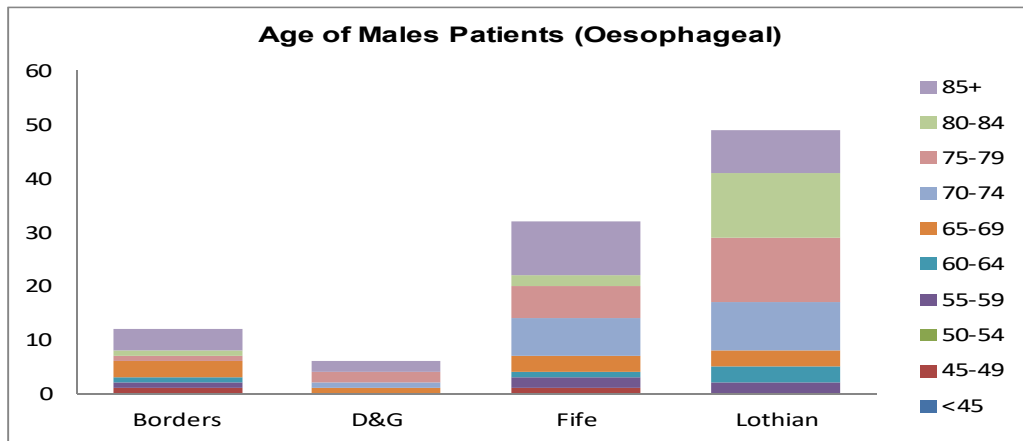
Gastric

Age at Diagnosis	Borders M n	Borders M %	Borders F n	Borders F %	D&G M n	D&G M %	D&G F n	D&G F %	Fife M n	Fife M %	Fife F n	Fife F %	Lothian M n	Lothian M %	Lothian F n	Lothian F %	SCAN M n	SCAN M %	SCAN F n	SCAN F %
<45	1	12.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	8.7	2	12.5	3	5.2	2	7.7
45-49	0	0.0	0	0.0	0	0.0	1	50.0	1	4.8	1	25.0	1	4.3	0	0.0	2	3.4	2	7.7
50-54	1	12.5	0	0.0	0	0.0	0	0.0	2	9.5	0	0.0	2	8.7	1	6.3	5	8.6	1	3.8
55-59	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	2	8.7	0	0.0	2	3.4	1	3.8
60-64	1	12.5	0	0.0	0	0.0	0	0.0	2	9.5	0	0.0	2	8.7	1	6.3	5	8.6	1	3.8
65-69	2	25.0	1	25.0	2	33.3	0	0.0	1	4.8	0	0.0	2	8.7	3	18.8	7	12.1	4	15.4
70-74	0	0.0	0	0.0	1	16.7	0	0.0	3	14.3	1	25.0	1	4.3	2	12.5	5	8.6	3	11.5
75-79	1	12.5	0	0.0	0	0.0	0	0.0	4	19.0	1	25.0	5	21.7	3	18.8	10	17.2	4	15.4
80-84	1	12.5	1	25.0	3	50.0	0	0.0	3	14.3	1	25.0	5	21.7	2	12.5	12	20.7	4	15.4
85+	1	12.5	1	25.0	0	0.0	1	50.0	5	23.8	0	0.0	1	4.3	2	12.5	7	12.1	4	15.4
Total	**8**	**100%**	**4**	**100%**	**6**	**100%**	**2**	**100%**	**21**	**100%**	**4**	**100%**	**23**	**100%**	**16**	**100%**	**58**	**100%**	**26**	**100%**

Age at Diagnosis	Borders M	Borders F	D&G M	D&G F	Fife M	Fife F	Lothian M	Lothian F
Min	44	55	67	45	47	47	32	43
Max	86	85	83	90	89	82	85	90
Mean	68	73	75.8	67.5	76	69	68	70
Median	68	76	77.5	67.5	76	74	71	70

Age of Male patients (Gastric)

Legend: 85+, 80-84, 75-79, 70-74, 65-69, 60-64, 55-59, 50-54, 45-49, <45

Regions: Borders, D&G, Fife, Lothian

Age of Female patients (Gastric)

Legend: 85+, 80-84, 75-79, 70-74, 65-69, 60-64, 55-59, 50-54, 45-49, <45

Regions: Borders, D&G, Fife, Lothian

QPI	Type	Target%	Borders N	D	%	D&G N	D	%	Fife N	D	%	Lothian N	D	%	SCAN N	D	%
QPI 1: Endoscopy - Histological diagnosis made within 6 weeks of initial endoscopy and biopsy	Oesophageal	95	31	34	91.2%	25	26	96.2%	74	79	93.7%	116	134	86.6%	246	273	90.1%
	Gastric	95	9	9	100%	9	11	81.8%	17	19	89.5%	30	35	85.7%	65	74	87.8%
QPI 3: MDT before definitive treatment	Oesophageal	95	28	32	87.5%	24	24	100%	75	79	94.9%	128	134	95.5%	255	269	94.8%
	Gastric	95	5	8	62.5%	11	11	100%	18	19	94.7%	34	37	91.9%	68	75	90.7%
QPI 4: TNM Staging recorded at MDT prior to treatment	Oesophageal	90	29	34	85.3%	24	26	92.3%	79	79	100%	122	137	89.1%	254	276	92.0%
	Gastric	90	6	9	66.7%	11	11	100%	19	19	100%	30	37	81.1%	66	76	86.8%
QPI 4: TNM Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	30	34	88.2%	24	26	92.3%	78	79	98.7%	110	137	80.3%	242	276	87.7%
	Gastric	95	5	9	55.6%	11	11	100%	19	19	100%	31	37	83.8%	66	76	86.6%
QPI 5: Nutritional Assessment: Undergo screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.	Oesophageal	95	24	34	70.6%	10	26	38.5%	75	79	94.9%	84	137	61.3%	193	276	69.9%
	Gastric	95	5	9	55.6%	4	11	36.4%	19	19	100%	17	37	45.9%	45	76	59.2%
QPI 5: Nutritional Assessment: are at high risk of malnutrition (MUST score >2) referred to dietician	Oesophageal	90	18	18	100%	12	12	100%	42	42	100%	54	55	98.2%	126	127	99.2%
	Gastric	90	1	1	100%	6	6	100%	4	4	100%	15	15	100%	26	26	100%
QPI 6: Appropriate Selection: Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	4	5	80.0%	4	5	80.0%	9	10	90.0%	17	19	89.5%	34	39	87.2%
	Gastric	80	1	2	50.0%	1	1	100.0%	1	1	100%	1	1	100.0%	4	5	80.0%

QPI	Subcategory	Site	Target	Data 1 (N/D/%)	Data 2 (N/D/%)	Data 3 (N/D/%)	Data 4 (N/D/%)	Data 5 (N/D/%)
QPI 7 (i): 30 Day Mortality Following Surgery (presented by Board of Surgery)		Oesophageal	<5	Board of Surgery			N 1 / D 42 — 2.4%	N 1 / D 42 — 2.4%
		Gastric	<5	N 0 / D 0 — -	N 0 / D 1 — 0.0%	N 0 / D 0 — -	N 0 / D 14 — 0.0%	N 0 / D 15 — 0.0%
QPI 7 (II): 90 Day Mortality Following Surgery (presented by Board of Surgery)		Oesophageal	<7.5	Board of Surgery			N 2 / D 42 — 4.8%	N 2 / D 42 — 4.8%
		Gastric	<7.5	N 0 / D 0 — -	N 0 / D 1 — 0.0%	N 0 / D 0 — -	N 0 / D 14 — 0.0%	N 0 / D 15 — 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 38 / D 42 — 90.5%	N 38 / D 42 — 90.5%
		Gastric	80	N 0 / D 0 — -	N 1 / D 1 — 100%	N 0 / D 0 — -	N 9 / D 14 — 64.3% (red)	N 10 / D 15 — 66.7% (red)
QPI 9: Hospital of Stay: Discharge within 14 days of surgical procedure (presented by Board of Surgery)		Oesophageal	60	Board Of Surgery			N 36 / D 49 — 73.5%	N 36 / D 49 — 73.5%
		Gastric	60	N 0 / D 0 — -	N 2 / D 2 — 100%	N 0 / D 0 — -	N 18 / D 19 — 94.7%	N 20 / D 21 — 95.2%
QPI 10(I): Oesophageal resection margins. Circumferential clear (presented by Board of Surgery)		Oesophageal	70	Board of Surgery			N 31 / D 42 — 73.8%	N 31 / D 42 — 73.8%
QPI 10(II): Longitudinal margins clear (presented by Board of Surgery)		Oesophageal	90	Board of Surgery			N 42 / D 42 — 100%	N 42 / D 42 — 100%
		Gastric	90	N 0 / D 0 — -	N 1 / D 1 — 100%	N 0 / D 0 — -	N 14 / D 14 — 100%	N 15 / D 15 — 100%
QPI 11: Curative Treatment Rates		Oesophageal	35	N 8 / D 34 — 23.5% (red)	N 6 / D 26 — 23.1% (red)	N 19 / D 79 — 24.1% (red)	N 35 / D 137 — 25.5% (red)	N 68 / D 276 — 24.6% (red)
		Gastric	35	N 2 / D 9 — 22.2% (red)	N 2 / D 11 — 18.2% (red)	N 4 / D 19 — 21.1% (red)	N 9 / D 37 — 24.3% (red)	N 17 / D 76 — 22.4% (red)
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal curative Chemoradiotherapy		<5	N 0 / D 0 — -	N 0 / D 0 — -	N 0 / D 1 — 0.0%	N 0 / D 1 — 0.0%	N 0 / D 2 — 0.0%
	Oesophageal Peri-operative Chemotherapy		<5	N 0 / D 5 — 0.0%	N 0 / D 5 — 0.0%	N 0 / D 8 — 0.0%	N 0 / D 18 — 0.0%	N 0 / D 36 — 0.0%
	Oesophageal Adjuvant Chemotherapy		<5	N 0 / D 0 — -	N 0 / D 2 — 0.0%	N 0 / D 0 — -	N 0 / D 1 — 0.0%	N 0 / D 3 — 0.0%

QPI	Treatment	Target	N/D	%	N/D	%	N/D	%	N/D	%	N/D	%
	Oesophageal Downstaging Chemotherapy	<5	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 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	<5	N 0 / D 2	0.0%	N 0 / D 1	0.0%	N 0 / D 1	0.0%	N 0 / D 1	0.0%	N 0 / D 5	0.0%
	Gastric Adjuvant Chemotherapy	<5	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	0.0%	N 0 / D 0	-	N 0 / D 0	0.0%
	Gastric Downstaging Chemotherapy	<5	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-
QPI 12: 90 day Mortality after Oncological Treatment	Oesophageal Curative Chemoradiotherapy	<7.5%	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 1	0.0%	N 0 / D 1	0.0%	N 0 / D 2	0.0%
	Oesophageal Peri-operative Chemotherapy	<7.5%	N 0 / D 5	0.0%	N 0 / D 5	0.0%	N 0 / D 8	0.0%	N 0 / D 18	0.0%	N 0 / D 36	0.0%
	Oesophageal Adjuvant Chemotherapy	<7.5%	N 0 / D 0	-	N 0 / D 2	0.0%	N 0 / D 0	-	N 0 / D 1	0.0%	N 0 / D 3	0.0%
	Oesophageal Downstaging chemotherapy	<7.5%	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-
	Gastric Curative Chemoradiotherapy	<7.5%	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-
	Gastric Peri-operative Chemotherapy	<7.5%	N 0 / D 2	0.0%	N 0 / D 1	0.0%	N 0 / D 1	0.0%	N 0 / D 1	0.0%	N 0 / D 5	0.0%
	Gastric Adjuvant Chemotherapy	<7.5%	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-	N 0 / D 0	-
	Gastric Downstaging Chemotherapy	<7.5%	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 1 / D 5	20.0%	N 0 / D 4	0.0%	N 4 / D 15	26.7%	N 0 / D 19	0.0%	N 5 / D 43	11.6%
	Gastric Palliative Chemotherapy	<5%	N 0 / D 1	0.0%	N 0 / D 0	-	N 0 / D 2	0.0%	N 0 / D 3	0.0%	N 0 / D 6	0.0%
QPI 13 HER2 Status in Advanced Gastric Cancer		90%	N 0 / D 0	-	N 1 / D 1	100%	N 1 / D 1	100%	N 2 / D 2	100%	N 4 / D 4	100%
Clinical Trial QPI NB: N= patients consented to trial/study on SCRN database, D = 5 year average Cancer Registry patients		15%	N 2 / D 36	5.6%	N 1 / D 46	2.2%	N 2 / D 95	2.1%	N 14 / D 185	7.6%	N 19 / D 362	5.2%