

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

OESOPHAGO-GASTRIC CANCER 2020

COMPARATIVE AUDIT REPORT

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Patients diagnosed 1st January 2020 – 31st December 2020

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DOCUMENT HISTORY

Version	Circulation	Date	Comments
Version 1	SCAN Upper GI Group meeting	24/09/2021	Comments and actions added at sign-off meeting. Format changes.
Version 2	Lead Clinician for commentary and comments	13/10/2021	Sent to sign-off group. Comments added and modified.
Version 3	Final draft report circulated to SCAN Upper GI Group	10/11/2021	Lead commentary added.
Version 4	Final report and action plans circulated to SCAN Upper GI Group and Clinical Governance Groups	24/11/2021	Comments update for final circulation
Version 4w	Final report added to the SCAN website	2022	Disclosure check completed prior to publishing to website

OESOPHAGO-GASTRIC CANCER 2020 COMPARATIVE AUDIT REPORT
COMMENT BY CHAIR OF THE SCAN UPPER GI GROUP

The introduction of oesophago-gastric 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 particularly hard to provide complete and accurate data for the 2020 report during what has been a difficult year for everyone.

In many QPIs there has been good performance including improvements in some areas despite the COVID pandemic. This is a tribute to the hard work of all members of the multidisciplinary teams throughout the SCAN region. However, there are some QPIs where the results are repeatedly below the target level that represent an ongoing challenge for SCAN and at a national level. In particular the low levels of patients undergoing curative treatment requires further work at a national level focused on earlier diagnosis.

Pete Lamb
SCAN Lead Clinician for OG Cancers
Nov 2021

Actions 2020

QPI	Action	Lead	Date for update
1	Review patients with non-diagnostic biopsies at first endoscopy to identify any common factors (e.g. Number of biopsies, transnasal endoscopy)	PL	
5i	Lothian to ask MUST score at the outset from time of index endoscopy as part of MDT referral, PL to liaise with Nick Church (Lothian Endoscopy Lead).	PL	

SCAN Actions 2019

No Actions identified from 2019 results

OG Attainment Summary 2020

OG QPI Attainment Summary - 2020		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 1: Endoscopy - Histological diagnosis made within 6 weeks of initial endoscopy and biopsy	Oesophageal	95	N 28 D 28	100%	N 28 D 30	93.3%	N 64 D 66	97.0%	N 122 D 138	88.4%	N 242 D 262	92.4%
	Gastric	95	N 5 D 5	100%	N 7 D 7	100%	N 11 D 12	91.7%	N 58 D 61	95.1%	N 81 D 85	95.3%
QPI 3: MDT before definitive treatment	Oesophageal	95	N 24 D 28	85.7%	N 30 D 33	90.9%	N 64 D 67	95.5%	N 141 D 146	96.6%	N 259 D 274	94.5%
	Gastric	95	N 6 D 6	100%	N 8 D 10	80.0%	N 11 D 13	84.6%	N 60 D 65	92.3%	N 85 D 94	90.4%
QPI 4: TNM Staging recorded at MDT prior to treatment	Oesophageal	90	N 26 D 28	92.9%	N 33 D 33	100%	N 66 D 68	97.1%	N 138 D 146	94.5%	N 263 D 275	95.6%
	Gastric	90	N 6 D 6	100%	N 10 D 10	100%	N 11 D 15	73.3%	N 59 D 66	89.4%	N 86 D 97	88.7%
QPI 4ii: TNM Treatment Intent recorded at MDT prior to treatment	Oesophageal	95	N 27 D 28	96.4%	N 32 D 33	97.0%	N 67 D 68	98.5%	N 136 D 146	93.2%	N 262 D 275	95.3%
	Gastric	95	N 6 D 6	100%	N 10 D 10	100%	N 12 D 15	80.0%	N 54 D 66	81.8%	N 82 D 97	84.5%
QPI 5i: Nutritional Assessment: Undergo screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.	Oesophageal	95	N 22 D 28	78.6%	N 32 D 33	97.0%	N 66 D 68	97.1%	N 96 D 146	65.8%	N 216 D 275	78.5%
	Gastric	95	N 5 D 6	83.3%	N 8 D 10	80.0%	N 13 D 15	86.7%	N 50 D 66	75.8%	N 76 D 97	78.4%
QPI 5ii: Nutritional Assessment: are at high risk of malnutrition (MUST score >2) referred to dietician	Oesophageal	90	N 9 D 9	100%	N 15 D 15	100%	N 23 D 23	100%	N 79 D 83	95.2%	N 126 D 130	96.9%
	Gastric	90	N 3 D 3	100%	N 2 D 2	100%	N 7 D 7	100%	N 32 D 38	84.2%	N 44 D 50	88.0%
QPI 6: Appropriate Selection: Neo-Adjuvant chemotherapy followed by surgical resection	Oesophageal	80	N 4 D 5	80.0%	N 3 D 4	75.0%	N 9 D 12	75.0%	N 21 D 24	87.5%	N 37 D 45	82.2%
	Gastric	80	N 0 D 0	-	N 1 D 1	100.0%	N 0 D 1	0.0%	N 8 D 9	88.9%	N 9 D 11	81.8%

QPI 7i: 30 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<5	Presented by Board of Surgery			N 0 0.0%	D 43	N 0 0.0%	D 43			
	Gastric	<5	Board of Surgery	N 0 0.0%	D 1	Board of Surgery	N 0 0.0%	D 17				
QPI 7ii: 90 Day Mortality Following Surgery (presented by Board of Surgery)	Oesophageal	<7.5	Board of Surgery			N 1 2.3%	D 43	N 1 2.3%	D 43			
	Gastric	<7.5	Board of Surgery	N 0 0.0%	D 1	Board of Surgery	N 0 0.0%	D 17				
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 42 97.7%	D 43	N 42 97.7%	D 43			
	Gastric	80	Board of Surgery			N 14 82.4%	D 17	N 14 82.4%	D 17			
QPI 9: Hospital of Stay: Discharge within 14 days of surgical procedure (presented by Board of Surgery)	Oesophageal	60	Board Of Surgery			N 23 57.5%	D 40	N 23 57.5%	D 40			
	Gastric	60	Board of Surgery			N 12 75.0%	D 16	N 12 75.0%	D 16			
QPI 10i: Oesophageal clear circumferential resection margins (presented by Board of Surgery)	Oesophageal	70	Board of Surgery			N 35 81.4%	D 43	N 35 81.4%	D 43			
QPI 10ii: Longitudinal margins clear (presented by Board of Surgery)	Oesophageal	90	Board of Surgery			N 43 100%	D 43	N 43 100%	D 43			
	Gastric	95		N 0 0.0%	D 1		N 17 100%	D 17	N 17 94.4%	D 18		
QPI 11: Curative Treatment Rates	Oesophageal	35	N 6 21.4%	D 28	N 4 12.1%	D 33	N 13 19.1%	D 68	N 38 26%	D 146	N 61 22.2%	D 275
	Gastric	35	N 0 0.0%	D 6	N 3 30.0%	D 10	N 1 6.7%	D 15	N 17 25.8%	D 66	N 21 21.6%	D 97
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal curative Chemoradiotherapy		<5	Not yet reported - Awaiting Chemocare National query tool								
	Gastric Curative Chemoradiotherapy		<5									
QPI 13 HER2 Status in Advanced Oesophageal /Gastric Adenocarcinoma		90	N 1 50.0%	D 2	N 1 100%	D 1	N 8 80.0%	D 10	N 18 85.7%	D 21	N 27 81.8%	D 33
Clinical Trial QPI NB: N= patients consented to trial/study on SCRN database, D = 5 year average Cancer Registry patients		15	N 5 13.2%	D 38	N 2 4.3%	D 46	N 2 2.0%	D 99	N 18 10.1%	D 178	N 27 7.5%	D 361

INTRODUCTION AND METHODS

Cohort

This report covers patients diagnosed with an Oesophageal or Gastric cancer from 01/01/2020 to 31/12/2020. 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 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 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 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 was a delay in publication of the review. The revised QPIs will be used to report Year 9, 2021 data.

The following QPIs have been updated:

QPI	Change	Year for reporting
4i	New data item: TNM recorded at MDT (TNM) (Yes/No)	2021
5ii	QPI amended to patients being "assessed by" dietetics rather than "referred to" dietetics. New data items added: Dietetic assessment (ASSESSDIET), Date of dietetic assessment (DATEDIET).	2021
9	QPI to now be measured using audit data rather than SMR01 data New data item: Date of discharge (DDISCHARGE)	2021
12 (SACT)	New standardised 30 day SACT Mortality QPI across all tumour types replacing audit data with data from Chemocare to provide results for all OG cancer patients undergoing chemotherapy in 1 year. A further target of <15% has been added for patients undergoing palliative treatment New data items added: Location code of SACT treatment (HOSPSACT), Location code of Radiotherapy Treatment (HOSPRADIO).	TBC
13	HER2 testing measurability to include all patients with adenocarcinoma of gastric and gastro-oesophageal cancers.	2020

No QPIs were archived in the 2020 Formal Review. QPI 2 was archived in the 2016 Formal Review.

¹ Datasets and measurability documents are available at www.isdscotland.org

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.	

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 audit of the patient record and review of various hospitals electronic records systems.

Surgical and Oncology data is obtained either from the clinical records (electronic systems and case notes)

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	Suzanne Tunmore
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Mr Jeyakumar Apollos	Jenny Bruce / Christy Bell
NHS Fife	Queen Margaret Hospital Victoria Hospital	Mr Andreas Luhmann	Maureen Lamb
SCAN & NHS Lothian	St John's Hospital Royal Infirmary Edinburgh Western General Hospital	Mr Peter Lamb	Kirsty Martin
	Edinburgh Cancer Centre	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 24th September 2021.
- The final draft of the regional report was circulated to members of the SCAN Upper GI Group and Clinical Governance Framework on 24/11/2021 .

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 2015 to 2019. 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 01/01/2020 – 31/12/2020

	Borders	D&G	Fife	Lothian	SCAN
Oesophageal Cancer	28	33	68	146	275
Gastric Cancer	6	10	15	66	97
Total OG Cancers	34	43	83	212	372

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	34	43	83	212	372
Cases from Cancer Registry	38	46	99	178	361
Case Ascertainment %	89.5	93.5	83.8	119.1	103.0

Source: Scottish Cancer Registry, PHS. Data extracted from ACaDMe 01/08/2021.

Note: Case ascertainment is reported by board of diagnosis and has been estimated using a denominator based on the latest (2015-2019) 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
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	3	2	8	13
Numerator	28	28	64	122	242
Not recorded for numerator	0	0	0	0	0
Denominator	28	30	66	138	262
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	93.3	97.0	88.4	92.4

Comments where QPI was not met

D&G: The QPI was not met showing a shortfall of 1.7% (2 cases). Both cases showed high grade dysplasia/suspicious for cancer (1 was diagnosed by CT with disseminated disease and 1 was diagnosed by CT with liver metastases).

Lothian: The QPI was not met with a shortfall of 6.6% (16 cases). In 13 cases, patients were clinically diagnosed with pathology showing high grade dysplasia or were highly suspicious. 2 patients were diagnosed on subsequent endoscopies (outwith QPI timeframe) and 1 patient declined further investigation.

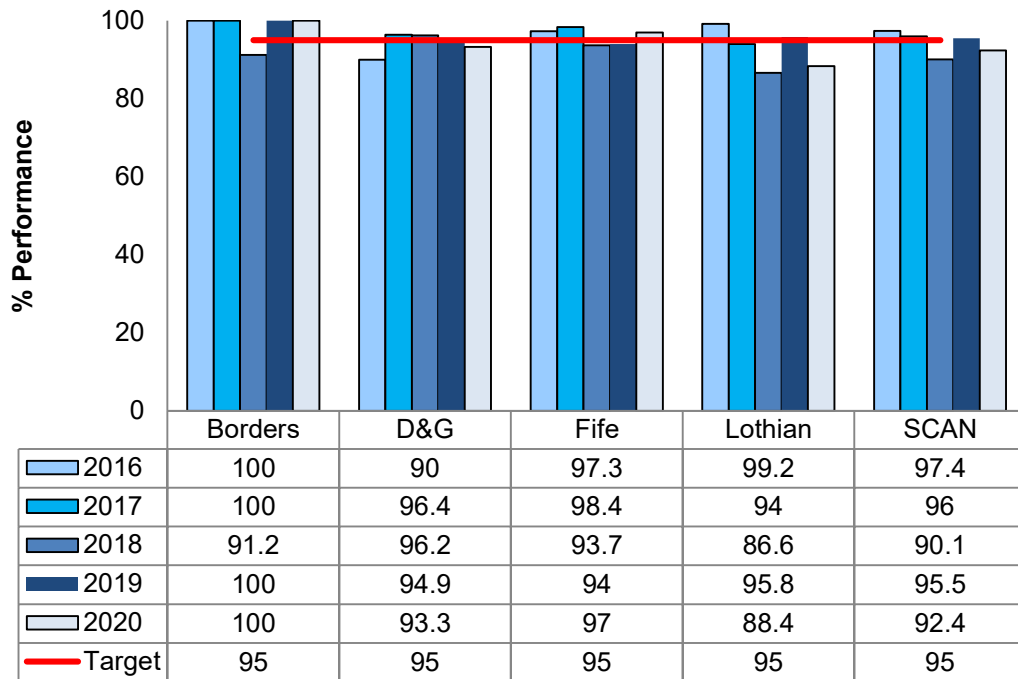
Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	1	3	3	5	12
Numerator	5	7	11	58	81
Not recorded for numerator	0	0	0	0	0
Denominator	5	7	12	61	85
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	100.0	91.7	95.1	95.3

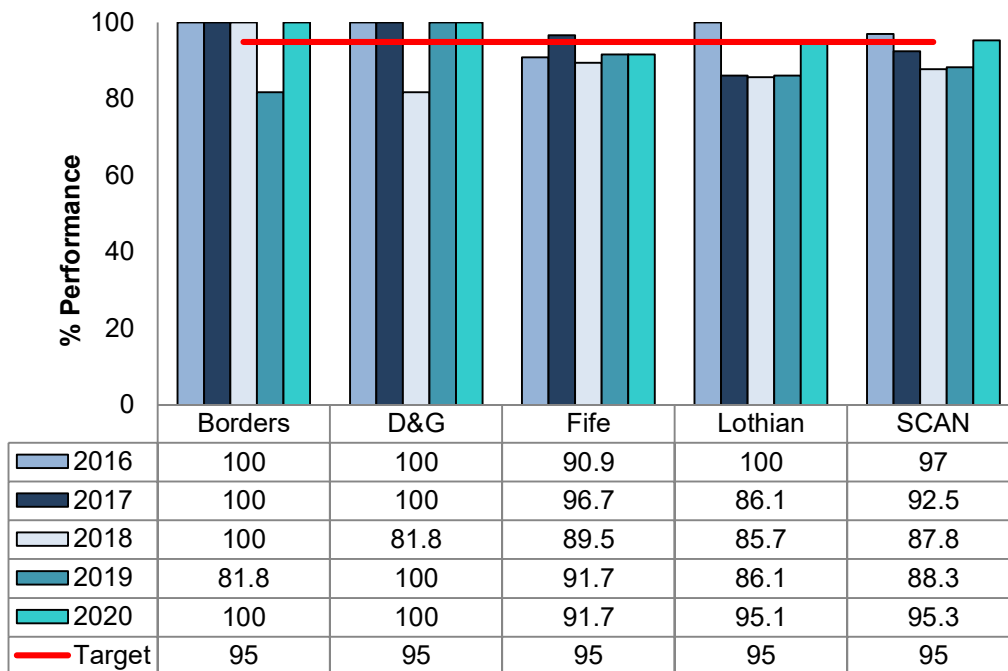
Comments where QPI was not met

Fife: The QPI was not met with a shortfall of 3.3% (1 case). The patient was diagnosed by peritoneal biopsy and had no endoscopy.

QPI 1 - Endoscopy (Oesophageal)



QPI 1 - Endoscopy (Gastric)

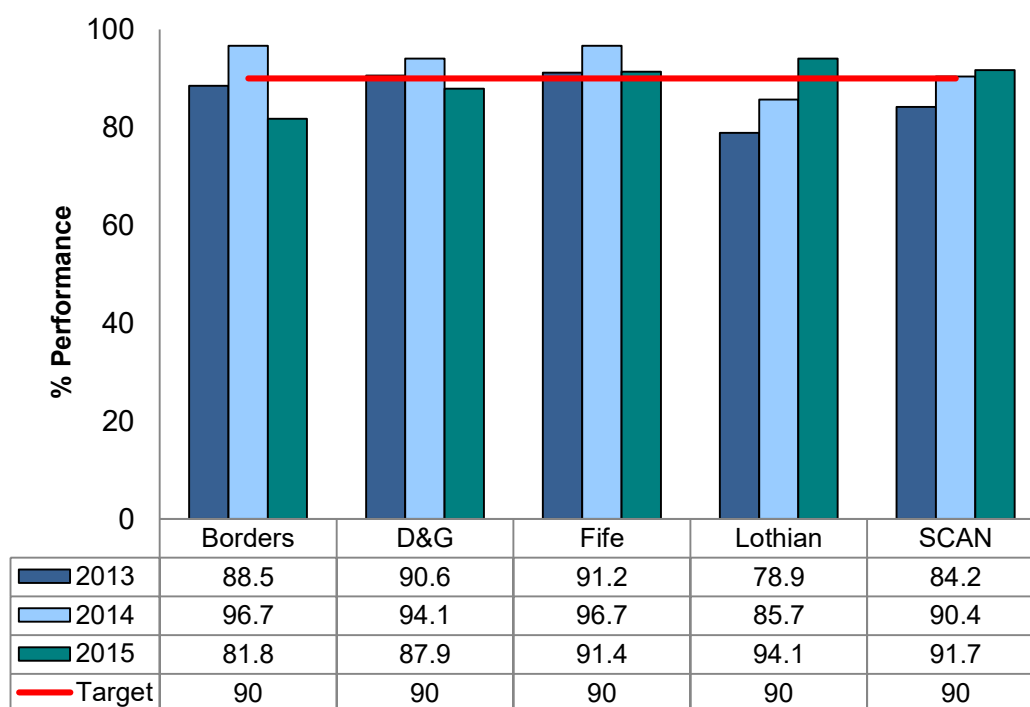


Some cases that did not meet the QPI numerator criteria had a 'highly suspicious' pathology result which was sufficient for clinical decision making.

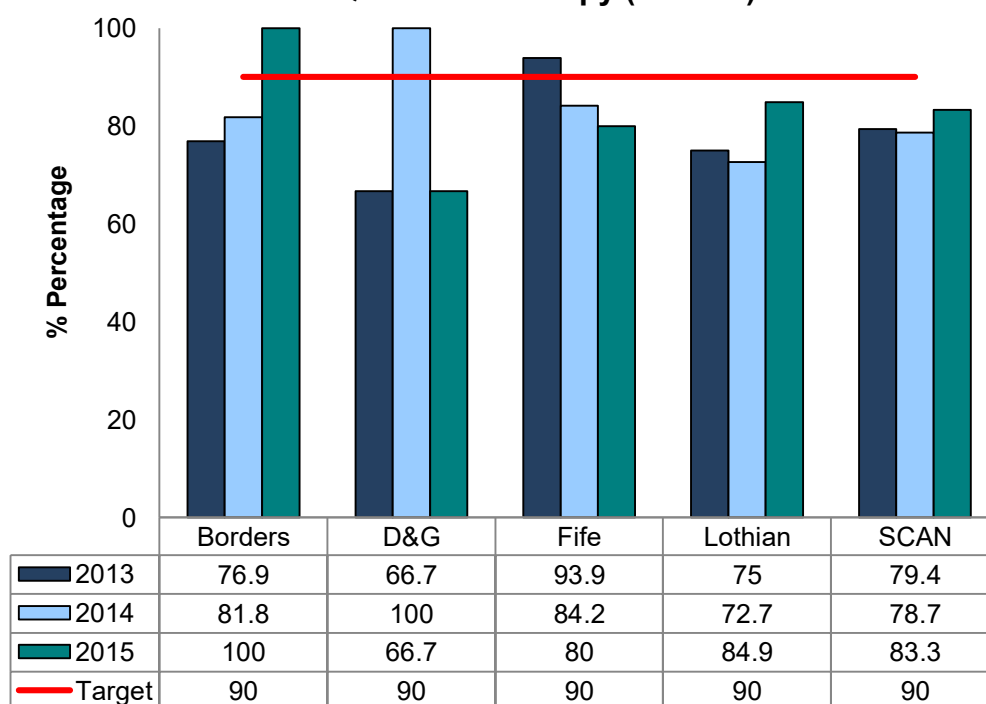
Action: Review patients with non-diagnostic biopsies at first endoscopy to identify any common factors (e.g. Number of biopsies, transnasal endoscopy)

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
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	0	1	0	1
Numerator	24	30	64	141	259
Not recorded for numerator	0	0	0	0	0
Denominator	28	33	67	146	274
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	85.7	90.9	95.5	96.6	94.5

Comments where QPI was not met

Borders: The QPI was not met with a shortfall of 9.3% (4 cases). 2 had stents inserted prior to MDT, 1 received radiotherapy prior to MDT (to reduce symptoms) and 1 died before MDT.

D&G: The QPI was not met with a shortfall of 4.1% (3 cases). 1 patient received radiotherapy prior to MDT, 1 was an emergency admission and died before MDT. 1 was seen by palliative care team and not referred to MDT due to frailty.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	0	0	1	1	2
Numerator	6	8	11	60	85
Not recorded for numerator	0	0	0	0	0
Denominator	6	10	13	65	94
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	80.0	84.6	92.3	90.4

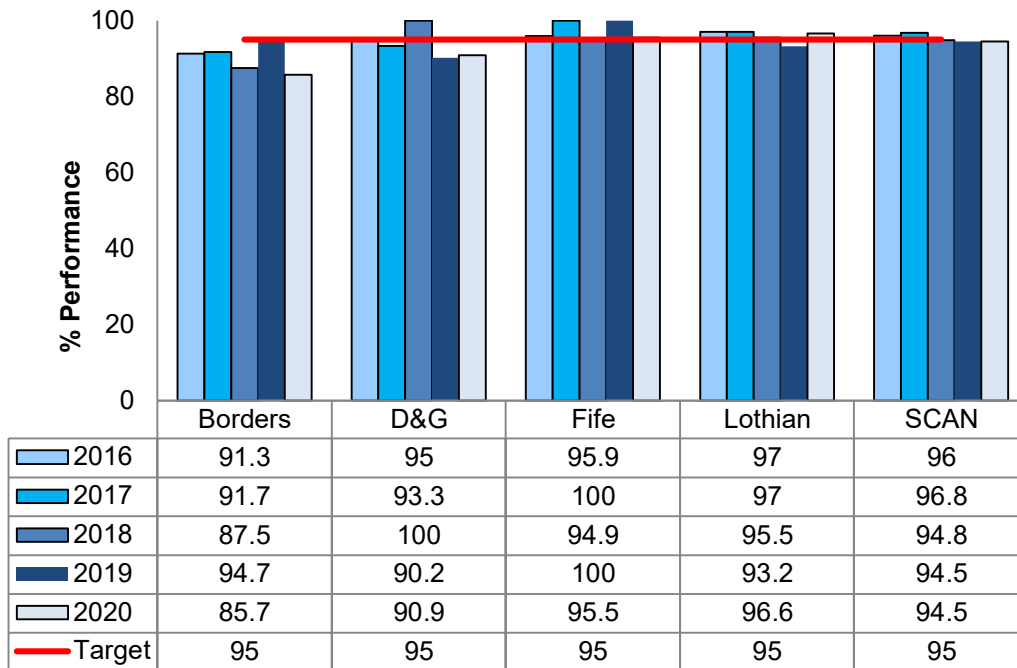
Comments where QPI was not met

D&G: The QPI was not met with a shortfall of 5% (2 cases) 1 emergency admission received surgery for a perforated ulcer prior to MDT. 1 patient was given palliative treatment and was not referred to MDT due to frailty and liver metastases on CT.

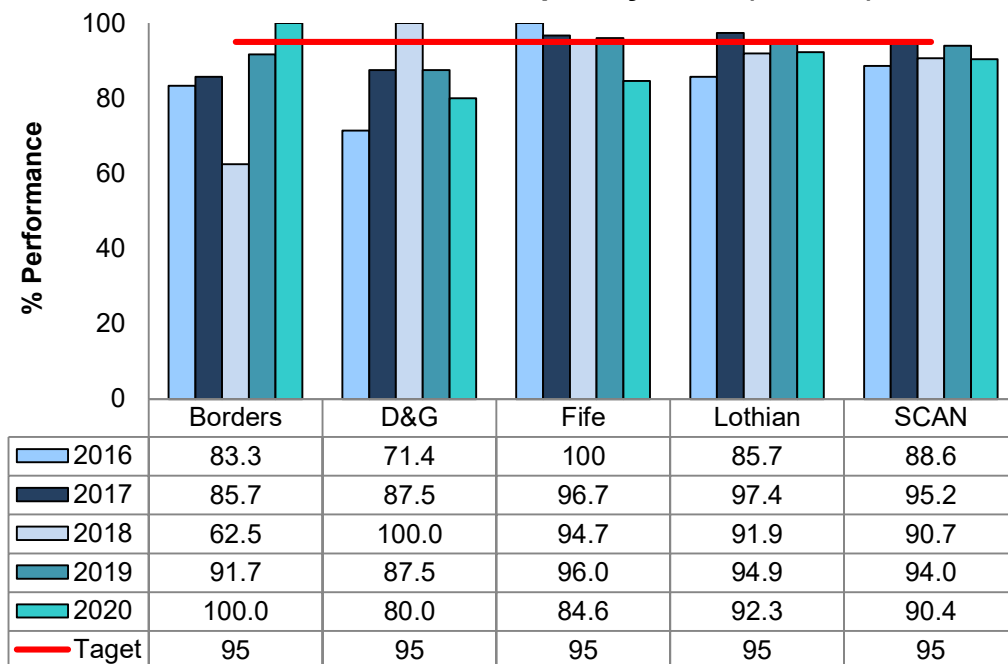
Fife: The QPI was not met by 10.4% (2 cases): 1 patient had an incidental diagnosis at surgery for another primary. 1 frail patient was not discussed at MDT and was given best supportive care.

Lothian: The QPI was not met by 2.7% (5 cases): 3 were not discussed at MDT and were for BSC only (2 were frail and 1 had another primary cancer). 1 patient was diagnosed at emergency surgery prior to MDT and 1 had a stent inserted prior to MDT.

QPI 3 - Multi-Disciplinary Team (Oesophageal)



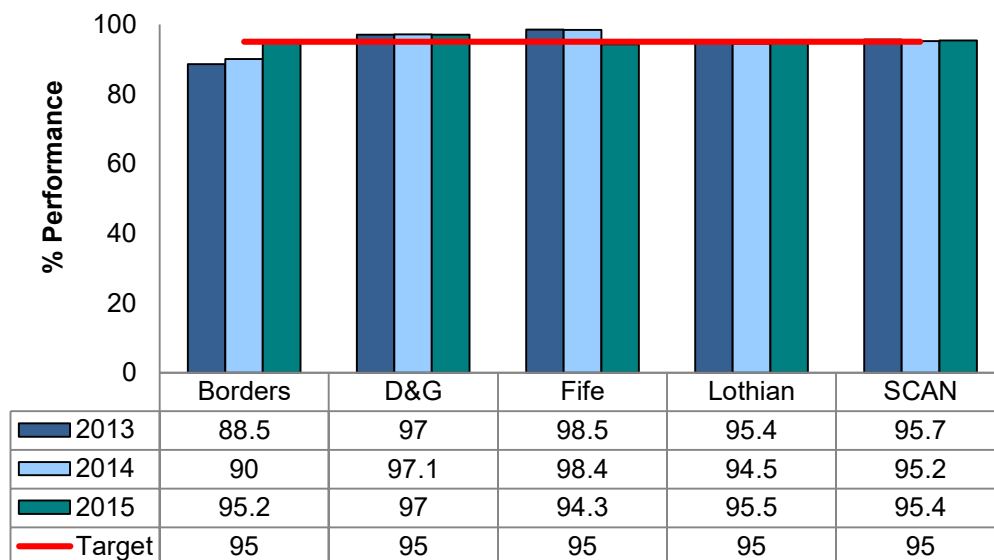
QPI 3 - Multi-Disciplinary Team (Gastric)



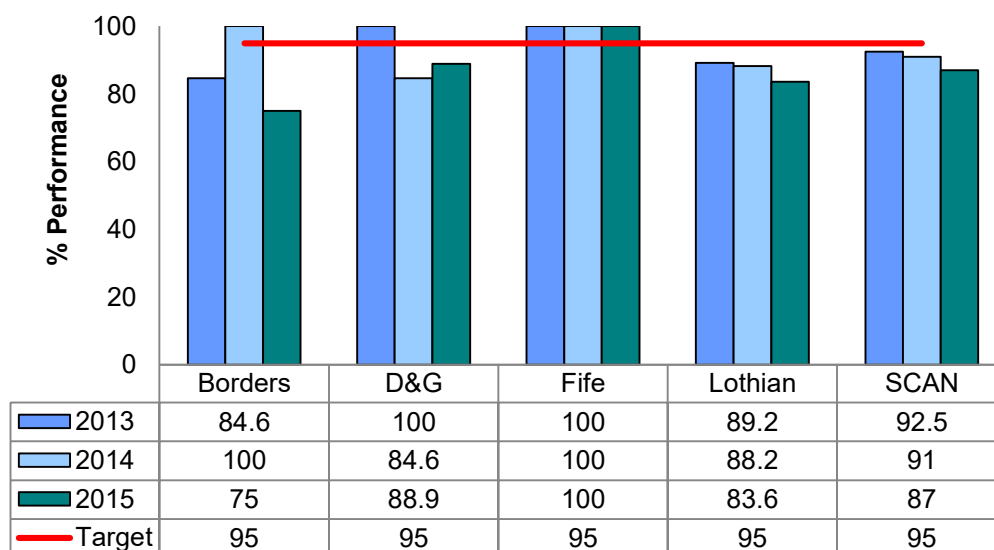
Comment: These results are similar to previous years. All cases were reviewed and patients who were treated prior to MDT discussion were treated appropriately. No action has been identified.

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 (Oesophageal) 2013 - 2015



QPI 3 - MultiDisciplinary Team (Gastric) 2013 - 2015



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
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	0	0	0	0
Numerator	26	33	66	138	263
Not recorded for numerator	0	0	0	0	0
Denominator	28	33	68	146	275
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	92.9	100.0	97.1	94.5	95.6

QPI was met in all Health Boards

Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	0	0	0	0	0
Numerator	6	10	11	59	86
Not recorded for numerator	0	0	0	0	0
Denominator	6	10	15	66	97
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	100.0	73.3	89.4	88.7

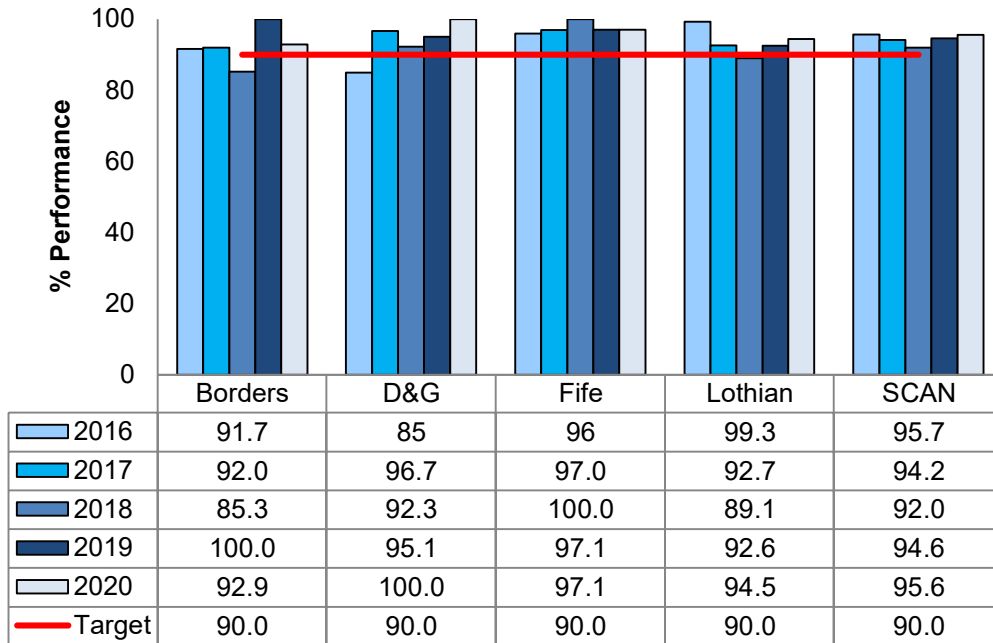
Comments where QPI was not met

Fife: The QPI was not met with a shortfall of 16.7% (4 cases). 3 patients died before MDT and 1 had no TNM recorded at MDT.

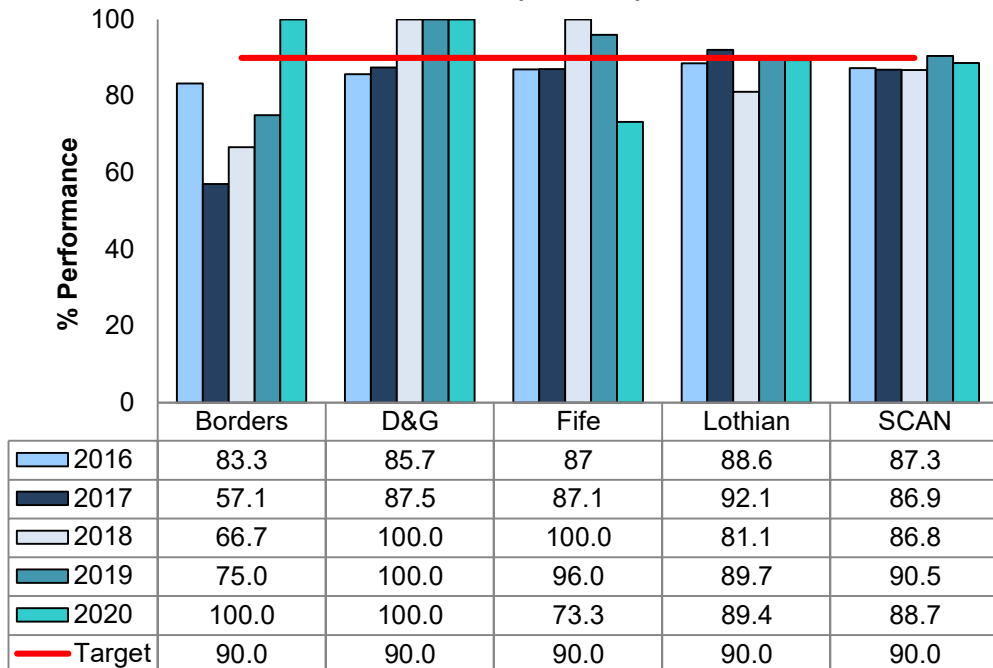
Lothian: The QPI was not met with a shortfall of 0.6% (7 patients).

3 were not discussed at MDT and were for BSC only (2 were frail and 1 had another primary cancer). 3 were discussed at MDT but had no TNM recorded (2 for BSC, 1 diagnosed at emergency surgery) 1 patient only had M stage recorded and was stented prior to MDT.

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



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



TNMs are being documented at MDT, although sometimes patients with widespread disease are recorded without TNM explicitly documented. No issues and no actions were identified

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 (no exclusions)

Oesophageal Cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	0	0	0	0
Numerator	27	32	67	136	262
Not recorded for numerator	0	0	0	0	0
Denominator	28	33	68	146	275
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	96.4	97.0	98.5	93.2	95.3

Comments where QPI was not met

Lothian: The QPI was not met with a shortfall of 1.8% (10 patients). 8 patients were discussed at MDT, 4 were to be seen at clinic to check fitness prior to treatment decision (1 had a stent inserted, 1 had RFA, 1 had radiotherapy and 1 had chemotherapy). 3 received EMR which diagnosed and treated the cancer. 1 patient initially thought to have head and neck cancer was given chemotherapy. 2 patients were not discussed at UGI MDT: 1 patient was discussed at Cancer of Unknown Primary meeting with no intent recorded (had BSC) and 1 patient was not referred to MDT and received BSC.

Gastric Cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	0	0	0	0	0
Numerator	6	10	12	54	82
Not recorded for numerator	0	0	0	0	0
Denominator	6	10	15	66	97
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100.0	100.0	80.0	81.8	84.5

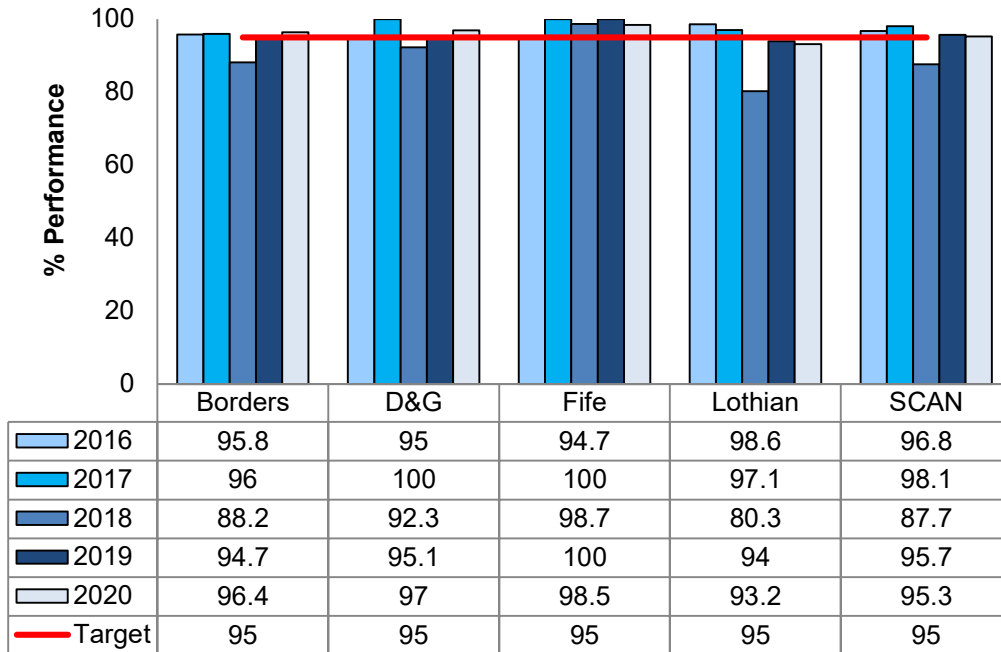
Comments where QPI was not met

Fife: The QPI was not met showing a shortfall on 15% (3 patients). All 3 died before MDT.

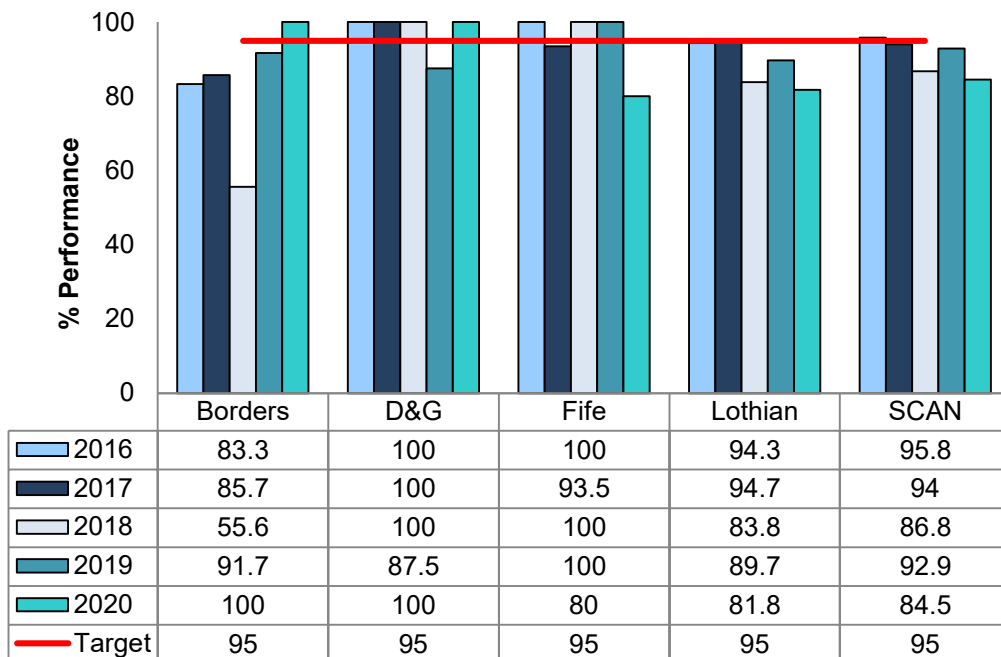
Lothian: The QPI was not met showing a shortfall of 13.2% (12 patients).

3 for BSC were not discussed at MDM. 3 patients had no treatment (1 died before treatment and 2 declined treatment). The remaining 6 were discussed and treated but had no intent recorded (2 for BSC, 1 received surgery which diagnosed and treated cancer, 1 was stented, 1 (with metastases) had radiotherapy and 1 had chemotherapy).

QPI 4 - Treatment Intent recorded 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

Terminology can be an issue for audit staff. No clinical problems have been identified and no actions.

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
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	0	0	0	0
Numerator	22	32	66	96	216
Not recorded for numerator	0	0	0	0	0
Denominator	28	33	68	146	275
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	78.6	97.0	97.1	65.8	78.5

Comments where QPI was not met

Borders: The QPI was not met with a shortfall of 16.4% (6 patients). 3 patients received first treatment before MUST screening (1 had radiotherapy, 1 had chemotherapy and 1 had a stent inserted). 3 patients had no MUST score recorded (2 had BSC and 1 had chemotherapy).

Lothian: The QPI was not met with a shortfall of 29.2% (50 patients). 40 had MUST score recorded after first treatment (27 within 2 weeks of first treatment, 9 between 2 weeks to 3 months, 4 were greater than 3 months post treatment). 10 patients had no MUST score recorded.

Gastric cancer

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	0	0	0	0	0
Numerator	5	8	13	50	76
Not recorded for numerator	0	0	2	0	0
Denominator	6	10	15	66	97
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	83.3	80.0	86.7	75.8	78.4

Comments where QPI was not met

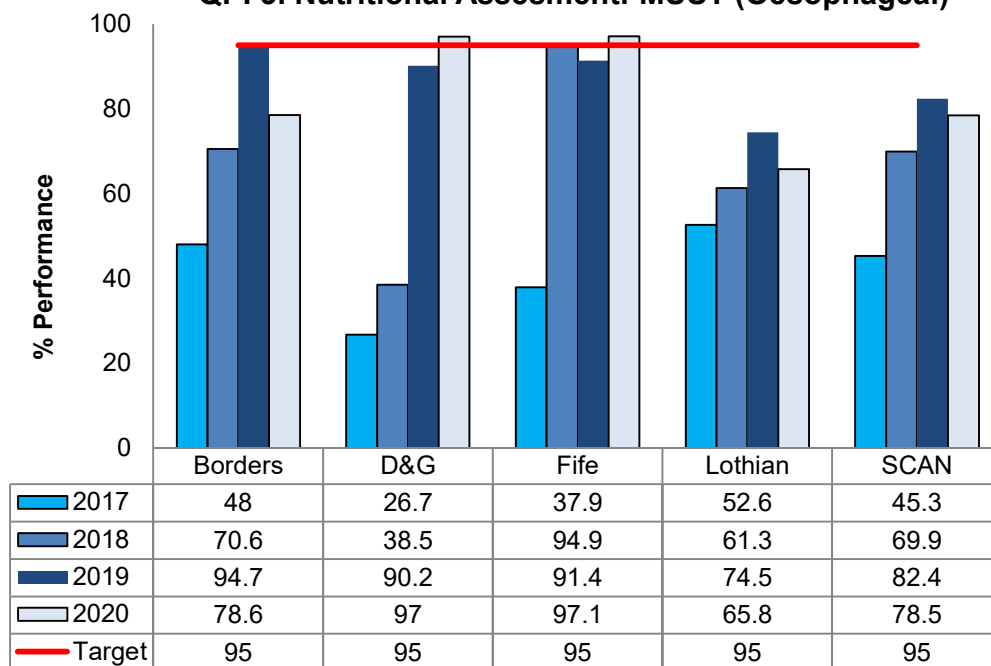
Borders: The QPI was not met with a shortfall of 11.7% (1 case). No MUST score was recorded.

D&G: The QPI was not met with a shortfall of 15% (2 cases). Both received first treatment prior to MUST score (1 had emergency surgery and 1 had BSC).

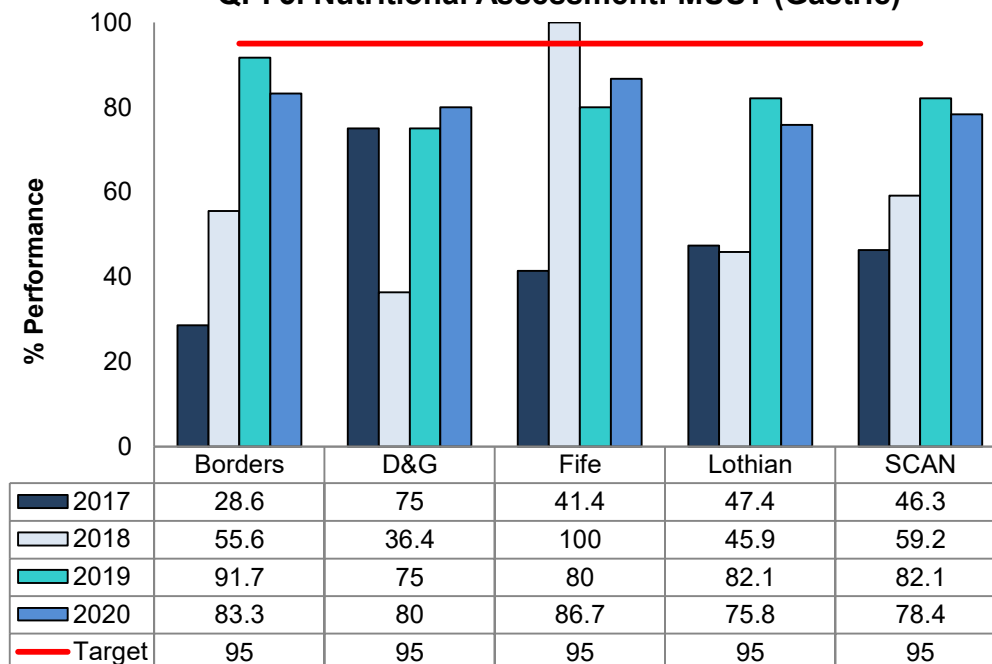
Fife: The QPI was not met with a shortfall of 8.3% (2 cases). No MUST score was recorded.

Lothian: The QPI was not met with a shortfall of 19.2% (16 patients). 13 patients had a MUST score recorded after first treatment (7 recorded after < 2 weeks, 5 between 2 weeks to 3 months and 1 after 4 months). 3 patients had no MUST score recorded (all had BSC).

QPI 5i Nutritional Assessment: MUST (Oesophageal)



QPI 5i Nutritional Assessment: MUST (Gastric)



Comment

The majority of patients who did not have MUST before first treatment had it completed within 2 weeks of treatment. Patients not being seen through combined surgical OG clinic were more difficult to have MUST score recorded.

Action: Lothian to ask for MUST score at the outset from time of index endoscopy as part of MDT referral, Pete Lamb to liaise with Nick Church (Lothian Endoscopy Lead).

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
2020 Cohort	28	33	68	146	276
Ineligible for this QPI	19	17	45	63	144
Numerator	9	15	23	79	126
Not recorded for numerator	0	0	0	0	0
Denominator	9	15	23	83	130
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	2	14	0
% Performance	100.0	100.0	100.0	95.2	96.9

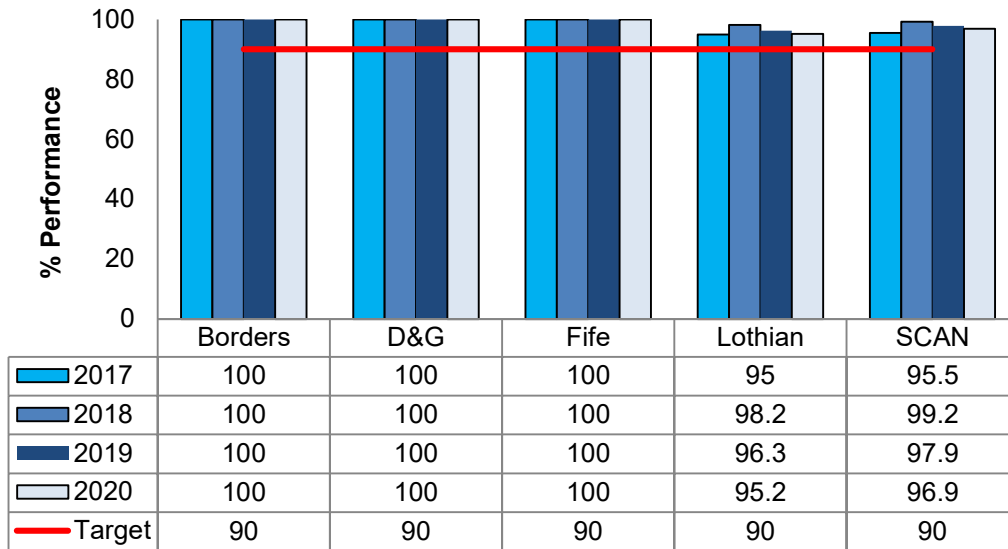
Gastric cancer

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	3	8	8	28	47
Numerator	3	2	7	32	44
Not recorded for numerator	0	0	0	0	0
Denominator	3	2	7	38	50
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	4	1	1
% Performance	100.0	100.0	100.0	84.2	88.0

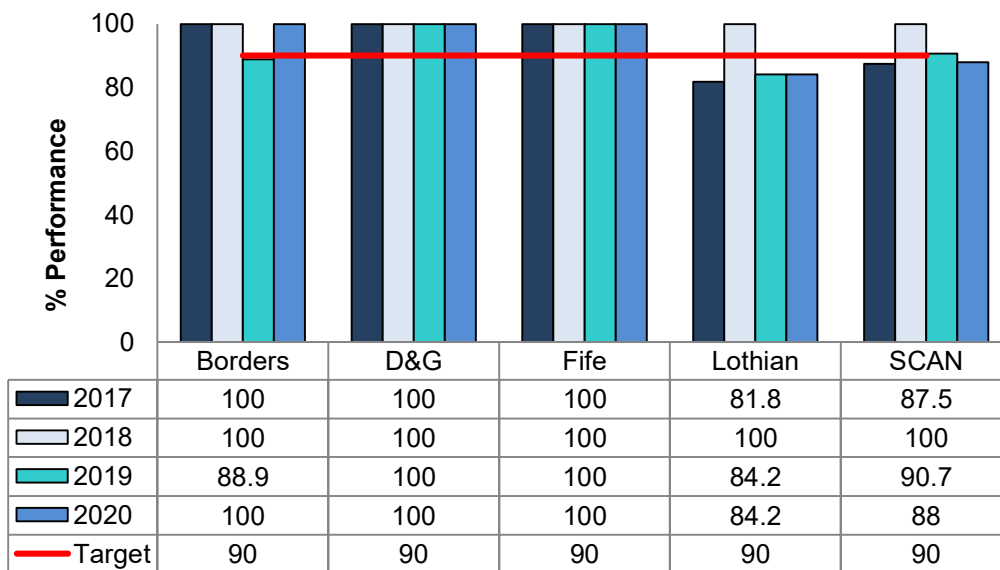
Comments where QPI was not met

Lothian: The QPI was not met with a shortfall of 5.8%. (6 patients). 2 patients declined treatment, 2 had palliative chemotherapy, 1 had BSC and 1 died prior to MDT.

**QPI 5 (ii) - MUST score \geq Referred to a Dietician
(Oesophageal)**



**QPI 5 (ii) - MUST Score \geq 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
2020 Cohort	28	33	12	146	219
Ineligible for this QPI	23	29	0	122	174
Numerator	4	3	9	21	37
Not recorded for numerator	0	0	0	0	0
Denominator	5	4	12	24	45
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	80.0	75.0	75.0	87.5	82.2

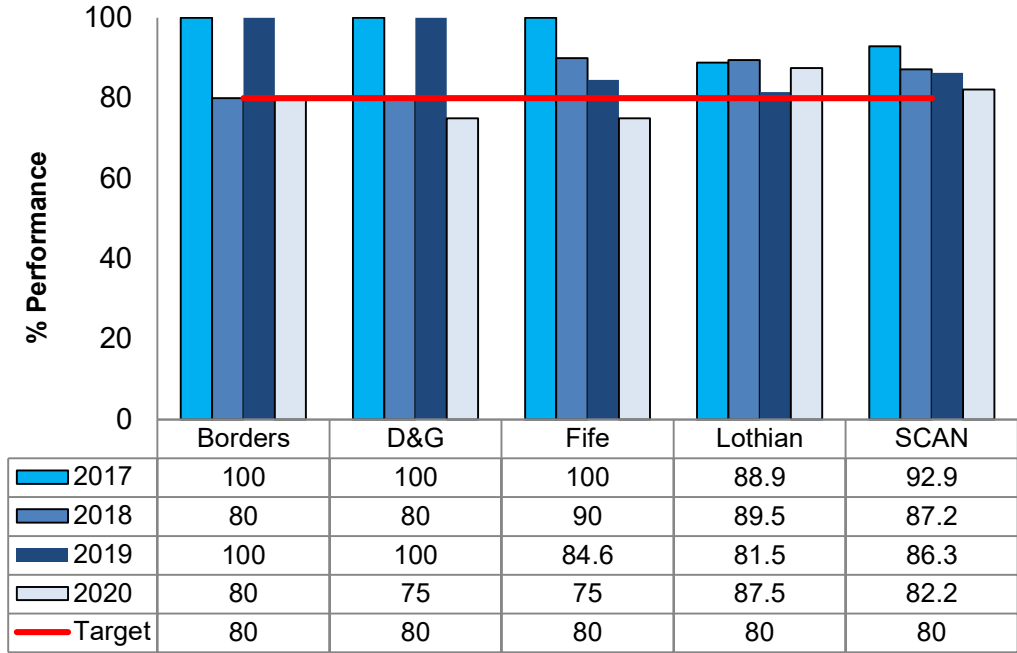
Gastric cancer

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	1	66	83
Ineligible for this QPI	6	9	0	57	72
Numerator	0	1	0	8	9
Not recorded for numerator	0	0	0	0	0
Denominator	0	1	1	9	11
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	n/a	100.0	0.0	88.9	81.8

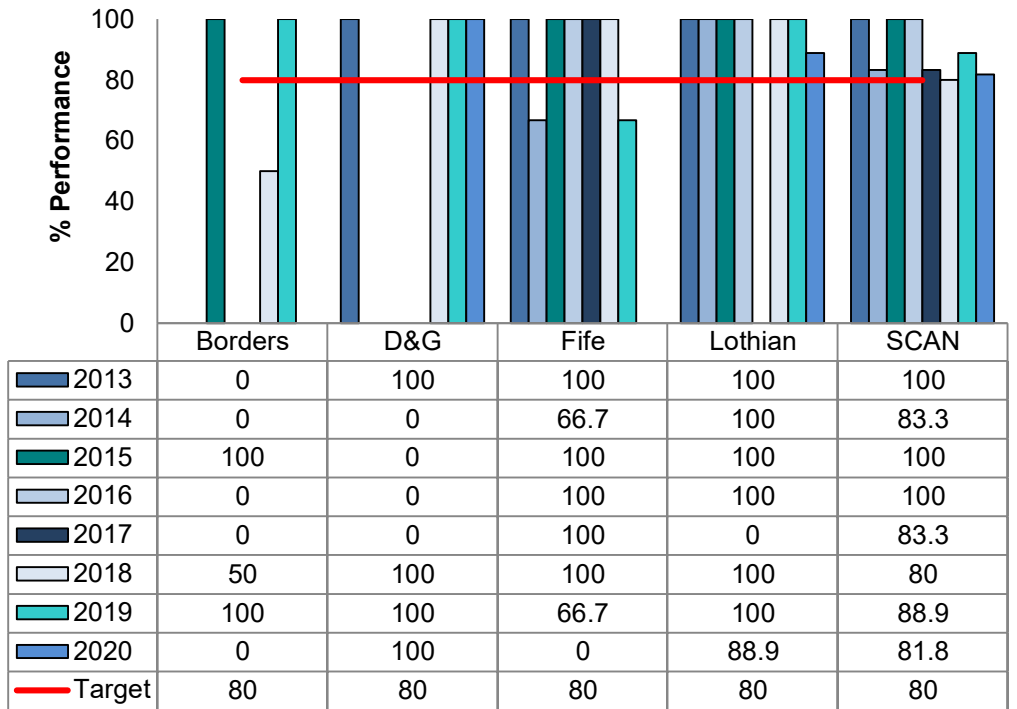
All surgical patients have been reviewed.

Comment: No actions were identified.

QPI 6 - Appropriate Selection of Surgical Patients (Oesophageal)

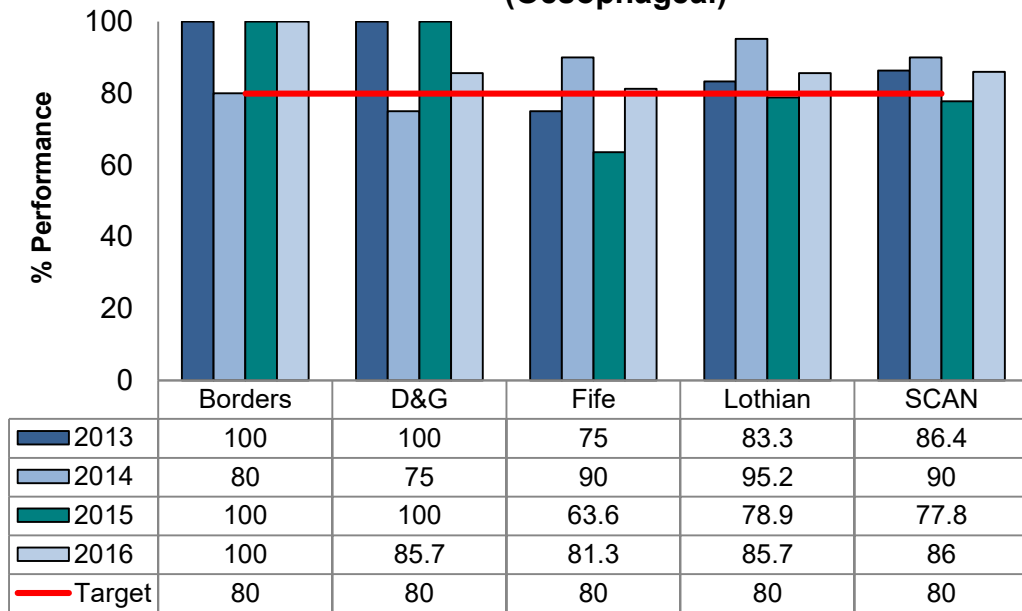


QPI 6 - Appropriate Selection of Surgical Patients (Gastric)



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 prior to 2017.

QPI 6 - Appropriate Selection of Surgical Patients (Oesophageal)



QPI 7 – 30/90 Day Mortality Following Surgery 30d Target <5%, 90d 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
2020 Cohort	217	217
Ineligible for this QPI	174	174
Numerator	0	0
Not recorded for numerator	0	0
Denominator	43	43
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
2020 Cohort	217	217
Ineligible for this QPI	174	174
Numerator	1	1
Not recorded for numerator	0	0
Denominator	43	43
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	2.3	2.3

Gastric cancer by Hospital of Surgery

30 Day Mortality

30 day Mortality Target < 5%	DGRI	RIE	SCAN
2020 Cohort	-	-	97
Ineligible for this QPI	-	-	79
Numerator	0	0	0
Not recorded for numerator	0	0	0
Denominator	1	17	18
Not recorded for exclusions	0	0	0
Not recorded for denominator	0	0	0
% Performance	0.0	0.0	0.0

90 day Mortality Target < 7.5%	DGRI	RIE	SCAN
2020 Cohort	-	-	97
Ineligible for this QPI	-	-	79
Numerator	0	0	0
Not recorded for numerator	0	0	0
Denominator	1	17	18
Not recorded for exclusions	0	0	0
Not recorded for denominator	0	0	0
% Performance	0.0	0.0	0.0

All surgical deaths have been reviewed.

Results reflect appropriate surgical selection and management.

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 (no exclusions).

Oesophageal cancer – Hospital of surgery

Target 90%	RIE	SCAN
2020 Cohort	217	217
Ineligible for this QPI	174	174
Numerator	42	42
Not recorded for numerator	0	0
Denominator	43	43
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	97.7	97.7

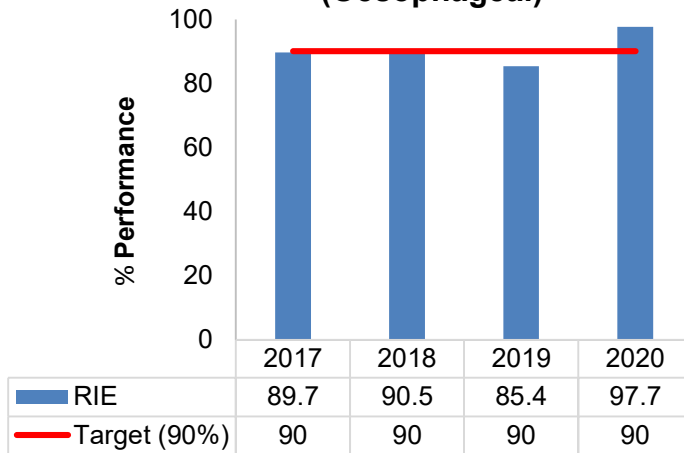
Gastric cancer – Hospital of surgery

Target 80%	RIE	SCAN
2020 Cohort	97	97
Ineligible for this QPI	80	80
Numerator	14	14
Not recorded for numerator	0	0
Denominator	17	17
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	82.4	82.4

1 Surgery partial gastrectomy performed at DGRI is not included in this table

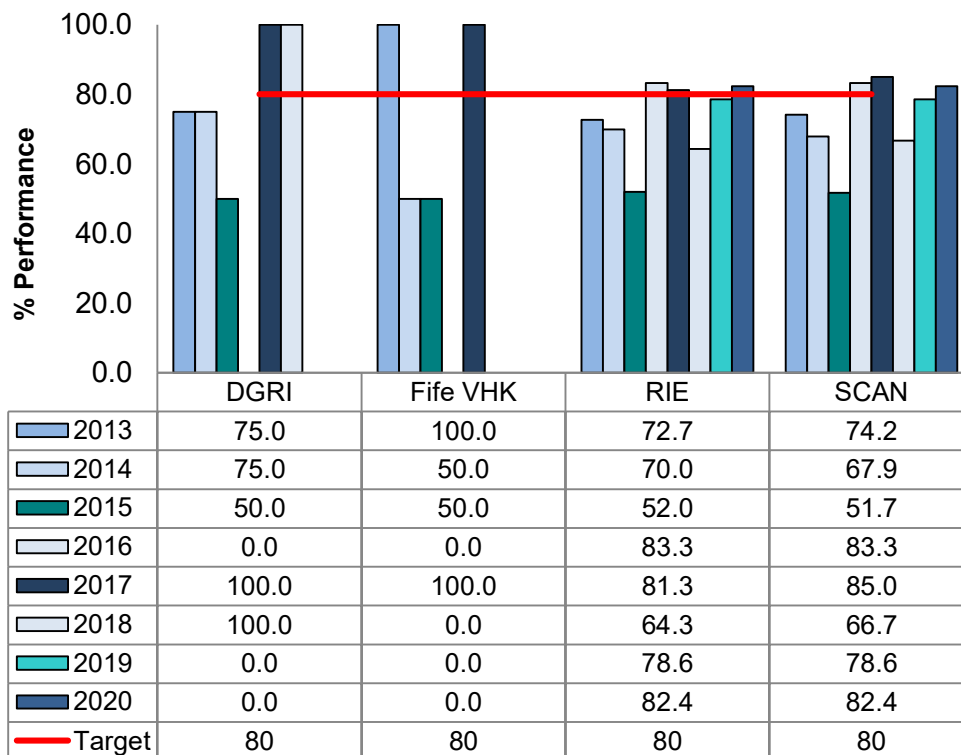
Pathology colleagues have put a lot of work into this and all cases are reviewed where lymph node yield was low. No actions were identified.

QPI 8 - Lymph Node Yield (Oesophageal)



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 8 years below with the unchanged target of 80%.

QPI 8 - Lymph Node Yield (Gastric)



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 (no exclusions)

This QPI 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	23	23
Not recorded for numerator	0	0
Denominator	40	40
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	57.5	57.5

SCAN median was 10 days (range 7-38)

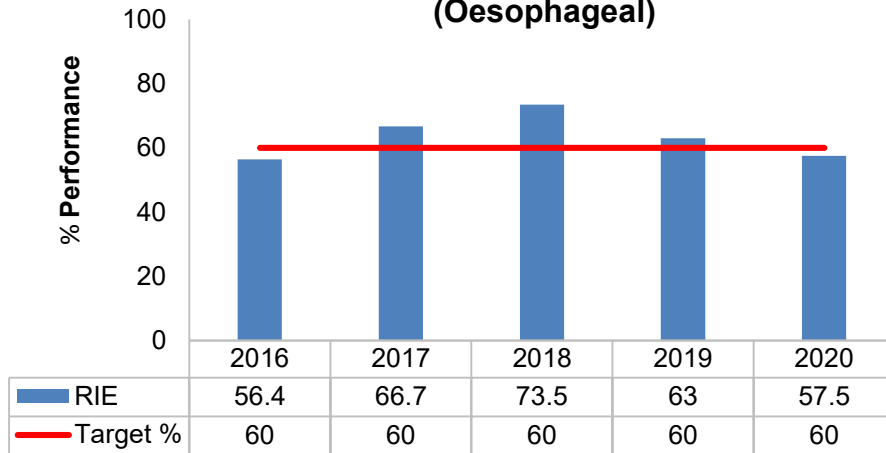
Gastric cancer – Hospital of surgery

Target 60%	RIE	SCAN
Numerator	12	12
Not recorded for numerator	0	0
Denominator	16	16
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	75.0	75.0

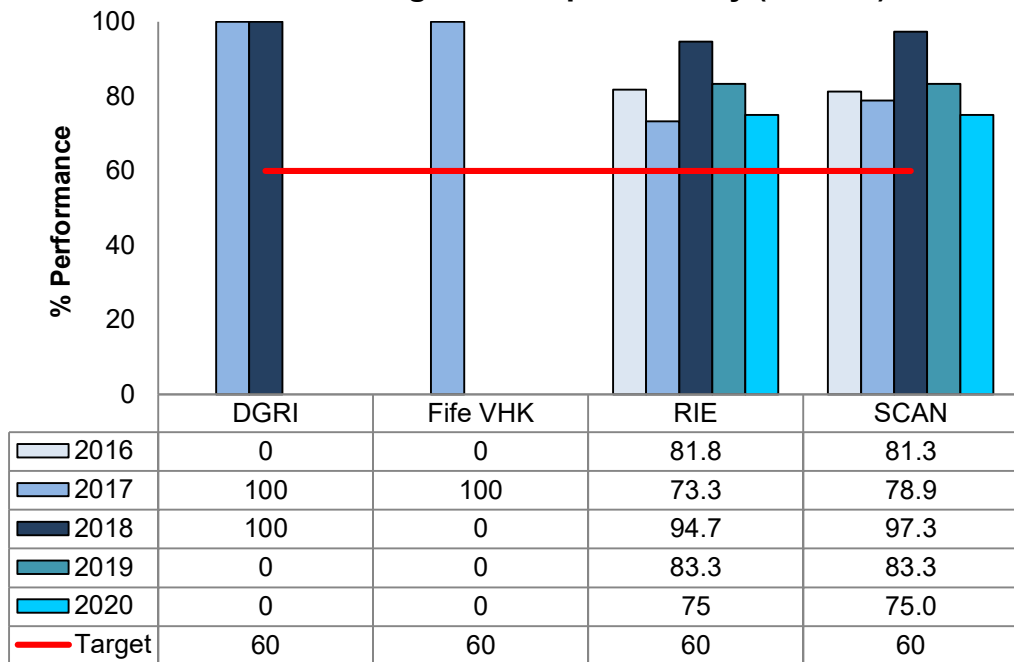
SCAN median was 12 days (range 7-20)

This QPI is intended as a surrogate marker to address various issues of quality care including surgery, post-operative complications and access to community services. There were no specific issues noted and no action has been identified.

QPI 9 Length of Hospital Stay (Oesophageal)

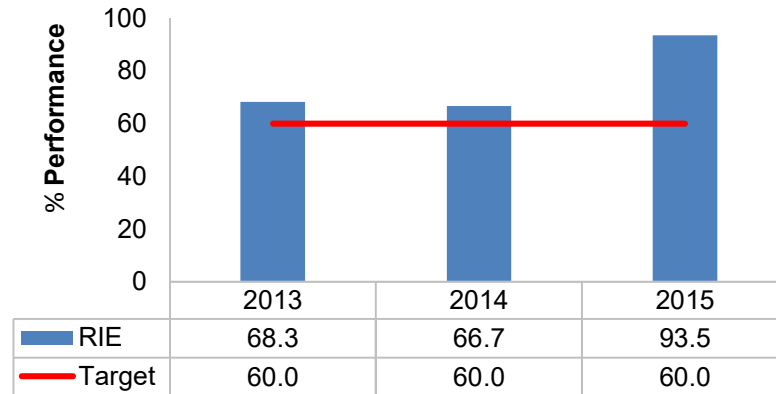


QPI 9 Length of Hospital of Stay (Gastric)

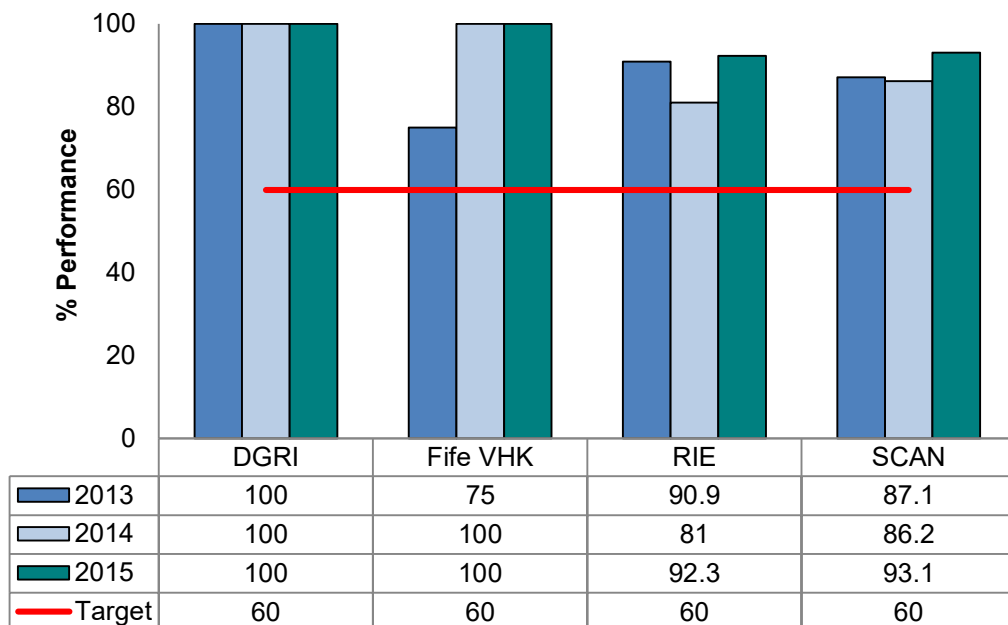


Following formal review, QPI 9 was updated in 2016. The time in days was changed from 21 to 14. Below are QPI 9 Oesophageal details for the first 3 years, measuring 21 days.

Length of Hospital Stay (Oesophageal, 21 day target)



Length of Hospital Stay (Gastric, 21 day target)



QPI 10i – Circumferential Resection Margins

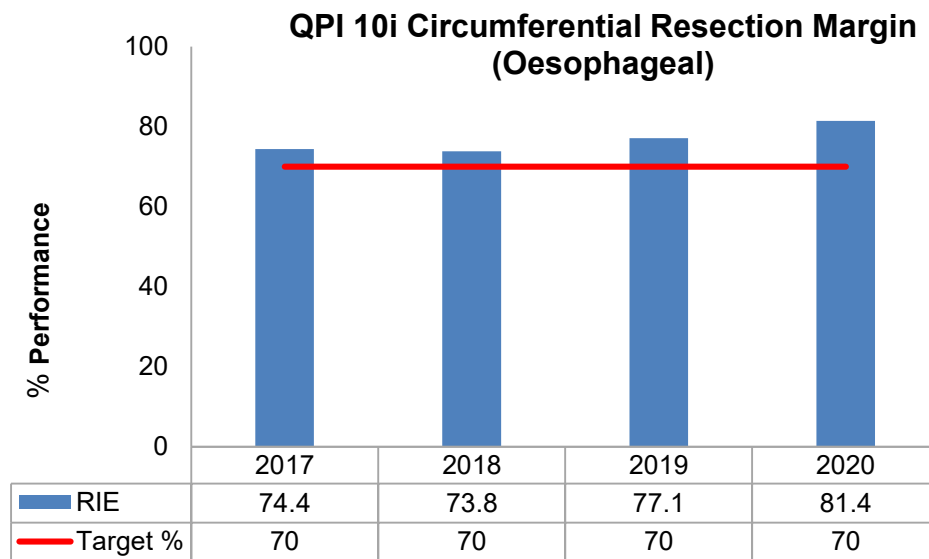
Target = 70%

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 (no exclusions)

Oesophageal cancer – Hospital of surgery

Target 70%	RIE	SCAN
2020 Cohort	217	217
Ineligible for this QPI	174	174
Numerator	35	35
Not recorded for numerator	0	0
Denominator	43	43
Not recorded for exclusions	0	0
Not recorded for denominator	0	0
% Performance	81.4	81.4



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 (no exclusions)

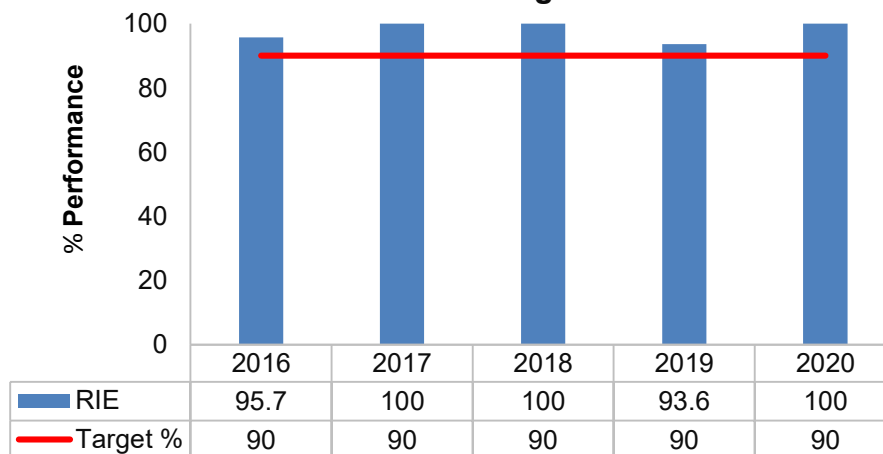
Oesophageal Longitudinal margin (Hospital of Surgery)

Target 90%	RIE	SCAN
2020 Cohort	217	217
Ineligible for this QPI	174	174
Numerator	43	43
Not recorded for numerator	0	0
Denominator	43	43
% Performance	100.0	100.0

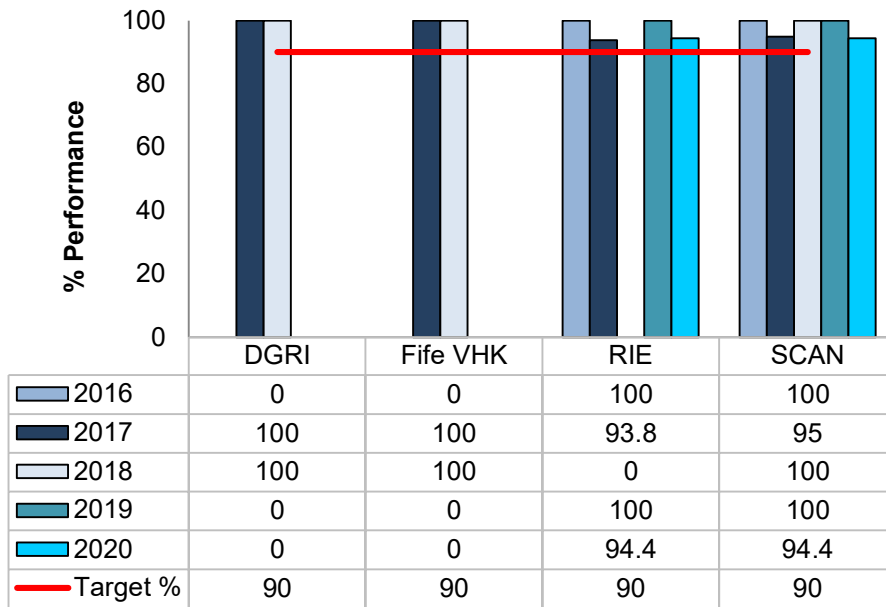
Gastric Longitudinal margin (Hospital of Surgery)

Target 90%	DGRI	RIE	SCAN
2020 Cohort	-	97	97
Ineligible for this QPI	-	79	79
Numerator	0	17	17
Not recorded for numerator	0	0	0
Denominator	1	17	18
% Performance	0.0	100.0	94.4

QPI 10ii Oesophageal Longitudinal Resection Margin



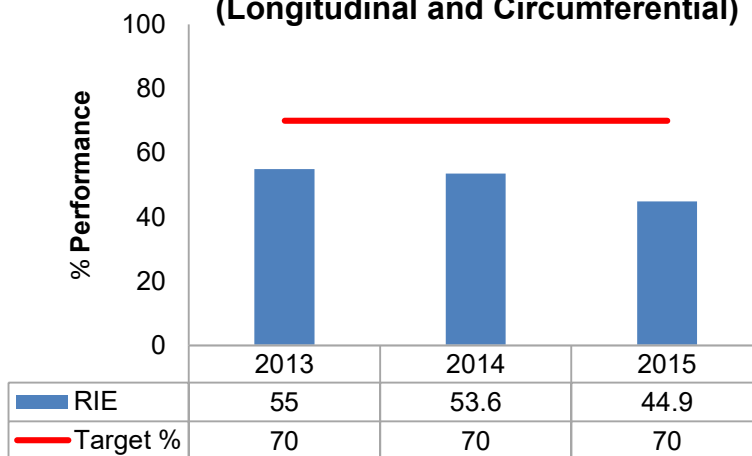
QPI 10ii Gastric Longitudinal Resection Margin



Comment: CRM margins have progressively improved and the pathology service continues to be very good. Perioperative chemo results in less bulky stage T3 cancers, so this is an encouraging result.

Following first 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 the first 3 years of collection with the 70% target.

Oesophagogastric Resection Margins (Longitudinal and Circumferential)



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 (no exclusions)

Oesophageal cancer – Health board of diagnosis

Target 35%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	28	33	68	146	275
Ineligible for this QPI	0	0	0	0	0
Numerator	6	4	13	38	61
Not recorded for numerator	0	0	0	0	0
Denominator	28	33	68	146	275
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	21.4	12.1	19.1	26.0	22.2

Gastric cancer – Health board of diagnosis

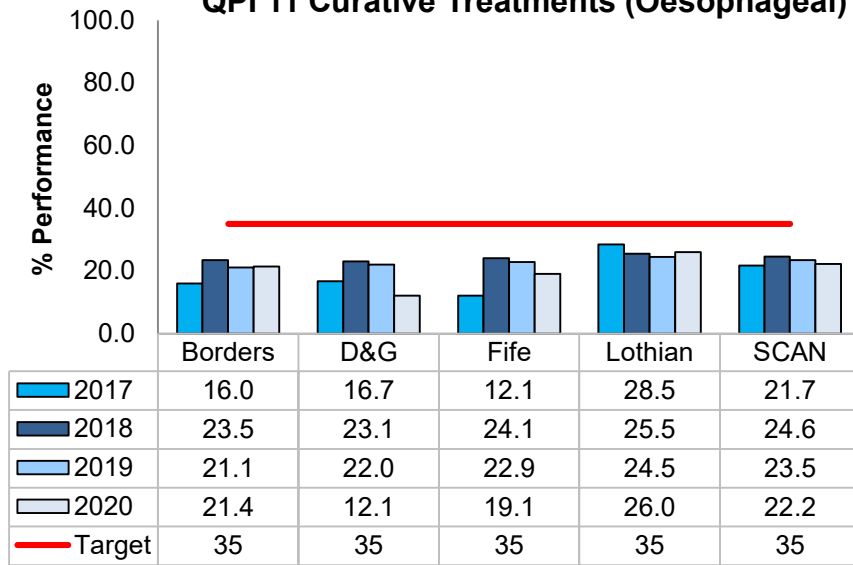
Target 35%	Borders	D&G	Fife	Lothian	SCAN
2020 Cohort	6	10	15	66	97
Ineligible for this QPI	0	0	0	0	0
Numerator	0	3	1	17	21
Not recorded for numerator	0	0	0	0	0
Denominator	6	10	15	66	97
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	0.0	30.0	6.7	25.8	21.6

Comment

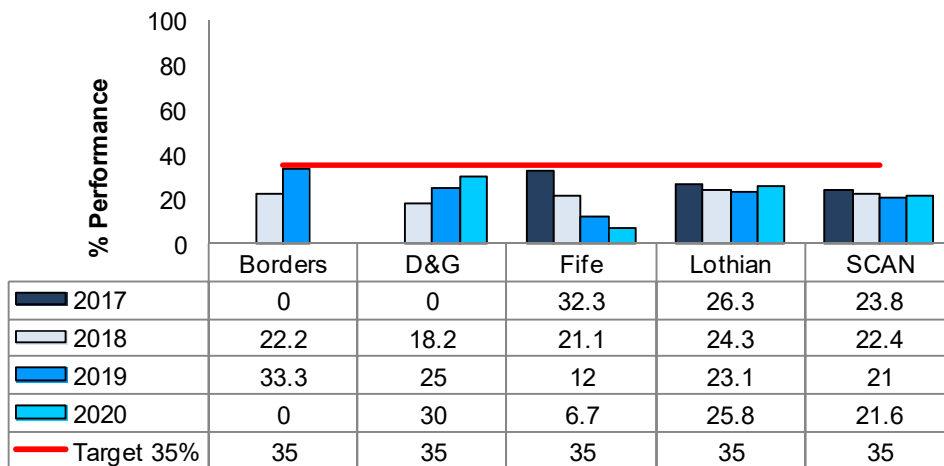
This is an aspirational QPI, because our audit is very comprehensive with good case ascertainment the denominator is large so it's difficult to improve rates in this QPI. Focus needs to be on earlier detection and treatment to improve outcomes.

Action: Note Health Board variation and continue to review especially need to monitor with the current pandemic situation.

QPI 11 Curative Treatments (Oesophageal)



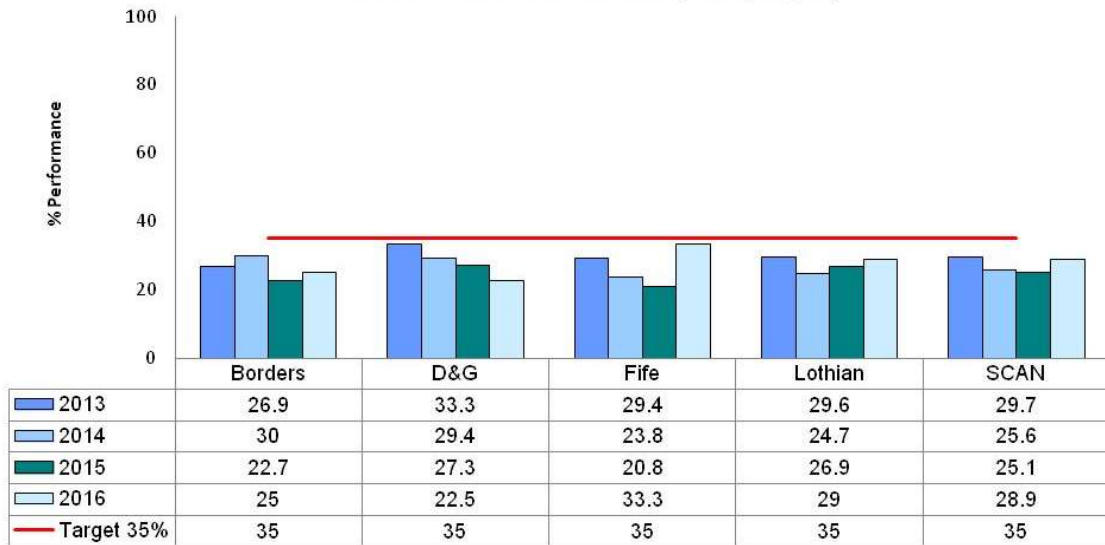
QPI 11 - Curative Treatments (Gastric)



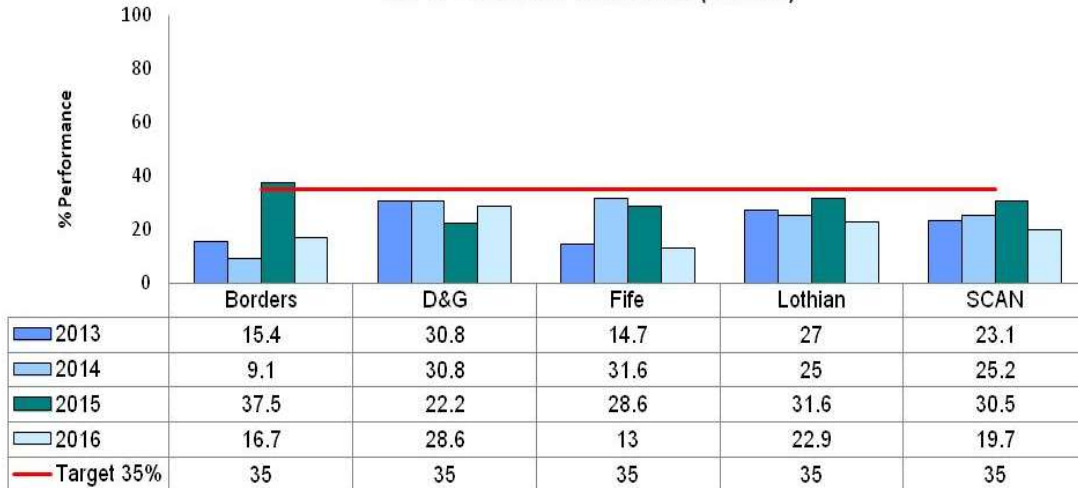
Following first formal review, QPI 11 was updated in Year 5, 2017. The curative treatment now includes neoadjuvant chemotherapy and neoadjuvant chemoradiotherapy and additional oesophagectomy and gastrectomy procedures.

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

QP 11 - Curative Treatments (Oesophageal)



QPI 11 - Curative Treatments (Gastric)



Comment: This QPI shows lower rates of curative treatments than in England, but our very good case ascertainment may be affecting this in SCAN.

QPI 12 – 30 Day Mortality Following Oncological Treatment for Oesophageal or Gastric Cancer

Target <5%

This QPI has been replaced with a standardised 30 day SACT Mortality QPI across all the tumour types covered by the QPI program.

Measurement is being revised to use data from Chemocare (electronic chemotherapy prescribing system) for reporting in order to utilise existing data and provide an accurate picture of all patients with OG cancer undergoing chemotherapy, rather than the subset of all diagnosed in the audit year cohort only.

A further target of <15% been added for patients undergoing palliative treatment.

The development of a National reporting tool is currently underway through a collaboration with Public Health Scotland and the 3 Cancer Networks; NCA, SCAN and WoSCAN. This is to ensure that reporting is consistent throughout Scotland.

Progress has been complicated by the differences in the 5 instances of Chemocare across Scotland and a date for initial reporting is yet to be confirmed at the time of writing this report.

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 having palliative chemotherapy with HER2 status reported prior to treatment.

Denominator = All patients with metastatic oesophageal or gastric adenocarcinoma undergoing first line palliative chemotherapy as their initial treatment (no exclusions).

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 Cohort	28	10	9	146	193
Ineligible for this QPI	26	9	0	125	160
Numerator	1	1	8	18	28
Not recorded for numerator	0	0	0	0	0
Denominator	2	1	10	21	34
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	50.0	100.0	80.0	85.7	82.4

Comments where QPI was not met

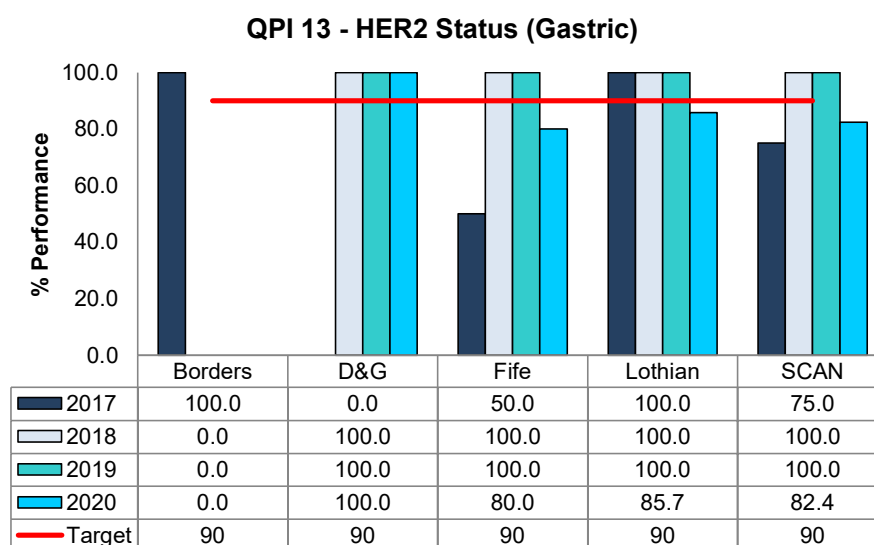
Borders: The QPI was not met with a shortfall of 40% (1 patient.) HER2 was reported 1 day after chemotherapy started.

Fife: The QPI was not met with a shortfall of 12.2% (2 patients). Both results were reported after chemotherapy started.

Lothian: The QPI was not met with a shortfall of 4.3% (3 patients). All were reported after chemotherapy started.

SCAN Comment

All 6 cases not meeting the QPI criteria were reviewed by Oncology and Pathology. 2 cases were issues in pathology: in 1 case the result took 21 days and in the other the request was mislaid. In 1 case it was unclear if the patient was fit for oncology review (the pathway has been reviewed in Fife with the new CNS who will request HER2 if appropriate after review). In 2 cases chemotherapy was expedited due to symptoms and commenced prior to the Her2 result being available. In 1 case there was a delay in requesting HER2 as there was a dual pathology, initial biopsies only showing NET. 4 reports were received <9 days after the start of chemotherapy. 2 reports were received over 50 days after chemotherapy was started. Only one of these patients was HER2 positive. Trastuzumab was added to the chemotherapy from cycle 2. This patient remains on trastuzumab and outcomes seem unaffected by the delay.



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

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

Clinical Trials	Borders	D&G	Fife	Lothian	SCAN
Numerator	5	2	2	18	27
Denominator	38	46	99	178	361
% Performance	13.2	4.3	2.0	10.1	7.5

Patients in Trials not currently held on EDGE database	Patient numbers as reported by (principle investigator)
GI-ACP UGI Participants 2020	8
ENERGY	5

Comment

This QPI does not reflect all the research work going on in SCAN, due to where these trials are registered e.g., GP or palliative studies. It's important to note that the Covid 19 pandemic stopped a lot of trial recruitment in 2020.

There are current ongoing national discussions on changing this generic QPI

Key Categories

Number of Cases By Site of Origin of Tumour

Tumour Site	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
Oesophageal cancer	28	82.4	33	76.7	68	81.9	146	68.9	275	73.9
Gastric cancer	6	17.6	10	23.3	15	18.1	66	31.1	97	26.1
Total OG cancers	34	100.0	43	100.0	83	100.0	212	100.0	372	100.0

Breakdown of Site of Origin of Tumour

Tumour Site code (See ICD key below)	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	%	n	%	n
C15.0	0	0.0	1	2.0	0	0.0	8	4.3	9	2.5
C15.1	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
C15.3	0	0.0	5	10.2	1	1.1	0	0.0	6	1.7
C15.4	5	16.1	7	14.3	10	10.5	33	17.6	55	15.2
C15.5	10	32.3	20	40.8	51	53.7	78	41.5	159	43.8
C15.8	3	9.7	1	2.0	3	3.2	13	6.9	20	5.5
C15.9	1	3.2	0	0.0	0	0.0	8	4.3	9	2.5
C16.0	0	0.0	7	14.3	5	5.3	9	4.8	21	5.8
C16.1	1	3.2	0	0.0	0	0.0	1	0.5	2	0.6
C16.2	2	6.5	0	0.0	10	10.5	9	4.8	21	5.8
C16.3	4	12.9	6	12.2	6	6.3	15	8.0	31	8.5
C16.4	2	6.5	0	0.0	5	5.3	3	1.6	10	2.8
C16.5	0	0.0	0	0.0	2	2.1	5	2.7	7	1.9
C16.6	1	3.2	0	0.0	1	1.1	2	1.1	4	1.1
C16.8	0	0.0	0	0.0	0	0.0	1	0.5	1	0.3
C16.9	2	6.5	2	4.1	1	1.1	3	1.6	8	2.2
Total	31	100%	49	100%	95	100%	188	100%	363	100%

ICD Key

ICD-O(3) Code	Description
C15.0	Cervical oesophagus
C15.1	Thoracic oesophagus
C15.2	Abdominal part of oesophagus
C15.3	Upper third of oesophagus
C15.4	Middle third of oesophagus
C15.5	Lower third of oesophagus
C15.8	Overlapping lesion of oesophagus
C15.9	Oesophagus, NOS.
C16.0	Cardia, NOS
C16.1	Fundus of stomach
C16.2	Body of stomach
C16.3	Gastric antrum
C16.4	Pylorus
C16.5	Lesser curvature of stomach, unspecified
C16.6	Greater curvature of stomach, unspecified
C16.8	Overlapping lesion of the stomach
C16.9	Stomach, (NOS)

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	4.0	0	0.0	1	2.1	0	0.0	1	1.0	0	0.0	3	1.6	0	0.0
45-49	0	0.0	0	0.0	0	0.0	0	0.0	1	2.1	0	0.0	1	1.0	1	2.3	2	1.0	1	1.2
50-54	1	5.9	0	0.0	0	0.0	0	0.0	4	8.5	2	9.5	7	6.8	3	6.8	12	6.3	5	6.0
55-59	0	0.0	0	0.0	0	0.0	1	12.5	7	14.9	1	4.8	8	7.8	1	2.3	15	7.8	3	3.6
60-64	2	11.8	1	9.1	3	12.0	1	12.5	5	10.6	3	14.3	9	8.7	4	9.1	19	9.9	9	10.8
65-69	4	23.5	2	18.2	4	16.0	0	0.0	5	10.6	6	28.6	24	23.3	4	9.1	37	19.3	12	14.5
70-74	1	5.9	2	18.2	7	28.0	0	0.0	7	14.9	4	19.0	19	18.4	8	18.2	34	17.7	14	16.9
75-79	4	23.5	1	9.1	0	0.0	3	37.5	6	12.8	2	9.5	13	12.6	10	22.7	23	12.0	16	19.3
80-84	2	11.8	4	36.4	7	28.0	1	12.5	7	14.9	2	9.5	14	13.6	5	11.4	30	15.6	12	14.5
85+	3	17.6	1	9.1	3	12.0	2	25.0	4	8.5	1	4.8	7	6.8	8	18.2	17	8.9	11	13.3
Total	17	100	11	100	25	100	8	100	47	100	21	100	103	100	44	100	192	100	83	100

Oesophageal

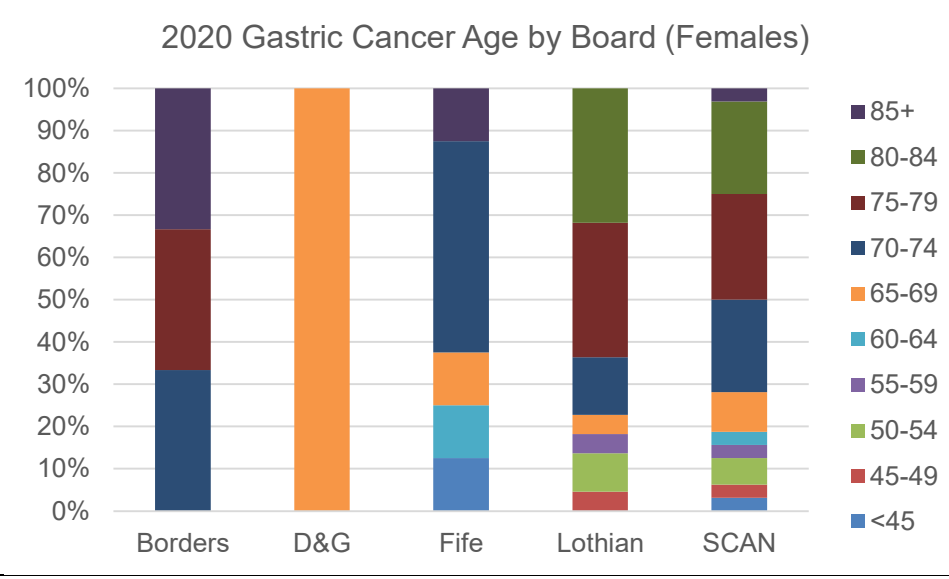
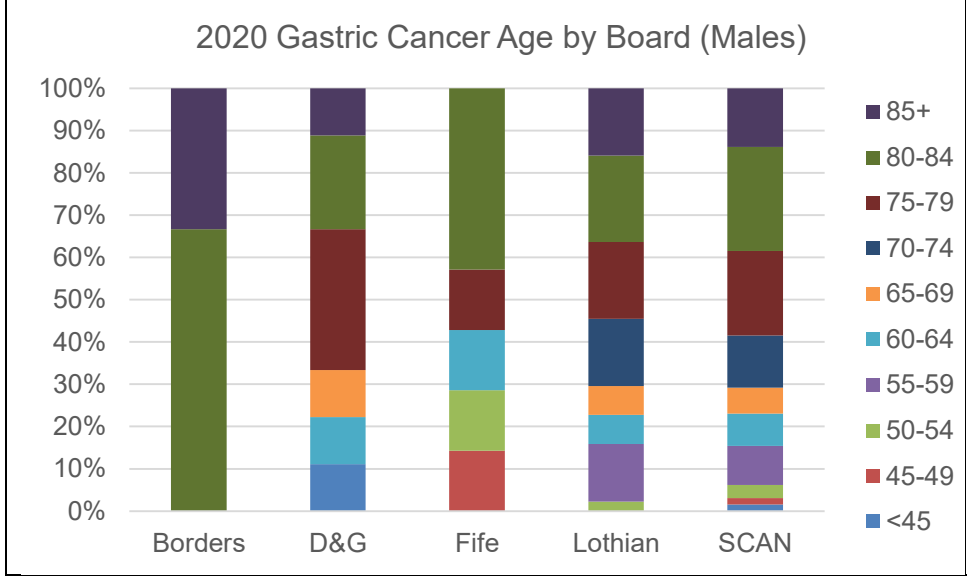
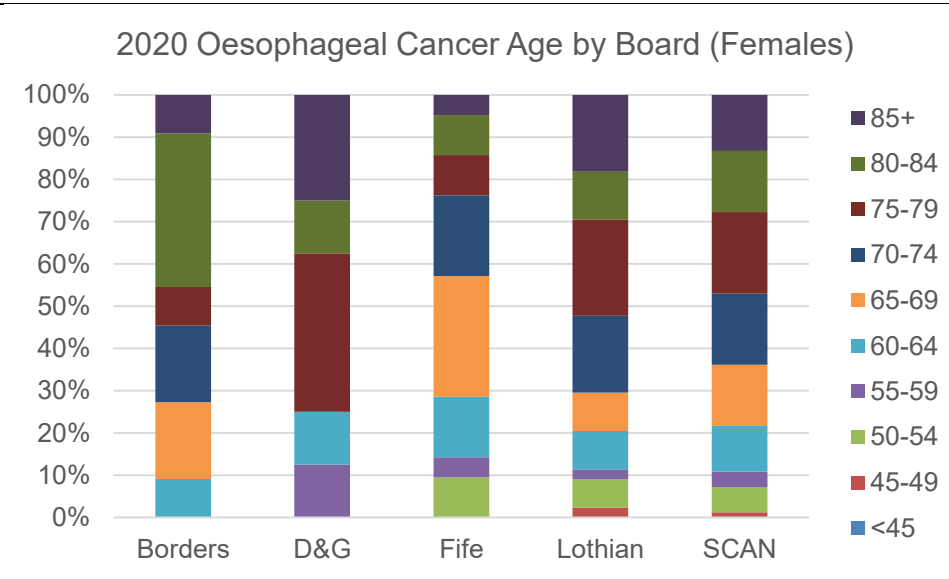
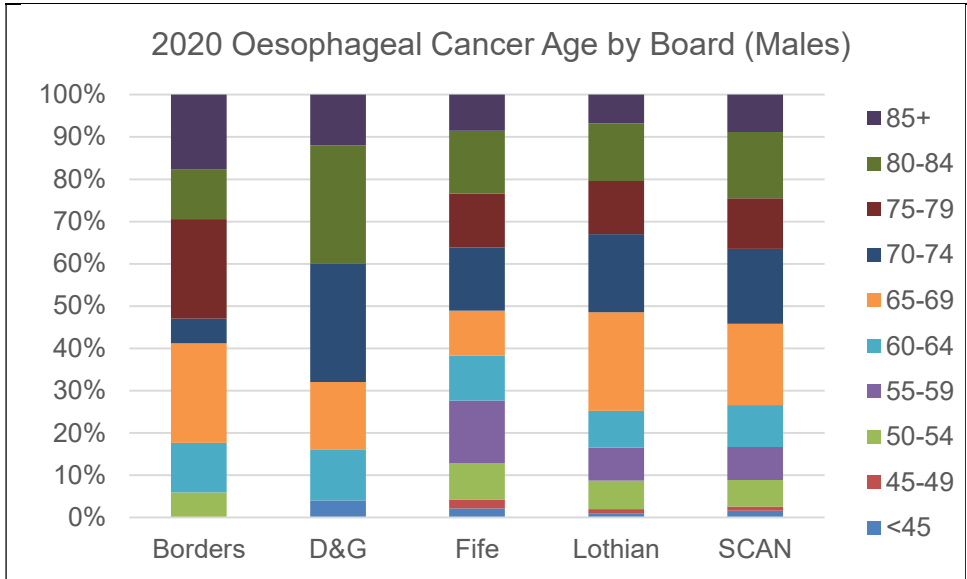
Age at Diagnosis	Borders		D&G		Fife		Lothian		SCAN	
	M	F	M	F	M	F	M	F	M	F
Mean	73	75	74	77	69	69	69	74	70	73
Median	75	75	73	78	70	67	70	75	71	74
Min	50	63	44	57	44	50	38	44	38	44
Max	91	86	98	91	91	91	90	95	98	95

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	1	11.1	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	1	1.5	1	3.1
45-49	0	0.0	0	0.0	0	0.0	0	0.0	1	14.3	0	0.0	0	0.0	1	4.5	1	1.5	1	3.1
50-54	0	0.0	0	0.0	0	0.0	0	0.0	1	14.3	0	0.0	1	2.3	2	9.1	2	3.1	2	6.3
55-59	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	13.6	1	4.5	6	9.2	1	3.1
60-64	0	0.0	0	0.0	1	11.1	0	0.0	1	14.3	1	12.5	3	6.8	0	0.0	5	7.7	1	3.1
65-69	0	0.0	0	0.0	1	11.1	1	100.	0	0.0	1	12.5	3	6.8	1	4.5	4	6.2	3	9.4
70-74	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0	4	50.0	7	15.9	3	13.6	8	12.3	7	21.9
75-79	0	0.0	1	33.3	3	33.3	0	0.0	1	14.3	0	0.0	8	18.2	7	31.8	13	20.0	8	25.0
80-84	2	66.7	0	0.0	2	22.2	0	0.0	3	42.9	0	0.0	9	20.5	7	31.8	16	24.6	7	21.9
85+	1	33.3	1	33.3	1	11.1	0	0.0	0	0.0	1	12.5	7	15.9	0	0.0	9	13.8	1	3.1
Total	3	100	3	100	9	100	1	100	7	100	8	100	44	100	22	100	65	100	32	100

Gastric

Age at Diagnosis	Borders		D&G		Fife		Lothian		SCAN	
	M	F	M	F	M	F	M	F	M	F
Mean	83	78	73	N/A	69	68	73	72	73	71
Median	N/A	N/A	77	N/A	73	70	76	76	76	74
Min	80	71	43	68	45	44	48	48	43	44
Max	88	87	88	68	83	85	90	84	90	87



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

OG QPI Attainment Summary - 2019		Target %	Borders	D&G	Fife	Lothian	SCAN
	Gastric	<7.5	Board of Surgery			N 1 7.1% D 14	N 1 7.1% D 14
QPI 8: Lymph Node Yield – Curative resection where >15 lymph nodes are resected and examined (Presented by Board of Surgery)	Oesophageal	90	Board of Surgery			N 41 85.4% D 48	N 41 85.4% D 48
	Gastric	80	Board of Surgery			N 11 78.6% D 14	N 11 78.6% D 14
QPI 9: Hospital of Stay: Discharge within 14 days of surgical procedure (presented by Board of Surgery)	Oesophageal	60	Board Of Surgery			N 29 63.0% D 46	N 29 63.0% D 46
	Gastric	60	Board of Surgery			N 10 83.3% D 12	N 10 83.3% D 12
QPI 10i: Oesophageal clear circumferential resection margins (presented by Board of Surgery)	Oesophageal	70	Board of Surgery			N 37 77.1% D 48	N 37 77.1% D 48
QPI 10ii: Longitudinal margins clear (presented by Board of Surgery)	Oesophageal	90	Board of Surgery			N 45 93.8% D 48	N 45 93.8% D 48
	Gastric	90	Board of Surgery			N 14 100% D 14	N 14 100% D 14
QPI 11: Curative Treatment Rates	Oesophageal	35	N 4 21.1% D 19	N 9 22.0% D 41	N 16 22.9% D 70	N 38 25.5% D 149	N 67 24.0% D 279
	Gastric	35	N 3 33.3% D 9	N 2 25.0% D 8	N 3 12.0% D 25	N 9 23.1% D 39	N 17 21.0% D 81
QPI 12: 30 day Mortality after Oncological Treatment	Oesophageal curative Chemoradiotherapy	<5	N 0 - D 0	N 0 0.0% D 2	N 0 0.0% D 3	N 0 0.0% D 4	N 0 0.0% D 9
	Oesophageal Peri-operative Chemotherapy	<5	N 0 0.0% D 4	N 0 0.0% D 7	N 0 0.0% D 12	N 0 0.0% D 23	N 0 0.0% D 46
	Oesophageal Adjuvant Chemotherapy	<5	N 0 0.0% D 3	N 0 0.0% D 3	N 0 0.0% D 1	N 0 0.0% D 1	N 0 0.0% D 8
	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% D 1	N 0 0.0% D 1	N 0 0.0% D 3	N 0 0.0% D 4	N 0 0.0% D 9
	Gastric Adjuvant Chemotherapy	<5	N 0 0.0% D 1	N 0 - D 0	N 0 0.0% D 1	N 0 0.0% D 2	N 0 0.0% D 4

OG QPI Attainment Summary - 2019		Target %	Borders			D&G			Fife			Lothian			SCAN		
	Gastric Downstaging Chemotherapy	<5	N 0 D 0	-	N 0 D 0	-	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 2	0.0%	N 0 D 3	0.0%	N 0 D 4	0.0%	N 0 D 23	8.7%	N 0 D 45	6.7%	N 0 D 9	0.0%	
	Oesophageal Peri-operative Chemotherapy	<7.5	N 0 D 4	0.0%	N 1 D 6	16.7%	N 0 D 12	0.0%	N 2 D 23	8.7%	N 3 D 45	6.7%	N 0 D 8	0.0%	N 0 D 0	-	
	Oesophageal Adjuvant Chemotherapy	<7.5	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 0	-	N 0 D 0	-	N 0 D 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	-	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	-	N 0 D 0	-	N 0 D 0	-	
	Gastric Peri-operative Chemotherapy	<7.5	N 0 D 1	0.0%	N 0 D 1	0.0%	N 0 D 3	0.0%	N 0 D 4	0.0%	N 0 D 9	0.0%	N 0 D 4	0.0%	N 0 D 0	-	
	Gastric Adjuvant Chemotherapy	<7.5	N 0 D 1	0.0%	N 0 D 0	-	N 0 D 1	0.0%	N 0 D 2	0.0%	N 0 D 4	0.0%	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	-	N 0 D 0	-	N 0 D 0	-	
	QPI12ii: 30 day Mortality after Oncological Treatment	Oesophageal Palliative Chemotherapy	<5	N 0 D 3	0.0%	N 0 D 7	0.0%	N 2 D 13	15.4%	N 0 D 28	0.0%	N 2 D 51	3.9%	N 0 D 9	0.0%	N 0 D 0	-
Gastric Palliative Chemotherapy		<5	N 0 D 0	-	N 0 D 1	0.0%	N 0 D 5	0.0%	N 0 D 3	0.0%	N 0 D 9	0.0%	N 0 D 0	-	N 0 D 0	-	
QPI 13 HER2 Status in Advanced Gastric Cancer		90	N 0 D 0	-	N 1 D 1	100%	N 3 D 3	100%	N 2 D 2	100%	N 6 D 6	100%	N 0 D 0	-	N 0 D 0	-	
Clinical Trial QPI NB: N= patients consented to Trials and held on SCRN database, D = 5 year average Cancer		15	N 10 D 37	27.0%	N 10 D 45	22.2%	N 17 D 95	17.9%	N 53 D 179	29.6%	N 90 D 356	25.3%	N 0 D 0	-	N 0 D 0	-	