

SOUTH EAST SCOTLAND CANCER NETWORK
PROSPECTIVE CANCER AUDIT

OESOPHAGOGASTRIC CANCER 2010 COMPARATIVE AUDIT REPORT

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**SE SCOTLAND CANCER NETWORK
PROSPECTIVE CANCER AUDIT
OESOPHAGOGASTRIC (OG) CANCER
REPORT ON PATIENTS DIAGNOSED 01 JANUARY – 31 DECEMBER 2010
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OESOPHAGOGASTRIC CANCER AUDIT REPORT

Comment by Chair of the SCAN Upper GI Group

Second Annual Comparative Report – four services linked by regional Upper GI service at NRIE: I am very pleased to present the second annual comparative report on patients diagnosed in 2010 with Oesophageal and Gastric (OG) cancers in SCAN. This year all SCAN health boards are represented with the inclusion of data from Dumfries & Galloway. The report reflects the practice in the four services in Lothian, Fife, Borders and D&G which are linked through the regional Upper GI service based in the New Royal Infirmary of Edinburgh.

The report follows the pattern of last year, and develops the picture of the population of patients with OG cancers in our region, and the treatment they receive. The data is collected in line with the current nationally-agreed and defined dataset. This enabled us to compare results with our colleagues in West and North of Scotland networks at a meeting in November 2011.

Action Points: At present there are no nationally-agreed standards for the care of OG cancer patients. The results raise some questions which we will review and report on over the coming year and these are noted in the Action Points.

- We note, for example, variations in the proportion of patients in different parts of SCAN receiving surgery as first treatment, although almost all patients are discussed at the regional MDM. Issues such as age differences impacting on co-morbidities, and deprivation categories will be looked at.

Outcomes of Treatment: 30-day mortality after curative surgery:

Comparative annual reports present information on a number of treatment outcomes. 30-day mortality after curative surgery is an important indicator of quality of surgery and choice of treatment.

We are pleased with results showing 0% 30-day mortality for oesophageal cancer patients and 2.4% (=1 patient) for gastric cancer patients. Because of small numbers results will inevitably fluctuate year on year. 5 and 10 year mortality rates for the RIE are 3.6% and 4.1% respectively and these figures compare very well with recent national audit figures for England and Wales

Data Quality – audit resource: Reliability of results requires complete identification and accurate data recording for all patients diagnosed with these cancers. Audit resource remains the key to this and we are grateful to the audit staff in SCAN health boards for their hard work, especially for the coordination and quality-checking undertaken by Peigi Muir of the SCAN Audit Team. Confirmed future resource for data quality work for SCAN/NHS Lothian is as yet unresolved, although developments in essential data capture through the TRAK patient administration system are underway.

Upper GI Quality Performance Indicators (QPIs) – Implementation in 2012: With a number of representatives from SCAN I have participated in the programme to develop QPIs for Upper GI cancers, supervised by the National Cancer Quality Steering Group. We look forward to the implementation of the QPIs later this year, and to being able to review comparative results across Scotland, which it is hoped will bring about further improvements in the service offered to patients.

Graeme Couper,
Consultant Surgeon,
Chair of SCAN Upper GI Group

ACTION POINTS FROM 2009 - PROGRESS

Listed below are some possible areas for improvement identified throughout the Report with proposed action outlined against each:

Report Table	Possible area for improvement	Proposed action	Which clinical standard will this meet/ How will this improve patient care?	Progress on Actions
E2	Improve case ascertainment to at least 90 of estimated population.		No specific standard as yet but will improve the reliability and accuracy of the results reported.	Action point again for 2010
E5	Improve clinical recording of Performance Status at MDM	Ensure routine recording of Performance Status at MDM	No specific standard though SIGN Guideline no 87, Section 5.3 states that "All patients being considered for surgery should undergo careful assessment of fitness with emphasis on performance status and respiratory function". Performance status provides important information for detailed comparison of stage at presentation	Action point again for 2010
M3	Improve recording of dietetic input	Review processes for efficient recording of dietetic input	No specific standard though SIGN Guideline no 87, S.10.11 suggests that: "All patients with oesophageal or gastric cancer should be screened using a validated nutritional screening tool to assess nutritional risk."	Action point again for 2010
S8	Method of reporting on residual disease does not present full picture	Reach consensus on classification of residual disease	No specific standard though SIGN Guideline 87: 7.3.2 identifies that surgery should aim at an R0 resection. Residual disease an important indicator of potential survival	Action point again for 2010

ACTION PLAN 2010

Report Table	Possible area for improvement	Proposed action	Which clinical standard will this meet/How will this improve patient care?	Progress on actions
E2	Improve case ascertainment	To investigate ways of identifying patients not referred to the MDM for treatment. NB will be dependent of audit resource.	No specific standard as yet but will improve the reliability and accuracy of the results reported	
E5	To improve clinical recording of performance status	Ensure routine recording of performance status at MDM.	No specific standard though SIGN Guideline no. 87, Section 5.3 states that "All patients being considered for surgery should undergo careful assessment of fitness with emphasis on performance status and respiratory function". Performance status provides important information for detailed comparison of stage at presentation.	
M2	Ensure equity of access to CNS for Borders patients	To highlight the lack of Borders CNS to management		
M4	Ensure equity of access to surgery across SCAN	To review data on variations for surgery across SCAN.		
ET3.1	30 Day mortality in endoscopy treated patients	Review details of patient pathways		

**SOUTH EAST SCOTLAND CANCER NETWORK
PROSPECTIVE CANCER AUDIT
UPPER GI (OESOPHAGEAL AND GASTRIC) CANCER
REPORT ON PATIENTS DIAGNOSED 1 JANUARY – 31 DECEMBER 2010**

INTRODUCTION AND METHODS

This report presents analysis of data collected on oesophageal and gastric cancer patients diagnosed between 1 January and 31 December 2010 in Borders, Dumfries & Galloway, Fife and Lothian health board regions within the S E Scotland Cancer Network.

Basis of Analysis

There are currently no nationally agreed standards for quality of Upper GI cancer care. This analysis was prepared using the measures and measurability criteria developed by West of Scotland Cancer Network. Because Lothian and Fife patients are now managed through the regional MDM in the Royal Infirmary of Edinburgh results are shown both combined and by health board of residence.

Patients included in the Report

Patients included: all patients newly-diagnosed with oesophageal and gastric cancers 1 January – 31 December 2010

SCAN Region	Hospital	Lead Clinician	Audit Support
Borders	Borders General Hospital	Mr Jonathan Fletcher	Alistair Meikle
Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Mr Charles Auld	Martin Keith
Fife	Queen Margaret Hospital Victoria Hospital	Mr Alasdair Macmillan	Maureen Lamb
Lothian	St Johns Hospital at Howden; Royal Infirmary Edinburgh; Western General Hospital,	Mr Graeme Couper	Paulina Ofori-Adu Peigi Muir Alison Allen
	Edinburgh Cancer Centre	Oncologist: Dr Lucy Wall	

Data Collection

Patients were mainly identified through registration at weekly multidisciplinary meetings, and through checks made against pathology listings. Data capture was dependent on casenote audit or review of various hospitals electronic records systems. Data was recorded on eCase in both Lothian, Fife and D&G, and on an Access database in Borders.

Datasets and definitions

The dataset collected is the SIGN Core Minimum dataset as published by ISD December 2007. (www.isdscotland.org/cancer)

Data Quality

External Quality Assurance

All hospitals in the region participate in the Quality Assurance programme provided by the National Services Scotland Information Services Division. There has been no recent QA of Upper GI data.

Estimate of Case Ascertainment

Combined case ascertainment is estimated at for Borders, Dumfries & Galloway, Fife, and Lothian when compared with a 5 year average of Scottish Cancer Registry data from 2005 -2009, based on health board of residence.

Clinical Sign-Off

This report compares data from reports prepared for individual hospitals and signed off as accurate following review by the lead clinicians from each service. Additionally, the collated SCAN results are reviewed by lead clinicians, including the lead Oncologist, Dr Lucy Wall, to assess variances and provide comments on results.

Actions for Improvement

After final sign off, the process is for the report to be sent to the Clinical Governance groups within the four health boards and to the Regional Cancer Planning Group. Action plans and progress with plans will be highlighted to the groups. The report will be placed on the SCAN website once it has been fully signed-off and checked for any disclosive material.

Action points for 2010: as part of clinical sign-off areas for improvement are highlighted in the Action Plan 2010 in Section v.

Action points from 2009 results: information is provided on progress with Action Plans for 2009.”

Paulina Ofori-Adu
Audit Facilitator

Peigi Muir
SCAN Audit Facilitator

DOCUMENT HISTORY

Version	Date	Circulation	Comments
1	Version 1 circulated 22/9/11 for meeting with Mr Graeme Couper, Lead Clinician and Dr Lucy Wall on 27/9/11	Mr Graeme Couper and Dr Lucy Wall	Comments received and amendments made. Version 2 prepared
2	For national meeting on 4/11/11	Version 2 sent to Lead Clinician for clinical sign-off	Additional patients added. Version 3 prepared.
3	Deadline for comments 29 th March 2012	Version 3 approved by Lead Clinician and circulated to SCAN Group 16/3/12 for final comment following sign off meeting.	Comments received. Any further amendments made subject to views of Lead clinician(s). Version 4 prepared
4	Report circulated noting report would be put on website after suitable period of time	Version 4 circulated to the Health Board Clinical Governance Groups and to the RCPG Also numbered and lodged on audit report index	Consideration by lead Clinicians of any comments received from Clinical Governance Groups or RCPG. Audit staff assess report for risk of disclosing any sensitive personal information. Amendments made as required. Version 4W (for website) prepared
4W	June 2012	Version 4W lodged on website after elapse of suitable length of time	Report has been assessed for risk of disclosure of sensitive information and placed on SCAN website

EPIDEMIOLOGY

E1: Number of cases recorded in audit based on site of origin of tumour

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Oesophageal cancer	23	67.6	24	75.0	63	58.3	114	64.4	224	63.8
Gastric cancer	11	32.4	8	25.0	45	41.7	63	35.6	127	36.2
Total	34	100.0	32	100.0	108	100.0	177	100.0	351	100.0

E2: Estimate of Case ascertainment

Case ascertainment based on health board of residence

	Borders	D&G	Fife	Lothian	SCAN
Cases from audit	34	32	108	177	351
Cancer Registration cases (2005 – 2009)	34	49	114	208	405
Case Ascertainment	100.0	65.3	94.7	85.1	86.7

Note: Case ascertainment has been estimated using a denominator based on the latest (2005-2009) five-year annual average available from the Scottish Cancer Registry. Death certificate only cases have been excluded. Cases that have been diagnosed in private sector but received any treatment in NHS hospitals have been included.

Comment: Some patients may not be referred to the MDM, especially the frail elderly (who may not receive active anti cancer treatment) therefore may not be registered in the audit.

Comment from Dumfries & Galloway: The number of patients diagnosed in 2010 has been checked against the UGI CNS's database, checked against MDT records, the Cancer Tracking Database and has been reviewed by Mr Auld. We are therefore satisfied that the patient numbers submitted for audit are an accurate reflection of the numbers of patients treated locally in Dumfries and Galloway.

Action Point: To investigate ways of identifying patients not referred to the MDM for treatment. NB will be dependent on audit resource.

E3: Age and gender distribution

E3.1: Oesophageal patients

	Borders				DGRI				Fife				Lothian				SCAN					
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Under 45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45 – 49	0	0.0	0	0.0	3	15.0	0	0.0	0	0.0	1	4.3	2	2.7	1	2.4	5	3.4	2	2.5		
50 – 54	1	8.3	0	0.0	0	0.0	0	0.0	1	2.5	1	4.3	4	5.5	1	2.4	6	4.1	2	2.5		
55 – 59	2	16.7	0	0.0	0	0.0	0	0.0	4	10.0	2	8.7	8	11.0	4	9.8	14	9.7	6	7.6		
60 – 64	3	25.0	0	0.0	1	5.0	0	0.0	3	7.5	4	17.4	18	24.7	3	7.3	25	17.2	7	8.9		
65 – 69	1	8.3	1	9.1	3	15.0	0	0.0	9	22.5	0	0.0	9	12.3	4	9.8	22	15.2	5	6.3		
70 – 74	0	0.0	2	18.2	5	25.0	0	0.0	7	17.5	3	13.0	10	13.7	7	17.1	22	15.2	12	15.2		
75 – 79	3	25.0	3	27.3	4	20.0	2	50.0	8	20.0	4	17.4	12	16.4	5	12.2	27	18.6	14	17.7		
80 – 84	1	8.3	2	18.2	2	10.0	1	25.0	4	10.0	4	17.4	4	5.5	10	24.4	11	7.6	17	21.5		
85+	1	8.3	3	27.3	2	10.0	1	25.0	4	10.0	4	17.4	6	8.2	6	14.6	13	9.0	14	17.7		
Total	12	100.0	11	100.0	20	100.0	4	100.0	40	100.0	23	100.0	73	100.0	41	100.0	145	100.0	79	100.0		

E3.2: Gastric patients

	Borders				DGRI				Fife				Lothian				SCAN					
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Under 45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4	1	4.5	1	1.3	1	2.0		
45 – 49	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	9.1	0	0.0	2	4.1		
50 – 54	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	1	5.9	1	2.4	0	0.0	2	2.6	1	2.0		
55 – 59	0	0.0	1	16.7	0	0.0	0	0.0	2	7.1	1	5.9	0	0.0	0	0.0	2	2.6	2	4.1		
60 – 64	0	0.0	0	0.0	0	0.0	0	0.0	1	3.6	1	5.9	7	17.1	2	9.1	8	10.3	3	6.1		
65 – 69	0	0.0	3	50.0	0	0.0	0	0.0	1	3.6	2	11.8	5	12.2	0	0.0	6	7.7	5	10.2		
70 – 74	1	20.0	0	0.0	0	0.0	2	50.0	8	28.6	1	5.9	9	22.0	5	22.7	18	23.1	8	16.3		
75 – 79	1	20.0	1	16.7	2	50.0	2	50.0	9	32.1	5	29.4	14	34.1	4	18.2	26	33.3	12	24.5		
80 – 84	1	20.0	1	16.7	1	25.0	0	0.0	4	14.3	4	23.5	3	7.3	4	18.2	9	11.5	9	18.4		
85+	2	40.0	0	0.0	0	0.0	0	0.0	3	10.7	2	11.8	1	2.4	4	18.2	6	7.7	6	12.2		
Total	5	100.0	6	100.0	4	100.0	4	100.0	28	100.0	17	100.0	41	100.0	22	100.0	78	100.0	49	100.0		

E4: Deprivation Category

Note: Not found category indicates cases for which a corresponding deprivation category code is not associated with the recorded post code.

E4.1: Oesophageal patients

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Null	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	0	0.0	4	16.7	12	19.0	15	13.2	31	13.8
2	7	30.4	6	25.0	19	30.2	32	28.1	64	28.6
3	9	39.1	7	29.2	12	19.0	25	21.9	53	23.7
4	6	26.1	7	29.2	11	17.5	17	14.9	41	18.3
5	1	4.3	0	0.0	9	14.3	25	21.9	35	15.6
TOTAL	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

E4.2: Gastric patients

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Null	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	0	0.0	2	25.0	11	24.4	9	14.3	22	17.3
2	1	9.1	1	12.5	13	28.9	12	19.0	27	21.3
3	4	36.4	3	37.5	8	17.8	13	20.6	28	22.0
4	6	54.5	1	12.5	8	17.8	12	19.0	27	21.3
5	0	0.0	1	12.5	5	11.1	17	27.0	23	18.1
TOTAL	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

E5: WHO/ECOG performance status

E5.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
0	0	0.0	6	25.0	1	1.6	8	7.0	15	6.7
1	0	0.0	6	25.0	1	1.6	6	6.0	13	5.8
2	0	0.0	2	8.3	1	1.6	0	0.0	3	1.3
3	0	0.0	1	4.2	2	3.2	1	0.9	4	1.8
4	0	0.0	0	0.0	0	0.0	1	0.9	1	0.4
Missing Data	23	100.0	0	0.0	0	0.0	7	6.1	30	13.4
Not Known	0	0.0	9	37.5	58	92.1	91	79.8	158	70.5
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

E5.2: Gastric patients

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
0	0	0.0	1	12.5	0	0.0	6	9.5	7	5.5
1	0	0.0	4	50.0	0	0.0	5	7.9	9	7.1
2	0	0.0	1	12.5	2	4.4	0	0.0	3	2.4
3	0	0.0	0	0.0	1	2.2	0	0.0	1	0.8
4	0	0.0	0	0.0	1	2.2	0	0.0	1	0.8
Missing Data	11	100.0	0	0.0	0	0.0	14	22.2	25	19.7
Not Known	0	0.0	2	25.0	41	91.1	38	60.3	81	63.8
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

- 0 Fully active. Able to carry on all pre-disease performance without restriction.
- 1 Restricted in physically strenuous activities but ambulatory and able to carry out work of a light and sedentary nature.
- 2 Ambulatory and capable of all self-care but unable to carry out many work activities; up and about more than 50 waking hours.
- 3 Capable of only limited self-care; confined to bed or a chair for more than 50 waking hours.
- 4 Completely disabled; unable to carry out any self-care; totally confined to bed or a chair.

Note: "Not known" = "Not clinically recorded".

Comment: For the majority of patients the performance status is not clinically recorded (except in those cases where oncological treatment is administered). However, it is recognised to be an important indicator of case-mix and is likely to be a requirement of national Quality Performance Indicators.

Action Point: To improve clinical recording of performance status.

DIAGNOSIS AND STAGING

D1: Staging investigations total number of patients receiving each type of investigation (PET scan, Endoscopic Ultrasound (EUS), Laparoscopy & CT)

n = all patients diagnosed in the year (excluding metastatic disease at presentation)

D1.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n = 18		n = 20		n = 53		n = 74		n = 53	
PET	6	33.3%	11	55.0%	22	41.5%	30	40.5%	69	41.8%
EUS	7	38.9%	5	25.0%	20	37.7%	32	43.2%	64	38.8%
Laparoscopy	2	11.1%	20	100.0%	3	5.7%	3	4.1%	28	17.0%
CT	18	100.0%	7	35.0%	49	92.5%	72	97.3%	146	88.5%
Not Recorded	0	0.0%	0	0.0%	0	0.0%	1	1.4%	1	0.6%

D1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n = 6		n = 4		n = 27		n = 47		n = 84	
PET	2	33.3%	1	25.0%	0	0.0%	3	6.4%	6	7.1%
EUS	2	33.3%	2	50.0%	0	0.0%	10	21.3%	14	16.7%
Laparoscopy	2	33.3%	1	25.0%	16	59.3%	26	55.3%	45	53.6%
CT	6	100.0%	4	100.0%	25	92.6%	33	70.2%	68	81.0%
Not Recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Comment: CT scanning is an important component for the investigation of oesophageal-gastric cancers and is likely to be the subject of a national Quality Performance Indicator.

D2a: Clinical Staging - assessment of completeness of data

n = All patients diagnosed in the year including Not Assessable, Not Recorded and Inapplicable

D2a1: Oesophageal patients

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
T Only	0	0.0	1	4.2	3	4.8	3	2.6	7	3.1
N Only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
M Only	13	56.5	0	0.0	0	0.0	32	28.1	45	20.1
T & N	0	0.0	2	8.3	15	23.8	1	0.9	18	8.0
T & M	0	0.0	0	0.0	0	0.0	2	1.8	2	0.9
N & M	0	0.0	0	0.0	0	0.0	1	0.9	1	0.4
TNM Complete	8	34.8	11	45.8	13	20.6	54	47.4	86	38.4
Not Recorded/Assessed	2	8.7	10	41.7	31	49.2	21	18.4	64	28.6
Inapplicable	0	0.0	0	0.0	1	1.6	0	0.0	1	0.4
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

D2b1: Gastric patients

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
T Only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
N Only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
M Only	7	63.6	1	12.5	0	0.0	31	49.2	39	30.7
T & N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
T & M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
N & M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TNM Complete	2	18.2	1	12.5	0	0.0	8	12.7	11	8.7
Not Recorded/Assessed	2	18.2	6	75.0	45	100.0	24	38.1	77	60.6
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

D2b1: Clinical Staging - Oesophageal patients

n = All patients diagnosed in the year split by stage - including Not Assessable, Not Recorded and Inapplicable

	BORDERS		DGRI		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stage 1	0	0.0	1	4.2	0	0.0	3	2.6	4	1.8
Stage 2A	0	0.0	1	4.2	0	0.0	16	14.0	17	7.6
Stage 2B	0	0.0	1	4.2	0	0.0	0	0.0	1	0.4
Stage 3	0	0.0	3	12.5	0	0.0	26	22.8	29	12.9
Stage 4	0	0.0	5	20.8	0	0.0	40	35.1	45	20.1
Staging Error	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unable to Stage	0	0.0	3	12.5	0	0.0	0	0.0	3	1.3
Not Recorded	23	100.0	10	41.7	63	100.0	29	25.4	125	55.8
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

D2b2: Clinical Staging - Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stage 1	0	0.0	0	0.0	0	0.0	3	4.8	3	2.4
Stage 2A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stage 2B	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stage 3	0	0.0	0	0.0	0	0.0	4	6.3	4	3.1
Stage 4	0	0.0	2	25.0	0	0.0	15	23.8	17	13.4
Staging Error	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unable to Stage	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	11	100.0	6	75.0	45	100.0	41	65.1	103	81.1
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

D2c: Staging - surgical patients

n = All patients who had surgery
Excluding surgery for diagnostic or staging purposes

D2c.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stage 1	0	0.0	1	16.7	0	0.0	3	15.8	4	9.8
Stage 2A	0	0.0	0	0.0	0	0.0	3	15.8	3	7.3
Stage 2B	0	0.0	0	0.0	0	0.0	1	5.3	1	2.4
Stage 3	0	0.0	2	33.3	0	0.0	2	10.5	4	9.8
Stage 4	0	0.0	2	33.3	0	0.0	0	0.0	2	4.9
Staging Error	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unable to Stage	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	4	100.0	1	16.7	12	100.0	10	52.6	27	65.9
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

D2c.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stage 1	0	0.0	0	0.0	0	0.0	2	7.4	2	4.8
Stage 2A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stage 2B	0	0.0	1	50.0	0	0.0	0	0.0	1	2.4
Stage 3	0	0.0	0	0.0	0	0.0	5	18.5	5	11.9
Stage 4	0	0.0	1	50.0	0	0.0	4	14.8	5	11.9
Staging Error	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unable to Stage	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	2	100.0	0	0.0	11	100.0	16	59.3	29	69.0
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

MANAGEMENT

M1: Discussed by MDT

n = All patients diagnosed in the year

M1.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Discussed	21	91.3	24	100.0	61	96.8	111	97.4	217	96.9
Not Discussed	2	8.7	0	0.0	2	3.2	3	2.6	7	3.1
Planned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

M1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Discussed	8	72.7	8	100.0	44	97.8	59	93.7	119	93.7
Not Discussed	3	27.3	0	0.0	1	2.2	4	6.3	8	6.3
Planned	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

M2: Seen by clinical nurse specialist (CNS)

n= All patients diagnosed in the year

M2.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Seen by CNS	13	56.5	22	91.7	61	96.8	85	74.6	181	80.8
Not seen by CNS	7	30.4	2	8.3	2	3.2	16	14.0	27	12.1
Planned	2	8.7	0	0.0	0	0.0	1	0.9	3	1.3
Not Recorded	1	4.3	0	0.0	0	0.0	12	10.5	13	5.8
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

M2.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Seen by CNS	3	27.3	7	87.5	44	97.8	49	77.8	103	81.1
Not seen by CNS	6	54.5	1	12.5	1	2.2	14	22.2	22	17.3
Planned	1	9.1	0	0.0	0	0.0	0	0.0	1	0.8
Not Recorded	1	9.1	0	0.0	0	0.0	0	0.0	1	0.8
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

Comment: There is no Clinical Nurse Specialist in Borders. Some patients who come to Lothian for treatment are seen by the Lothian Clinical Nurse Specialist.

M3: Patients assessed by dietician

n = All patients diagnosed in the year

M3.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Seen by Dietician	20	87.0	10	41.7	13	20.6	64	56.1	107	47.8
Not seen by Dietician	1	4.3	5	20.8	0	0.0	15	13.2	21	9.4
Planned	2	8.7	0	0.0	0	0.0	3	2.6	5	2.2
Missing Data	0	0.0	0	0.0	0	0.0	2	1.8	2	0.9
Not Recorded	0	0.0	9	37.5	50	79.4	30	26.3	89	39.7
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

M3.2 : Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Seen by Dietician	6	54.5	3	37.5	11	24.4	32	50.8	52	40.9
Not seen by Dietician	3	27.3	3	37.5	0	0.0	27	42.9	33	26.0
Planned	1	9.1	0	0.0	0	0.0	3	4.8	4	3.1
Missing Data	1	9.1	0	0.0	0	0.0	0	0.0	1	0.8
Not Recorded	0	0.0	2	25.0	34	75.6	1	1.6	37	29.1
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

Comment: Continued gaps in the dietetic input to care of patients. This relates to dietetic resource issues e.g. delayed replacement of dietetic vacancy in Fife.

Fife : This is an area which is difficult to collect data on, not always routinely recorded in notes

M4: Mode of First Treatment

n = All patients diagnosed in the year

M4.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Surgery	2	8.7	2	8.3	3	4.8	7	6.1	14	6.3
Radiotherapy	1	4.3	5	20.8	10	15.9	15	13.2	31	13.8
Chemotherapy	6	26.1	5	20.8	17	27.0	22	19.3	50	22.3
Synchronous Chemoradiotherapy	0	0.0	0	0.0	1	1.6	3	2.6	4	1.8
Endoscopic	6	26.1	3	12.5	17	27.0	60	52.6	86	38.4
Not Active Treatment (Supportive Care)	6	26.1	8	33.3	14	22.2	4	3.5	32	14.3
Patient Refused all therapies	0	0.0	0	0.0	1	1.6	0	0.0	1	0.4
Other Therapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No Active Treatment (Watchful Waiting)	1	4.3	1	4.2	0	0.0	1	0.9	3	1.3
Patient died before treatment	1	4.3	0	0.0	0	0.0	2	1.8	3	1.3
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

M4.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Surgery	1	9.1	2	25.0	9	20.0	25	39.7	37	29.1
Radiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chemotherapy	2	18.2	2	25.0	6	13.3	11	17.5	21	16.5
Synchronous Chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Endoscopic	1	9.1	0	0.0	3	6.7	9	14.3	13	10.2
Not Active Treatment (Supportive Care)	7	63.6	4	50.0	25	55.6	13	20.6	49	38.6
Patient Refused all therapies	0	0.0	0	0.0	0	0.0	2	3.2	2	1.6
Other Therapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No Active Treatment (Watchful Waiting)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient died before treatment	0	0.0	0	0.0	2	4.4	3	4.8	5	3.9
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

Comment: Variations in the percentage receiving surgery as first treatment have been noted and there will be further review of the reasons for these, considering that the decisions for surgery are

made at the regional MDM. Relevant issues include possible differences in age and deprivation category.

Action Point: To review data on variances in surgery rates across SCAN.

Comment: Noted that the numbers of patients receiving preoperative chemotherapy is gradually increasing.

SURGERY

S1: Number of patients receiving surgery

n = All patients diagnosed in the year

S1.1: All patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Surgery	6	17.6	8	25.0	23	21.3	54	30.5	91	25.9
No Surgery	28	82.4	24	75.0	85	78.7	122	68.9	259	73.8
Patient Refused	0	0.0	0	0.0	0	0.0	1	0.6	1	0.3
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	34	100.0	32	100.0	108	100.0	177	100.0	351	100.0

S1.2: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Surgery	4	17.4	6	25.0	12	19.0	20	17.5	42	18.8
No Surgery	19	82.6	18	75.0	51	81.0	94	82.5	182	81.3
Patient Refused	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

S1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Surgery	2	18.2	2	25.0	11	24.4	34	54.0	49	38.6
No Surgery	9	81.8	6	75.0	34	75.6	28	44.4	77	60.6
Patient Refused	0	0.0	0	0.0	0	0.0	1	1.6	1	0.8
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

S2: Age and gender distribution of patients receiving surgery

n = All patients diagnosed in the year

S2.1: Oesophageal patients

	Borders				DGRI				Fife				Lothian				SCAN					
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Under 45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45 – 49	0	0.0	0	0.0	2	40.0	0	0.0	0	0.0	0	0.0	1	6.3	0	0.0	3	9.7	0	0.0	0	0.0
50 – 54	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	12.5	0	0.0	3	9.7	0	0.0	0	0.0
55 – 59	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	1	6.3	1	25.0	1	3.2	3	27.3	3	27.3
60 – 64	1	50.0	0	0.0	1	20.0	0	0.0	0	0.0	1	25.0	5	31.3	2	50.0	7	22.6	3	27.3	3	27.3
65 – 69	0	0.0	0	0.0	1	20.0	0	0.0	4	50.0	0	0.0	4	25.0	1	25.0	9	29.0	1	9.1	1	9.1
70 – 74	0	0.0	1	50.0	1	20.0	0	0.0	2	25.0	1	25.0	2	12.5	0	0.0	5	16.1	2	18.2	2	18.2
75 – 79	0	0.0	1	50.0	0	0.0	1	100.0	2	25.0	0	0.0	1	6.3	0	0.0	3	9.7	2	18.2	2	18.2
80 – 84	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	2	100.0	5	100.0	1	100.0	8	100.0	4	100.0	16	100.0	4	100.0	31	100.0	11	100.0	11	100.0

S2.2: Gastric patients

	Borders				DGRI				Fife				Lothian				SCAN					
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Under 45	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45 – 49	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	14.3	0	0.0	1	6.7	0	0.0
50 – 54	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	3.7	0	0.0	2	5.9	0	0.0	0	0.0
55 – 59	0	0.0	1	50.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	1	2.9	1	6.7	0	0.0
60 – 64	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0	5	18.5	1	14.3	5	14.7	2	13.3	0	0.0
65 – 69	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	1	20.0	5	18.5	0	0.0	5	14.7	2	13.3	0	0.0
70 – 74	0	0.0	0	0.0	0	0.0	1	100.0	4	66.7	0	0.0	5	18.5	4	57.1	9	26.5	5	33.3	0	0.0
75 – 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	29.6	0	0.0	8	23.5	0	0.0	0	0.0
80 – 84	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	3	60.0	2	7.4	1	14.3	3	8.8	4	26.7	0	0.0
85+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.7	0	0.0	1	2.9	0	0.0	0	0.0
Total	0	0.0	2	100.0	1	100.0	1	100.0	6	100.0	5	100.0	27	100.0	7	100.0	34	100.0	15	100.0	0	0.0

S3: Deprivation Category for surgical patients

Note: Null category indicates cases for whom a corresponding deprivation category code is not associated with the recorded post code or where a postcode is not recorded.

n = All patients diagnosed in the year

S3.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Null	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	0	0.0	1	16.7	2	16.7	0	0.0	3	7.1
2	2	50.0	3	50.0	3	25.0	5	25.0	13	31.0
3	2	50.0	0	0.0	3	25.0	5	25.0	10	23.8
4	0	0.0	2	33.3	3	25.0	3	15.0	8	19.0
5	0	0.0	0	0.0	1	8.3	7	35.0	8	19.0
Total	4	100.0	6	100.0	12	100.0	20	100.0	42	100.0

S3.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Null	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1	0	0.0	1	50.0	2	18.2	7	20.6	10	20.4
2	1	50.0	0	0.0	6	54.5	7	20.6	14	28.6
3	0	0.0	1	50.0	0	0.0	6	17.6	7	14.3
4	1	50.0	0	0.0	2	18.2	5	14.7	8	16.3
5	0	0.0	0	0.0	1	9.1	9	26.5	10	20.4
Total	2	100.0	2	100.0	11	100.0	34	100.0	49	100.0

S4: Surgical procedures performed

n = All patients having surgery

Exclude: surgery for staging or diagnostic purposes only

S4.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Total Gastrectomy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Trans-Hiatal Oesophagectomy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
L Thoraco-abdominal oesophago-gastrectomy	0	0.0	0	0.0	0	0.0	1	5.3	1	2.4
Sub Total Gastrectomy	0	0.0	0	0.0	0	0.0	2	10.5	2	4.9
Oesophogogastrectomy and anastomosis of oesophagus to stomach (Ivor Lewis)	3	75.0	4	66.7	11	91.7	12	63.2	30	73.2
Thoracoscopic-assisted Oesophagectomy	0	0.0	0	0.0	0	0.0	3	15.8	3	7.3
Pharyngolaryngeal Oesophagectomy	0	0.0	0	0.0	0	0.0	1	5.3	1	2.4
Laparotomy only	0	0.0	2	33.3	0	0.0	0	0.0	2	4.9
Other	1	25.0	0	0.0	0	0.0	0	0.0	1	2.4
Not Recorded	0	0.0	0	0.0	1	8.3	0	0.0	1	
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

S4.2: Gastric patients (by health board of diagnosis)

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Total Gastrectomy	0	0.0	0	0.0	4	36.4	10	37.0	14	33.3
L Thoraco-abdominal oesophago-gastrectomy	0	0.0	0	0.0	0	0.0	1	3.7	1	2.4
Sub Total Gastrectomy	0	0.0	0	0.0	5	45.5	10	37.0	15	35.7
Partial Gastrectomy	0	0.0	0	0.0	1	9.1	3	11.1	4	9.5
Ivor Lewis	2	100.0	0	0.0	0	0.0	1	3.7	3	7.1
Distal Gastrectomy	0	0.0	1	50.0	0	0.0	0	0.0	1	2.4
Laparotomy only	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gastrojejunostomy	0	0.0	1	50.0	0	0.0	0	0.0	1	2.4
Other	0	0.0	0	0.0	1	9.1	2	7.4	3	7.1
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

Note: Gastric operations for Lothian and Borders patients are carried out at the New Royal Infirmary of Edinburgh and for Fife patients at Queen Margaret Hospital, Dunfermline.

S5: Postoperative complications – surgical patients having at least one post-operative complication

n = Patients having surgery

Exclusions: Patients having staging or diagnostic surgical procedures

S5.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Post op complications	1	25.0	2	33.3	6	50.0	9	47.4	18	43.9
No postop complications	3	75.0	4	66.7	6	50.0	10	52.6	23	56.1
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

S5.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Post op complications	0	0.0	1	50.0	5	45.5	9	33.3	15	35.7
No postop complications	2	100.0	1	50.0	6	54.5	17	63.0	26	61.9
Missing Data	0	0.0	0	0.0	0	0.0	1	3.7	1	2.4
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

Breakdown of major complications

Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Anastomotic leak	1	100.0	0	0.0	1	16.7	0	0.0	2	11.8
Pulmonary	0	0.0	1	50.0	1	16.7	7	87.5	9	52.9
Gastric Dysfunction	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cardiac	0	0.0	0	0.0	1	16.7	1	12.5	2	11.8
Wound infection/dehiscence	0	0.0	0	0.0	1	16.7	0	0.0	1	5.9
Intra abdominal collection/abscess	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Postoperative bleeding	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pancreatic leak	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bile leak	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Enteric leak	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Liver failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Renal failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other complication	0	0.0	1	50.0	2	33.3	0	0.0	3	17.6
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1	100.0	2	100.0	6	100.0	8	100.0	17	100.0

Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Anastomotic leak	0	0.0	0	0.0	0	0.0	3	33.3	3	20.0
Pulmonary	0	0.0	0	0.0	1	20.0	2	22.2	3	20.0
Gastric Dysfunction	0	0.0	0	0.0	0	0.0	1	11.1	1	6.7
Cardiac	0	0.0	0	0.0	0	0.0	1	11.1	1	6.7
Wound infection/dehiscence	0	0.0	0	0.0	0	0.0	1	11.1	1	6.7
Intra abdominal collection/abscess	0	0.0	0	0.0	1	20.0	0	0.0	1	6.7
Postoperative bleeding	0	0.0	0	0.0	0	0.0	1	11.1	1	6.7
Pancreatic leak	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bile leak	0	0.0	0	0.0	1	20.0	0	0.0	1	6.7
Enteric leak	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Liver failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Renal failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other complication	0	0.0	1	100.0	2	40.0	0	0.0	3	20.0
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	0	0.0	1	100.0	5	100.0	9	100.0	15	100.0

S6: 30 day mortality for surgical patients: Patients who die within 30 days of definitive surgery

n = Patients having surgery

S6.1: All Patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	1	4.3	0	0.0	1	1.2
Patient alive within 30 days	6	100.0	8	100.0	22	95.7	46	100.0	82	98.8
Total	6	100.0	8	100.0	23	100.0	46	100.0	83	100.0

S6.2: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient alive within 30 days	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

Note: All Oesophageal operations performed at New Royal Infirmary of Edinburgh.

S6.3: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	1	9.1	0	0.0	1	2.4
Patient alive within 30 days	2	100.0	2	100.0	10	90.9	27	100.0	41	97.6
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

Note: Gastric operations for Lothian and Borders patients are performed at the New Royal Infirmary of Edinburgh and for Fife patients at Queen Margaret Hospital, Dunfermline.

S6a: 90 day mortality for surgical patients

n = All patients having surgery (excluding surgery for staging or diagnostic purposes) by Health Board of diagnosis

S6a.1: All patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 90 days	0	0.0	1	12.5	1	4.3	2	4.3	4	4.8
Patient alive within 90 days	6	100.0	7	87.5	22	95.7	44	95.7	79	95.2
Total	6	100.0	8	100.0	23	100.0	46	100.0	83	100.0

S6a.2: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 90 days	0	0.0	1	16.7	0	0.0	1	5.3	2	4.9
Patient alive within 90 days	4	100.0	5	83.3	12	100.0	18	94.7	39	95.1
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

S6a.3: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 90 days	0	0.0	0	0.0	1	9.1	1	3.7	2	4.8
Patient alive within 90 days	2	100.0	2	100.0	10	90.9	26	96.3	40	95.2
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

S7: Residual disease (only for surgeries with curative intent and where resections have been completed)

Note: Curative intent is based on the operative procedure recorded

n = All patients having curative (complete) resections (exc surgery for staging or diagnostic purposes) based on Health Board of Diagnosis

S7.1: Oesophageal patients

Note: All Oesophageal operations performed at New Royal Infirmary of Edinburgh.

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
No residual disease	3	100.0	2	50.0	5	41.7	10	52.6	20	52.
Microscopic	0	0.0	0	0.0	6	50.0	9	47.4	15	39.5
Macroscopic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	2	50.0	1	8.3	0	0.0	3	7.9
Missing data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	3	100.0	4	100.0	12	100.0	19	100.0	38	100.0

S7.2: Gastric patients

Note: Gastric operations for Lothian and Borders patients performed at New Royal Infirmary of Edinburgh and for Fife patients at Queen Margaret Hospital, Dunfermline.

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
No residual disease	1	50.0	1	100.0	5	45.5	22	95.7	29	78.4
Microscopic	0	0.0	0	0.0	6	54.5	1	4.3	7	18.9
Macroscopic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Missing data	1	50.0	0	0.0	0	0.	0	0.0	1	2.7
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	1	100.0	11	100.0	23	100.0	37	100.0

Comment: Continuing need for international agreement on methods of recording of residual disease. This is likely to be included in national Quality Performance Indicators.

S8: Curative surgical patients receiving chemotherapy

Only for surgeries with curative intent based on operation code

n = All patients having surgery with curative intent (exc surgery for staging or diagnostic purposes)

S8.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Perioperative chemo*	2	66.7	2	50.0	10	83.3	11	57.9	25	65.8
Chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Adjuvant Chemo	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No Chemo	1	33.3	2	50.0	0	0.0	7	36.8	10	26.3
Palliative	0	0.0	0	0.0	2	16.7	1	5.3	3	7.9
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	3	100.0	4	100.0	12	100.0	19	100.0	38	100.0

S8.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Perioperative chemo*	1	50.0	0	0.0	2	18.2	5	21.7	8	21.6
Chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Adjuvant Chemo	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No Chemo	1	50.0	1	100.0	0	0.0	18	78.3	20	54.1
Palliative	0	0.0	0	0.0	9	81.8	0	0.0	9	24.3
Missing Data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	2	100.0	1	100.0	11	100.0	23	100.0	37	100.0

*Neoadjuvant and adjuvant

PATHOLOGY

P1: Tumour morphology (all patients)

n = All patients diagnosed in year

P1.1 Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Adenocarcinoma	15	65.2	15	62.5	38	60.3	70	61.4	138	61.6
Squamous cell carcinoma	6	26.1	5	20.8	17	27.0	30	26.3	58	25.9
Neuroendocrine Tumour	1	4.3	0	0.0	0	0.0	0	0.0	1	0.4
Adenosquamous carcinoma	0	0.0	0	0.0	0	0.0	1	0.9	1	0.4
Carcinoma; undifferentiated; nos unclassified tumour; malignant	0	0.0	1	4.2	6	9.5	12	10.5	19	8.5
Small cell carcinoma	0	0.0	0	0.0	0	0.0	1	0.9	1	0.4
Carcinoid	1	4.3	0	0.0	0	0.0	0	0.0	1	0.4
Not assessable	0	0.0	1	4.2	2	3.2	0	0.0	3	1.3
Inapplicable	0	0.0	2	8.3		0.0		0.0	2	0.9
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

P1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Adenocarcinoma	10	90.9	7	87.5	40	88.9	54	85.7	111	87.4
Squamous cell carcinoma	0	0.0	0	0.0	0	0.0	1	1.6	1	0.8
Neuroendocrine Tumour	0	0.0	0	0.0	0	0.0	4	6.3	4	3.1
Adenosquamous carcinoma	0	0.0	0	0.0	0	0.0	1	1.6	1	0.8
Carcinoma; undifferentiated; nos unclassified tumour; malignant	1	9.1	1	12.5	3	6.7	2	3.2	7	5.5
Small cell carcinoma	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Carcinoid	0	0.0	0	0.0	0	0.0	1	1.6	1	0.8
Not assessable	0	0.0	0	0.0	2	4.4	0	0.0	2	1.6
Inapplicable	0	0.0	0	0.0		0.0		0.0	0	0.0
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

P1a: Tumour morphology (for surgical patients)

n = Patients having surgery

Exclusions: Patients having staging or diagnostic surgical procedures

P1a1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Adenocarcinoma	2	50.0	5	83.3	8	66.7	16	84.2	31	75.6
Squamous cell carcinoma	1	25.0	1	16.7	4	33.3	3	15.8	9	22.0
Other	1	25.0	0	0.0	0	0.0	0	0.0	1	2.4
Not Recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

P1a2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Adenocarcinoma	2	100.0	2	100.0	9	81.8	26	96.3	39	92.9
Squamous cell carcinoma	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	0	0.0	1	3.7	1	2.4
Not Recorded	0	0.0	0	0.0	2	18.2	0	0.0	2	4.8
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

P2a: Nodes examined (surgical patients)

n = Patients having surgery

Exclusions: Patients having staging or diagnostic surgical procedures

P2a.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Less than or equal to 10	1	25.0	1	16.7	0	0.0	1	5.3	3	7.3
11 - 19	1	25.0	3	50.0	3	25.0	10	52.6	17	41.5
Greater than or equal to 20	2	50.0	1	16.7	8	66.7	8	42.1	19	46.3
Not surgically sampled	0	0.0	1	16.7	1	8.3	0	0.0	2	4.9
Not known/not recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

P2a.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Less than or equal to 10	0	0.0	0	0.0	3	27.3	1	3.7	4	9.5
11 - 19	1	50.0	1	50.0	2	18.2	11	40.7	15	35.7
Greater than or equal to 20	1	50.0	0	0.0	5	45.5	13	48.1	19	45.2
Not surgically sampled	0	0.0	1	50.0	1	9.1	0	0.0	2	4.8
Not known/not recorded	0	0.0	0	0.0	0	0.0	2	7.4	2	4.8
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

P2b: Nodes involved (surgical patients)

n = All patients having surgery excluding surgery for staging or diagnostic purposes

P2b.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Less than or equal to 10	4	100.0	4	66.7	9	75.0	19	100.0	36	87.8
11 - 19	0	0.0	1	16.7	2	16.7	0	0.0	3	7.3
Greater than or equal to 20	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not surgically sampled	0	0.0	1	16.7	0	0.0	0	0.0	1	2.4
Not known/not recorded	0	0.0	0	0.0	1	8.3	0	0.0	1	2.4
Total	4	100.0	6	100.0	12	100.0	19	100.0	41	100.0

P2b.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Less than or equal to 10	2	100.0	1	50.0	9	81.8	19	70.4	31	73.8
11 - 19	0	0.0	0	0.0	1	9.1	5	18.5	6	14.3
Greater than or equal to 20	0	0.0	0	0.0	0	0.0	1	3.7	1	2.4
Not surgically sampled	0	0.0	1	50.0	1	9.1	0	0.0	2	4.8
Not known/not recorded	0	0.0	0	0.0	0	0.0	2	7.4	2	4.8
Total	2	100.0	2	100.0	11	100.0	27	100.0	42	100.0

ONCOLOGICAL TREATMENT

O1: Radiotherapy treatment

n = All patients diagnosed in the year

O1.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Chemoradiotherapy	0	0.0	0	0.0	1	1.6	3	2.6	4	1.8
Radical radiotherapy (defined as ≥ 20 #)	1	4.3	1	4.2	5	7.9	9	7.9	16	7.1
Palliative radiotherapy	0	0.0	4	16.7	7	11.1	9	7.9	20	8.9
No radiotherapy	22	95.7	18	75.0	50	79.4	93	81.6	183	81.7
Not known/not recorded	0	0.0	1	4.2	0	0.0	0	0.0	1	0.4
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

O1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Palliative radiotherapy	1	9.1	0	0.0	0	0.0	0	0.0	1	1.6
Chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No radiotherapy	10	90.9	8	100.0	45	100.0	63	0.0	126	98.4
Not known/not recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	11	100.0	8	100.0	45	100.0	63	0.0	127	100.0

O2: 30 day mortality for radiotherapy patients

n = All patients receiving Radiotherapy

O2.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	1	20.0	2	15.4	2	9.5	5	12.5
Patient alive within 30 days	1	100.0	4	80.0	11	84.6	19	90.5	35	87.5
Total	1	100.0	5	100.0	13	100.0	21	100.0	40	100.0

Fife: Both patients were treated with palliative radiotherapy

O2.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0		0.0	0	0.0	0	0.0	0	0.0
Patient alive within 30 days	1	100.0		0.0	0	0.0	0	0.0	1	100.0
Total	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0

No Lothian gastric patients having radiotherapy.

O3: Type of chemotherapy treatment

n = All patients diagnosed in the year

O3.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Neoadjuvant	3	13.0	3	12.5	10	15.9	12	10.5	28	12.5
Adjuvant	1	4.3	0	0.0	0	0.0	0	0.0	1	0.4
Chemoradiotherapy	0	0.0	0	0.0	1	1.6	3	2.6	4	1.8
Palliative	3	13.0	2	8.3	6	9.5	20	17.5	31	13.8
No chemotherapy	16	69.6	19	79.2	46	73.0	77	67.5	158	70.5
Patient Refused	0	0.0	0	0.0	0	0.0	2	1.8	2	0.9
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

O3.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Neoadjuvant	1	9.1	0	0.0	2	4.4	1	1.6	4	3.1
Adjuvant	0	0.0	0	0.0	0	0.0	5	7.9	5	3.9
Chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Palliative	1	9.1	3	37.5	5	11.1	9	14.3	18	14.2
No chemotherapy	9	81.8	5	62.5	38	84.4	46	73.0	98	77.2
Patient Refused	0	0.0	0	0.0	0	0.0	2	3.2	2	1.6
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

O4: Neoadjuvant chemotherapy patients having curative surgery

n = All patients receiving neoadjuvant chemotherapy and surgery with curative intent (exc surgery performed for staging or diagnostic purposes)

O4.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had curative surgical treatment	2	66.7	2	100.0	9	90.0	11	100.0	24	92.3
No curative surgical treatment	1	33.3	0	0.0	1	10.0	0	0.0	2	7.7
Total	3	100.0	2	100.0	10	100.0	11	100.0	26	100.0

Fife : One patient was scheduled for surgery following neoadjuvant chemotherapy, however, chemotherapy had to be stopped due to dysphagia and surgery was not performed; patient was stented instead.

O4.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had curative surgical treatment	1	100.0	0	0.0	2	100.0	1	100.0	4	100.0
No curative surgical treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1	100.0	0	0.0	2	100.0	1	100.0	4	100.0

O5: 30 day mortality for chemotherapy patients

n = All patients receiving chemotherapy

O5.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	0	0.0	1	2.9	1	1.6
Patient alive within 30 days	7	100.0	5	100.0	17	100.0	34	97.1	63	98.4
Total	7	100.0	5	100.0	17	100.0	35	100.0	64	100.0

O5.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient alive within 30 days	2	100.0	3	100.0	7	100.0	15	100.0	27	100.0
Total	2	100.0	3	100.0	7	100.0	15	100.0	27	100.0

O6: Chemoradiotherapy treatment

n = All patients diagnosed in the year

O6.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had chemoradiotherapy	0	0.0	0	0.0	1	1.6	3	2.6	4	1.8
No chemoradiotherapy	23	100.0	24	100.0	62	98.4	111	97.4	220	98.2
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

O6.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had chemoradiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No chemoradiotherapy	11	100.0	8	100.0	45	100.0	63	0.0	127	100.0
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

O7 30 Day Post Chemoradiotherapy Mortality

n = All patients receiving chemoradiotherapy

O7.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient alive within 30 days	0	0.0	0	0.0	1	100.0	3	100.0	4	100.0
Total	0	0.0	0	0.0	1	100.0	3	100.0	4	100.0

O7.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient alive within 30 days	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

CURATIVE TREATMENT

T1: Patients receiving curative treatment

Note: curative treatment is considered to be surgery or chemoradiotherapy

n = All patients receiving curative treatment

Exclusions: patients who died before treatment or refused treatment

T1.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had curative treatment	6	26.1	5	20.8	12	19.0	21	18.4	44	19.6
No curative treatment	17	73.9	19	79.2	51	81.0	93	81.6	180	80.4
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

T1.2: Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Had curative treatment	2	18.2	1	12.5	11	24.4	24	38.1	38	29.9
No curative treatment	9	81.8	7	87.5	34	75.6	39	61.9	89	70.1
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

ENDOSCOPIC TREATMENT

ET1: Endoscopic treatment

N = All patients diagnosed in the year

ET1.1: Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stent with dilation	0	0.0	1	4.2	7	11.1	11	9.6	19	8.5
Stent without dilation	6	26.1	2	8.3	11	17.5	41	36.0	60	26.8
Dilation alone	0	0.0	3	12.5	0	0.0	4	3.5	7	3.1
Endo-mucosal resection	0	0.0	0	0.0	0	0.0	1	0.9	1	0.4
Photodynamic therapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ERCP/PTC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Laser	0	0.0	0	0.0	0	0.0	3	2.6	3	1.3
Laser with dilation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Argon	3	13.0	0	0.0	0	0.0	10	8.8	13	5.8
Argon with dilation	0	0.0	0	0.0	0	0.0	2	1.8	2	0.9
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient refused	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
None	14	60.9	18	75.0	45	71.4	42	36.8	119	53.1
Total	23	100.0	24	100.0	63	100.0	114	100.0	224	100.0

E1.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Stent with dilation	0	0.0	0	0.0	1	2.4	2	3.2	3	2.4
Stent without dilation	1	9.1	0	0.0	2	4.8	6	9.5	9	7.1
Dilation alone	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Endo-mucosal resection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Photodynamic therapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ERCP/PTC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Laser	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Laser with dilation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Argon	0	0.0	0	0.0	0	0.0	3	4.8	3	2.4
Argon with dilation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	0	0.0	1	1.6	1	0.8
Missing data	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Patient refused	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
None	10	90.9	8	100.0	42	100.0	51	81.0	111	87.4
Total	11	100.0	8	100.0	45	100.0	63	100.0	127	100.0

ET2: Complications from endoscopic treatment

n = All patients receiving endoscopic treatment

ET2.1 Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
No complication	9	100.0	6	100.0	18	100.0	48	68.6	81	78.6
Pain/bleeding	0	0	0	0.0	0	0.0	3	4.3	3	2.9
Perforation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stent migration/replacement requiring replacement	0	0.0	0	0.0	0	0.0	1	1.4	1	1.0
Bolus obstruction	0	0.0	0	0.0	0	0.0	4	5.7	4	3.9
Other	0	0.0	0	0.0	0	0.0	1	1.4	1	1.0
Missing data	0	0.0	0	0.0	0	0.0	6	8.6	6	
Not recorded	0	0.0	0	0.0	0	0.0	7	10.0	7	6.8
Inapplicable	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	9	100.0	6	100.0	18	100.0	70	100.0	103	100.0

ET2.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
No complication	1	100.0	0	0.0	3	100.0	6	50.0	10	62.5
Pain/bleeding	0	0.0	0	0.0	0	0.0	1	8.3	1	6.3
Perforation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stent migration/replacement requiring replacement	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bolus obstruction	0	0.0	0	0.0	0	0.0	1	8.3	1	6.3
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Missing data	0	0.0	0	0.0	0	0.0	1	8.3	1	
Not recorded	0	0.0	0	0.0	0	0.0	3	25.0	3	18.8
Inapplicable	0	0.0	0	0.0	0	0.0		0.0	0	0.0
Total	1	100.0	0	0.0	3	100.0	12	100.0	16	100.0

ET3: 30-Day mortality after Endoscopic Treatment

n = All patients receiving endoscopic treatment

ET3.1 Oesophageal patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	1	11.1	1	16.7	1	5.9	9	12.5	12	11.4
Patient alive within 30 days	8	88.9	5	83.3	17	94.4	63	87.5	93	88.6
Total	9	100.0	6	100.0	18	100.0	72	100.0	105	100.0

ET3.2 Gastric patients

	BORDERS		D&G		FIFE		LOTHIAN		SCAN	
	n	%	n	%	n	%	n	%	n	%
Patient died within 30 days	1	100.0	0	0.0	1	33.3	5	41.7	7	43.8
Patient alive within 30 days	0	0.0	0	0.0	2	66.7	7	58.3	9	56.3
Total	1	100.0	0	0.0	3	100.0	12	100.0	16	100.0

Comment and Action point : A further audit is required for 30 day mortality to review the reasons for treatment in this group of patients.

Appendix 1: Glossary

Adjuvant therapy

A treatment given in addition to the main or primary treatment (for example, chemotherapy given after surgery) to try to prevent a cancer recurring.

Audit

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

Case ascertainment

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

Case-mix

Population of patients with different prognostic factors.

Chemotherapy

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

Chemoradiation

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

CNS

A Cancer Nurse Specialist is a first level nurse, locally recognised as part of the specialist cancer multidisciplinary team and designated as a specialist in I cancer.

Computed Tomography (CT) scan

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

Co-morbidity

The condition of having two or more diseases at the same time.

Concurrent Therapy

A treatment that is given at the same time as another treatment.

Cytology/Cytological

The study of the structure and function of cells under the microscope, and of their abnormalities.

Diagnosis

Confirmation of the presence of the disease.

Endoscopic Ultrasound (EUS)

A procedure that combines endoscopy and ultrasound to obtain images and information about the digestive tract and the surrounding tissue and organs

GRO Records

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

Histology/Histological

The study of cells and tissue on the microscopic level.

MDM

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

MDT: Multi-Disciplinary Team

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

Neoadjuvant Therapy

Treatment given as first step to shrink the tumour prior to the main treatment with the 'main' treatment usually as surgery.

NR

Not Recorded.

Outcome

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

effectiveness of care and treatment, and/or rehabilitation.

Palliative Care

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

Palliative Radiotherapy

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

Pathological diagnosis

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

Positron Emission Tomography (PET) scan

A specialised scintigraphic imaging technique now frequently combined with CT which demonstrates uptake of tracer in areas of high cell metabolism and can help differentiate between benign and malignant masses. It is used to help stage cancer by demonstrating or excluding distant metastases.

Primary Tumour

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

Radical Radiotherapy

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

Radiotherapy (RT)

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

Resection

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

Staging

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

TNM Classification

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

Tumour

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

WHO (World Health Organisation) Performance Status (PS)

An overall assessment of the functional/physical performance of the patient (see Appendix for further details).

Appendix 2: Performance Status

WHO/ECOG PERFORMANCE STATUS (PS) CATEGORIES

- | | |
|---|---|
| 0 | Fully active. Able to carry on all pre-disease performance without restriction. |
| 1 | Restricted in physically strenuous activities but ambulatory and able to carry out work of a light and sedentary nature. |
| 2 | Ambulatory and capable of all self-care but unable to carry out many work activities; up and about more than 50 waking hours. |
| 3 | Capable of only limited self-care; confined to bed or a chair for more than 50 of waking hours. |
| 4 | Completely disabled; unable to carry out any self-care; totally confined to bed or a chair. |
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