

Table 4.1

## Characteristics of all patients with bowel cancer included in the current audit report

## South East Scotland Cancer Network (SCAN)

Nationality	Measure	Value	Total (N)	Total (%)
SCAN (Exc Dumfries & Galloway)	Total number of reported cases		807	
SCAN (Exc Dumfries & Galloway)	Total number of surgically treated cases		679	
SCAN (Exc Dumfries & Galloway)	Total number of major resections		594	
SCAN (Exc Dumfries & Galloway)	Sex	Male	462	57.2
SCAN (Exc Dumfries & Galloway)	Sex	Female	345	42.8
SCAN (Exc Dumfries & Galloway)	Age group	<65 yrs	235	29.1
SCAN (Exc Dumfries & Galloway)	Age group	65-74 yrs	249	30.9
SCAN (Exc Dumfries & Galloway)	Age group	75-84 yrs	229	28.4
SCAN (Exc Dumfries & Galloway)	Age group	85+ yrs	94	11.6
SCAN (Exc Dumfries & Galloway)	Cancer Site	Colon	557	71.1
SCAN (Exc Dumfries & Galloway)	Cancer Site	Rectosigmoid**	0	
SCAN (Exc Dumfries & Galloway)	Cancer Site	Rectal	226	28.9
SCAN (Exc Dumfries & Galloway)	Cancer Site	Unknown*	24	

\*Colon-unspecified tumour sites have been excluded from the analysis.

\*\*Please note also that there is no option available within the Scottish national audit to allow for the tumour site Rectosigmoid.

<http://www.scan.scot.nhs.uk/health%20professionals/tumour-specific/colorectal/audit.aspx>

Table 4.2

## Characteristics of patients with a known cancer site

Nationality	Measure	Value	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
SCAN (Exc Dumfries & Galloway)	Total patients per cancer site		557		0		226	
SCAN (Exc Dumfries & Galloway)	Patients undergoing surgery		490		0		178	
SCAN (Exc Dumfries & Galloway)	Sex	Male	304	54.6	0		145	64.2
SCAN (Exc Dumfries & Galloway)	Sex	Female	253	45.4	0		81	35.8
SCAN (Exc Dumfries & Galloway)	Age group	<65 yrs	152	27.3	0		80	35.4
SCAN (Exc Dumfries & Galloway)	Age group	65-74 yrs	172	30.9	0		68	30.1
SCAN (Exc Dumfries & Galloway)	Age group	75-84 yrs	166	29.8	0		54	23.9
SCAN (Exc Dumfries & Galloway)	Age group	85+ yrs	67	12	0		24	10.6
SCAN (Exc Dumfries & Galloway)	Dukes'	A	50	10.4	0		35	20.7
SCAN (Exc Dumfries & Galloway)	Dukes'	B	157	32.7	0		39	23.1
SCAN (Exc Dumfries & Galloway)	Dukes'	C	150	31.3	0		55	32.5
SCAN (Exc Dumfries & Galloway)	Dukes'	D	123	25.6	0		40	23.7
SCAN (Exc Dumfries & Galloway)	Dukes'	No available data*	77		0		57	
SCAN (Exc Dumfries & Galloway)	Liver metastasis	Liver metastasis	81	15.4	0		28	13
SCAN (Exc Dumfries & Galloway)	Liver metastasis	Normal liver	425	80.8	0		176	81.5
SCAN (Exc Dumfries & Galloway)	Liver metastasis	Liver uncertain	20	3.8	0		12	5.6
SCAN (Exc Dumfries & Galloway)	Liver metastasis	No available data*	31		0		10	

\*Due to variances in coding between the national datasets for England and Scotland, some SCAN data is not comparable and therefore is deemed to be unavailable for inclusion in the analysed figures

Table 4.3

## Description of management of the patients with known cancer site

Nationality	Measure	Value	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
SCAN (Exc Dumfries & Galloway)	Total patients per cancer site		557		0		226	
SCAN (Exc Dumfries & Galloway)	Patients undergoing surgery		490		0		178	
SCAN (Exc Dumfries & Galloway)	Discussed at multi-disciplinary team meeting	Yes	541	99.3	0		223	99.6
SCAN (Exc Dumfries & Galloway)	Discussed at multi-disciplinary team meeting	No	4	0.7	0		1	0.4
SCAN (Exc Dumfries & Galloway)	Discussed at multi-disciplinary team meeting	No available data*	12		0		2	
SCAN (Exc Dumfries & Galloway)	Seen by clinical nurse specialist	Yes	495	90	0		211	93.4
SCAN (Exc Dumfries & Galloway)	Seen by clinical nurse specialist	No	55	10	0		15	6.6
SCAN (Exc Dumfries & Galloway)	Seen by clinical nurse specialist	No available data*	7		0		0	
SCAN (Exc Dumfries & Galloway)	Had CT Scan	Yes	530	95.2	0		217	96
SCAN (Exc Dumfries & Galloway)	Had CT Scan	No	27	4.8	0		9	4
SCAN (Exc Dumfries & Galloway)	Surgery type	Major resection	439	89.6	0		146	82
SCAN (Exc Dumfries & Galloway)	Surgery type	Local resection	32	6.5	0		19	10.7
SCAN (Exc Dumfries & Galloway)	Surgery type	Non resectional procedure	9	1.8	0		13	7.3
SCAN (Exc Dumfries & Galloway)	Surgery type	Other procedure	10	2	0		0	
SCAN (Exc Dumfries & Galloway)	Surgery type	No surgery	67		0		48	
SCAN (Exc Dumfries & Galloway)	Urgency of operation	Elective	383	79.6	0		165	95.9
SCAN (Exc Dumfries & Galloway)	Urgency of operation	Scheduled	0		0		0	
SCAN (Exc Dumfries & Galloway)	Urgency of operation	Urgent	0		0		0	
SCAN (Exc Dumfries & Galloway)	Urgency of operation	Emergency	98	20.4	0		7	4.1
SCAN (Exc Dumfries & Galloway)	Urgency of operation	No available data*	9		0		6	
SCAN (Exc Dumfries & Galloway)	Urgency of operation	No surgery	67		0		48	
SCAN (Exc Dumfries & Galloway)	Laparoscopy	Open	361	81.1	0		130	84.4
SCAN (Exc Dumfries & Galloway)	Laparoscopy	Laparoscopic then open	0		0		0	
SCAN (Exc Dumfries & Galloway)	Laparoscopy	Laparoscopy converted to open	12	2.7	0		9	5.8
SCAN (Exc Dumfries & Galloway)	Laparoscopy	Laparoscopic completed	72	16.2	0		15	9.7
SCAN (Exc Dumfries & Galloway)	Laparoscopy	No available data*	45		0		24	
SCAN (Exc Dumfries & Galloway)	Laparoscopy	No surgery	67		0		48	

\*Due to variances in coding between the national datasets for England and Scotland, some SCAN data is not comparable and therefore is deemed to be unavailable for inclusion in the analysed figures. A proportion of missing data is included under "No available data" for surgical and pathological fields only. This is due entirely to 4 patients who had just completed long course chemotherapy/c emoradiotherapy and were awaiting surgery, at the time of submission of the data.

Table 4.4

## Description of the patients who underwent major surgery by cancer site

Nationality	Measure	Value	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
SCAN (Exc Dumfries & Galloway)	Total patients undergoing major resection		439		0		146	
SCAN (Exc Dumfries & Galloway)	Sex	Male	230	52.4	0		103	70.5
SCAN (Exc Dumfries & Galloway)	Sex	Female	209	47.6	0		43	29.5
SCAN (Exc Dumfries & Galloway)	Sex	Missing	0		0		0	
SCAN (Exc Dumfries & Galloway)	Age group	<65 yrs	122	27.8	0		57	39
SCAN (Exc Dumfries & Galloway)	Age group	65-74 yrs	145	33	0		47	32.2
SCAN (Exc Dumfries & Galloway)	Age group	75-84 yrs	125	28.5	0		33	22.6
SCAN (Exc Dumfries & Galloway)	Age group	85+ yrs	47	10.7	0		9	6.2
SCAN (Exc Dumfries & Galloway)	ASA	ASA 1: fit	23	9.2	0		10	13.3
SCAN (Exc Dumfries & Galloway)	ASA	ASA 2: relevant disease	136	54.6	0		46	61.3
SCAN (Exc Dumfries & Galloway)	ASA	ASA 3: restrictive disease	74	29.7	0		18	24
SCAN (Exc Dumfries & Galloway)	ASA	ASA 4: life-threatening disease	16	6.4	0		1	1.3
SCAN (Exc Dumfries & Galloway)	ASA	ASA 5: moribund	0		0		0	
SCAN (Exc Dumfries & Galloway)	ASA	No available data*	190		0		71	
SCAN (Exc Dumfries & Galloway)	Dukes'	A	48	11.2	0		35	24.6
SCAN (Exc Dumfries & Galloway)	Dukes'	B	155	36.1	0		37	26.1
SCAN (Exc Dumfries & Galloway)	Dukes'	C	147	34.3	0		55	38.7
SCAN (Exc Dumfries & Galloway)	Dukes'	D	79	18.4	0		15	10.6
SCAN (Exc Dumfries & Galloway)	Dukes'	No available data*	10		0		4	
SCAN (Exc Dumfries & Galloway)	Urgency	Elective	349	79.9	0		143	97.9
SCAN (Exc Dumfries & Galloway)	Urgency	Scheduled	0		0		0	
SCAN (Exc Dumfries & Galloway)	Urgency	Urgent	0		0		0	
SCAN (Exc Dumfries & Galloway)	Urgency	Emergency	88	20.1	0		3	2.1
SCAN (Exc Dumfries & Galloway)	Urgency	No available data*	2		0		0	
SCAN (Exc Dumfries & Galloway)	Procedure	Right hemicolectomy	218	49.7	0		0	
SCAN (Exc Dumfries & Galloway)	Procedure	Transverse colectomy	8	1.8	0		0	
SCAN (Exc Dumfries & Galloway)	Procedure	Left hemicolectomy	34	7.7	0		0	
SCAN (Exc Dumfries & Galloway)	Procedure	Sigmoid colectomy	25	5.7	0		0	
SCAN (Exc Dumfries & Galloway)	Procedure	Total/subtotal colectomy	14	3.2	0		2	1.4
SCAN (Exc Dumfries & Galloway)	Procedure	Anterior resection	118	26.9	0		104	71.2
SCAN (Exc Dumfries & Galloway)	Procedure	APER	0		0		21	14.4
SCAN (Exc Dumfries & Galloway)	Procedure	Hartmann procedure	22	5	0		19	13

\*Due to variances in coding between the national datasets for England and Scotland, some SCAN data is not comparable and therefore is deemed to be unavailable for inclusion in the analysed figures

**Table 4.5**  
**Surgical & pathological outcomes in patients who had major surgery by cancer site**

Nationality	Measure	Value	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
SCAN (Exc Dumfries & Galloway)	Total patients undergoing major resection		439		0		146	
SCAN (Exc Dumfries & Galloway)	Extramural Vascular Invasion	Positive	136	32.1	0		40	28.6
SCAN (Exc Dumfries & Galloway)	Extramural Vascular Invasion	Negative	288	67.9	0		100	71.4
SCAN (Exc Dumfries & Galloway)	Extramural Vascular Invasion	No available data*	15		0		6	
SCAN (Exc Dumfries & Galloway)	Median number of excised lymph nodes	Median	15		0		14	
SCAN (Exc Dumfries & Galloway)	Median number of excised lymph nodes	Range	1-52		0		2-46	
SCAN (Exc Dumfries & Galloway)	Median number of excised lymph nodes	Interquartile range	10-23		0		9-21	
SCAN (Exc Dumfries & Galloway)	At least one positive node found	Yes	201	47.1	0		64	45.1
SCAN (Exc Dumfries & Galloway)	At least one positive node found	No	226	52.9	0		78	54.9
SCAN (Exc Dumfries & Galloway)	At least one positive node found	No available data*	12		0		4	
SCAN (Exc Dumfries & Galloway)	Length of hospital stay (LOS)	Median	10		0		11	
SCAN (Exc Dumfries & Galloway)	Length of hospital stay (LOS)	Range	0-73		0		4-152	
SCAN (Exc Dumfries & Galloway)	Length of hospital stay (LOS)	Interquartile range	7-15		0		8-18	
SCAN (Exc Dumfries & Galloway)	Length of stay longer than 5 days	Yes	375	89.3	0		133	96.4
SCAN (Exc Dumfries & Galloway)	Length of stay longer than 5 days	No	45	10.7	0		5	3.6
SCAN (Exc Dumfries & Galloway)	Length of stay longer than 5 days	No available data*	19		0		8	
SCAN (Exc Dumfries & Galloway)	30-day mortality following major surgery	Yes	9	2.1	0		1	0.7
SCAN (Exc Dumfries & Galloway)	30-day mortality following major surgery	No	429	97.9	0		145	99.3
SCAN (Exc Dumfries & Galloway)	30-day mortality following major surgery	No available data*	1		0		0	
SCAN (Exc Dumfries & Galloway)	30-day mortality by urgency of operation	Elective	6	1.7	0		1	0.7
SCAN (Exc Dumfries & Galloway)	30-day mortality by urgency of operation	Scheduled	0		0		0	
SCAN (Exc Dumfries & Galloway)	30-day mortality by urgency of operation	Urgent	0		0		0	
SCAN (Exc Dumfries & Galloway)	30-day mortality by urgency of operation	Emergency	2	2.3	0		0	
SCAN (Exc Dumfries & Galloway)	30-day mortality by urgency of operation	No available data*	1	50	0		0	

\*Due to variances in coding between the national datasets for England and Scotland, some SCAN data is not comparable and therefore is deemed to be unavailable for inclusion in the analysed figures

Table 5.1

## Description of management of patients with rectal cancer who had major surgery

Nationality	Measure	Value	Total (N)	Total (%)
SCAN (Exc Dumfries & Galloway)	Total number of patients with rectal cancer who had major surgery		146	
SCAN (Exc Dumfries & Galloway)	MRI scan reported	Yes	139	95.2
SCAN (Exc Dumfries & Galloway)	MRI scan reported	No	7	4.8
SCAN (Exc Dumfries & Galloway)	Pre-operative radiotherapy	Short course	36	24.7
SCAN (Exc Dumfries & Galloway)	Pre-operative radiotherapy	Long course	22	15.1
SCAN (Exc Dumfries & Galloway)	Pre-operative radiotherapy	Post operative	0	
SCAN (Exc Dumfries & Galloway)	Pre-operative radiotherapy	Unknown type	0	
SCAN (Exc Dumfries & Galloway)	Pre-operative radiotherapy	No radiotherapy or not reported	88	60.3
SCAN (Exc Dumfries & Galloway)	Circumferential resection margins	Negative	122	90.4
SCAN (Exc Dumfries & Galloway)	Circumferential resection margins	Positive	13	9.6
SCAN (Exc Dumfries & Galloway)	Circumferential resection margins	No available data*	11	
SCAN (Exc Dumfries & Galloway)	Rectal surgical procedures	Anterior Resection	104	71.2
SCAN (Exc Dumfries & Galloway)	Rectal surgical procedures	APER	21	14.4
SCAN (Exc Dumfries & Galloway)	Rectal surgical procedures	Hartmann procedure	19	13
SCAN (Exc Dumfries & Galloway)	Rectal surgical procedures	Other procedure	2	1.4

\*Due to variances in coding between the national datasets for England and Scotland, some SCAN data is not comparable and therefore is deemed to be unavailable for inclusion in the analysed figures

## Appendices

Network code	Number of patients reported to the audit	Discussed at MDT meeting (%)	Seen by clinical nurse specialist (%)	CT scan reported (%)	Number of patients undergoing major surgery (N)	Patients with Dukes' D at time of surgery (%)	Major surgery carried out as urgent or emergency procedure (%)	Median number of lymph nodes excised (N)	Number of patients with rectal cancer undergoing major surgery (N)	MRI scan reported (%)	Pre-operative radiotherapy (short or long course) (%)	APER rate (%)
Borders	92	100.0%	100.0%	97.8%	69	10.3%	23.2%	17.5	18	94.4%	44.4%	*27.8%
Fife	214	98.6%	99.5%	95.8%	153	18.0%	11.8%	9	34	100.0%	50.0%	14.7%
Lothian	501	99.6%	85.6%	94.8%	372	16.9%	16.2%	17	94	93.6%	35.1%	11.7%
SCAN (Exc Dumfries & Galloway)	807	99.4%	90.9%	95.4%	594	16.4%	15.9%	15	146	95.2%	39.7%	14.4%

\* The high percentage rate for AP Resections in Borders is due to small patient numbers.