

Table 4.1

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

Measure	Value	ZT001		ZT003		ALL	
		Total (N)	Total (%)	Total (N)	Total (%)	Total (N)	Total (%)
Total number of reported cases		212		191		403	
Total number of surgically treated cases		178		158		336	
Total number of major resections		162		143		305	
Sex	Male	122	57.5	114	59.7	236	58.6
Sex	Female	90	42.5	77	40.3	167	41.4
Sex	Missing	0		0		0	
Age group	<65 yrs	65	30.7	61	31.9	126	31.3
Age group	65-74 yrs	68	32.1	58	30.4	126	31.3
Age group	75-84 yrs	56	26.4	65	34	121	30
Age group	85+ yrs	23	10.8	7	3.7	30	7.4
Cancer Site	Colon	124	65.6	123	64.7	247	65.2
Cancer Site	Rectosigmoid	7	3.7	12	6.3	19	5
Cancer Site	Rectal	58	30.7	55	28.9	113	29.8
Cancer Site	Unknown	23		1		24	

Table 4.2

## Characteristics of patients with a known cancer site

Measure	Value	ZT001				ZT003				ALL									
		Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
Total patients per cancer site		124		7		58		123		12		55		247		19		113	
Patients undergoing surgery		112		7		48		101		11		46		213		18		94	
Sex	Male	68	54.8	4	57.1	39	67.2	66	53.7	7	58.3	41	74.5	134	54.3	11	57.9	80	70.8
Sex	Female	56	45.2	3	42.9	19	32.8	57	46.3	5	41.7	14	25.5	113	45.7	8	42.1	33	29.2
Sex	Missing	0		0		0		0		0		0		0		0		0	
Age group	<65 yrs	37	29.8	4	57.1	19	32.8	41	33.3	4	33.3	16	29.1	78	31.6	8	42.1	35	31
Age group	65-74 yrs	42	33.9	3	42.9	19	32.8	36	29.3	5	41.7	17	30.9	78	31.6	8	42.1	36	31.9
Age group	75-84 yrs	30	24.2	0		16	27.6	40	32.5	3	25	21	38.2	70	28.3	3	15.8	37	32.7
Age group	85+ yrs	15	12.1	0		4	6.9	6	4.9	0		1	1.8	21	8.5	0		5	4.4
Dukes'	A	11	9.2	2	28.6	13	24.5	11	10.1	0		12	25.5	22	9.6	2	11.1	25	25
Dukes'	B	47	39.2	1	14.3	12	22.6	42	38.5	4	36.4	11	23.4	89	38.9	5	27.8	23	23
Dukes'	C	38	31.7	4	57.1	19	35.8	26	23.9	2	18.2	18	38.3	64	27.9	6	33.3	37	37
Dukes'	D	24	20	0		9	17	30	27.5	5	45.5	6	12.8	54	23.6	5	27.8	15	15
Dukes'	Missing	4		0		5		14		1		8		18		1		13	
Liver metastasis	Liver metastasis	11	28.2	0		4	20	15	20.5	0		0		26	23.2	0		4	17.4
Liver metastasis	Normal liver	28	71.8	2	100	14	70	55	75.3	5	100	3	100	83	74.1	7	100	17	73.9
Liver metastasis	Liver uncertain	0		0		2	10	3	4.1	0		0		3	2.7	0		2	8.7
Liver metastasis	Missing	85		5		38		50		7		52		135		12		90	

Table 4.3

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

Measure	Value	ZT001						ZT003						ALL					
		Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
Total patients per cancer site		124		7		58		123		12		55		247		19		113	
Patients undergoing surgery		112		7		48		101		11		46		213		18		94	
Discussed at multi-disciplinary team meeting	Yes	110	88.7	6	85.7	55	94.8	115	94.3	10	83.3	53	96.4	225	91.5	16	84.2	108	95.6
Discussed at multi-disciplinary team meeting	No	14	11.3	1	14.3	3	5.2	7	5.7	2	16.7	2	3.6	21	8.5	3	15.8	5	4.4
Discussed at multi-disciplinary team meeting	Missing	0		0		0		1		0		0		1		0		0	
Seen by clinical nurse specialist	Yes	29	23.4	1	14.3	28	48.3	55	44.7	7	58.3	40	72.7	84	34	8	42.1	68	60.2
Seen by clinical nurse specialist	No	95	76.6	6	85.7	30	51.7	68	55.3	5	41.7	15	27.3	163	66	11	57.9	45	39.8
Seen by clinical nurse specialist	Missing	0		0		0		0		0		0		0		0		0	
Had CT Scan	Yes	102	82.3	5	71.4	52	89.7	116	94.3	12	100	53	96.4	218	88.3	17	89.5	105	92.9
Had CT Scan	No	22	17.7	2	28.6	6	10.3	7	5.7	0		2	3.6	29	11.7	2	10.5	8	7.1
Surgery type	Major resection	107	95.5	5	71.4	44	91.7	93	92.1	8	72.7	42	91.3	200	93.9	13	72.2	86	91.5
Surgery type	Local resection	0		2	28.6	3	6.3	3	3	0		0		3	1.4	2	11.1	3	3.2
Surgery type	Non resectional procedure	5	4.5	0		1	2.1	5	5	3	27.3	4	8.7	10	4.7	3	16.7	5	5.3
Surgery type	Other procedure	0		0		0		0		0		0		0		0		0	
Surgery type	No surgery	12		0		10		22		1		9		34		1		19	
Urgency of operation	Elective	43	41	2	40	19	43.2	1	1.1	0		1	2.4	44	22.3	2	14.3	20	23.5
Urgency of operation	Scheduled	35	33.3	3	60	22	50	74	80.4	7	77.8	39	95.1	109	55.3	10	71.4	61	71.8
Urgency of operation	Urgent	26	24.8	0		1	2.3	14	15.2	2	22.2	1	2.4	40	20.3	2	14.3	2	2.4
Urgency of operation	Emergency	1	1	0		2	4.5	3	3.3	0		0		4	2	0		2	2.4
Urgency of operation	Missing	7		2		4		9		2		5		16		4		9	
Urgency of operation	No surgery	12		0		10		22		1		9		34		1		19	
Laparoscopy	Open	79	72.5	4	80	36	80	63	72.4	8	100	39	100	142	72.4	12	92.3	75	89.3
Laparoscopy	Laparoscopic then open	1	0.9	0		0		0		0		0		1	0.5	0		0	
Laparoscopy	Laparoscopy converted to open	2	1.8	0		1	2.2	0		0		0		2	1	0		1	1.2
Laparoscopy	Laparoscopic completed	27	24.8	1	20	8	17.8	24	27.6	0		0		51	26	1	7.7	8	9.5
Laparoscopy	Missing	3		2		3		14		3		7		17		5		10	
Laparoscopy	No surgery	12		0		10		22		1		9		34		1		19	

Table 4.4

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

Measure	Value	ZT001						ZT003						ALL					
		Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
Total patients undergoing major resection		107		5		44		93		8		42		200		13		86	
Sex	Male	58	54.2	3	60	32	72.7	54	58.1	4	50	32	76.2	112	56	7	53.8	64	74.4
Sex	Female	49	45.8	2	40	12	27.3	39	41.9	4	50	10	23.8	88	44	6	46.2	22	25.6
Sex	Missing	0		0		0		0		0		0		0		0		0	
Age group	<65 yrs	33	30.8	3	60	16	36.4	28	30.1	4	50	13	31	61	30.5	7	53.8	29	33.7
Age group	65-74 yrs	34	31.8	2	40	15	34.1	31	33.3	2	25	14	33.3	65	32.5	4	30.8	29	33.7
Age group	75-84 yrs	28	26.2	0		11	25	30	32.3	2	25	14	33.3	58	29	2	15.4	25	29.1
Age group	85+ yrs	12	11.2	0		2	4.5	4	4.3	0		1	2.4	16	8	0		3	3.5
ASA	ASA 1: fit	9	9.9	0		3	7.5	28	32.2	2	28.6	16	42.1	37	20.8	2	16.7	19	24.4
ASA	ASA 2: relevant disease	39	42.9	5	100	18	45	46	52.9	5	71.4	18	47.4	85	47.8	10	83.3	36	46.2
ASA	ASA 3: restrictive disease	38	41.8	0		19	47.5	13	14.9	0		4	10.5	51	28.7	0		23	29.5
ASA	ASA 4: llife-threatening disease	5	5.5	0		0		0		0		0		5	2.8	0		0	
ASA	ASA 5: moribund	0		0		0		0		0		0		0		0		0	
ASA	Missing	16		0		4		6		1		4		22		1		8	
Dukes'	A	10	9.3	0		9	20.5	8	9.2	0		11	28.2	18	9.3	0		20	24.1
Dukes'	B	45	42.1	1	20	12	27.3	39	44.8	4	57.1	10	25.6	84	43.3	5	41.7	22	26.5
Dukes'	C	38	35.5	4	80	18	40.9	25	28.7	2	28.6	18	46.2	63	32.5	6	50	36	43.4
Dukes'	D	14	13.1	0		5	11.4	15	17.2	1	14.3	0		29	14.9	1	8.3	5	6
Dukes'	Missing	0		0		0		6		1		3		6		1		3	
Urgency	Elective	43	41	2	40	19	43.2	1	1.1	0		1	2.6	44	22.9	2	16.7	20	24.4
Urgency	Scheduled	35	33.3	3	60	22	50	72	82.8	5	71.4	36	94.7	107	55.7	8	66.7	58	70.7
Urgency	Urgent	26	24.8	0		1	2.3	11	12.6	2	28.6	1	2.6	37	19.3	2	16.7	2	2.4
Urgency	Emergency	1	1	0		2	4.5	3	3.4	0		0		4	2.1	0		2	2.4
Urgency	Missing	2		0		0		6		1		4		8		1		4	
Procedure	Right hemicolectomy	54	50.5	0		0		52	55.9	0		0		106	53	0		0	
Procedure	Transverse colectomy	3	2.8	0		0		1	1.1	0		0		4	2	0		0	
Procedure	Left hemicolectomy	22	20.6	0		0		6	6.5	0		0		28	14	0		0	
Procedure	Sigmoid colectomy	16	15	1	20	1	2.3	16	17.2	1	12.5	0		32	16	2	15.4	1	1.2
Procedure	Total/subtotal colectomy	1	0.9	0		0		4	4.3	1	12.5	1	2.4	5	2.5	1	7.7	1	1.2
Procedure	Anterior resection	8	7.5	4	80	26	59.1	5	5.4	4	50	27	64.3	13	6.5	8	61.5	53	61.6
Procedure	APER	0		0		15	34.1	0		0		13	31	0		0		28	32.6
Procedure	Hartmann procedure	3	2.8	0		2	4.5	9	9.7	2	25	1	2.4	12	6	2	15.4	3	3.5

Table 4.5

## Surgical &amp; pathological outcomes in patients who had major surgery by cancer site

Measure	Value	ZT001						ZT003						ALL					
		Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)	Colon (N)	Colon (%)	Rectosigmoid (N)	Rectosigmoid (%)	Rectal (N)	Rectal (%)
Total patients undergoing major resection		107		5		44		93		8		42		200		13		86	
Extramural Vascular Invasion	Positive	29	29.3	2	40.0	14	34.1	6	6.6	0		8	19.5	35	18.4	2	16.7	22	26.8
Extramural Vascular Invasion	Negative	70	70.7	3	60.0	27	65.9	85	93.4	7	100.0	33	80.5	155	81.6	10	83.3	60	73.2
Extramural Vascular Invasion	Missing	8		0		3		2		1		1		10		1		4	
Median number of excised lymph nodes	Median	17.00		14.50		15.00		16.00		21.00		14.00		17.00		16.00		15.00	
Median number of excised lymph nodes	Range	4-40		10-20		2-41		2-38		4-34		5-39		2-40		4-34		2-41	
Median number of excised lymph nodes	Interquartile range	14-22		12-17		13-20		13-20		12-29		10-17		13-21		12-25		11-19	
At least one positive node found	Yes	48	48.5	4	100.0	19	46.3	45	49.5	2	28.6	19	48.7	93	48.9	6	54.5	38	47.5
At least one positive node found	No	51	51.5	0		22	53.7	46	50.5	5	71.4	20	51.3	97	51.1	5	45.5	42	52.5
At least one positive node found	Missing	8		1		3		2		1		3		10		2		6	
Length of hospital stay (LOS)	Median	10.00		8.00		11.00		8.00		8.00		12.50		8.50		8.00		12.00	
Length of hospital stay (LOS)	Range	3-68		6-48		5-36		0-32		6-14		5-75		0-68		6-48		5-75	
Length of hospital stay (LOS)	Interquartile range	6-15		7-28		8-17		5-13		8-12		8-20		6-14		7-13		8-19	
Length of stay longer than 5 days	Yes	35	85.4	3	100.0	23	95.8	60	74.1	7	100.0	35	97.2	95	77.9	10	100.0	58	96.7
Length of stay longer than 5 days	No	6	14.6	0		1	4.2	21	25.9	0		1	2.8	27	22.1	0		2	3.3
Length of stay longer than 5 days	Missing	66		2		20		12		1		6		78		3		26	
30-day mortality following major surgery	Yes	5	4.7	0		0		6	6.5	0		3	7.1	11	5.5	0		3	3.5
30-day mortality following major surgery	No	102	95.3	5	100.0	44	100.0	86	93.5	8	100.0	39	92.9	188	94.5	13	100.0	83	96.5
30-day mortality following major surgery	Missing	0		0		0		1		0		0		1		0		0	
30-day mortality by urgency of operation	Elective	3	7.0	0		0		0		0		1	100.0	3	6.8	0		1	5.0
30-day mortality by urgency of operation	Scheduled	0		0		0		6	8.3	0		1	2.8	6	5.6	0		1	1.7
30-day mortality by urgency of operation	Urgent	2	7.7	0		0		0		0		0		2	5.4	0		0	
30-day mortality by urgency of operation	Emergency	0		0		0		0		0		0		0		0		0	
30-day mortality by urgency of operation	Missing urgency of operation	0		0		0		0		0		1	25.0	0		0		1	25.0

Table 5.1

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

Measure	Value	ZT001		ZT003		ALL	
		Total (N)	Total (%)	Total (N)	Total (%)	Total (N)	Total (%)
Total number of patients with rectal cancer who had major surgery		44		42		86	
MRI scan reported	Yes	31	70.5	29	69	60	69.8
MRI scan reported	No	13	29.5	13	31	26	30.2
Pre-operative radiotherapy	Short course	17	38.6	10	23.8	27	31.4
Pre-operative radiotherapy	Long course	4	9.1	13	31	17	19.8
Pre-operative radiotherapy	Post operative	0		0		0	
Pre-operative radiotherapy	Unknown type	0		0		0	
Pre-operative radiotherapy	No radiotherapy or not reported	23	52.3	19	45.2	42	48.8
Circumferential resection margins	Negative	29	78.4	35	92.1	64	85.3
Circumferential resection margins	Positive	8	21.6	3	7.9	11	14.7
Circumferential resection margins	Missing	7		4		11	
Rectal surgical procedures	Anterior Resection	26	59.1	27	64.3	53	61.6
Rectal surgical procedures	APER	15	34.1	13	31	28	32.6
Rectal surgical procedures	Hartmann procedure	2	4.5	1	2.4	3	3.5
Rectal surgical procedures	Other procedure	1	2.3	1	2.4	2	2.3
Stoma	Permanent	16	44.4	15	36.6	31	40.3
Stoma	Temporary	14	38.9	16	39	30	39
Stoma	Type unknown	0		0		0	
Stoma	None	6	16.7	10	24.4	16	20.8
Stoma	Missing	8		1		9	