

Additional file 1

Table 1. Descriptive analyses between the participants and non-participants (colorectal cancer group)

Variables			Participated in WACS			p-value
			no n=859	yes n=239	total n=1098	
Status	eligible and consented	n	0	239	239	
		%	0.0	21.8	21.8	
	no consent (by patient)	n	466	0	466	
		%	42.4	0.0	42.4	-
	no consent (by doctor)	n	393	0	393	
	%	35.8	0.0	35.8		
	missing	n	0	0	0	-
Age	years in 2010	median (IQR)	58.0 (9.0)	57.0 (10.0)	58.0 (10.0)	0.017 <sup>†</sup>
		min-max	45-65	45-65	45-65	
	missing	n	0	0	0	-
Gender	male	n	500	159	659	
		%	58.2	66.5	60.0	0.020 <sup>◊</sup>
	female	n	359	80	439	
		%	41.8	33.5	40.0	
	missing	n	0	0	0	-
Area1	capital city	n	345	86	431	
		%	40.2	36.0	39.3	
	other metropolitan	n	143	39	182	
		%	16.7	16.3	16.6	
	large rural centre	n	116	37	153	
		%	13.5	15.5	14.0	
	small rural centre	n	66	15	81	
		%	7.7	6.3	7.4	0.715 <sup>◊</sup>
	other rural centre	n	144	50	194	
		%	16.8	20.9	17.7	
remote centre	n	21	6	27		
	%	2.5	2.5	2.5		
other remote area	n	23	6	29		
	%	2.7	2.5	2.6		
	missing	n	1	0	1	-
Area2	major city	n	464	117	581	
		%	54.1	49.0	53.0	
	inner regional	n	186	66	252	
		%	21.7	27.6	23.0	
	outer regional	n	158	44	202	
		%	18.4	18.4	18.4	0.352 <sup>◊</sup>
	remote	n	28	8	36	
	%	3.3	3.4	3.3		
very remote	n	22	4	26		
	%	2.6	1.7	2.4		
	missing	n	1	0	1	-
Excision or biopsy	excision	n	444	143	587	
		%	54.6	60.1	55.8	0.130 <sup>◊</sup>
	biopsy	n	370	95	465	
		%	45.5	39.9	44.2	
	missing	n	45	1	46	-
Cancer site	colon	n	412	105	517	
		%	48.6	44.1	47.6	0.470 <sup>◊</sup>
	rectum	n	292	90	382	
	%	34.4	37.8	35.2		

Variables			Participated in WACS			p-value
			no n=859	yes n=239	total n=1098	
	unknown	n	144	43	187	
		%	17.0	18.1	17.2	
	missing	n	11	1	12	-
Histology	adenocarcinoma	n	790	225	1,015	0.728 <sup>◊</sup>
		%	93.9	94.5	94.1	
	other	n	51	13	64	
		%	6.1	5.5	5.9	
	missing	n	18	1	19	-
Grade	well diff./low	n	84	19	103	0.325 <sup>◊</sup>
		%	12.7	9.5	11.9	
	mod. diff./intermed.	n	464	151	615	
		%	70.0	75.1	71.2	
	poorly diff./high	n	115	31	146	
	%	17.4	15.4	16.9		
	missing	n	196	38	234	-
AJCC staging	0	n	7	0	7	0.091 <sup>◊</sup>
		%	1.8	0.0	1.3	
	I	n	110	46	156	
		%	28.0	33.8	29.5	
	IIA	n	93	33	126	
		%	23.7	24.3	23.8	
	IIB	n	18	7	25	
		%	4.6	5.2	4.7	
	IIIA	n	19	5	24	
		%	4.8	3.7	4.5	
IIIB	n	72	21	93		
	%	18.3	15.4	17.6		
IIIC	n	41	21	62		
	%	10.4	15.4	11.7		
IV	n	33	3	36		
	%	8.4	2.2	6.8		
	missing	n	466	103	569	-
Tumour size / invaded nearby tissue	no signs of tumour	n	1	0	1	0.463 <sup>Δ</sup>
		%	0.2	0.0	0.2	
	size 1	n	57	24	81	
		%	13.9	17.7	14.8	
	size 2	n	77	28	105	
		%	18.7	20.6	19.2	
	size 3	n	204	67	271	
		%	49.6	49.3	49.5	
size 4	n	64	17	81		
	%	15.6	12.5	14.8		
carcinoma in situ	n	8	0	8		
	%	2.0	0.0	1.5		
	missing	n	448	103	551	-
Regional lymph nodes	tumor cells absent fr	n	209	83	292	0.386 <sup>Δ</sup>
		%	54.3	62.4	56.4	
	reg/lymph node metast	n	101	28	129	
		%	26.2	21.1	24.9	
	spread to an extent b	n	73	22	95	
		%	19.0	16.5	18.3	
cannot be evaluated	n	2	0	2		
	%	0.5	0.0	0.4		
	missing	n	474	106	580	-

Variables			Participated in WACS			p-value	
			no n=859	yes n=239	total n=1098		
Spread of cancer from one body part to another	no distant metastasis	n	57	28	85	0.045 <sup>◇</sup>	
	metastasis to distant	n	32	4	36		
	cannot be evaluated	n	92	37	129		
	missing	n	678	170	848		-
	invasion into but not	n	37	25	62		
Dukes staging	invasion through the lymph	n	151	51	202	0.005 <sup>◇</sup>	
	involvement of lymph	n	128	46	174		
	widespread metastases	n	34	3	37		
	missing	n	509	114	623		-
	missing	n	509	114	623		-

† t-test with equal variances used

◇ Pearson's chi-squared test used

Δ Fisher's exact test used

**Table 2. Descriptive analyses of baseline characteristics for completers versus non-completers (colorectal cancer group)**

Variables	Value labels, etc.	Phone interview, no. completed					Postal survey, no. completed				
		n	<two n=57	two n=182	total n=239	p	n	<two n=77	two n=162	total n=239	p
Age in 2010	median (IQR) years	239	58 (9)	57 (9)	58 (9)	0.575	239	58 (9)	56.5 (9)	57 (9)	0.957
	range (years)		45-64	45-65	45-65			45-64	46-65	45-65	
Gender	male	239	43	117	160	0.118	239	57	103	160	0.109
	female		75.4	64.3	67.0			74.0	63.6	67.0	
	%		14	65	79			20	59	79	
Country of birth	Australia	222	34	146	180	0.895	222	56	124	180	0.800
	English speaking		79.07	81.56	81.08			82.4	80.5	81.1	
	other		5	20	25			8	17	25	
	%		11.63	11.17	11.26			11.8	11.0	11.3	
First Peoples	no	222	42	177	219	0.478	222	67.0	152.0	219.0	1.000
	yes		97.67	98.88	98.65			98.5	98.7	98.7	
	%		1	2	3			1.0	2.0	3.0	
ARIA	major city	239	29	88	117	0.738	239	34	83	117	0.026
	inner regional		50.9	48.4	49.0			44.2	51.2	49.0	
	outer regional		13	53	66			16	50	66	
	remote		22.8	29.1	27.6			20.8	30.9	27.6	
	very remote		13	31	44			21	23	44	
	%		22.8	17.0	18.4			27.3	14.2	18.4	
Area1	capital city	239	20	66	86	0.533	239	28	58	86	0.266

Variables	Value labels, etc.	Phone interview, no. completed				Postal survey, no. completed					
			<two	two	total		<two	two	total		
		<i>n</i>	<i>n</i> =57	<i>n</i> =182	<i>n</i> =239	<i>p</i>	<i>n</i>	<i>n</i> =77	<i>n</i> =162	<i>n</i> =239	<i>p</i>
	%		35.1	36.3	36.0		36.36	35.8	35.98		
	other metropolitan		13	26	39		11	28	39		
	%		22.8	14.3	16.3		14.29	17.28	16.32		
	large rural centre		9	28	37		13	24	37		
	%		15.8	15.4	15.5		16.88	14.81	15.48		
	small rural centre		1	14	15		4	11	15		
	%		1.8	7.7	6.3		5.19	6.79	6.28		
	other rural centre		11	39	50		14	36	50		
	%		19.3	21.4	20.9		18.18	22.22	20.92		
	remote centre		2	4	6		5	1	6		
	%		3.5	2.2	2.5		6.49	0.62	2.51		
	other remote area		1	5	6		2	4	6		
	%		1.8	2.8	2.5		2.6	2.47	2.51		
Marital status	single		6	16	22		8	14	22		
	%		13.95	8.94	9.91		11.76	9.09	9.91		
	widowed		0	2	2		1	1	2		
	%	222	0	1.12	0.9	0.506	222	1.47	0.65	0.9	0.231
	divorced/separated		5	14	19		9	10	19		
	%		11.63	7.82	8.56		13.24	6.49	8.56		
married/partnered		32	147	179		50	129	179			
%		74.42	82.12	80.63		73.53	83.77	80.63			
Education	no formal schooling		0	1	1		0	1	1		
	%		0	0.56	0.45		0	0.65	0.45		
	primary school		3	14	17		6	11	17		
	%		6.98	7.87	7.69		8.96	7.14	7.69		
	junior high school		16	74	90		27	63	90		
	%	221	37.21	41.57	40.72	0.904	221	40.3	40.91	40.72	0.853
	senior high school		7	29	36		11	25	36		
	%		16.28	16.29	16.29		16.42	16.23	16.29		
trade/TAFE/diploma		5	24	29		11	18	29			
%		11.63	13.48	13.12		16.42	11.69	13.12			
university		12	36	48		12	36	48			
%		27.91	20.22	21.72		17.91	23.38	21.72			
Excision or biopsy	excision		37	106	143		44	99	143		
	%	238	64.9	58.6	60.1	0.393	238	57.14	61.49	60.08	0.522
	biopsy		20	75	95		33	62	95		
%		35.1	41.4	39.9		42.86	38.51	39.92			
Cancer site	colon		25	80	105		36	69	105		
	%		43.9	44.2	44.1		46.75	42.86	44.12		
	rectum		24	66	90		28	62	90		
	%	238	42.1	36.5	37.8	0.594	238	36.36	38.51	37.82	0.847
unknown		8	35	43		13	30	43			
%		14.0	19.3	18.1		16.88	18.63	18.07			
Histology	adenocarcinoma		56	169	225		74	151	225		
	%	238	98.3	93.4	94.5	0.199	238	96.1	93.79	94.54	0.556
	other		1	12	13		3	10	13		
%		1.8	6.6	5.5		3.9	6.21	5.46			
Grade	well diff./low		5	14	19		4	15	19		
	%		10.4	9.2	9.5		6.25	10.95	9.45		
	mod. diff./intermed.		39	112	151		47	104	151		
	%	201	81.3	73.2	75.1	0.296	201	73.44	75.91	75.12	0.285
poorly diff./high		4	27	31		13	18	31			
%		8.3	17.7	15.4		20.31	13.14	15.42			
AJCC staging	0	136	-	-	-	0.575	136	-	-	-	0.087

Variables	Value labels, etc.	Phone interview, no. completed					Postal survey, no. completed				
			<two	two	total	<i>p</i>	<i>n</i>	<two	two	total	<i>p</i>
		<i>n</i>	n=57	n=182	n=239		<i>n</i>	n=77	n=162	n=239	
	%		-	-	-		-	-	-		
	I		12	34	46		15	31	46		
	%		34.3	33.7	33.8		34.88	33.33	33.82		
	IIA		8	25	33		7	26	33		
	%		22.9	24.8	24.3		16.28	27.96	24.26		
	IIB		0	7	7		0	7	7		
	%		0.0	6.9	5.2		0	7.53	5.15		
	IIIA		2	3	5		3	2	5		
	%		5.7	3.0	3.7		6.98	2.15	3.68		
	IIIB		6	15	21		6	15	21		
	%		17.1	14.9	15.4		13.95	16.13	15.44		
	IIIC		7	14	21		11	10	21		
	%		20.0	13.9	15.4		25.58	10.75	15.44		
	IV		0	3	3		1	2	3		
	%		0.0	3.0	2.2		2.33	2.15	2.21		
No. of people in household	median (IQR) range	222	2 (1.0) 1-6	2 (1.0) 1-6	2 (1.0) 1-6	0.829	222	2 (1.0) 1-6	2 (1.0) 1-6	2 (1.0) 1-6	0.829
No. of <15yo in household	median (IQR) range	221	0 (0.0) 0-2	0 (0.0) 0-3	0 (0.0) 0-3	0.419	221	0 (0.0) 0-2	0 (0.0) 0-3	0 (0.0) 0-3	0.941
Annual household income gross AUD2010-11	less than \$ 10399		0	2	2			1	1	2	
	%		0	1.14	0.93			1.54	0.67	0.93	
	\$ 10400 - \$ 36399		3	11	14			4	10	14	
	%		7.5	6.29	6.51			6.15	6.67	6.51	
	\$ 36400 - \$ 77999		7	47	54			11	43	54	
	%	215	17.5	26.86	25.12	0.102	215	16.92	28.67	25.12	0.174
	\$ 78000 - \$103999		6	41	47			18	29	47	
	%		15	23.43	21.86			27.69	19.33	21.86	
	\$104000 - above		15	61	76			21	55	76	
%		37.5	34.86	35.35			32.31	36.67	35.35		
	refused to answer		9	13	22			10	12	22	
	%		22.5	7.43	10.23			15.38	8	10.23	
Long-term health condition: arthritis	no		38	144	182			57	125	182	
	%	222	88.37	80.45	81.98	0.225	222	83.82	81.17	81.98	0.635
	yes		5	35	40			11	29	40	
	%		11.63	19.55	18.02			16.18	18.83	18.02	
Long-term health condition: asthma	no		39	163	202			63	139	202	
	%		90.7	91.06	90.99	1.000		92.65	90.26	90.99	0.567
	yes		4	16	20			5	15	20	
	%		9.3	8.94	9.01			7.35	9.74	9.01	
Long-term health condition: cancer	no		37	156	193			60	133	193	
	%		86.05	87.15	86.94	0.847		88.24	86.36	86.94	0.703
	yes		6	23	29			8	21	29	
	%		13.95	12.85	13.06			11.76	13.64	13.06	
Long-term h/cond: chronic bronchitis/emphysema	no		40	170	210			61	149	210	
	%		95.24	94.97	95.02	1.000		91.04	96.75	95.02	0.073
	yes		2	9	11			6	5	11	
	%		4.76	5.03	4.98			8.96	3.25	4.98	
Long-term h/cond: diabetes (childhood onset)	no		42	178	220			66	154	220	
	%		100	99.44	99.55	1.000		98.51	100	99.55	0.129
	yes		0	1	1			1	0	1	
	%		0	0.56	0.45			1.49	0	0.45	
Long-term health condition:	no		38	159	197			57	140	197	
	%		90.48	88.83	89.14	1.000		85.07	90.91	89.14	0.200
	yes		4	20	24			10	14	24	

Variables	Value labels, etc.	Phone interview, no. completed					Postal survey, no. completed				
			<two	two	total	<i>p</i>		<two	two	total	<i>p</i>
		<i>n</i>	n=57	n=182	n=239		<i>n</i>	n=77	n=162	n=239	
type2 diabetes (adult onset)	%		9.52	11.17	10.86		14.93	9.09	10.86		
Long-term health condition: depression/anxiety	no		38	163	201	1.000	58	143	201	0.134	
	yes		4	16	20		9	11	20		
	%		9.52	8.94	9.05		13.43	7.14	9.05		
Long-term health condition: heart/ coronary disease	no		40	166	206	0.742	60	146	206	0.154	
	yes		2	13	15		7	8	15		
	%		4.76	7.26	6.79		10.45	5.19	6.79		
Long-term health condition: high blood pressure	no		32	133	165	0.800	44	121	165	0.043	
	yes		10	46	56		23	33	56		
	%		23.81	25.7	25.34		34.33	21.43	25.34		
Long-term health condition: diverticulitis	no		38	169	207	0.311	62	145	207	0.650	
	yes		4	10	14		5	9	14		
	%		9.52	5.59	6.33		7.46	5.84	6.33		
Long-term health condition: inf. bowel disease	no		40	175	215	0.320	63	152	215	0.070	
	yes		2	4	6		4	2	6		
	%		4.76	2.23	2.71		5.97	1.3	2.71		
Long-term health condition: other circ. condition	no		42	168	210	0.350	66	144	210	0.441	
	yes		0	7	7		1	6	7		
	%		0	4	3.23		1.49	4	3.23		
Dukes stage	invasion into bowel wall		7	18	25	0.418	7	18	25	0.241	
		%	21.88	19.35	20		17.07	21.43	20		
	invasion through wall		10	41	51		13	38	51		
		%	31.25	44.09	40.8		31.71	45.24	40.8		
	inv. of lymph nodes		15	31	46		20	26	46		
	%	46.88	33.33	36.8	48.78	30.95	36.8				
	widespread metastases		0	3	3	1	2	3			
	%		0	3.23	2.4	2.44	2.38	2.4			
Received chemotherapy*	no		26	79	105	0.111	34	71	105	0.612	
	yes		20	103	123		36	87	123		
	%		43.48	56.59	53.95		51.43	55.06	53.95		
Received radiotherapy*	no		40	149	189	0.146	61	128	189	0.339	
	yes		4	33	37		9	28	37		
	%		9.09	18.13	16.37		12.86	17.95	16.37		
Laparoscopic surgery	no		12	73	85	0.128	28	57	85	0.507	
	yes		29	100	129		37	92	129		
	%		70.73	57.8	60.28		56.92	61.74	60.28		
Were you fitted with a stoma?	no		27	123	150	0.905	43	107	150	0.625	
		%	67.5	70.69	70.09		69.35	70.39	70.09		
	yes, fitted with colo		11	41	52		17	35	52		
		%	27.5	23.56	24.3		27.42	23.03	24.3		
	yes, fitted with ileo		2	10	12	2	10	12			
	%		5	5.75	5.61	3.23	6.58	5.61			
Stoma temp. or perm. fitted	temporary stoma still		5	25	30	0.765	8	22	30	1.000	
	%		41.67	51.02	49.18		47.06	50	49.18		

Variables	Value labels, etc.	Phone interview, no. completed				Postal survey, no. completed				
		<i>n</i>	<two n=57	two n=182	total n=239	<i>p</i>	<i>n</i>	<two n=77	two n=162	total n=239
	temporary stoma no lo		4	14	18		5	13	18	
	%		33.33	28.57	29.51		29.41	29.55	29.51	
	permanent stoma		3	10	13		4	9	13	
	%		25	20.41	21.31		23.53	20.45	21.31	

\* - over the 12 months study period