3 Follow-up of positive faecal occult blood test results

Participants who have a valid FOBT kit tested by the pathology laboratory and receive a positive result are encouraged to follow up this outcome with their primary health care practitioner. This chapter discusses the follow-up procedures, including primary health care practitioner visits, colonoscopy procedures and histopathology diagnoses, for those participants who were invited in 2008.

Fast facts

- Using Kaplan-Meier estimates, of the 16,436 participants who had a positive FOBT, 42.9% had a follow-up primary health care practitioner visit recorded and 64.5% had a colonoscopy recorded by 31 January 2009.
- Primary health care practitioner follow-up was highest for participants with the lowest socioeconomic status and lowest for participants with the highest socioeconomic status; however, this was not mirrored in colonoscopy follow-up, where participants with the lowest socioeconomic status had the lowest colonoscopy follow-up rates.
- Participants who spoke a language other than English at home had a statistically significantly higher rate of colonoscopy follow-up than participants who spoke English.
- Participants with a severe or profound activity limitation had a statistically significantly lower rate of colonoscopy follow-up than participants without such limitations.
- Of the 6,496 participants who had reported a primary health care practitioner consultation: 83.7% reported experiencing no symptoms before receiving their positive FOBT result; and 91.7% were referred on for colonoscopy.

The National Bowel Cancer Screening Program follow-up process

Participants are advised to visit their primary health care practitioner to discuss follow-up testing upon receiving notification of a positive FOBT result. In accordance with National Health and Medical Research Council guidelines, primary health care practitioners are encouraged to refer all participants with a positive FOBT for a colonoscopy, unless other information gained at the consultation suggests an alternative course of action.

The Australian Cancer Network Colorectal Cancer Guidelines Revision Committee (ACN 2005) recommends colonoscopy as the most accurate investigation method to assess the colon and rectum, as it enables biopsy and subsequent histopathological diagnosis. Colonoscopies also allow identification and endoscopic removal of polyps.

Primary health care practitioner, colonoscopy and histopathology (if applicable) follow-up details are collected on specific NBCSP forms and returned to the register for analysis.

Overall primary health care practitioner follow-up

Background

Primary health care practitioners are classified by Medicare Australia as a general practitioner or other primary health care provider. This may include remote health clinics or other specialists providing general practitioner services.

Practitioners are requested to complete an Assessment form for consultations relating to the NBCSP, and this information is used to analyse details of participant follow-up in the NBCSP. However, completion of Assessment forms is not mandatory, so primary health care attendance rates presented in this section may be underestimated.

Underestimation of crude rates of practitioner follow-up also occurs due to lag time between a participant receiving a positive FOBT result and visiting a primary health care practitioner. This is a particular issue due to the annual nature of this report—many people who were issued an invitation in the last half of 2008 may have completed a FOBT and had a positive result, but not had sufficient time to visit their primary health care practitioner (and have the Assessment form returned to the Register) before this report was finalised. This underestimation does not affect comparisons between rates for different subgroups, but it does mean that the absolute levels of follow-up are understated.

A Kaplan-Meier estimate (similar to Chapter 1) of primary health care practitioner follow-up is used to minimise the effect of lag time, but it cannot account for non-return of Assessment forms from primary health care practitioners. This estimate calculates primary health care practitioner follow-up over time using the time in weeks from notification of a positive FOBT result and the date a participant first consulted their primary health care practitioner.

2008 primary health care practitioner follow-up

Of the 16,436 positive FOBT results from participants invited in 2008, 6,496 (39.5%) had a primary health care practitioner visit registered by 31 January 2009 (Table 3.1). Using Kaplan-Meier estimates, the follow-up rate was estimated at 42.9% at 26 weeks since receiving a positive FOBT (Table 3.2). The reminder letter sent to participants and their primary health care practitioner 8 weeks after a positive FOBT had a positive effect (Figure 3.2a). The low level of primary health care practitioner follow-up may be explained by two observations:

- Not all Assessment forms were returned by primary health care practitioners; there were more recorded colonoscopies than there were recorded primary health care practitioner visits (tables 3.1 and 3.13).
- Participants invited in the second half of the year may not have had time to organise a consultation, or for an Assessment form from a recent visit to be returned. An analysis of the data mid-year shows the overall primary health care practitioner follow-up rate for participants invited in the first half of 2008 was 48.8%. While the overall follow-up rate for participants invited in the second half of 2008 was 29.6%, with similar rates for those aged 50 years (28.5%), 55 years (29.2%) and 65 years (31.8%). The lower follow-up rate is therefore heavily influenced by the inclusion of people aged 50 years in the NBCSP late in 2008.

Of the 6,496 participants who had a reported primary health care practitioner consultation:

- 83.7% reported having no symptoms before the positive FOBT result (Table 3.9)
- 91.7% were referred for colonoscopy (Table 3.10)
- the main reasons for a non-referral were having had a recent colonoscopy (43.8%), or the participant declining a colonoscopy (31.9%) (Table 3.12).

Primary health care practitioner follow-up by population subgroups

Primary health care practitioner follow-up by state and territory

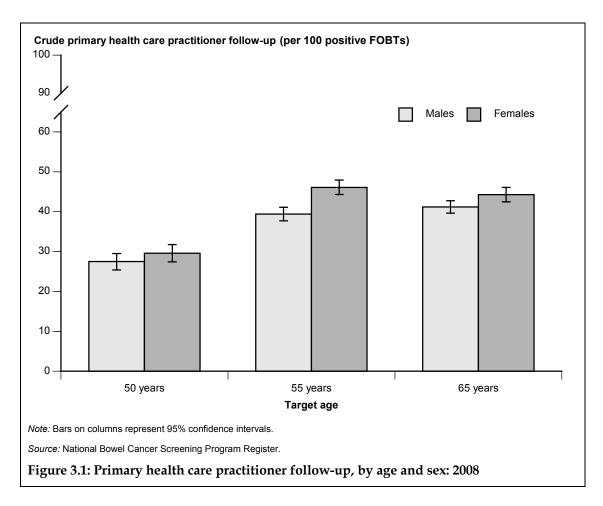
NBCSP implementation is the responsibility of each jurisdiction. Hence, states and territories may have different follow-up policies and procedures. There were significant differences recorded in primary health care practitioner follow-up between the jurisdictions. Queensland (52.5%), the Northern Territory (45.6%) and Tasmania (45.4%) had the highest crude rates of follow-up; however, the low numbers of consultations in the Northern Territory meant only Queensland and Tasmania's results were statistically significant (Table 3.1).

Table 3.2 and figures 3.2b and 3.2c show the Kaplan-Meier general practitioner follow-up rates up to 26 weeks from a positive FOBT result. For clarity, Kaplan-Meier curves for the states and territories were divided between figures 3.2b and 3.2c. All rates were slightly higher using this method to estimate true follow-up rates than the crude rates; however, the results still show a similar state and territory trend to the crude data.

Trends in primary health care practitioner follow-up (Table 3.3 and Figure 3.3) use crude rates for previous years and Kaplan-Meier estimates for 2008. Due to the low level of data available to calculate 52-week Kaplan-Meier estimates, the follow-up is only calculated to 26 weeks since notification of a positive FOBT result. Therefore, comparative trend data for primary health care follow-up and this table should be interpreted with caution.

Primary health care practitioner follow-up by age and sex

There were no differences shown in crude primary health care practitioner follow-up rates between those aged 55 years and those aged 65 years (42.6%). People aged 50 years had a lower rate (28.5%), but this was mainly due to the majority of this age group only receiving invitations late in 2008 and having less time to progress through the pathway (Figure 3.1 and Table 3.1).



More female participants (41.6%) had a returned Assessment form than males (37.7%). This was a common finding when comparing sexes across all subgroup tables.

From the primary health care practitioner visits recorded, women had a slightly higher rate of reported symptoms (Table 3.9), and a slightly lower rate of referral for colonoscopy (Table 3.10). A breakdown of reasons for non-referral is given in Table 3.12.

Primary health care practitioner follow-up by region and socioeconomic status

Inner regional (44.0%) and Outer regional (45.1%) areas had the highest rates of primary health care practitioner consultations – 1.2 times the rate of Major cities (36.5%) (Table 3.4). Remote and Very remote areas showed no statistically significant differences in primary health care practitioner follow-up to Major cities.

Referral for colonoscopy was slightly more common in *Remote* and *Very remote* areas than in other regions, but this was not statistically significant due to the small numbers of consultations in these areas (Table 3.11).

The rate of primary health care practitioner follow-up was highest in participants with the lowest socioeconomic status (41.5%), decreasing across the socioeconomic groups to a rate of 35.1% for participants with the highest socioeconomic status (Table 3.5). This meant participants with the lowest socioeconomic status had 1.2 times the rate of follow-up of those with the highest socioeconomic status.

Primary health care practitioner follow-up by Aboriginal and Torres Strait Islander status, language spoken at home and disability subgroups

All three of these population subgroups had low numbers of participants with returned Assessment forms. Care must be taken when analysing results in these tables.

While Aboriginal and Torres Strait Islander participants had a similar rate of primary health care practitioner visits to non-Indigenous participants, the very low number of visits reported (33) means no conclusions can be drawn for these data (Table 3.6).

While people who spoke a language other than English at home had a statistically significantly higher rate of primary health care practitioner visits (44.8%) compared with participants who spoke English (39.2%); this difference was only statistically significant for females, not for males (Table 3.7).

Males with a severe or profound activity limitation had statistically significantly higher rates of primary health care practitioner follow-up (47.2%) than those without such limitations (38.1%). However, this trend was not observed for females which meant the difference in the overall primary health care practitioner follow-up rate between people with and without a severe or profound activity limitation was not statistically significant (Table 3.8).

Primary health care practitioner follow-up tables and figures

Table 3.1: Crude follow-up by primary health care practitioners following a positive FOBT result, by state and territory: 2008

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
50 years	Number	107	118	160	49	51	14	2	5	506
	Per cent	18.7	25.3	45.2	24.7	28.8	35.9	11.8	29.4	27.5
55 years	Number	267	249	394	123	133	50	12	12	1,240
	Per cent	32.2	39.5	52.0	33.0	35.0	41.3	33.3	54.5	39.4
65 years	Number	401	293	447	163	165	74	10	14	1,567
	Per cent	35.8	39.0	51.6	37.1	40.0	50.3	25.0	56.0	41.2
Total	Number	775	660	1,001	335	349	138	24	31	3,313
	Per cent	30.8	35.7	50.6	33.2	36.0	45.0	25.8	48.4	37.7
	95% CI	29.0– 32.6	33.5– 37.9	48.4– 52.8	30.3– 36.1	33.0– 39.0	39.4– 50.5	16.9– 34.7	36.2– 60.7	36.7– 38.7
Females										
50 years	Number	113	126	161	36	53	8	10	7	514
	Per cent	20.9	27.9	51.3	18.7	35.3	18.6	31.3	43.8	29.6
55 years	Number	302	271	377	152	138	64	20	4	1,328
	Per cent	39.9	43.2	55.9	44.2	45.2	55.2	47.6	25.0	46.1
65 years	Number	377	245	380	125	133	59	17	5	1,341
	Per cent	41.0	39.3	55.2	41.0	42.8	46.5	37.8	71.4	44.3
Total	Number	792	642	918	313	324	131	47	16	3,183
	Per cent	35.7	37.7	54.7	37.2	42.3	45.8	39.5	41.0	41.6
	95% CI	33.7– 37.7	35.4– 40.0	52.4– 57.1	33.9– 40.4	38.8– 45.8	40.0– 51.6	30.7– 48.3	25.6– 56.5	40.5– 42.7
Persons										
50 years	Number	220	244	321	85	104	22	12	12	1,020
	Per cent	19.8	26.6	48.1	21.7	31.8	26.8	24.5	36.4	28.5
55 years	Number	569	520	771	275	271	114	32	16	2,568
	Per cent	35.9	41.3	53.8	38.4	39.6	48.1	41.0	42.1	42.6
65 years	Number	778	538	827	288	298	133	27	19	2,908
	Per cent	38.2	39.2	53.2	38.7	41.2	48.5	31.8	59.4	42.6
Total	Number	1,567	1,302	1,919	648	673	269	71	47	6,496
	Per cent	33.1	36.7	52.5	35.0	38.8	45.4	33.5	45.6	39.5
	95% CI	31.7– 34.4	35.1– 38.3	50.9– 54.1	32.8- 37.2	36.5– 41.1	41.4– 49.4	27.1– 39.8	36.0- 55.3	38.8– 40.3

^{1.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{2.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{3.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.2: Kaplan-Meier documented primary health care practitioner follow-up per 100 positive FOBTs at 26 weeks since positive FOBT, by state and territory: 2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Primary health care practitioner follow-up									
rate	38.5	40.3	53.9	38.6	41.5	46.4	35.7	52.2	42.9
95% CI	36.9-40.1	38.6-42.1	52.2-55.6	36.2-41.0	39.0-43.9	42.3–50.5	28.9–42.5	40.1–64.4	42.1–43.8

- Primary health care practitioner follow-up rates equal the estimated Kaplan-Meier follow-up rate of people who consulted a primary health care practitioner as a proportion of the total number of people with positive FOBT results. This excludes people who suspended or opted off the Program.
- 2. People aged 50 years were invited to screen from 1 July 2008.

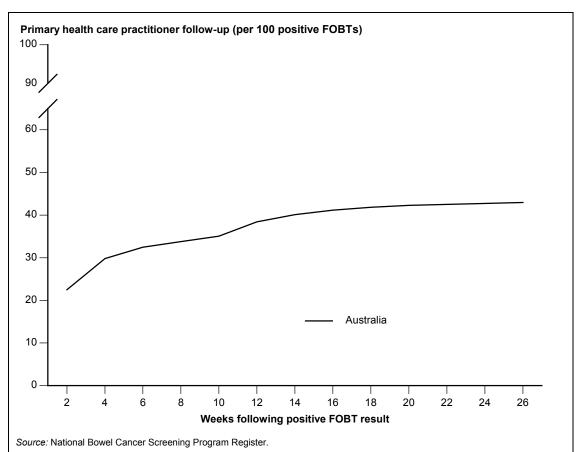
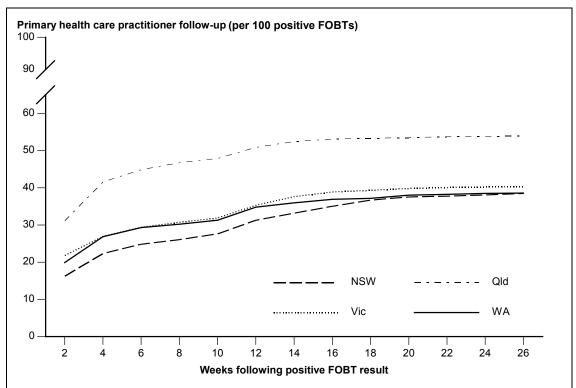
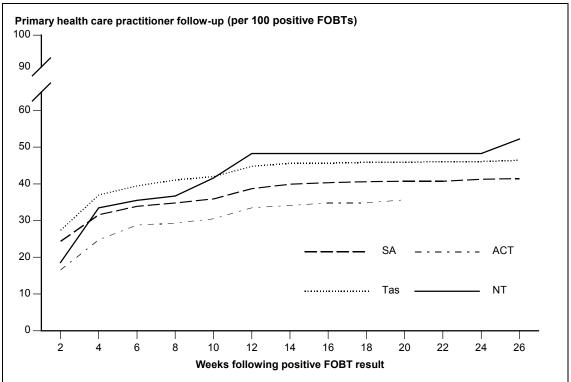


Figure 3.2a: Primary health care practitioner follow-up rate, by weeks since positive FOBT using Kaplan-Meier estimates, Australia: 2008



Source: National Bowel Cancer Screening Program Register.

Figure 3.2b: Primary health care practitioner follow-up rate, by weeks since positive FOBT using Kaplan-Meier estimates, New South Wales, Victoria, Queensland and Western Australia: 2008



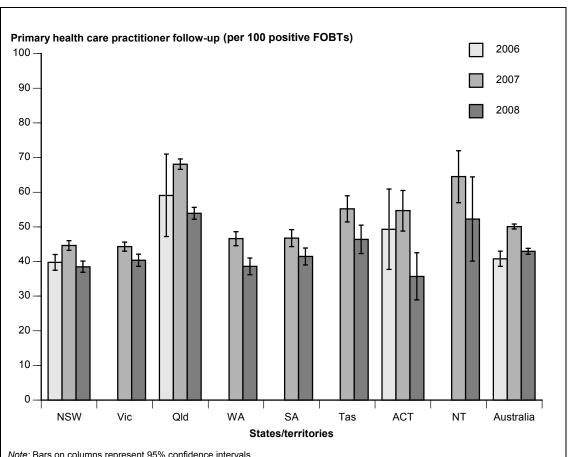
Source: National Bowel Cancer Screening Program Register.

Figure 3.2c: Primary health care practitioner follow-up rate, by weeks since positive FOBT using Kaplan-Meier estimates, South Australia, Tasmania, Australian Capital Territory and Northern Territory: 2008

Table 3.3: Trends in primary health care practitioner follow-up, by state and territory: 2006-2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
2006	39.8		59.1				49.3		40.8
95% CI	37.5–42.0		47.2–71.0				37.7–60.9		38.6–43.0
2007	44.6	44.3	68.1	46.6	46.8	55.2	54.7	64.5	50.1
95% CI	43.2-46.0	43.0–45.6	66.6–69.6	44.6–48.6	44.3–49.2	51.4–59.0	48.8–60.5	57.0-72.0	49.4–50.8
2008	38.5	40.3	53.9	38.6	41.5	46.4	35.7	52.2	42.9
95% CI	36.9-40.1	38.6-42.1	52.2-55.6	36.2-41.0	39.0–43.9	42.3–50.5	28.9-42.5	40.1–64.4	42.1–43.8

- Only New South Wales, Queensland and the Australian Capital Territory had started the NBCSP in 2006; therefore, 2006 data is only available for these jurisdictions. See page 5.
- 2. Primary health care practitioner follow-up rates for 2006 and 2007 equal crude follow-up rates calculated as the number of people with a positive FOBT who consulted a primary health care practitioner as a proportion of the total number of people with positive FOBT results.
- Primary health care practitioner follow-up rates for 2008 equal estimated Kaplan-Meier follow-up rates calculated as the number of people
 with a positive FOBT who consulted a primary health care practitioner as a proportion of the total number of people with positive FOBT
 results.
- 4. People aged 50 years were invited to screen from 1 July 2008, and this may affect results for 2008.



Note: Bars on columns represent 95% confidence intervals.

Source: National Bowel Cancer Screening Program Register.

Figure 3.3: Trends in primary health care practitioner follow-up, by state and territory: 2006–2008

Primary health care practitioner follow-up by population subgroups

Table 3.4: Crude follow-up by primary health care practitioners following a positive FOBT result, by geographic region: 2008

		Major cities	Inner regional	Outer regional	Remote	Very remote	Total
Males							
50 years	Number	292	127	77	8	2	506
	Per cent	24.5	32.9	35.2	24.0	20.5	27.5
55 years	Number	640	354	200	30	16	1,240
	Per cent	34.8	46.0	47.1	37.5	43.8	39.4
65 years	Number	830	433	262	33	9	1,567
	Per cent	38.7	43.9	47.2	39.9	29.5	41.3
Total	Number	1,763	913	540	70	27	3,313
	Per cent	34.1	42.7	45.0	36.3	34.9	37.7
	95% CI	32.8–35.4	40.6–44.8	42.2–47.8	29.5–43.0	24.2–45.6	36.7–38.7
Females							
50 years	Number	336	105	60	10	3	514
	Per cent	28.5	30.6	34.2	39.3	20.1	29.6
55 years	Number	785	344	164	26	9	1,328
	Per cent	44.1	51.2	45.5	57.9	39.6	46.1
65 years	Number	723	394	192	23	9	1,341
	Per cent	41.6	47.0	49.8	48.9	52.2	44.3
Total	Number	1,845	843	415	59	21	3,183
	Per cent	39.2	45.5	45.2	50.4	38.4	41.6
	95% CI	37.9–40.6	43.2–47.7	41.9–48.4	41.3–59.5	25.4–51.4	40.5–42.7
Persons							
50 years	Number	628	232	137	17	5	1,020
	Per cent	26.5	31.8	34.7	30.6	20.3	28.5
55 years	Number	1,425	697	364	56	25	2,568
	Per cent	39.4	48.4	46.4	44.8	42.1	42.6
65 years	Number	1,554	827	454	56	17	2,908
	Per cent	40.0	45.3	48.3	43.2	37.5	42.6
Total	Number	3,608	1,756	955	129	47	6,496
	Per cent	36.5	44.0	45.1	41.6	36.3	39.5
	95% CI	35.6–37.5	42.4-45.5	42.9-47.2	36.1-47.0	28.1-44.6	38.8-40.3

There were 3 positive FOBT results with postcodes that did not correspond with the ABS Australian Standard Geographical Classification for 2006 by postal area. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{2.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{3.} Because some postcodes cross regional boundaries, totals may not add up due to rounding.

^{4.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{5.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.5: Crude follow-up by primary health care practitioners following a positive FOBT result, by socioeconomic status: 2008

		Lowest SES				Highest SES	
		1	2	3	4	5	Total
Males							
50 years	Number	115	103	102	97	84	501
	Per cent	29.0	25.9	26.7	29.5	26.7	27.5
55 years	Number	305	282	233	241	165	1,226
	Per cent	42.7	40.8	37.4	40.4	34.2	39.5
65 years	Number	411	383	299	250	206	1,549
	Per cent	44.6	42.7	41.2	39.2	36.1	41.3
Total	Number	831	768	634	588	455	3,276
	Per cent	40.9	38.7	36.6	37.6	33.3	37.7
	95% CI	38.8–43.0	36.5–40.8	34.4–38.9	35.2–40.0	30.8–35.8	36.7–38.8
Females							
50 years	Number	88	107	103	112	99	509
	Per cent	27.2	30.8	29.5	33.3	27.1	29.6
55 years	Number	276	293	281	246	219	1,315
	Per cent	45.6	47.0	49.6	44.7	42.9	46.1
65 years	Number	344	305	274	239	168	1,330
	Per cent	45.8	45.4	46.4	43.4	38.1	44.2
Total	Number	708	705	658	597	486	3,154
	Per cent	42.1	42.9	43.7	41.5	36.9	41.6
	95% CI	39.8–44.5	40.5–45.3	41.2–46.2	39.0–44.1	34.3–39.5	40.5–42.7
Persons							
50 years	Number	203	210	205	209	183	1,010
	Per cent	28.2	28.2	28.0	31.4	26.9	28.5
55 years	Number	581	575	514	487	384	2,541
	Per cent	44.0	43.8	43.2	42.5	38.7	42.6
65 years	Number	755	688	573	489	374	2,879
	Per cent	45.2	43.8	43.5	41.1	37.0	42.6
Total	Number	1,539	1,473	1,292	1,185	941	6,430
	Per cent	41.5	40.6	39.9	39.5	35.1	39.5
	95% CI	39.9-43.0	39.0-42.2	38.2-41.6	37.7-41.2	33.3-36.9	38.8-40.3

There were 66 recorded primary health care practitioner visits and 174 positive FOBT results with postcodes that do not correspond with the ABS Index of Relative Socioeconomic Disadvantage classifications for 2006 by postal area. These were regarded as missing data and were excluded from this table. Hence, the totals in this table may be less than the national totals.

^{2.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{3.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{4.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.6: Crude follow-up by primary health care practitioners following a positive FOBT result, by Aboriginal and Torres Strait Islander status: 2008

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
50 years	Number	0	188	188
	Per cent	0.0	27.5	27.4
55 years	Number	12	946	958
	Per cent	48.0	43.1	43.2
65 years	Number	6	1,209	1,215
	Per cent	50.0	44.7	44.8
Total	Number	18	2,343	2,361
	Per cent	43.9	42.0	42.0
	95% CI	28.7–59.1	40.7–43.3	40.7–43.3
Females				
50 years	Number	1	179	180
	Per cent	12.5	26.8	26.6
55 years	Number	11	1,063	1,074
	Per cent	73.3	50.9	51.1
65 years	Number	3	1,019	1,022
	Per cent	30.0	48.2	48.1
Total	Number	15	2,261	2,276
	Per cent	45.5	46.4	46.4
	95% CI	28.5–62.4	45.0–47.8	45.0–47.8
Persons				
50 years	Number	1	367	368
	Per cent	8.3	27.1	27.0
55 years	Number	23	2,009	2,032
	Per cent	57.5	46.9	47.0
65 years	Number	9	2,228	2,237
	Per cent	40.9	46.3	46.2
Total	Number	33	4,604	4,637
	Per cent	44.6	44.1	44.1
	95% CI	33.3-55.9	43.1–45.0	43.1-45.0

^{1.} Aboriginal and Torres Strait Islander status was defined by the participant.

^{2.} There were 1,859 primary health care practitioner visits following a positive FOBT result and 5,911 valid FOBT results where Aboriginal and Torres Strait Islander status was not stated. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{3.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{4.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{5.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.7: Crude follow-up by primary health care practitioners following a positive FOBT result, by language spoken at home: 2008

		Language other than English	English	Total
Males			g	
50 years	Number	14	492	506
oo youro	Per cent	21.9	27.7	27.5
55 years	Number	100	1,140	1,240
oo you.o	Per cent	45.2	38.9	39.4
65 years	Number	117	1,450	1,567
,	Per cent	45.2	41.0	41.2
Total	Number	231	3,082	3,313
	Per cent	42.5	37.4	37.7
	95% CI	38.3–46.6	36.3–38.4	36.7–38.7
Females				
50 years	Number	18	496	514
,	Per cent	27.3	29.6	29.6
55 years	Number	113	1,215	1,328
,	Per cent	50.0	45.7	46.1
65 years	Number	95	1,246	1,341
,	Per cent	51.4	43.9	44.3
Total	Number	226	2,957	3.183
	Per cent	47.4	41.2	41.6
	95% CI	42.9–51.9	40.1–42.4	40.5–42.7
Persons				
50 years	Number	32	988	1,020
·	Per cent	24.6	28.6	28.5
55 years	Number	213	2,355	2,568
	Per cent	47.7	42.2	42.6
65 years	Number	212	2,696	2,908
-	Per cent	47.7	42.3	42.6
Total	Number	457	6,039	6,496
	Per cent	44.8	39.2	39.5
	95% CI	41.7–47.8	38.4–39.9	38.8–40.3

Participants were assumed to speak English at home unless otherwise indicated. See Appendix B for a detailed explanation of language spoken at home.

^{2.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{3.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{4.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.8: Crude follow-up by primary health care practitioners following a positive FOBT result, by disability status: 2008

		Severe or profound activity limitation	No severe or profound activity limitation	Total
Males				
50 years	Number	35	447	482
	Per cent	36.8	27.8	28.3
55 years	Number	101	1,112	1,213
	Per cent	50.2	39.9	40.6
65 years	Number	174	1,349	1,523
	Per cent	48.2	41.6	42.3
Total	Number	310	2,908	3,218
	Per cent	47.2	38.1	38.8
	95% CI	43.4–51.0	37.0–39.2	37.8–39.9
Females				
50 years	Number	40	451	491
	Per cent	30.3	30.4	30.4
55 years	Number	76	1,234	1,310
	Per cent	39.6	47.6	47.1
65 years	Number	117	1,190	1,307
	Per cent	45.2	45.2	45.2
Total	Number	233	2,875	3,108
	Per cent	40.0	42.8	42.6
	95% CI	36.0–43.9	41.7–44.0	41.5–43.8
Persons				
50 years	Number	75	898	973
	Per cent	33.0	29.1	29.3
55 years	Number	177	2,346	2,523
	Per cent	45.0	43.6	43.7
65 years	Number	291	2,539	2,830
	Per cent	46.9	43.2	43.6
Total	Number	543	5,783	6,326
	Per cent	43.8	40.3	40.6
	95% CI	41.0-46.6	39.5–41.1	39.8–41.4

^{1.} Disability status is reported by the participant on the Participant Details form.

There were 170 primary health care practitioner consultations following positive FOBT results and 850 positive FOBT results where
disability status was not stated. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be
less than the national totals.

^{3.} A 'profound' disability status indicates that a person always needs assistance with self-care, movement and/or communications activities. A 'severe' disability status indicates that a person sometimes needs assistance with these activities.

^{4.} Percentages equal the number of people having consulted a primary health care practitioner following a positive FOBT result as a proportion of the total number of people with positive FOBT results.

^{5.} As progression through the pathway to the consultation stage may take some time, some participants may not have had sufficient time to obtain a consultation. Additionally, reporting of primary health care practitioner follow-up is not mandatory. Therefore, actual numbers of participant consultations may be underestimated.

^{6.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.9: Symptoms reported to primary health care practitioners following a positive FOBT result: 2008

		No symptoms	Recent onset rectal bleeding ≤6 months	Longer standing rectal bleeding >6 months	Significant change in bowel habits	Iron deficiency anaemia	Abdominal pain	All participants reporting symptom status
Males								
50 years	Number	409	22	32	11	3	16	477
	Per cent	85.7	4.6	6.7	2.3	0.6	3.4	
55 years	Number	981	57	76	15	11	29	1,153
	Per cent	85.1	4.9	6.6	1.3	1.0	2.5	
65 years	Number	1,230	61	93	41	18	41	1,455
	Per cent	84.5	4.2	6.4	2.8	1.2	2.8	
Total	Number	2,620	140	201	67	32	86	3,085
	Per cent	84.9	4.5	6.5	2.2	1.0	2.8	
Females								
50 years	Number	395	28	24	15	14	15	480
	Per cent	82.3	5.8	5.0	3.1	2.9	3.1	
55 years	Number	997	69	77	53	15	52	1,228
	Per cent	81.2	5.6	6.3	4.3	1.2	4.2	
65 years	Number	1,026	56	64	49	19	51	1,226
	Per cent	83.7	4.6	5.2	4.0	1.5	4.2	
Total	Number	2,418	153	165	117	48	118	2,934
	Per cent	82.4	5.2	5.6	4.0	1.6	4.0	
Persons								
50 years	Number	804	50	56	26	17	31	957
	Per cent	84.0	5.2	5.9	2.7	1.8	3.2	
55 years	Number	1,978	126	153	68	26	81	2,381
	Per cent	83.1	5.3	6.4	2.9	1.1	3.4	
65 years	Number	2,256	117	157	90	37	92	2,681
	Per cent	84.1	4.4	5.9	3.4	1.4	3.4	
Total	Number	5,038	293	366	184	80	204	6,019
	Per cent	83.7	4.9	6.1	3.1	1.3	3.4	

^{1.} Only participants who had a symptom status (including 'no symptoms') recorded in the Assessment form question 2 were included in this analysis. There were 477 participants with missing data for this question excluded from the analysis.

^{2.} Percentages equal the number of primary health care practitioner consultations reporting specific symptoms following a positive FOBT result as a proportion of the total number of consultations following a positive FOBT result in which respondents reported any symptoms.

^{3.} Excluding the last column, percentages can add to more than 100, as respondents may have reported more than one symptom.

^{4.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to visit a primary health care practitioner after notification of a positive FOBT result.

Table 3.10: Referrals for colonoscopy or other outcomes following a positive FOBT result and subsequent consultation with primary health care practitioner: 2008

		Colonoscopy	Double contrast barium enema	Sigmoidoscopy	CT colonography	Other	No referral	All follow- up visits
Males		Согоповсору	enema	oiginoidoscopy	colonography	Other	Teleffai	VISILS
50 years	Number	481	0	0	0	5	20	506
oo yearo	Per cent	95.1	0.0	0.0	0.0	1.0	4.0	000
55 years	Number	1,166	2	0.0	1	14	57	1,240
oo yearo	Per cent	94.0	0.2	0.0	0.1	1.1	4.6	1,240
65 years	Number	1,411	11	0.0	2	38	105	1,567
oo yearo	Per cent	90.0	0.7	0.0	0.1	2.4	6.7	1,007
Total	Number	3,058	13	0.0	3	57	182	3,313
70147	Per cent	92.3	0.4	0.0	0.1	1.7	5.5	0,010
Females	T CT CCTR	32.0	0.7	0.0	0.1	7.7	0.0	
50 years	Number	476	0	0	0	18	20	514
oo youro	Per cent	92.6	0.0	0.0	0.0	3.5	3.9	011
55 years	Number	1,219	0.0	0.0	2	41	66	1,328
oo youro	Per cent	91.8	0.0	0.0	0.2	3.1	5.0	1,020
65 years	Number	1,207	7	1	2	34	90	1,341
oo you.o	Per cent	90.0	0.5	0.1	0.1	2.5	6.7	.,
Total	Number	2,902	7	1	4	93	176	3,183
	Per cent	91.2	0.2	0.0	0.1	2.9	5.5	0,.00
Persons					***			
50 years	Number	957	0	0	0	23	40	1,020
Ţ	Per cent	93.8	0.0	0.0	0.0	2.3	3.9	·
55 years	Number	2,385	2	0	3	55	123	2,568
•	Per cent	92.9	0.1	0.0	0.1	2.1	4.8	, -
65 years	Number	2,618	18	1	4	72	195	2,908
·	Per cent	90.0	0.6	0.0	0.1	2.5	6.7	•
Total	Number	5,960	20	1	7	150	358	6,496
	Per cent	91.7	0.3	0.0	0.1	2.3	5.5	•

Percentages equal the number of people consulting a primary health care practitioner following a positive FOBT who received/did not
receive referral for either colonoscopy or other examination as a proportion of the total number of follow-up consultations following a positive
FOBT

^{2.} Referrals may sum to more than all follow-up primary health care practitioner visits, as more than one referral may be given at each visit.

Table 3.11: Referrals for colonoscopy or other examination following a positive FOBT result, by geographic location: 2008

		Colonoscopy	scopy	Double contrast barium enema	ontrast enema	Sigmoidoscopy	oscopy	CT colonography	ography	Other	er	No referral	ferral	All follow- up visits
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number
Major	Males	1,623	92.1	7	0.4	0	0.0	2	0.1	33	1.9	86	5.5	1,763
cities	Females	1,672	9.06	က	0.2	~	0.1	7	0.1	54	2.9	112	6.1	1,845
	Persons	3,296	91.4	10	0.3	1	0.0	4	0.1	87	2.4	210	5.8	3,608
	95% CI		90.4–92.3		0.1–0.4		0.0-0.1		0.0-0.2		1.9–2.9		5.1–6.6	
Inner	Males	848	92.9	2	0.2	0	0.0	0	0.0	12	1.3	51	5.5	913
regional	Females	773	91.7	4	0.5	0	0.0	0	0.0	25	3.0	4	4.8	843
	Persons	1,622	92.3	9	0.4	0	0.0	0	0.0	37	2.1	91	5.2	1,756
	95% CI		91.1–93.6		0.1-0.6		0.0-0.0		0.0-0.0		1.5–2.8		4.2–6.2	
Outer	Males	495	91.6	4	2.0	0	0.0	1	0.2	11	2.1	29	5.4	540
regional	Females	383	92.2	0	0.0	0	0.0	~	0.2	12	2.9	19	4.6	415
	Persons	878	91.9	4	9.0	0	0.0	2	0.2	24	2.5	48	5.0	955
	95% CI		90.1–93.6		0.0-0.8		0.0-0.0		0.0-0.5		1.5–3.5		3.6–6.4	
Remote	Males	99	94.3	0	0.0	0	0.0	0	0.0	0	0.0	4	5.7	70
	Females	54	91.5	0	0.0	0	0.0	~	1.7	~	1.5	ဇ	5.3	29
	Persons	120	93.0	0	0.0	0	0.0	1	0.8	1	0.7	_	5.5	129
	95% CI		88.6–97.4		0.0-0.0		0.0-0.0		0.0–2.3		0.0–2.1		1.6–9.5	
Very	Males	25	93.4	0	0.0	0	0.0	0	0.0	~	3.7	~	2.9	27
remote	Females	20	94.7	0	0.0	0	0.0	0	0.0	0	0.5	~	8.4	21
	Persons	45	93.9	0	0.0	0	0.0	0	0.0	1	2.3	2	3.8	48
	95% CI		87.1–100.0		0.0-0.0		0.0-0.0		0.0-0.0		0.0–6.6		0.0-9.2	
Notes														

Because some postcodes cross regional boundaries, totals may not add up due to rounding.

Percentages equal the number of people consulting a primary health care practitioner following a positive FOBT who received/did not receive referral for either colonoscopy or other examination as a proportion of the total number of follow-up consultations following a positive FOBT. -. ~i

Table 3.12: Reason for non-referrals for colonoscopy by primary health care practitioners: 2008

		Bowel cancer previously diagnosed	Limited life expectancy	Recent colonoscopy (<18 months)	Patient declines colonoscopy	Significant comorbidity	Other medical condition(s)	All non- referred participants
Males								
50 years	Number	0	1	16	4	1	8	25
	Per cent	0.0	4.0	64.0	16.0	4.0	32.0	
55 years	Number	1	1	34	28	5	18	74
	Per cent	1.4	1.4	45.9	37.8	6.8	24.3	
65 years	Number	4	4	61	45	26	47	156
	Per cent	2.6	2.6	39.1	28.8	16.7	30.1	
Total	Number	5	6	111	77	32	73	255
	Per cent	2.0	2.4	43.5	30.2	12.5	28.6	
Female								
50 years	Number	0	0	13	14	1	13	38
	Per cent	0.0	0.0	34.2	36.8	2.6	34.2	
55 years	Number	0	2	44	41	3	27	109
	Per cent	0.0	1.8	40.4	37.6	2.8	24.8	
65 years	Number	5	3	67	39	11	29	134
	Per cent	3.7	2.2	50.0	29.1	8.2	21.6	
Total	Number	5	5	124	94	15	69	281
	Per cent	1.8	1.8	44.1	33.5	5.3	24.6	
Persons								
50 years	Number	0	1	29	18	2	21	63
	Per cent	0.0	1.6	46.0	28.6	3.2	33.3	
55 years	Number	1	3	78	69	8	45	183
	Per cent	0.5	1.6	42.6	37.7	4.4	24.6	
65 years	Number	9	7	128	84	37	76	290
	Per cent	3.1	2.4	44.1	29.0	12.8	26.2	
Total	Number	10	11	235	171	47	142	536
	Per cent	1.9	2.1	43.8	31.9	8.8	26.5	

^{1.} Percentages equal the number of consultations for each reason (following a positive FOBT) that did not refer for colonoscopy as a proportion of the total number of positive FOBT consultations that did not refer for a colonoscopy.

^{2.} A participant may have multiple reasons for non-referral for colonoscopy indicated.

Overall colonoscopy follow-up

Background

The colonoscopy follow-up rates in this section present the rate at which participants with a positive FOBT underwent follow-up by colonoscopy. Due to the National Health and Medical Research Council recommendation that all referrals be for colonoscopy, follow-up by other methods (for example, sigmoidoscopy) were not analysed in this report.

Three main factors influence the data presented in this section: lag time, under-reporting by clinicians, and the denominator used for the rate of follow-up.

First, the lag time between receiving a positive FOBT result and undergoing a colonoscopy means colonoscopy follow-up rates for the current reporting period are likely to underestimate the true rate. To reduce the effect of lag time, Kaplan-Meier estimates of colonoscopy follow-up based on the time in weeks from notification of a positive FOBT result and the date a participant first underwent a colonoscopy were calculated.

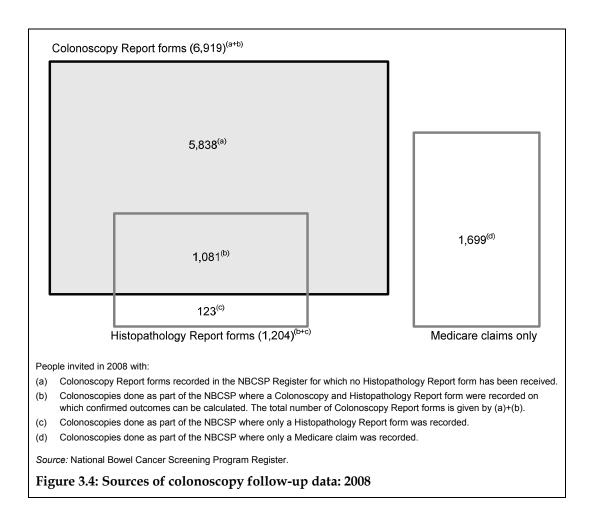
Second, completion of Colonoscopy Report forms by practitioners is not mandatory. To obtain the most comprehensive picture of colonoscopy follow-up, colonoscopy procedures were identified to the Register through three sources (Figure 3.4):

- Colonoscopy Report forms (from which colonoscopy quality and findings can be analysed)
- Histopathology Report forms (from the subset of colonoscopies that sent suspicious samples to histopathology for analysis)
- claims for Medicare benefits for colonoscopic services relating to the NBCSP (from the subset of colonoscopies that were undertaken through the private health care system).

However, many colonoscopies will remain unaccounted for, so rates may be underestimated.

If all forms were returned and recorded, it would be expected that no extra colonoscopies would be counted from outside the Colonoscopy Report forms box (Figure 3.4); all Medicare claims shown should be included as a subset within the Colonoscopy Report forms box. As it stands, 1,699 colonoscopies were reported by a Medicare claim only, and a further 123 were reported by a Histopathology Report form only; Colonoscopy Report forms for these participants' colonoscopies have not been recorded. Therefore, details such as colonoscopic findings could not be obtained for these colonoscopies.

Finally, the denominator used also affects the colonoscopy follow-up rate. Theoretically, the denominator for the colonoscopy follow-up rate should be all primary health care practitioner visits that resulted in referral for colonoscopy. However, due to the low return rate of Assessment forms, the number of positive FOBTs was used as a substitute for the denominator. As not all participants with a positive FOBT will be referred for a colonoscopy (for example, see Table 3.12), this may result in an underestimation of the true follow-up rate. The use of positive FOBTs as the denominator may also influence the rates shown in unexpected ways – differences in age and sex population subgroups may be masked by differing referral rates.



2008 colonoscopy follow-up

Of the 16,436 positive FOBT results from participants invited in 2008, 8,741 had a colonoscopy registered by 31 January 2009, giving a crude rate of colonoscopy follow-up of 53.2% (Table 3.13). Of these, 1,699 colonoscopies were only known to have taken place through a Medicare claim for the procedure; no Colonoscopy or Histopathology Report forms were recorded for these colonoscopies.

Reasons for this low rate of follow-up were similar to reasons for the low rate of primary health care practitioner follow-up: return of these forms is not mandatory, there is some delay in returning Colonoscopy Report forms and there is lag time (especially in participants who received their positive FOBT notification late in 2008) between booking and undergoing a colonoscopy.

To remove the effect of lag time on the follow-up rate, a Kaplan-Meier analysis was performed. The Kaplan-Meier analysis of colonoscopy follow-up estimated 64.5% of participants with a positive FOBT had a colonoscopy within 26 weeks of notification of their positive result (Table 3.14). Outcomes of colonoscopic investigation are discussed in Chapter 4 Cancer detection.

Colonoscopy follow-up by population subgroups

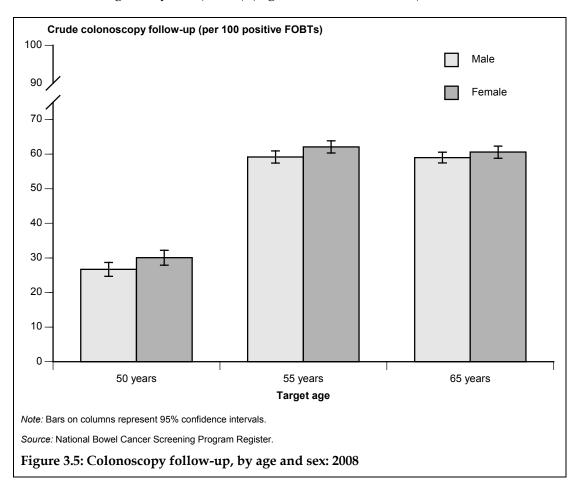
Colonoscopy follow-up by state and territory

There were statistically significant differences in colonoscopy follow-up rates between states and territories. Kaplan-Meier estimates at 26 weeks since a positive FOBT result showed Queensland (76.9%), South Australia (74.1%) and Tasmania (74.0%) had statistically significantly higher rates of colonoscopy follow-up than the other jurisdictions. This was a similar finding to primary health care practitioner follow-up and may relate to program implementation procedures specific to each jurisdiction (tables 3.13 and 3.14 and figures 3.6a–3.6c).

Trends in state and territory follow-up rates since 2006 showed all jurisdictions were lower in 2008 than previous years (Table 3.15 and Figure 3.7). This was mainly due to the inclusion of people aged 50 years in the NBCSP mid-2008, which lowered the overall 2008 colonoscopy follow-up rate. However, the available data only allowed 26-week Kaplan-Meier colonoscopy follow-up estimates to be calculated, not 52-week estimates.

Colonoscopy follow-up by age and sex

The crude rate of colonoscopy follow-up for people aged 55 years (60.6%) was slightly higher than for those aged 65 years (59.7%) (Figure 3.5 and Table 3.13).



Although this was a common trend across all subgroup comparisons, the validity of this result may be questionable due to the use of positive FOBTs as a substitute denominator. Lower follow-up rates for people aged 65 years may be a reflection of lower referral rates for colonoscopy for this age group (Table 3.10). Once again, crude colonoscopy follow-up rates were lower for people aged 50 years but this was mainly due to their mid-year start in the NBCSP.

The difference in crude colonoscopy follow-up between males and females was not statistically significant (Table 3.13). However, the substitute denominator used for colonoscopy follow-up may be influencing the rates shown in unexpected ways, as actual referral from primary health care practitioners is not taken into account; therefore, this result should be interpreted with caution.

Colonoscopy follow-up by region and socioeconomic status

There were no statistically significant differences noted in crude colonoscopy follow-up rate between the geographic areas (Table 3.16). There were, however, differences in colonoscopy follow-up between participants with different socioeconomic status, although no clear trend was shown (Table 3.17).

Colonoscopy follow-up by Aboriginal and Torres Strait Islander status, language spoken at home and disability subgroups

All three of these population subgroups had low numbers of participants with returned Assessment forms. Care must be taken when analysing results in these tables.

Only 6,713 of the 8,741 participants who underwent a colonoscopy had their Indigenous status recorded. Of these, only 37 were Aboriginal and Torres Strait Islander peoples (Table 3.18); therefore, comparisons of colonoscopy follow-up rates between Aboriginal and Torres Strait Islander peoples and non-Indigenous people should be made with caution.

Participants who spoke a language other than English at home had a statistically significantly higher rate of colonoscopy follow-up (59.2%) than participants who spoke English (52.8%) (Table 3.19).

Participants with a severe or profound activity limitation had statistically significantly lower rates of colonoscopy follow-up (46.8%) than participants without such limitations (55.8%) (Table 3.20). This is an opposite finding to the primary health care practitioner follow-up result where participants with a severe or profound activity limitation had the higher rate of follow-up (Table 3.8). This may be a reflection of lower referral rates for these participants, and requires further analysis, which was not done in this report.

Overall histopathology follow-up

Background

If a colonoscopy procedure removed polyps or a biopsy for analysis by histopathology, the result of the analysis should have been returned to the Register via a completed Histopathology Report form. As only a small proportion of people originally invited into the

NBCSP ultimately require histopathology, numbers of Histopathology Report forms were low. There is also a high rate of non-return of these forms, as can be seen by comparing the number of colonoscopy procedures where specimens were sent to histopathology (3,579) to the number of Histopathology Report forms returned (1,204).

As final diagnosis of cancers suspected at colonoscopy require confirmation by histopathology, the low number of Histopathology Report forms means confirmed cancer numbers are most likely under-reported (Chapter 4).

2008 histopathology follow-up

Samples were sent to histopathology for 3,579 participants who underwent colonoscopy. However, as at 31 January 2009, only 1,204 Histopathology Report forms had been returned. Outcomes of these are discussed in Chapter 4 Cancer detection.

Colonoscopy follow-up tables and figures

Table 3.13: Crude colonoscopy follow-up following a positive FOBT result, by state and territory: 2008

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
50 years	Number	94	119	162	43	51	15	4	3	491
	Per cent	16.4	25.5	45.8	21.7	28.8	38.5	23.5	17.6	26.7
55 years	Number	367	368	578	179	255	88	18	10	1,863
	Per cent	44.3	58.3	76.3	48.0	67.1	72.7	50.0	45.5	59.2
65 years	Number	526	440	629	231	278	107	22	9	2,242
	Per cent	47.0	58.6	72.6	52.6	67.5	72.8	55.0	36.0	59.0
Total	Number	987	927	1,369	453	584	210	44	22	4,596
	Per cent	39.2	50.1	69.2	44.9	60.3	68.4	47.3	34.4	52.3
	95% CI	37.3– 41.1	47.9– 52.4	67.2– 71.2	41.8– 47.9	57.2– 63.3	63.2– 73.6	37.2– 57.5	22.7– 46.0	51.2– 53.3
Females			<u> </u>							
50 years	Number	100	154	157	37	48	16	6	5	523
	Per cent	18.5	34.1	50.0	19.2	32.0	37.2	18.8	31.3	30.1
55 years	Number	401	382	498	175	215	86	21	11	1,789
	Per cent	53.0	60.9	73.8	50.9	70.5	74.1	50.0	68.8	62.1
65 years	Number	453	379	515	165	206	89	23	3	1,833
	Per cent	49.2	60.8	74.9	54.1	66.2	70.1	51.1	42.9	60.6
Total	Number	954	915	1,170	377	469	191	50	19	4,145
	Per cent	43.0	53.8	69.8	44.8	61.2	66.8	42.0	48.7	54.2
	95% CI	41.0– 45.1	51.4– 56.2	67.6– 72.0	41.4– 48.1	57.8– 64.7	61.3– 72.2	33.1– 50.9	33.0– 64.4	53.1– 55.3
Persons										
50 years	Number	194	273	319	80	99	31	10	8	1,014
	Per cent	17.4	29.7	47.8	20.5	30.3	37.8	20.4	24.2	28.3
55 years	Number	768	750	1,076	354	470	174	39	21	3,652
	Per cent	48.5	59.6	75.1	49.4	68.6	73.4	50.0	55.3	60.6
65 years	Number	979	819	1,144	396	484	196	45	12	4,075
	Per cent	48.0	59.6	73.6	53.2	66.9	71.5	52.9	37.5	59.7
Total	Number	1,941	1,842	2,539	830	1,053	401	94	41	8,741
	Per cent	41.0	51.9	69.5	44.8	60.7	67.6	44.3	39.8	53.2
	95% CI	39.6- 42.4	50.2- 53.5	68.0– 71.0	42.6– 47.1	58.4– 63.0	63.9– 71.4	37.7– 51.0	30.4– 49.3	52.4- 53.9

Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a
proportion of the total number of people with positive FOBT results.

^{2.} Record of a colonoscopy as part of the NBCSP is identified from the Colonoscopy Report form, Histopathology Report form and/or Medicare claims.

As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

^{4.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.

Table 3.14: Kaplan-Meier documented colonoscopy follow-up per 100 positive FOBTs at 26 weeks since positive FOBT, by state and territory: 2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Colonoscopy follow-up rate	53.9	62.8	76.9	55.0	74.1	74.0	54.4	50.7	64.5
95% CI	52.1– 55.8	60.8– 64.9	75.3– 78.5	52.1– 57.8	71.4– 76.7	70.0– 78.1	45.9– 63.0	37.9– 63.4	63.6– 65.4

- Colonoscopy follow-up rates equal the estimated Kaplan-Meier follow-up rate of people who have had a colonoscopy as a proportion of the
 total number of people with positive FOBT results, excluding people who suspended or opted off the Program.
- 2. People aged 50 years were invited to screen from 1 July 2008.

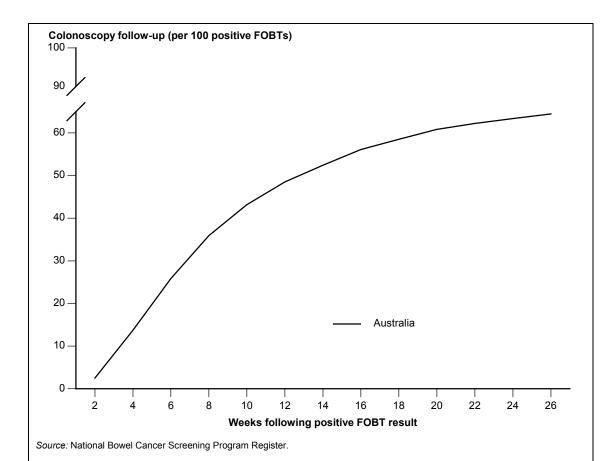
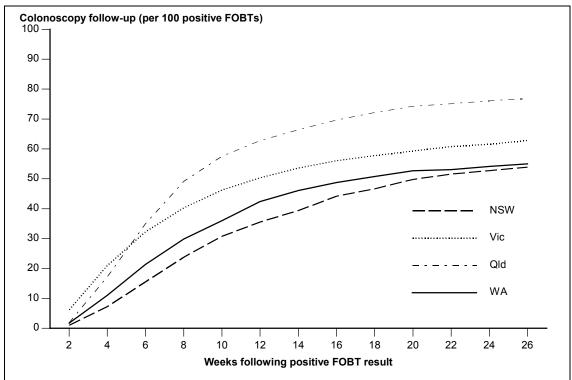
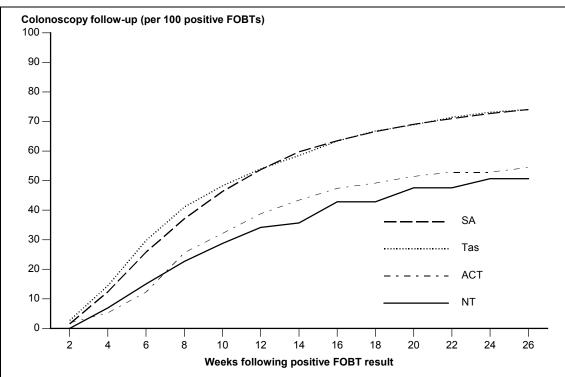


Figure 3.6a: Colonoscopy follow-up, by weeks since positive FOBT using Kaplan-Meier estimates, Australia: 2008



Source: National Bowel Cancer Screening Program Register.

Figure 3.6b: Colonoscopy follow-up, by weeks since positive FOBT using Kaplan-Meier estimates, New South Wales, Victoria, Queensland and Western Australia: 2008



Source: National Bowel Cancer Screening Program Register.

Figure 3.6c: Colonoscopy follow-up, by weeks since positive FOBT using Kaplan-Meier estimates, South Australia, Tasmania, Australian Capital Territory and Northern Territory: 2008

Table 3.15: Trends in colonoscopy follow-up, by state and territory: 2006-2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
2006	72.4		86.4				73.2		72.8
95% CI	70.4–74.5		78.1–94.6				62.9-83.5		70.8–74.8
2007	71.7	77.7	86.1	73.3	87.4	79.1	77.7	71.0	78.1
95% CI	70.4–72.9	76.6–78.8	85.0-87.2	71.5–75.1	85.8-89.0	76.0–82.2	72.8–82.6	63.8–78.1	77.5–78.6
2008	53.9	62.8	76.9	55.0	74.1	74.0	54.4	50.7	64.5
95% CI	52.1–55.8	60.8–64.9	75.3–78.5	52.1–57.8	71.4–76.7	70.0–78.1	45.9–63.0	37.9–63.4	63.6–65.4

- New South Wales, Queensland and the Australian Capital Territory had started the NBCSP in 2006; therefore, 2006 data is only available for these jurisdictions. See page 5.
- Colonoscopy follow-up rates for 2006 and 2007 equal crude follow-up rates calculated as the number of people with a positive FOBT who
 underwent a colonoscopy as a proportion of the total number of people with positive FOBT results
- Colonoscopy follow-up rates for 2008 equal estimated 26-week Kaplan-Meier follow-up rates calculated as the number of people with a positive FOBT who underwent a colonoscopy as a proportion of the total number of people with positive FOBT results.
- 4. People aged 50 years were invited to screen from 1 July 2008, and this may affect results for 2008.

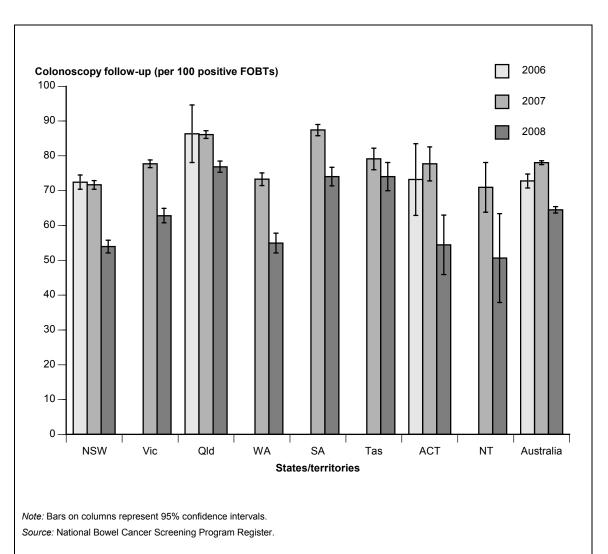


Figure 3.7: Trends in colonoscopy follow-up, by state and territory: 2006-2008

Colonoscopy follow-up by population subgroups

Table 3.16: Crude colonoscopy follow-up following a positive FOBT result, by geographic location: 2008

		Major cities	Inner regional	Outer regional	Remote	Very remote	Total
Males		<u> </u>					
50 years	Number	311	104	66	7	3	491
	Per cent	26.1	27.0	29.8	22.1	30.0	26.7
55 years	Number	1,076	450	265	47	25	1,863
	Per cent	58.5	58.6	62.4	58.5	69.4	59.2
65 years	Number	1,285	566	326	46	19	2,242
	Per cent	60.0	57.4	58.6	55.7	63.4	59.0
Total	Number	2,672	1,120	657	100	47	4,596
	Per cent	51.6	52.4	54.7	51.3	61.5	52.3
	95% CI	50.3-53.0	50.2-54.5	51.8–57.5	44.3–58.4	50.6-72.4	51.3-53.3
Females							
50 years	Number	351	108	52	8	3	523
	Per cent	29.8	31.4	29.8	34.4	22.8	30.1
55 years	Number	1,094	427	229	28	11	1,789
	Per cent	61.4	63.5	63.7	61.6	48.3	62.1
65 years	Number	1,081	491	227	26	8	1,833
	Per cent	62.1	58.6	59.1	54.1	50.8	60.6
Total	Number	2,526	1,026	509	62	23	4,145
	Per cent	53.7	55.3	55.3	52.9	42.4	54.2
	95% CI	52.3–55.2	53.0-57.6	52.1–58.5	43.8–61.9	29.2–55.6	53.1–55.3
Persons							
50 years	Number	662	212	118	15	6	1,014
	Per cent	27.9	29.1	29.8	27.4	25.9	28.3
55 years	Number	2,170	877	495	74	36	3,652
	Per cent	59.9	60.9	63.0	59.7	61.1	60.6
65 years	Number	2,366	1,057	553	72	27	4,075
	Per cent	60.9	57.9	58.8	55.1	58.9	59.7
Total	Number	5,198	2,146	1,165	161	70	8,741
	Per cent	52.6	53.7	55.0	51.9	53.6	53.2
	95% CI	51.6-53.6	52.2-55.3	52.8-57.1	46.4–57.5	45.1-62.2	52.4-54.0

There were 3 positive FOBT results with postcodes that do not correspond with the ABS Australian Standard Geographical Classification for 2006 by postal area. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{2.} Because some postcodes cross regional boundaries, totals may not add up due to rounding.

^{3.} Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a proportion of the total number of people with positive FOBT results.

^{4.} As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.

Table 3.17: Crude colonoscopy follow-up following a positive FOBT result, by socioeconomic status: 2008

		Lowest SES				Highest SES	
		1	2	3	4	5	Total
Males							
50 years	Number	102	90	103	102	90	487
	Per cent	25.7	22.6	27.0	31.0	28.6	26.7
55 years	Number	409	407	395	351	277	1,839
	Per cent	57.3	58.9	63.4	58.8	57.5	59.2
65 years	Number	511	514	430	425	340	2,220
	Per cent	55.5	57.3	59.2	66.6	59.6	59.2
Total	Number	1,022	1,011	928	878	707	4,546
	Per cent	50.3	50.9	53.6	56.1	51.7	52.4
	95% CI	48.1–52.5	48.7–53.1	51.3-56.0	53.7–58.6	49.1–54.4	51.3-53.4
Females							
50 years	Number	94	85	113	125	101	518
	Per cent	29.0	24.5	32.4	37.2	27.7	30.1
55 years	Number	365	375	368	350	317	1,775
	Per cent	60.3	60.2	65.0	63.6	62.0	62.2
65 years	Number	428	386	377	363	270	1,824
	Per cent	57.0	57.4	63.8	65.9	61.2	60.7
Total	Number	887	846	858	838	688	4,117
	Per cent	52.8	51.5	57.0	58.3	52.2	54.3
	95% CI	50.4-55.2	49.1–53.9	54.5–59.5	55.8-60.9	49.5–54.9	53.2-55.4
Persons							
50 years	Number	196	175	216	227	191	1,005
	Per cent	27.2	23.5	29.5	34.1	28.1	28.4
55 years	Number	774	782	763	701	594	3,614
	Per cent	58.7	59.5	64.2	61.1	59.8	60.6
65 years	Number	939	900	807	788	610	4,044
	Per cent	56.2	57.4	61.3	66.3	60.3	59.8
Total	Number	1,909	1,857	1,786	1,716	1,395	8,663
	Per cent	51.4	51.2	55.2	57.2	52.0	53.3
	95% CI	49.8-53.0	49.6-52.8	53.5-56.9	55.4-59.0	50.1-53.9	52.5-54.0

There were 78 recorded colonoscopies and 174 positive FOBT results with postcodes that do not correspond with the ABS Index of Relative Socioeconomic Disadvantage classifications for 2006 by postal area. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{2.} Totals may not sum due to rounding caused by postcodes overlapping category boundaries. See Appendix C.

^{3.} Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a proportion of the total number of people with positive FOBT results.

^{4.} As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.

Table 3.18: Crude colonoscopy follow-up following a positive FOBT result, by Aboriginal and Torres Strait Islander status: 2008

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
50 years	Number	n.p.	n.p.	179
	Per cent	n.p.	n.p.	26.1
55 years	Number	n.p.	n.p.	1,508
	Per cent	n.p.	n.p.	68.0
65 years	Number	n.p.	n.p.	1,833
	Per cent	n.p.	n.p.	67.5
Total	Number	22	3,498	3,520
	Per cent	53.7	62.7	62.6
	95% CI	38.4–68.9	61.4–64.0	61.4–63.9
Females				
50 years	Number	n.p.	n.p.	208
	Per cent	n.p.	n.p.	30.7
55 years	Number	n.p.	n.p.	1,508
	Per cent	n.p.	n.p.	71.7
65 years	Number	n.p.	n.p.	1,477
	Per cent	n.p.	n.p.	69.5
Total	Number	15	3,178	3,193
	Per cent	45.5	65.2	65.1
	95% CI	28.5–62.4	63.9–66.6	63.8–66.4
Persons				
50 years	Number	n.p.	n.p.	387
	Per cent	n.p.	n.p.	28.4
55 years	Number	n.p.	n.p.	3,016
	Per cent	n.p.	n.p.	69.8
65 years	Number	n.p.	n.p.	3,310
	Per cent	n.p.	n.p.	68.4
Total	Number	37	6,676	6,713
	Per cent	50.0	63.9	63.8
	95% CI	38.6-61.4	63.0-64.8	62.9-64.7

^{1.} Aboriginal and Torres Strait Islander status was defined by the participant on the Participant Details form.

There were 2,028 recorded colonoscopies and 5,911 positive FOBT results where Aboriginal and Torres Strait Islander status was not stated. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{3.} Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a proportion of the total number of people with positive FOBT results.

^{4.} As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

^{5.} People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.

Table 3.19: Crude colonoscopy follow-up following a positive FOBT result, by language spoken at home: 2008

		Language other than English	English	Total
Males				
50 years	Number	14	477	491
	Per cent	21.9	26.9	26.7
55 years	Number	143	1,720	1,863
	Per cent	64.7	58.7	59.2
65 years	Number	173	2,069	2,242
	Per cent	66.8	58.4	59.0
Total	Number	330	4,266	4,596
	Per cent	60.7	51.8	52.3
	95% CI	56.6-64.8	50.7–52.8	51.2-53.3
Females				
50 years	Number	19	504	523
	Per cent	28.8	30.1	30.1
55 years	Number	149	1,640	1,789
	Per cent	65.9	61.7	62.1
65 years	Number	106	1,727	1,833
	Per cent	57.3	60.8	60.6
Total	Number	274	3,871	4,145
	Per cent	57.4	54.0	54.2
	95% CI	53.0–61.9	52.8–55.1	53.1–55.3
Persons				
50 years	Number	33	981	1,014
	Per cent	25.4	28.5	28.4
55 years	Number	292	3,360	3,652
	Per cent	65.3	60.2	60.6
65 years	Number	279	3,796	4,075
	Per cent	62.8	59.5	59.7
Total	Number	604	8,137	8,741
	Per cent	59.2	52.8	53.2
	95% CI	56.1-62.2	52.0-53.6	52.4-53.9

Participants were assumed to speak English at home unless otherwise indicated. See Appendix B for a detailed explanation of language spoken at home.

^{2.} Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a proportion of the total number of people with positive FOBT results.

^{3.} As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.

Table 3.20: Documented colonoscopy follow-up following a positive FOBT result, by disability status: 2008

		Severe or profound activity limitation	No severe or profound activity limitation	Total
Males				
50 years	Number	25	463	488
	Per cent	26.3	28.8	28.7
55 years	Number	108	1,719	1,827
	Per cent	53.7	61.6	61.1
65 years	Number	173	2,013	2,186
	Per cent	47.9	62.1	60.7
Total	Number	306	4,195	4,501
	Per cent	46.6	54.9	54.3
	95% CI	42.8–50.4	53.8–56.1	53.2–55.3
Females				
50 years	Number	38	481	519
	Per cent	28.8	32.4	32.1
55 years	Number	106	1,663	1,769
	Per cent	55.2	64.2	63.5
65 years	Number	130	1,671	1,801
	Per cent	50.2	63.4	62.3
Total	Number	274	3,815	4,089
	Per cent	47.0	56.9	56.1
	95% CI	42.9–51.0	55.7–58.0	54.9–57.2
Persons				
50 years	Number	63	944	1,007
	Per cent	27.8	30.6	30.4
55 years	Number	214	3,382	3,596
	Per cent	54.5	62.8	62.3
65 years	Number	303	3,684	3,987
	Per cent	48.9	62.7	61.4
Total	Number	580	8,010	8,590
	Per cent	46.8	55.8	55.1
	95% CI	44.0-49.6	55.0-56.6	54.3-55.9

^{1.} Disability status was defined by the participant on the Participant Details form.

^{2.} There were 151 colonoscopies following positive FOBT results and 850 positive FOBT results where disability status was not stated. These were regarded as missing data and excluded from this table. Hence, the totals in this table may be less than the national totals.

^{3.} A 'profound' disability status indicates that a person always needs assistance with self-care, movement and/or communications activities. A 'severe' disability status indicates that a person sometimes needs assistance with these activities.

^{4.} Percentages of colonoscopies performed equal the number of people who have had a colonoscopy recorded following a positive FOBT as a proportion of the total number of people with positive FOBT results.

^{5.} As progression through the pathway to the colonoscopy stage may take some time, some participants may not have had sufficient time to undergo a colonoscopy. Additionally, reporting of colonoscopy follow-up is not mandatory. Therefore, actual numbers of participant colonoscopies may be underestimated.

People aged 50 years were invited to screen from 1 July 2008. Hence, many will not have had sufficient time to proceed through the screening pathway to colonoscopy after notification of a positive FOBT result.