

2 National Program

2.1 Participation

Numbers and rates of participation

The NBCSP commenced during August 2006 in Queensland and New South Wales, and September 2006 for the Australian Capital Territory. South Australia, Victoria and Western Australia commenced the NBCSP in late January 2007. The Northern Territory commenced in March 2007 and Tasmania in early April 2007. These timing variations were due to each state and territory having responsibility for the management of the Program rollout in their jurisdiction.

People who did not turn 55 or 65 between 1 May 2006 and 30 June 2008, and those who were ineligible for other reasons, were excluded from the eligible population. The excluded invitations included 835 people with age either unknown or outside the eligible ages of 55 or 65 years and 17 people with either state unknown or residence outside Australia. Of the 959,115 people who were correctly invited there were 9,034 who suspended participation in the National Program and 20,752 people who opted off after receiving an invitation to screen; these people were excluded from any analyses. Invitations sent to Pilot participants and invitees were also excluded from the National Program data (see Chapter 3 for analyses of the Pilot Program).

The participation proportions shown in Table 2.1.1b underestimate the true screening program participation. This is because of the lag in response time. This underestimation does not affect comparisons between different groups, but it does mean that the absolute levels of participation are likely to be understated.

An alternative approach used was to follow each individual and, for those who responded, to record the time it took them to respond. This allowed the calculation of a response rate over time from the date of invitation. The response rates were calculated using the Kaplan-Meier methods. These are standard statistical methods used to model the time to an event and the changes in the rates of an event over time. In this case, the event was a person's acceptance (either by returning a completed FOBT kit or Participant Details form) and the time to accept was measured in weeks from the date the invitation was sent. These Kaplan-Meier estimates represent valid estimates of the true participation rates. See Appendix C for a more detailed description of the statistical methods used.

Figure 2.1.1 presents the proportion of individuals (by time in weeks) who accepted the invitation to screen, calculated using the Kaplan-Meier estimates. Table 2.1.1c presents the corresponding 95% confidence intervals at 38 weeks.

Table 2.1.1a: Screening invitation, by state and territory

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Unknown/ missing	Australia
A. Invitations issued^(a)										
55 years	190,144	140,717	114,243	58,871	45,346	15,041	9,990	5,165	15	579,532
65 years	128,667	92,297	74,642	36,381	29,413	10,353	5,540	2,305	2	379,600
Other	262	215	183	60	59	23	7	26	0	835
Total	319,073	233,229	189,068	95,312	74,818	25,417	15,537	7,496	17	959,967
B. Persons suspended^(b)										
55 years	1,271	1026	819	440	334	123	83	21	..	4,117
65 years	1,624	1101	975	502	463	146	86	20	..	4,917
Total	2,895	2,127	1,794	942	797	269	169	41	..	9,034
C. Persons opting off^(c)										
55 years	2,466	2,222	1,665	885	838	244	140	62	..	8,522
65 years	3,911	3,081	2,424	1095	1109	381	172	57	..	12,230
Total	6,377	5,303	4,089	1,980	1,947	625	312	119	..	20,752
D. Eligible invitations^(d)										
Males										
55 years	93,477	68,430	56,503	29,168	21,820	7,356	4,771	2,703	..	284,228
65 years	62,128	44,332	36,515	17,952	13,875	4,960	2,655	1300	..	183,717
Total	155,605	112,762	93,018	47,120	35,695	12,316	7,426	4,003	..	467,945
Females										
55 years	92,930	69,039	55,256	28,378	22,354	7,318	4,996	2,379	..	282,650
65 years	61,004	43,783	34,728	16,832	13,966	4,866	2,627	928	..	178,734
Total	153,934	112,822	89,984	45,210	36,320	12,184	7,623	3,307	..	461,384
Persons										
55 years	186,407	137,469	111,759	57,546	44,174	14,674	9,767	5,082	..	566,878
65 years	123,132	88,115	71,243	34,784	27,841	9,826	5,282	2,228	..	362,451
Total	309,539	225,584	183,002	92,330	72,015	24,500	15,049	7,310	..	929,329

- (a) Invitations to screen were issued to all members of the population turning 55 or 65 between 1 May 2006 and 30 June 2008. Other eligibility criteria were not assessed until further in the screening pathway.
- (b) 'Persons suspended' refers to those people correctly invited to participate in the NBCSP who elected to suspend participation until a specified date. It excludes those people mistakenly invited to participate.
- (c) 'Persons opting off' refers to those people correctly invited to participate in the NBCSP who elected to opt off the National Program. It excludes those people mistakenly invited to participate.
- (d) 'Eligible invitations' refers to those invitations eligible for analysis. It includes only those people who were correctly invited to participate in the NBCSP and had not suspended participation or elected to opt off the National Program.

- There were 959,967 invitations sent out by 30 June 2008, of which 835 were sent to people outside the target ages and 17 to people with state unknown or residence outside Australia.
- There were 9,034 correctly invited respondents (1.0% of invitations) who suspended participation in the National Program. A further 20,752 correctly invited respondents (2.2% of invitations) declined to participate by opting off the National Program.
- A total of 929,329 invitations were therefore eligible for analysis.

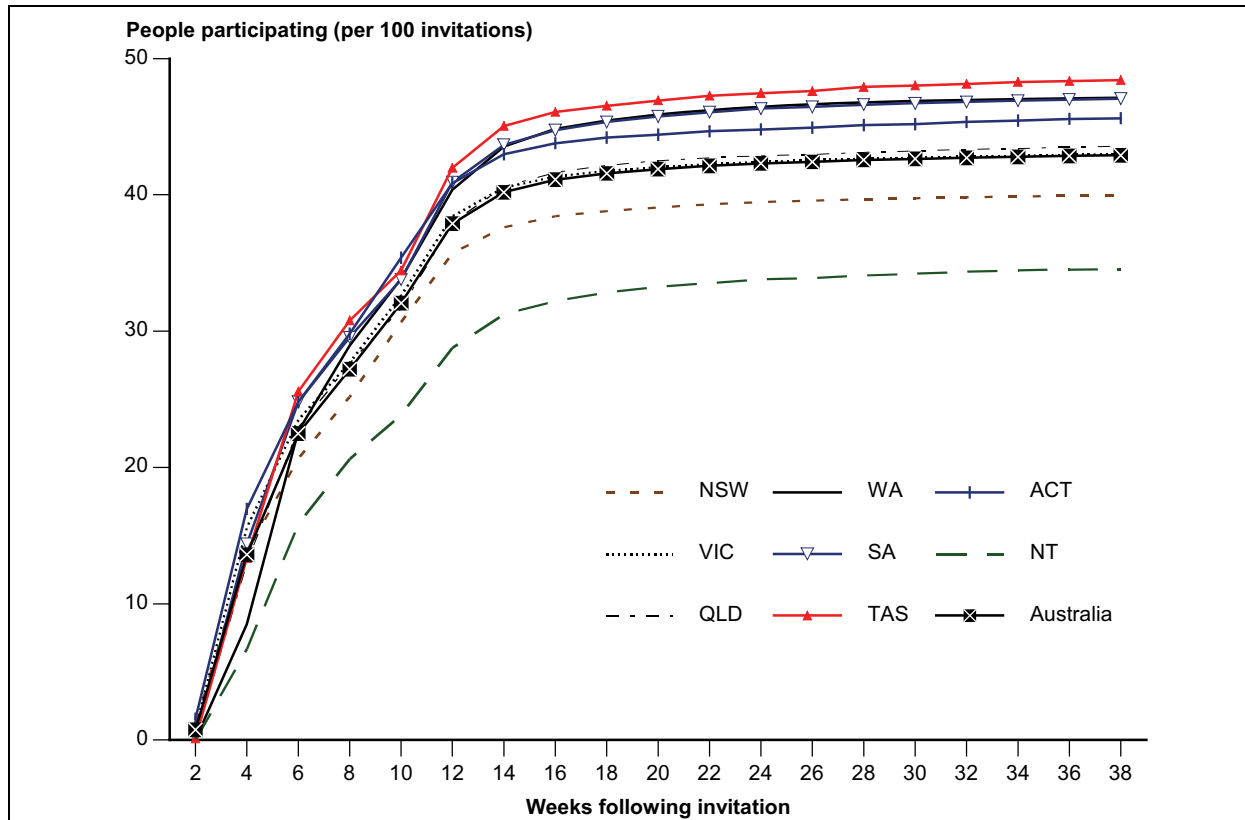
Table 2.1.1b: People who agreed to participate in the NBCSP, by state and territory

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Number	28,510	23,324	17,783	10,465	7,574	2,685	1,728	683	92,752
	Per cent	30.5	34.1	31.5	35.9	34.7	36.5	36.2	25.3	32.6
65 years	Number	24,500	18,587	14,992	8,155	6,435	2,180	1,200	403	76,452
	Per cent	39.4	41.9	41.1	45.4	46.4	44.0	45.2	31.0	41.6
Total	Number	53,010	41,911	32,775	18,620	14,009	4,865	2,928	1,086	169,204
	Per cent	34.1	37.2	35.2	39.5	39.2	39.5	39.4	27.1	36.2
	95% CI	33.8– 34.3	36.9– 37.4	34.9– 35.5	39.1– 40.0	38.7– 39.8	38.6– 40.4	38.3– 40.5	25.8– 28.5	36.0–36.3
Females										
55 years	Number	35,775	29,550	21,939	12,533	9,877	3,228	2,225	691	115,818
	Per cent	38.5	42.8	39.7	44.2	44.2	44.1	44.5	29.0	41.0
65 years	Number	27,207	20,621	16,363	8,650	7,149	2,421	1,339	277	84,027
	Per cent	44.6	47.1	47.1	51.4	51.2	49.8	51.0	29.8	47.0
Total	Number	62,982	50,171	38,302	21,183	17,026	5,649	3,564	968	199,845
	Per cent	40.9	44.5	42.6	46.9	46.9	46.4	46.8	29.3	43.3
	95% CI	40.7– 41.2	44.2– 44.8	42.2– 42.9	46.4– 47.3	46.4– 47.4	45.5– 47.2	45.6– 47.9	27.7– 30.8	43.2–43.5
Persons										
55 years	Number	64,285	52,874	39,722	22,998	17,451	5,913	3,953	1,374	208,570
	Per cent	34.5	38.5	35.5	40.0	39.5	40.3	40.5	27.0	36.8
65 years	Number	51,707	39,208	31,355	16,805	13,584	4,601	2,539	680	160,479
	Per cent	42.0	44.5	44.0	48.3	48.8	46.8	48.1	30.5	44.3
Total	Number	115,992	92,082	71,077	39,803	31,035	10,514	6,492	2,054	369,049
	Per cent	37.5	40.8	38.8	43.1	43.1	42.9	43.1	28.1	39.7
	95% CI	37.3– 37.6	40.6– 41.0	38.6– 39.1	42.8– 43.4	42.7– 43.5	42.3– 43.5	42.3– 43.9	27.1– 29.1	39.6–39.8

Notes

1. Participants in the Program were defined as members of the eligible population who returned a Participant Details form and/or a completed FOBT kit.
2. Percentages equal people participating as a proportion of the total number of the eligible population who were sent an invitation to screen. This excludes people who suspended or opted off the National Program.

- As at 30 June 2008, there were 369,049 eligible invitees (39.7%) who responded by returning a completed Participant Details form and/or completed FOBT kit.
- Western Australia, South Australia and the Australian Capital Territory had the highest proportion of acceptances at 43.1%, followed by Tasmania (42.9%).
- The proportion of eligible invitees accepting was significantly lower for the Northern Territory (28.1%) than the other jurisdictions.
- A significantly higher proportion of females accepted in all states and territories, with the exception of the Northern Territory. Overall, females were 1.2 times more likely than males to participate.
- For both sexes, the proportion accepting the invitation was higher for those aged 65 years than for those aged 55 years. Overall, people aged 65 years were 1.2 times more likely to participate.



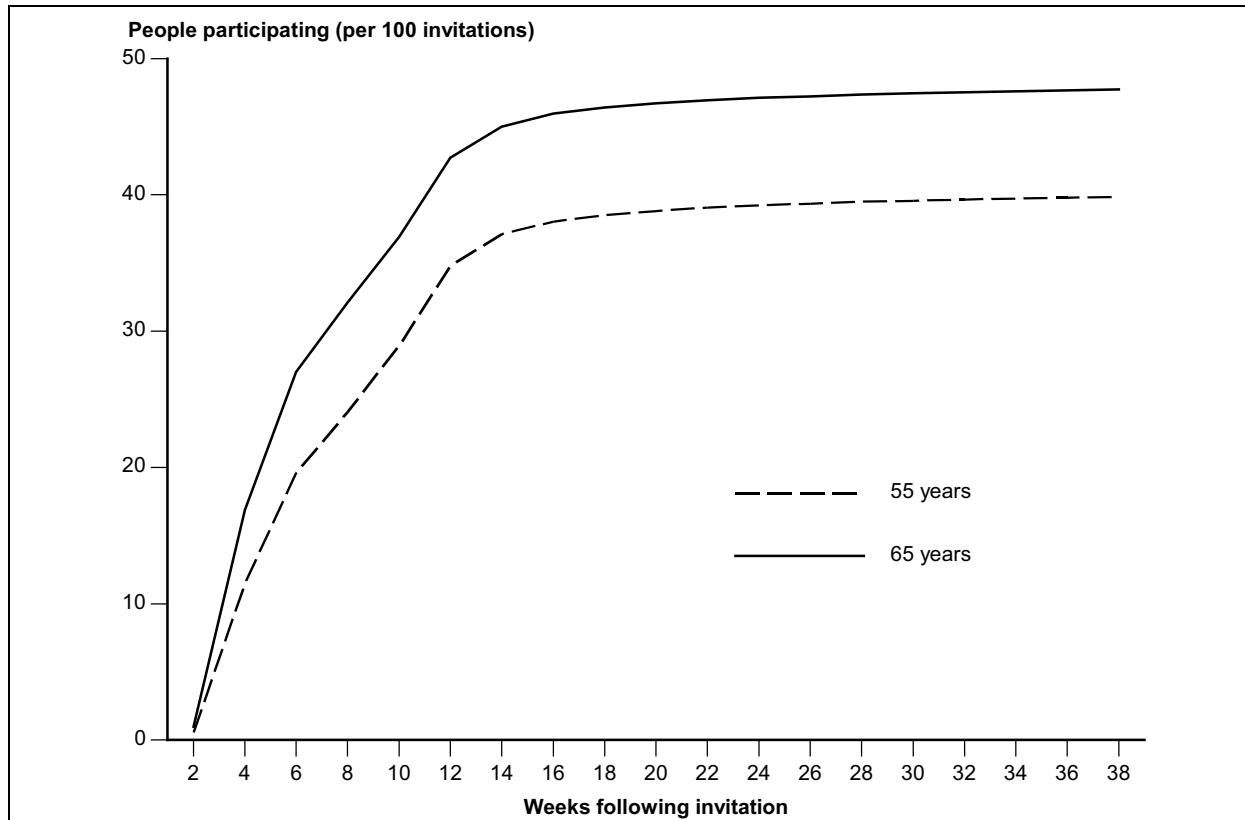
Source: National Bowel Cancer Screening Program Register.

Figure 2.1.1: Participation, by weeks since invitation using Kaplan-Meier estimates, by state and territory

Table 2.1.1c: Kaplan-Meier participation rates at 38 weeks since invitation, by state and territory

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
People participating (per 100 invitations)	40.0	43.0	43.6	47.1	47.1	48.4	45.6	34.6	42.9
95% CI	39.8–40.2	42.8–43.2	43.3–43.8	46.8–47.5	46.7–47.5	47.7–49.1	44.8–46.5	33.3–35.8	42.8–43.0

- There was a rise in participation in most states and territories in the first 6 weeks after invitation, which then tapered off. Participation rose again after 10 weeks and began to plateau at about 14 weeks from the first invitation. Reminders sent out to non-respondents 8 weeks after the original invitation may be responsible for the second rise in participation rates.
- Tasmania, Western Australia, South Australia, the Australian Capital Territory and Queensland had significantly higher participation rates at 38 weeks than the other states and territories and the national rate of 42.9%.



Source: National Bowel Cancer Screening Program Register.

Figure 2.1.2: Participation, by weeks since invitation using Kaplan-Meier estimates, by age

Table 2.1.1d: Kaplan-Meier participation rates at 38 weeks since invitation, by age

	55 years	65 years
People participating (per 100 invitations)	39.9	47.7
95% CI	39.7–40.0	47.6–47.9

- The sharpest rise in participation for those aged 65 occurred in the first 6 weeks from invitation. Participation then continued to rise more slowly and began to plateau at 14 weeks from invitation.
- People aged 55 were slower than those aged 65 to accept the invitation to screen. The sharpest rise in participation occurred in the first 6 weeks from invitation. It then slowed, and rose again between 10 and 12 weeks from invitation, reaching a plateau at around 16 weeks from invitation. Reminders sent out to non-respondents 8 weeks after the original invitation may be responsible for the second rise in participation rates.
- The estimated FOBT participation rate at 38 weeks from invitation was 39.9% for people aged 55 and 47.7% for people aged 65.

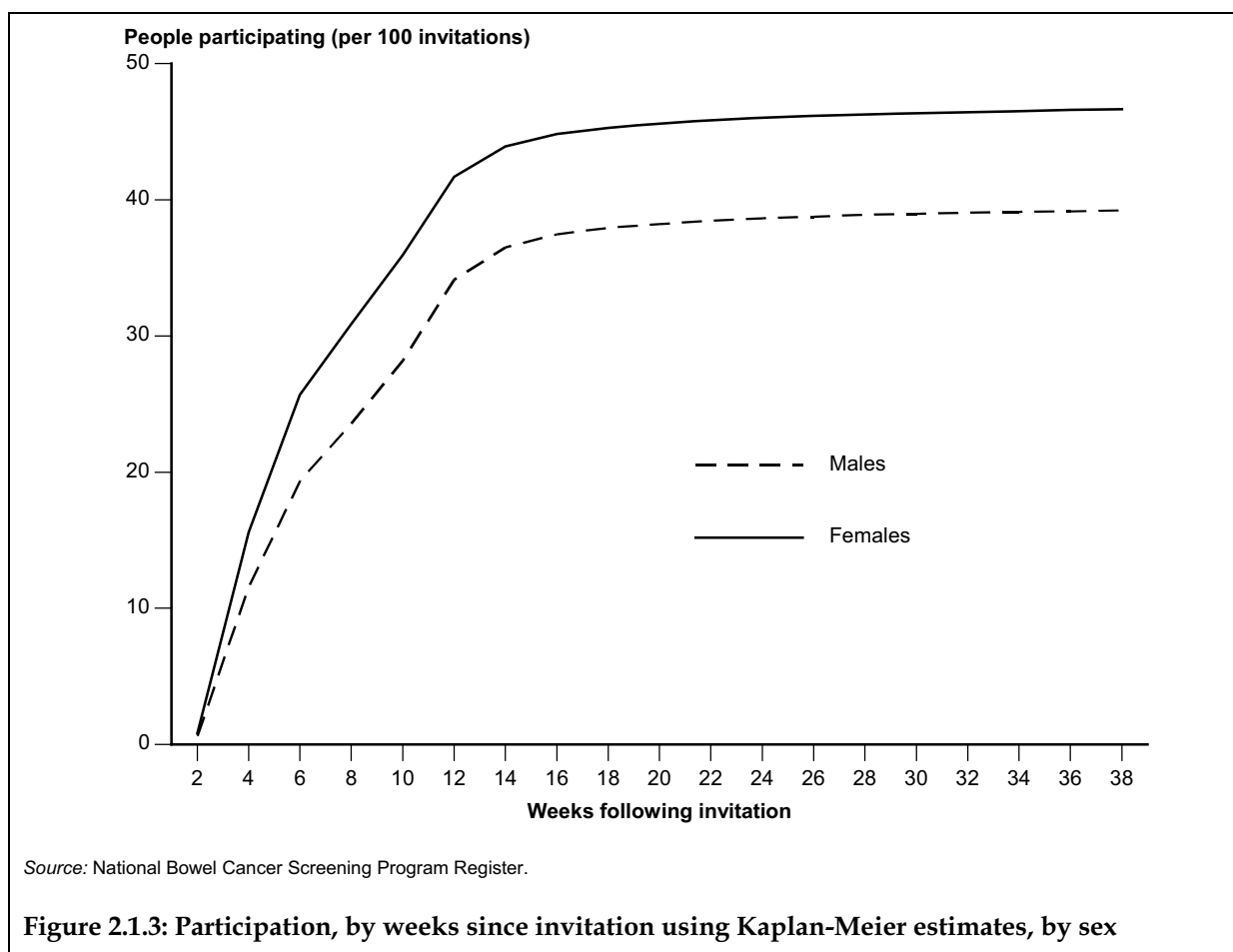


Table 2.1.1e: Kaplan-Meier participation rates at 38 weeks since invitation, by sex

	Males	Females
People participating (per 100 invitations)	39.2	46.7
95% CI	39.1–39.4	46.5–46.8

- The sharpest rise in participation for females occurred in the first 6 weeks from invitation. Participation continued to rise more slowly and began to plateau at 16 weeks from invitation.
- Males were slower than females to accept the invitation to screen. The sharpest rise in participation occurred in the first 6 weeks from invitation. It then slowed, and rose again between 10 and 12 weeks from invitation, reaching a plateau at around 16 weeks from invitation. Reminders sent out to non-respondents 8 weeks after the original invitation may be responsible for the second rise in participation rates.
- The estimated FOBT participation rate at 38 weeks from invitation was 39.2% for males and 46.7% for females.

Participation by population subgroups

Table 2.1.2: People accepting the invitation to screen, by geographic location

		Major cities	Inner regional	Outer regional	Remote	Very remote	Total
Males							
55 years	Number	60,051	21,132	9,824	1,221	477	92,706
	Per cent	31.8	35.4	33.2	29.7	23.1	32.6
65 years	Number	47,170	19,453	8,510	948	322	76,404
	Per cent	40.3	45.7	42.3	36.4	27.6	41.6
Total	Number	107,221	40,586	18,335	2,170	798	169,110
	Per cent	35.1	39.7	36.9	32.3	24.7	36.2
	95% CI	34.9–35.2	39.4–40.0	36.5–37.3	31.1–33.4	23.2–26.2	36.0–36.3
Females							
55 years	Number	76,032	26,472	11,516	1,272	463	115,755
	Per cent	39.8	45.0	42.4	36.8	26.0	41.0
65 years	Number	52,203	21,618	8,996	918	252	83,987
	Per cent	45.1	51.8	49.3	44.0	27.9	47.0
Total	Number	128,235	48,091	20,512	2,189	715	199,742
	Per cent	41.8	47.8	45.2	39.5	26.6	43.3
	95% CI	41.6–41.9	47.5–48.1	44.7–45.6	38.2–40.8	25.0–28.3	43.2–43.5
Persons							
55 years	Number	136,083	47,605	21,341	2,493	939	208,461
	Per cent	35.8	40.1	37.6	32.9	24.4	36.8
65 years	Number	99,373	41,072	17,506	1,866	574	160,391
	Per cent	42.7	48.7	45.6	39.8	27.7	44.3
Total	Number	235,457	88,676	38,847	4,359	1,513	368,852
	Per cent	38.4	43.7	40.9	35.5	25.6	39.7
	95% CI	38.3–38.6	43.5–43.9	40.5–41.2	34.7–36.4	24.5–26.7	39.6–39.8

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
2. There were 560 invitations and 197 respondents with postcodes that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis, so the sum of the regions may be less than the national total.
3. Percentages equal the number of people participating (by returning a Participant Details form and/or a completed FOBT kit) as a proportion of the total number of the eligible population who were sent an invitation to screen.
4. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.

- The proportion of people participating was significantly higher in Inner regional areas (43.7%) than other geographic areas. This was consistent for both males and females.
- The proportion of people participating was significantly lower in Remote and very remote areas compared with the national level.
- Females aged 65 years in Inner regional areas had the highest proportion of participation (51.8%).

Table 2.1.3: People accepting the invitation to screen, by socioeconomic status

		1st quintile (least disadvantaged)	2nd quintile	3rd quintile	4th quintile	5th quintile (most disadvantaged)	Total
Males							
55 years	Number	19,835	18,309	17,695	18,733	16,901	91,473
	Per cent	34.1	33.5	32.1	32.9	30.6	32.7
65 years	Number	14,880	13,866	14,545	16,551	15,641	75,483
	Per cent	43.1	42.2	41.6	42.9	39.0	41.7
Total	Number	34,715	32,175	32,240	35,284	32,542	166,956
	Per cent	37.5	36.8	35.8	37.0	34.1	36.2
	95% CI	37.2–37.8	36.5–37.1	35.5–36.1	36.7–37.3	33.8–34.4	36.1–36.4
Females							
55 years	Number	25,107	22,874	22,175	23,253	20,969	114,378
	Per cent	42.4	41.9	40.4	41.7	38.5	41.0
65 years	Number	16,202	15,355	16,040	18,340	17,298	83,235
	Per cent	48.4	48.2	46.7	48.3	44.1	47.1
Total	Number	41,309	38,229	38,215	41,593	38,267	197,613
	Per cent	44.6	44.2	42.8	44.4	40.9	43.4
	95% CI	44.3–44.9	43.9–44.5	42.5–43.2	44.1–44.7	40.5–41.2	43.2–43.5
Persons							
55 years	Number	44,942	41,183	39,870	41,986	37,870	205,851
	Per cent	38.3	37.7	36.2	37.3	34.6	36.8
65 years	Number	31,082	29,221	30,585	34,891	32,939	158,718
	Per cent	45.7	45.2	44.1	45.6	41.5	44.4
Total	Number	76,024	70,404	70,455	76,877	70,809	364,569
	Per cent	41.0	40.5	39.3	40.6	37.5	39.8
	95% CI	40.8–41.3	40.3–40.7	39.1–39.5	40.4–40.9	37.3–37.7	39.7–39.9

Notes

1. A participant's socioeconomic status was classified using the participant's residential postcode according to the ABS Index of Relative Socioeconomic Disadvantage (IRSD) for 2006.
2. There were 4,480 respondents with postcodes that did not correspond with the 2006 ABS IRSD classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
3. Percentages equal the number of people participating (by returning a Participant Details form and/or a completed FOBT kit) as a proportion of the total number of the eligible population who were sent an invitation to screen.

- Participation was significantly lower in the most disadvantaged quintile (37.5%) compared with other socioeconomic quintiles. This was consistent for both males and females, and for those aged 55 years and 65 years.

Table 2.1.4: People accepting the invitation to screen, by Aboriginal and Torres Strait Islander status

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
55 years	Number	512	88,931	89,443
	Per cent	14.9	31.7	31.5
65 years	Number	326	73,141	73,467
	Per cent	20.3	40.2	40.0
Total	Number	838	162,072	162,910
	Per cent	16.6	35.0	34.8
	95% CI	15.6–17.7	34.9–35.1	34.7–35.0
Females				
55 years	Number	630	111,729	112,359
	Per cent	16.8	40.1	39.8
65 years	Number	356	80,548	80,904
	Per cent	18.4	45.6	45.3
Total	Number	986	192,277	193,263
	Per cent	17.3	42.2	41.9
	95% CI	16.3–18.3	42.1–42.3	41.7–42.0
Persons				
55 years	Number	1,142	200,660	201,802
	Per cent	15.9	35.9	35.6
65 years	Number	682	153,689	154,371
	Per cent	19.3	42.8	42.6
Total	Number	1,824	354,349	356,173
	Per cent	17.0	38.6	38.3
	95% CI	16.3–17.7	38.5–38.7	38.2–38.4

Notes

1. There were 12,876 respondents with Aboriginal and Torres Strait Islander status not stated. These were treated as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. Aboriginal and Torres Strait Islander status was defined by the participant.
3. Percentages equal the number of people participating (by returning a Participant Details form and/or a completed FOBT kit) as a proportion of the estimated eligible population who were sent an invitation to screen.

- The estimated proportion of people who identified as Aboriginal and Torres Strait Islander who accepted the invitation to screen (17.0%) was significantly lower than that for non-Indigenous people (38.6%); non-Indigenous people were 2.3 times more likely to accept the invitation to screen than Aboriginal and Torres Strait Islander peoples.

Table 2.1.5: People accepting the invitation to screen, by preferred correspondence language

		Preferred correspondence language		
		Language other than English	English	Total
Males				
55 years	Number	10,398	82,354	92,752
	Per cent	24.6	34.0	32.6
65 years	Number	8,348	68,104	76,452
	Per cent	26.6	44.7	41.6
Total	Number	18,746	150,458	169,204
	Per cent	25.4	38.2	36.2
	95% CI	25.1–25.7	38.0–38.3	36.0–36.3
Females				
55 years	Number	13,411	102,407	115,818
	Per cent	29.3	43.2	41.0
65 years	Number	8,526	75,501	84,027
	Per cent	27.3	51.2	47.0
Total	Number	21,937	177,908	199,845
	Per cent	28.5	46.3	43.3
	95% CI	28.2–28.8	46.1–46.4	43.2–43.5
Persons				
55 years	Number	23,809	184,761	208,570
	Per cent	27.0	38.6	36.8
65 years	Number	16,874	143,605	160,479
	Per cent	26.9	47.9	44.3
Total	Number	40,683	328,366	369,049
	Per cent	27.0	42.2	39.7
	95% CI	26.8–27.2	42.1–42.3	39.6–39.8

Notes

1. Preferred correspondence language was self-reported to Medicare Australia through this or other programs. Participants were assumed to prefer to correspond in English unless otherwise indicated.
2. Percentages equal the number of people participating (by returning a Participant Details form and/or a completed FOBT kit) as a proportion of the estimated eligible population who were sent an invitation to screen.

- Of those that accepted the invitation to screen, 40,683 (11.0%) preferred to correspond with Medicare Australia in a language other than English.
- The estimated proportion of people who accepted the invitation to screen was significantly lower for people who preferred to correspond in a language other than English (27.0%) than for those who did not prefer to correspond in a language other than English (42.2%).
- People who were assumed to prefer to correspond with Medicare Australia in English were 1.6 times more likely to accept the invitation to screen than those who indicated that they preferred to correspond in a language other than English.

Table 2.1.6: People accepting the invitation to screen, by reported disability status

		Disability level		Total
		Severe or profound activity limitation	No severe or profound activity limitation	
Males				
55 years	Number	4,177	82,571	86,748
	Per cent	36.1	30.3	30.5
65 years	Number	5,173	66,246	71,419
	Per cent	41.5	38.7	38.9
Total	Number	9,350	148,817	158,167
	Per cent	38.9	33.5	33.8
	95% CI	38.3–39.5	33.4–33.7	33.7–33.9
Females				
55 years	Number	5,568	103,600	109,168
	Per cent	51.8	38.1	38.6
65 years	Number	4,965	73,748	78,713
	Per cent	48.5	43.8	44.0
Total	Number	10,533	177,348	187,881
	Per cent	50.2	40.3	40.7
	95% CI	49.5–50.9	40.1–40.4	40.6–40.9
Persons				
55 years	Number	9,745	186,171	195,916
	Per cent	43.7	34.2	34.6
65 years	Number	10,138	139,994	150,132
	Per cent	44.8	41.2	41.4
Total	Number	19,883	326,165	346,048
	Per cent	44.2	36.9	37.2
	95% CI	43.7–44.7	36.8–37.0	37.1–37.3

Notes

1. There were 23,001 respondents with disability status not stated. These were treated as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. 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.
3. Percentages equal the number of people participating (by returning a Participant Details form and/or a completed FOBT kit) as a proportion of the estimated eligible population who were sent an invitation to screen.

- Approximately 6% of people who accepted the invitation to screen in the NBCSP between 7 August 2006 and 30 June 2008 indicated that they had severe or profound limitations.
- The estimated proportion of people who accepted the invitation was significantly higher for people with a severe or profound limitation (44.2%) than for those without a severe or profound limitation (36.9%).
- People with a severe or profound limitation were 1.2 times more likely to accept the invitation to screen than those without a severe or profound limitation.

2.2 FOBT outcomes

This section of the report covers all eligible FOBT results that were returned to the Register between 7 August 2006 and 30 June 2008. In this report, FOBT refers to the entire test kit, explained as follows:

Each participant in the NBCSP is initially sent one FOBT kit containing two samples to be completed and returned to the pathology laboratory for analysis. Pathologists categorise these returned FOBTs into three groups: correctly completed, incorrectly completed or unsatisfactory. A kit may be incorrectly completed or unsatisfactory (and thus ineligible for analysis) due to:

- the participant not completing the test correctly
- the completed kit having expired
- a delay of more than two weeks between the taking of the two samples, or
- the kit having taken more than one month to arrive at the pathology laboratory.

Participants with FOBTs that were not correctly completed were requested to complete another FOBT.

Results of correctly completed FOBT kits are classified by pathologists as either positive (blood is detected in either sample), negative (blood is not detected in either sample) or inconclusive (only one sample was taken, and it was negative). See Table 2.2.3 for FOBT result details. Participants with an inconclusive kit are requested to complete another FOBT kit. See Appendix A for details of the screening pathway.

The classification of FOBT by return status and positivity was based only on returned kits. Any results where the participants were outside the ages of 55 or 65 years, or where the respondent opted off or suspended from the NBCSP were excluded. In analysing return status, the dependent variable was whether or not the test was correctly completed. Where participants have completed more than one FOBT kit, completion status and FOBT results from each FOBT kit were included. In analysing positivity rates, only correctly completed FOBTs were included in the denominator and the dependent variable was whether or not the result was positive.

Numbers and rates of FOBT completion

Table 2.2.1: FOBT kit completion status, Australia

	FOBT correctly completed		FOBT not correctly completed		All FOBTs
	Number	Per cent	Number	Per cent	Number
Males					
55 years	91,877	97.0	2,869	3.0	94,746
65 years	75,874	96.8	2,498	3.2	78,372
Total	167,751	96.9	5,367	3.1	173,118
Females					
55 years	114,225	95.8	5,069	4.2	119,294
65 years	83,017	95.3	4,122	4.7	87,139
Total	197,242	95.5	9,191	4.5	206,433
Persons					
55 years	206,102	96.3	7,938	3.7	214,040
65 years	158,891	96.0	6,620	4.0	165,511
Total	364,993	96.2	14,558	3.8	379,551

Notes

1. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
2. A participant may have completed more than one FOBT kit.
3. Percentages equal the number of FOBT kits received in each status category as a proportion of the total number of FOBT kits received.

- There were 379,551 FOBT kits returned to pathology laboratories for analysis in the period 7 August 2006 to 30 June 2008. This included 14,558 incorrectly completed kits. Participants with incorrectly completed FOBTs were requested to complete a subsequent FOBT.
- Overall, 96.2% of returned FOBTs were correctly completed.
- The proportion of correctly completed FOBT kits for males (96.9%) was significantly higher than for females (95.5%) (Pearson's Chi-square = 466.7; 1 df; P<0.001).

Table 2.2.2a: Correctly completed FOBT kits, by state and territory

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Number	28,182	23,094	17,656	10,374	7,514	2,667	1,711	679	91,877
	Per cent	96.8	96.7	97.3	97.3	97.3	97.3	97.5	97.0	97.0
65 years	Number	24,252	18,412	14,933	8,107	6,396	2,178	1,195	401	75,874
	Per cent	96.6	96.3	97.2	97.4	97.3	97.5	96.5	96.4	96.8
Total	Number	52,434	41,506	32,589	18,481	13,910	4,845	2,906	1,080	167,751
	Per cent	96.7	96.5	97.3	97.4	97.3	97.4	97.1	96.8	96.9
	95% CI	96.5– 96.8	96.3– 96.7	97.1– 97.4	97.1– 97.6	97.0– 97.5	97.0– 97.8	96.5– 97.7	95.7– 97.8	96.8–97.0
Females										
55 years	Number	35,198	29,092	21,701	12,399	9,778	3,203	2,182	672	114,225
	Per cent	95.5	95.3	96.3	96.2	96.4	96.2	96.4	93.3	95.8
65 years	Number	26,817	20,285	16,244	8,578	7,090	2,414	1,318	271	83,017
	Per cent	95.0	94.5	95.9	96.2	95.7	95.6	96.1	94.4	95.3
Total	Number	62,015	49,377	37,945	20,977	16,868	5,617	3,500	943	197,242
	Per cent	95.2	95.0	96.1	96.2	96.1	96.0	96.3	93.6	95.5
	95% CI	95.1– 95.4	94.8– 95.2	95.9– 96.3	95.9– 96.5	95.8– 96.4	95.5– 96.5	95.6– 96.9	92.1– 95.2	95.5–95.6
Persons										
55 years	Number	63,380	52,186	39,357	22,773	17,292	5,870	3,893	1,351	206,102
	Per cent	96.0	95.9	96.7	96.7	96.7	96.7	96.9	95.1	96.3
65 years	Number	51,069	38,697	31,177	16,685	13,486	4,592	2,513	672	158,891
	Per cent	95.7	95.4	96.5	96.8	96.4	96.5	96.3	95.6	96.0
Total	Number	114,449	90,883	70,534	39,458	30,778	10,462	6,406	2,023	364,993
	Per cent	95.9	95.7	96.6	96.7	96.6	96.6	96.7	95.3	96.2
	95% CI	95.8– 96.0	95.5– 95.8	96.5– 96.8	96.6– 96.9	96.4– 96.8	96.3– 97.0	96.2– 97.1	94.4– 96.2	96.1–96.2

Notes

1. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
2. A participant may have completed more than one FOBT kit.
3. Percentages equal the number of correctly completed FOBT kits received in each state or territory as a proportion of the total number of completed FOBT kits received in that state or territory.

- Correct completion of FOBT kits was high for all states and territories. The lowest overall proportion (95.3%) of correctly completed kits was in the Northern Territory; however, this was not statistically significant.

FOBT completion by population subgroups

Table 2.2.2b: Correctly completed FOBT kits, by geographic location

		Major cities	Inner regional	Outer regional	Remote	Very remote	All regions
Males							
55 years	Number	59,396	20,997	9,759	1,209	470	91,831
	Per cent	96.7	97.4	97.4	97.9	97.1	97.0
65 years	Number	46,708	19,381	8,479	941	317	75,826
	Per cent	96.5	97.4	97.4	96.8	97.1	96.8
Total	Number	106,104	40,379	18,238	2,150	787	167,657
	Per cent	96.6	97.4	97.4	97.4	97.1	96.9
	95% CI	96.5–96.7	97.2–97.5	97.2–97.7	96.7–98.1	95.9–98.3	96.8–97.0
Females							
55 years	Number	74,807	26,231	11,396	1,270	457	114,161
	Per cent	95.3	96.6	96.3	97.5	96.1	95.7
65 years	Number	51,463	21,447	8,908	913	247	82,977
	Per cent	94.7	96.3	96.1	97.1	92.8	95.3
Total	Number	126,270	47,677	20,305	2,182	704	197,138
	Per cent	95.1	96.4	96.2	97.4	94.9	95.5
	95% CI	95.0–95.2	96.3–96.6	95.9–96.5	96.7–98.0	93.3–96.5	95.5–95.6
Persons							
55 years	Number	134,203	47,228	21,155	2,479	927	205,992
	Per cent	96.0	96.9	96.8	97.7	96.6	96.3
65 years	Number	98,171	40,828	17,387	1,853	564	158,803
	Per cent	95.5	96.8	96.7	97.0	95.1	96.0
Total	Number	232,374	88,056	38,542	4,332	1,491	364,795
	Per cent	95.8	96.9	96.8	97.4	96.0	96.2
	95% CI	95.7–95.9	96.8–97.0	96.6–97.0	96.9–97.9	95.1–97.0	96.1–96.2

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
2. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
3. A participant may have completed more than one FOBT kit.
4. There were 198 correctly completed FOBT kits with postcodes that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the areas may be less than the national total.
5. Percentages equal the number of correctly completed FOBT kits received in each geographic region as a proportion of the total number of FOBT kits received in that region.
6. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.

- The proportion of correctly completed kits in Major cities (95.8%) was significantly lower than other geographic locations, with the exception of Very remote areas.

Table 2.2.2c: Correctly completed FOBT kits, by Aboriginal and Torres Strait Islander status

		Aboriginal and Torres Strait Islander	Non-Indigenous	All correctly completed FOBTs
Males				
55 years	Number	504	88,182	88,686
	Per cent	95.6	97.1	97.1
65 years	Number	316	72,684	73,000
	Per cent	94.0	96.9	96.9
Total	Number	820	160,866	161,686
	Per cent	95.0	97.0	97.0
	95% CI	93.6–96.5	96.9–97.1	96.9–97.1
Females				
55 years	Number	619	110,311	110,930
	Per cent	94.5	95.9	95.8
65 years	Number	340	79,692	80,032
	Per cent	90.4	95.4	95.4
Total	Number	959	190,003	190,962
	Per cent	93.0	95.7	95.7
	95% CI	91.5–94.6	95.6–95.8	95.6–95.8
Persons				
55 years	Number	1,123	198,493	199,616
	Per cent	95.0	96.4	96.4
65 years	Number	656	152,376	153,032
	Per cent	92.1	96.1	96.1
Total	Number	1,779	350,869	352,648
	Per cent	93.9	96.3	96.3
	95% CI	92.9–95.0	96.2–96.3	96.2–96.3

Notes

1. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
2. A participant may have completed more than one FOBT kit.
3. Aboriginal and Torres Strait Islander status was defined by the participant.
4. There were 12,345 returned FOBTs with Aboriginal and Torres Strait Islander status not stated. These were treated as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
5. Percentages equal the number of correctly completed FOBT kits received as a proportion of the total number of FOBT kits received in each category.

- The proportion of correctly completed FOBTs for people who identified as Aboriginal and Torres Strait Islander (93.9%) was significantly lower than the proportion for people identified as non-Indigenous (96.3%).
- Females aged 65 years who identified as Aboriginal and Torres Strait Islander were the least likely (90.4%) to complete the FOBT correctly.

Table 2.2.2d: Correctly completed FOBT kits, by preferred correspondence language

		Preferred correspondence language		All correctly completed FOBTs
		Language other than English	English	
Males				
55 years	Number	10,128	81,749	91,877
	Per cent	94.1	97.3	97.0
65 years	Number	8,115	67,759	75,874
	Per cent	93.0	97.3	96.8
Total	Number	18,243	149,508	167,751
	Per cent	93.6	97.3	96.9
	95% CI	93.3–93.9	97.2–97.4	96.8–97.0
Females				
55 years	Number	12,933	101,292	114,225
	Per cent	91.1	96.4	95.8
65 years	Number	8,166	74,851	83,017
	Per cent	88.6	96.1	95.3
Total	Number	21,099	176,143	197,242
	Per cent	90.1	96.2	95.5
	95% CI	89.7–90.5	96.2–96.3	95.5–95.6
Persons				
55 years	Number	23,061	183,041	206,102
	Per cent	92.4	96.8	96.3
65 years	Number	16,281	142,610	158,891
	Per cent	90.8	96.6	96.0
Total	Number	39,342	325,651	364,993
	Per cent	91.7	96.7	96.2
	95% CI	91.4–92.0	96.7–96.8	96.1–96.2

Notes

1. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
2. A participant may have completed more than one FOBT kit.
3. Preferred correspondence language was self-reported to Medicare Australia through this or other programs. Participants are assumed to prefer to correspond in English unless otherwise indicated.
4. Percentages equal the number of correctly completed FOBT kits received as a proportion of the total number of FOBT kits received in each category.

- The proportion of correctly completed FOBTs for people who specified a language other than English as their preferred correspondence language was 91.7%. This was significantly lower than the proportion of 96.7% for people whose preferred correspondence language was assumed to be English.
- Females aged 65 years with a preferred correspondence language other than English were the least likely (88.6%) to complete the FOBT correctly.

Table 2.2.2e: Correctly completed FOBT kits, by reported disability status

		Disability level		
		Severe or profound activity limitation	No severe or profound activity limitation	All correctly completed FOBTs
Males				
55 years	Number	4,071	81,950	86,021
	Per cent	92.9	97.2	97.0
65 years	Number	5,056	65,924	70,980
	Per cent	93.6	97.1	96.8
Total	Number	9,127	147,874	157,001
	Per cent	93.3	97.1	96.9
	95% CI	92.8–93.8	97.1–97.2	96.8–97.0
Females				
55 years	Number	5,295	102,460	107,755
	Per cent	89.6	96.0	95.7
65 years	Number	4,695	73,162	77,857
	Per cent	87.0	95.9	95.3
Total	Number	9,990	175,622	185,612
	Per cent	88.4	96.0	95.5
	95% CI	87.8–88.9	95.9–96.1	95.4–95.6
Persons				
55 years	Number	9,366	184,410	193,776
	Per cent	91.0	96.5	96.3
65 years	Number	9,751	139,086	148,837
	Per cent	90.3	96.4	96.0
Total	Number	19,117	323,496	342,613
	Per cent	90.6	96.5	96.2
	95% CI	90.3–91.0	96.4–96.6	96.1–96.2

Notes

1. FOBT refers to an entire test kit. FOBT completion status was determined by the pathologist performing the FOBT analysis. It indicates the status of the FOBT received by the laboratory.
2. A participant may have completed more than one FOBT kit.
3. There were 22,380 correctly completed FOBT kits with disability status missing. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
4. Percentages equal the number of correctly completed FOBT kits received as a proportion of the total number of FOBT kits received in each category.

- The proportion of correctly completed FOBTs for people with a severe or profound activity limitation was 90.6%. This was significantly lower than for people without these limitations (96.5%).
- Females with a severe or profound activity limitation were the least likely (88.4%) to complete the FOBT correctly.

FOBT positivity outcomes

Only correctly completed FOBT kits were analysed by the pathology laboratory. Where participants completed more than one FOBT kit, results from each FOBT kit were included. If no significant blood was found in either of the samples, the FOBT result was considered negative. People who received a negative result were advised to repeat a FOBT every two years.

If significant levels of blood were present in at least one of two samples, the FOBT result was considered positive. People with a positive FOBT were advised to contact their primary health care practitioner to discuss the result.

An inconclusive FOBT result may have occurred if the participant only took one sample, which was negative for blood. People with an inconclusive FOBT result were sent a replacement FOBT kit by the Register and asked to complete the test again.

Table 2.2.3: FOBT results, by age and sex

	FOBT positive		FOBT negative		FOBT inconclusive		All results
	Number	Per cent	Number	Per cent	Number	Per cent	Number
Males							
55 years	6,876	7.5	84,336	91.8	665	0.7	91,877
65 years	8,006	10.6	67,287	88.7	581	0.8	75,874
Total	14,882	8.9	151,623	90.4	1,246	0.7	167,751
Females							
55 years	6,297	5.5	107,256	93.9	672	0.6	114,225
65 years	6,163	7.4	76,256	91.9	598	0.7	83,017
Total	12,460	6.3	183,512	93.0	1,270	0.6	197,242
Persons							
55 years	13,173	6.4	191,592	93.0	1,337	0.6	206,102
65 years	14,169	8.9	143,543	90.3	1,179	0.7	158,891
Total	27,342	7.5	335,135	91.8	2,516	0.7	364,993

Notes

1. A participant may have completed more than one FOBT kit.
2. Percentages equal the number of FOBT results in each category in terms of 'positive', 'negative' and 'inconclusive' as a proportion of the total number of correctly completed FOBTs.

- There were 27,342 positive tests (7.5%), 335,135 (91.8%) negative tests and 2,516 inconclusive tests (0.7%) completed in the period 7 August 2006 to 30 June 2008.
- The proportion of positive results was higher for males (8.9%) than for females (6.3%), and people aged 65 years (8.9%) when compared with those aged 55 years (6.4%).
- The proportions of inconclusive results were similar between males and females, and between those aged 65 years compared with those aged 55 years.

Only valid FOBT results were used to analyse positivity rate in the NBCSP. A valid result was either positive or negative; inconclusive results were excluded from this analysis.

Table 2.2.4a: FOBT positivity rate, Australia

	Positive results		Valid results
	Number	Rate (per 100 valid results)	
Males			
55 years	6,876	7.5	91,212
65 years	8,006	10.6	75,293
Total	14,882	8.9	166,505
Females			
55 years	6,297	5.5	113,553
65 years	6,163	7.5	82,419
Total	12,460	6.4	195,972
Persons			
55 years	13,173	6.4	204,765
65 years	14,169	9.0	157,712
Total	27,342	7.5	362,477

Notes

1. A participant may have completed more than one FOBT kit.
2. Rates equal the number of FOBT positive results as a percentage of the total number of valid results.
3. A valid result was either positive or negative; inconclusive results were excluded.

- The overall FOBT positivity rate was 7.5%.
- The FOBT positivity rate was 1.4 times higher for males (8.9%) than females (6.4%). (Pearson's Chi-square = 859.1; 1 df; P<0.001).
- Positivity rates were 1.4 times higher for people aged 65 years (9.0%) than those aged 55 years (6.4%) (Pearson's Chi-square = 831.2; 1 df; P<0.001).

FOBT positivity rates by population subgroups

Table 2.2.4b: FOBT positivity rates, by geographic location

		Major cities	Inner regional	Outer regional	Remote	Very remote	All regions
Males							
55 years	Positive results	4,224	1,641	854	112	44	6,874
	Valid results	58,953	20,847	9,692	1,205	469	91,166
	Rate	7.2	7.9	8.8	9.3	9.4	7.5
65 years	Positive results	4,707	2,114	1,025	120	38	8,004
	Valid results	46,360	19,229	8,408	932	316	75,245
	Rate	10.2	11.0	12.2	12.9	12.0	10.6
Total	Positive results	8,931	3,755	1,879	232	82	14,878
	Valid results	105,314	40,076	18,100	2,138	784	166,411
	Rate	8.5	9.4	10.4	10.8	10.4	8.9
	95% CI	8.3–8.6	9.1–9.7	9.9–10.8	9.5–12.2	8.3–12.6	8.8–9.1
Females							
55 years	Positive results	4,064	1,480	658	66	26	6,293
	Valid results	74,360	26,080	11,337	1,260	452	113,490
	Rate	5.5	5.7	5.8	5.2	5.7	5.5
65 years	Positive results	3,673	1,641	748	79	21	6,162
	Valid results	51,083	21,299	8,847	907	244	82,379
	Rate	7.2	7.7	8.5	8.7	8.5	7.5
Total	Positive results	7,737	3,121	1,406	145	47	12,455
	Valid results	125,443	47,379	20,184	2,167	696	195,869
	Rate	6.2	6.6	7.0	6.7	6.7	6.4
	95% CI	6.0–6.3	6.4–6.8	6.6–7.3	5.6–7.7	4.8–8.5	6.3–6.5
Persons							
55 years	Positive results	8,288	3,120	1,512	177	70	13,167
	Valid results	133,313	46,927	21,029	2,466	921	204,656
	Rate	6.2	6.6	7.2	7.2	7.6	6.4
65 years	Positive results	8,380	3,755	1,773	199	59	14,166
	Valid results	97,443	40,528	17,254	1,839	560	157,624
	Rate	8.6	9.3	10.3	10.8	10.5	9.0
Total	Positive results	16,668	6,876	3,285	376	128	27,333
	Valid results	230,757	87,454	38,284	4,305	1,480	362,280
	Rate	7.2	7.9	8.6	8.7	8.7	7.5
	95% CI	7.1–7.3	7.7–8.0	8.3–8.9	7.9–9.6	7.2–10.1	7.5–7.6

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
 2. There were 9 positive FOBT results and 197 valid FOBT results with postcodes that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the areas may be less than the national total.
 3. A participant may have completed more than one FOBT kit.
 4. Rates equal the number of FOBT positive results as a percentage of the total number of valid results. A valid result was either positive or negative; inconclusive results were excluded.
 5. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.
- Positivity rates were significantly higher in Remote and Inner and Outer regional areas when compared with Major cities. Very remote areas had low numbers of FOBT results; care must be exercised when interpreting results from this region.

Table 2.2.4c: FOBT positivity rates, by Aboriginal and Torres Strait Islander status

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
55 years	Positive results	46	6,568	6,614
	Valid results	497	87,551	88,048
	Rate	9.3	7.5	7.5
65 years	Positive results	38	7,663	7,701
	Valid results	314	72,129	72,443
	Rate	12.1	10.6	10.6
Total	Positive results	84	14,231	14,315
	Valid results	811	159,680	160,491
	Rate	10.4	8.9	8.9
	95% CI	8.3–12.5	8.8–9.1	8.8–9.1
Females				
55 years	Positive results	44	6,056	6,100
	Valid results	615	109,671	110,286
	Rate	7.2	5.5	5.5
65 years	Positive results	23	5,888	5,911
	Valid results	338	79,122	79,460
	Rate	6.8	7.4	7.4
Total	Positive results	67	11,944	12,011
	Valid results	953	188,793	189,746
	Rate	7.0	6.3	6.3
	95% CI	5.4–8.7	6.2–6.4	6.2–6.4
Persons				
55 years	Positive results	90	12,624	12,714
	Valid results	1,112	197,222	198,334
	Rate	8.1	6.4	6.4
65 years	Positive results	61	13,551	13,612
	Valid results	652	151,251	151,903
	Rate	9.4	9.0	9.0
Total	Positive results	151	26,175	26,326
	Valid results	1,764	348,473	350,237
	Rate	8.6	7.5	7.5
	95% CI	7.3–9.9	7.4–7.6	7.4–7.6

Notes

1. There were 1,016 positive FOBT results and 12,240 valid FOBT results where Aboriginal and Torres Strait Islander status was not stated. These were regarded as missing data and excluded from this analysis. Hence sum of the columns may be less than the national total.
2. Aboriginal and Torres Strait Islander status was defined by the participant.
3. A participant may have completed more than one FOBT kit.
4. Rates equal the number of FOBT positive results as a percentage of the total number of valid results. A valid result was either positive or negative; inconclusive results were excluded.

- FOBT positivity rates were higher for people who identified as Aboriginal and Torres Strait Islander (8.6%) than those who identified as non-Indigenous (7.5%). However, this result was not statistically significant, due to the small number of FOBTs completed by people who identified as Aboriginal and Torres Strait Islander.

2.3 Primary health care practitioner visits

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 GP services.

Participants were advised to visit their primary health care practitioner upon receiving a positive FOBT result to discuss follow-up testing. Practitioners were requested to complete a GP Assessment form for these consultations; however, completion of these forms is not mandatory. As a result, primary health care attendance proportions presented in this section may be underestimated.

Data on primary health care practitioner visits for participants in the National Program who received a positive FOBT result are included in this section. Results were excluded for participants who were outside the target age group of 55 or 65 years, opted off or suspended participation in the NBCSP.

Primary health care practitioner consultations

Table 2.3.1: Primary health care practitioner consultations following a positive FOBT result, by state and territory

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Number	728	705	748	290	207	97	51	40	2,866
	Per cent	36.7	40.5	55.3	37.1	34.4	41.1	46.4	54.8	41.7
65 years	Number	875	708	928	355	257	130	39	27	3,319
	Per cent	35.5	37.8	57.7	38.8	36.6	44.7	39.0	54.0	41.5
Total	Number	1,603	1,413	1,676	645	464	227	90	67	6,185
	Per cent	36.0	39.1	56.6	38.1	35.6	43.1	42.9	54.5	41.6
	95% CI	34.6– 37.5	37.5– 40.7	54.8– 58.4	35.7– 40.4	33.0– 38.2	38.8– 47.3	36.2– 49.6	45.7– 63.3	40.8–42.4
Females										
55 years	Number	764	645	688	278	237	114	57	14	2,797
	Per cent	40.4	40.2	58.4	40.8	41.2	51.4	50.0	43.8	44.4
65 years	Number	761	667	726	249	247	119	53	9	2,831
	Per cent	39.9	42.6	61.5	41.0	44.3	51.1	57.0	50.0	45.9
Total	Number	1,525	1,312	1,414	527	484	233	110	23	5,628
	Per cent	40.1	41.4	59.9	40.9	42.7	51.2	53.1	46.0	45.2
	95% CI	38.6– 41.7	39.7– 43.1	57.9– 61.9	38.2– 43.6	39.8– 45.6	46.6– 55.8	46.3– 59.9	32.2– 59.8	44.3–46.0
Persons										
55 years	Number	1,492	1,350	1,436	568	444	211	108	54	5,663
	Per cent	38.5	40.4	56.7	38.9	37.7	46.1	48.2	51.4	43.0
65 years	Number	1,636	1,375	1,654	604	504	249	92	36	6,150
	Per cent	37.4	40.0	59.3	39.7	40.0	47.5	47.7	52.9	43.4
Total	Number	3,128	2,725	3,090	1,172	948	460	200	90	11,813
	Per cent	37.9	40.2	58.1	39.3	38.9	46.8	48.0	52.0	43.2
	95% CI	36.9– 39.0	39.0– 41.4	56.7– 59.4	37.5– 41.0	36.9– 40.8	43.7– 50.0	43.2– 52.8	44.6– 59.5	42.6–43.8

Notes

1. A participant may have had more than one consultation.
2. Percentages equal the number of primary health care practitioner consultations following a positive FOBT result as a proportion of the total number of positive FOBT results.

- The total number of recorded visits to primary health care practitioners following a positive FOBT result for the period 7 August 2006 to 30 June 2008 was 11,813 (43.2% of positive FOBT results). This figure is likely to be understated as it is possible there were participants with positive FOBT results who intended to visit a primary health care practitioner but had not yet done so, GP Assessment forms were not completed, or forms were not yet received by the Register.
- Queensland had the highest level of recorded primary health care practitioner attendance following a positive FOBT result (58.1%). The lowest levels of recorded attendance were in New South Wales (37.9%), South Australia (38.9%) and Western Australia (39.3%).

Primary health care practitioner consultations by population subgroups

Table 2.3.2: Primary health care practitioner consultations following a positive FOBT result, by geographic location

		Major cities	Inner regional	Outer regional	Remote and very remote	All regions
Males						
55 years	Number	1,656	740	410	59	2,865
	Per cent	39.2	45.1	48.0	38.2	41.7
65 years	Number	1,850	970	442	56	3,318
	Per cent	39.3	45.9	43.1	35.7	41.5
Total	Number	3,505	1,710	852	116	6,183
	Per cent	39.3	45.5	45.3	37.0	41.6
	95% CI	38.2–40.3	43.9–47.1	43.1–47.6	31.6–42.3	40.8–42.3
Females						
55 years	Number	1,734	703	314	46	2,797
	Per cent	42.7	47.5	47.7	50.5	44.4
65 years	Number	1,597	803	386	45	2,831
	Per cent	43.5	48.9	51.6	44.9	45.9
Total	Number	3,331	1,506	700	91	5,628
	Per cent	43.1	48.3	49.8	47.6	45.2
	95% CI	41.9–44.2	46.5–50.0	47.2–52.4	40.5–54.7	44.3–46.1
Persons						
55 years	Number	3,389	1,443	724	106	5,662
	Per cent	40.9	46.2	47.9	42.7	43.0
65 years	Number	3,447	1,773	828	101	6,149
	Per cent	41.1	47.2	46.7	39.3	43.4
Total	Number	6,836	3,216	1,552	207	11,811
	Per cent	41.0	46.8	47.2	41.0	43.2
	95% CI	40.3–41.8	45.6–48.0	45.5–48.9	36.7–45.3	42.6–43.8

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
2. Data for Remote and very remote regions were combined due to small numbers.
3. There were 2 GP visits and 9 positive FOBT results with postcodes that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the areas may be less than the national total.
4. A participant may have had more than one consultation.
5. Percentages equal the number of primary health care practitioner consultations following a positive FOBT as a proportion of the total number of positive FOBT results.
6. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.

- The highest proportions of recorded visits to primary health care practitioners following a positive FOBT result were in Outer (47.2%) and Inner (46.8%) regional areas; these were significantly higher than the other regions.
- The number of consultations following a positive FOBT result in Remote and very remote regions was small compared with other geographic regions, and care must be exercised in interpreting these results.

Table 2.3.3: Primary health care practitioner consultations following a positive FOBT result, by socioeconomic status

		1st quintile (least disadvantaged)	2nd quintile	3rd quintile	4th quintile	5th quintile (most disadvantaged)	Total
Males							
55 years	Number	445	591	532	615	644	2,827
	Per cent	37.4	44.3	41.7	41.3	43.1	41.7
65 years	Number	485	600	618	780	792	3,275
	Per cent	38.7	43.4	40.0	41.5	42.9	41.4
Total	Number	930	1,191	1,150	1,395	1,436	6,102
	Per cent	38.1	43.8	40.8	41.4	43.0	41.5
	95% CI	36.1–40.0	42.0–45.7	39.0–42.6	39.8–43.1	41.3–44.7	40.8–42.3
Females							
55 years	Number	513	517	544	620	574	2,768
	Per cent	43.5	43.2	45.1	46.6	43.7	44.4
65 years	Number	400	476	561	676	699	2,812
	Per cent	42.7	44.3	47.3	48.1	46.2	46.0
Total	Number	913	993	1,105	1,296	1,273	5,580
	Per cent	43.1	43.7	46.2	47.4	45.0	45.2
	95% CI	41.0–45.2	41.7–45.8	44.2–48.2	45.5–49.3	43.2–46.9	44.3–46.1
Persons							
55 years	Number	958	1,108	1,076	1,235	1,218	5,595
	Per cent	40.4	43.8	43.4	43.8	43.4	43.0
65 years	Number	885	1,076	1,179	1,456	1,491	6,087
	Per cent	40.4	43.8	43.2	44.4	44.4	43.4
Total	Number	1,843	2,184	2,255	2,691	2,709	11,682
	Per cent	40.4	43.8	43.3	44.1	43.9	43.2
	95% CI	39.0–41.8	42.4–45.2	41.9–44.6	42.9–45.4	42.7–45.2	42.6–43.8

Notes

1. A participant's socioeconomic status was classified using the participant's residential postcode according to the ABS Index of Relative Socioeconomic Disadvantage (IRSD) for 2006.
2. There were 131 recorded GP visits and 314 positive FOBT results with postcodes that did not correspond with the 2006 ABS IRSD classifications by postal area. These were regarded as missing data and are excluded from this analysis. Hence the sum of the columns may be less than the national total.
3. A participant may have had more than one consultation.
4. Percentages equal the number of primary health care practitioner consultations following a positive FOBT as a proportion of the total number of positive FOBT results.

- The proportion of recorded consultations by primary health care practitioners following a positive FOBT result was significantly lower in the least disadvantaged quintile (40.4%) than in the other quintiles.

Table 2.3.4: Primary health care practitioner consultations following a positive FOBT result, by Aboriginal and Torres Strait Islander status

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
55 years	Number	20	2,782	2,802
	Per cent	43.5	42.4	42.4
65 years	Number	16	3,215	3,231
	Per cent	42.1	42.0	42.0
Total	Number	36	5,997	6,033
	Per cent	42.9	42.1	42.1
	95% CI	32.3–53.4	41.3–43.0	41.3–43.0
Females				
55 years	Number	26	2,713	2,739
	Per cent	59.1	44.8	44.9
65 years	Number	8	2,737	2,745
	Per cent	34.8	46.5	46.4
Total	Number	34	5,450	5,484
	Per cent	50.7	45.6	45.7
	95% CI	38.8–62.7	44.7–46.5	44.8–46.5
Persons				
55 years	Number	46	5,495	5,541
	Per cent	51.1	43.5	43.6
65 years	Number	24	5,952	5,976
	Per cent	39.3	43.9	43.9
Total	Number	70	11,447	11,517
	Per cent	46.4	43.7	43.7
	95% CI	38.4–54.3	43.1–44.3	43.1–44.3

Notes

1. There were 296 GP visits following a positive FOBT result and 1,016 valid FOBT results where Aboriginal and Torres Strait Islander status was not stated. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. Aboriginal and Torres Strait Islander status was defined by the participant.
3. A participant may have had more than one consultation.
4. Percentages equal the number of primary health care practitioner consultations following a positive FOBT as a proportion of the total number of positive FOBT results.

- There was not a significant difference in proportion of recorded primary health consultations following a positive FOBT result between Aboriginal and Torres Strait Islander (46.4%) and non-Indigenous (43.7%) people. However, the numbers of positive FOBT results and primary health consultations for Aboriginal and Torres Strait Islander peoples was very small and should be interpreted with caution.

Table 2.3.5: Primary health care practitioner consultations following a positive FOBT result, by preferred correspondence language

		Preferred correspondence language		
		Language other than English	English	Total
Males				
55 years	Number	309	2,557	2,866
	Per cent	40.1	41.9	41.7
65 years	Number	324	2,995	3,319
	Per cent	39.5	41.7	41.5
Total	Number	633	5,552	6,185
	Per cent	39.8	41.8	41.6
	95% CI	36.0–43.5	40.5–43.1	40.3–42.8
Females				
55 years	Number	287	2,510	2,797
	Per cent	38.1	45.3	44.4
65 years	Number	277	2,554	2,831
	Per cent	42.5	46.3	45.9
Total	Number	564	5,064	5,628
	Per cent	40.1	45.8	45.2
	95% CI	37.6–42.7	44.9–46.7	44.3–46.0
Persons				
55 years	Number	596	5,067	5,663
	Per cent	39.1	43.5	43.0
65 years	Number	601	5,549	6,150
	Per cent	40.8	43.7	43.4
Total	Number	1,197	10,616	11,813
	Per cent	40.0	43.6	43.2
	95% CI	38.2–41.7	43.0–44.2	42.6–43.8

Notes

1. Preferred correspondence language was self-reported to Medicare Australia through this or other programs. Participants were assumed to prefer to correspond in English unless otherwise indicated.
2. A participant may have had more than one consultation.
3. Percentages equal the number of primary health care practitioner consultations following a positive FOBT as a proportion of the total number of positive FOBT results for preferred correspondence language.

- The proportion of recorded primary health care practitioner consultations following a positive FOBT result was significantly lower for people who preferred to correspond in a language other than English (40.0%) than for people whose preferred correspondence language was English (43.6%).

Table 2.3.6: Primary health care practitioner consultations following a positive FOBT result, by reported disability status

		Disability status		Total
		Severe or profound activity limitation	No severe or profound activity limitation	
Males				
55 years	Number	204	2,638	2,842
	Per cent	45.2	43.0	43.2
65 years	Number	318	2,966	3,284
	Per cent	43.0	42.6	42.7
Total	Number	522	5,604	6,126
	Per cent	43.8	42.8	42.9
	95% CI	41.0–46.6	42.0–43.7	42.1–43.7
Females				
55 years	Number	204	2,572	2,776
	Per cent	43.1	45.7	45.5
65 years	Number	255	2,539	2,794
	Per cent	48.4	47.2	47.3
Total	Number	459	5,111	5,570
	Per cent	45.9	46.5	46.4
	95% CI	42.8–49.0	45.5–47.4	45.5–47.3
Persons				
55 years	Number	408	5,210	5,618
	Per cent	44.2	44.3	44.3
65 years	Number	573	5,505	6,078
	Per cent	45.2	44.6	44.7
Total	Number	981	10,715	11,696
	Per cent	44.8	44.5	44.5
	95% CI	42.7–46.9	43.9–45.1	43.9–45.1

Notes

1. There were 117 primary health care practitioner consultations following positive FOBT results and 1,067 positive FOBT results where disability status was not stated. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. 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.
3. A participant may have had more than one consultation.
4. Percentages equal the number of primary health care practitioner consultations following a positive FOBT as a proportion of the total number of positive FOBT results for that group.

- The proportion of primary health care consultations recorded in the Register after a positive FOBT result for people with a severe or profound activity limitation was 44.8%. This was not significantly different to the 44.5% recorded for people without a severe or profound limitation.

Primary health care practitioner consultations by reported symptoms

Table 2.3.7: Primary health care practitioner consultations following a positive FOBT result, by reported symptom status

		Symptom status						All participants recording symptom status
		No symptoms	Recent onset rectal bleeding ≤6 months	Longer standing rectal bleeding >6 months	Significant change in bowel habits	Iron deficiency anaemia	Abdominal pain	
Males								
55 years	Number	2,223	157	199	58	24	76	2,683
	Per cent	82.9	5.9	7.4	2.2	0.9	2.8	..
65 years	Number	2,671	140	195	71	36	69	3,122
	Per cent	85.6	4.5	6.2	2.3	1.2	2.2	..
Total	Number	4,894	297	394	129	60	145	5,805
	Per cent	84.3	5.1	6.8	2.2	1.0	2.5	..
Females								
55 years	Number	2,131	159	173	97	32	96	2,615
	Per cent	81.5	6.1	6.6	3.7	1.2	3.7	..
65 years	Number	2,140	123	156	102	52	132	2,636
	Per cent	81.2	4.7	5.9	3.9	2.0	5.0	..
Total	Number	4,271	282	329	199	84	228	5,251
	Per cent	81.3	5.4	6.3	3.8	1.6	4.3	..
Persons								
55 years	Number	4,354	316	372	155	56	172	5,298
	Per cent	82.2	6.0	7.0	2.9	1.1	3.2	..
65 years	Number	4,811	263	351	173	88	201	5,758
	Per cent	83.6	4.6	6.1	3.0	1.5	3.5	..
Total	Number	9,165	579	723	328	144	373	11,056
	Per cent	82.9	5.2	6.5	3.0	1.3	3.4	..

Notes

1. Only participants who had a symptom status (including 'no symptoms') recorded in the GP Assessment form Q2 were included in this analysis. There were 757 participants with missing data for this question excluded from the analysis. Hence the sum of the columns may be less than the national total.
2. A participant may have had more than one consultation.
3. 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.
4. Excluding the last column, percentages can add to more than 100 as participants may have reported more than one symptom.

- The majority (82.9%) of people who visited a primary health care practitioner following a positive FOBT result reported that they had experienced no symptoms.
- Rectal bleeding was reported by 11.7% of people, with 5.2% reporting recent onset and 6.5% reporting longer standing rectal bleeding.

Primary health care practitioner referrals

The Australian Cancer Network Colorectal Cancer Guidelines Revision Committee (2005) recommends colonoscopy as the most accurate investigation for assessing the colon and rectum. Colonoscopy enables biopsy and histologic confirmation of the diagnosis. It also allows identification and endoscopic removal of synchronous polyps.

Table 2.3.8a: Referrals for colonoscopy or other examination following a positive FOBT result

	Referral for colonoscopy ^(a)		Referral for other examination ^(b)		No referral ^(c)		All GP visits
	Number	Per cent	Number	Per cent	Number	Per cent	Number
Males							
55 years	2,644	92.3	66	2.3	156	5.4	2,866
65 years	3,024	91.1	87	2.6	208	6.3	3,319
Total	5,668	91.6	153	2.5	364	5.9	6,185
Females							
55 years	2,518	90.0	106	3.8	173	6.2	2,797
65 years	2,524	89.2	110	3.9	197	7.0	2,831
Total	5,042	89.6	216	3.8	370	6.6	5,628
Persons							
55 years	5,162	91.2	172	3.0	329	5.8	5,663
65 years	5,548	90.2	197	3.2	405	6.6	6,150
Total	10,710	90.7	369	3.1	734	6.2	11,813

(a) Patients referred for colonoscopy with/without referral for other examination.

(b) Patients not referred for colonoscopy but referred for other examination only.

(c) Patients not referred for colonoscopy or other examination.

Notes

1. A participant may have had more than one consultation.
2. Percentages are the number of consultations following a positive FOBT who received/did not receive referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT.

- Around 90% of the 11,813 recorded primary health care practitioner consultations following a positive FOBT result referred the patient for colonoscopy. Reasons for non-referral for colonoscopy are detailed in Table 2.3.10.
- A higher proportion of people aged 55 years (91.2%) were referred for colonoscopy than for those aged 65 years (90.2%).
- Males (91.6%) were more commonly referred for colonoscopy than females (89.6%).

Table 2.3.8b: Referrals for colonoscopy or other examination following a positive FOBT result, by geographic location

		Referral for colonoscopy ^(a)		Referral for other examination ^(b)		No referral ^(c)		All GP visits
		Number	Per cent	Number	Per cent	Number	Per cent	Number
Major cities								
Males	55 years	1,508	91.0	42	2.5	106	6.4	1,656
	65 years	1,688	91.2	47	2.6	115	6.2	1,850
	Total	3,195	91.1	89	2.5	221	6.3	3,505
Females	55 years	1,559	89.9	66	3.8	109	6.3	1,734
	65 years	1,413	88.4	67	4.2	118	7.4	1,597
	Total	2,971	89.2	132	4.0	227	6.8	3,331
Persons	55 years	3,066	90.5	108	3.2	216	6.4	3,389
	65 years	3,100	89.9	114	3.3	233	6.8	3,447
	Total	6,166	90.2	222	3.2	448	6.6	6,836
Inner regional								
Males	55 years	700	94.5	14	1.8	27	3.6	740
	65 years	889	91.6	22	2.3	59	6.1	970
	Total	1,588	92.9	36	2.1	86	5.0	1,710
Females	55 years	634	90.2	27	3.8	42	6.0	703
	65 years	720	89.7	30	3.7	53	6.6	803
	Total	1,355	89.9	56	3.7	95	6.3	1,506
Persons	55 years	1,334	92.4	40	2.8	69	4.8	1,443
	65 years	1,609	90.7	52	2.9	112	6.3	1,773
	Total	2,943	91.5	92	2.9	181	5.6	3,216
Outer regional								
Males	55 years	384	93.7	7	1.7	19	4.6	410
	65 years	393	88.9	18	4.0	32	7.2	442
	Total	777	91.2	24	2.9	51	5.9	852
Females	55 years	282	89.9	12	3.7	20	6.4	314
	65 years	348	90.2	14	3.5	24	6.3	386
	Total	630	90.1	25	3.6	44	6.3	700
Persons	55 years	666	92.1	19	2.6	39	5.4	724
	65 years	741	89.5	31	3.8	56	6.8	828
	Total	1,407	90.7	50	3.2	95	6.1	1,552

(continued)

Table 2.3.8b (continued): Referrals for colonoscopy or other examination following a positive FOBT result, by geographic location

		Referral for colonoscopy ^(a)		Referral for other examination ^(b)		No referral ^(c)		All GP visits
		Number	Per cent	Number	Per cent	Number	Per cent	Number
Remote								
Males	55 years	37	84.2	n.p.	n.p.	n.p.	n.p.	44
	65 years	40	96.8	n.p.	n.p.	n.p.	n.p.	42
	Total	77	90.3	n.p.	n.p.	n.p.	n.p.	86
Females	55 years	32	95.0	n.p.	n.p.	n.p.	n.p.	33
	65 years	35	98.1	n.p.	n.p.	n.p.	n.p.	36
	Total	67	96.7	n.p.	n.p.	n.p.	n.p.	69
Persons	55 years	69	88.9	n.p.	n.p.	n.p.	n.p.	77
	65 years	76	97.4	n.p.	n.p.	n.p.	n.p.	78
	Total	144	93.2	3	2.0	8	4.9	155
Very remote								
Males	55 years	15	96.6	n.p.	n.p.	n.p.	n.p.	15
	65 years	14	93.1	n.p.	n.p.	n.p.	n.p.	15
	Total	29	94.9	n.p.	n.p.	n.p.	n.p.	30
Females	55 years	11	84.7	n.p.	n.p.	n.p.	n.p.	13
	65 years	8	88.3	n.p.	n.p.	n.p.	n.p.	9
	Total	19	86.1	n.p.	n.p.	n.p.	n.p.	22
Persons	55 years	26	91.2	n.p.	n.p.	n.p.	n.p.	29
	65 years	22	91.3	n.p.	n.p.	n.p.	n.p.	24
	Total	48	91.2	2	4.7	2	4.1	52

(a) Patients referred for colonoscopy with/without referral for other examination.

(b) Patients not referred for colonoscopy but referred for other examination.

(c) Patients not referred for any examination.

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
2. There were 2 primary health care practitioner consultations following positive FOBT results with a postcode that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
3. A participant may have had more than one consultation.
4. Percentages equal the number of consultations following a positive FOBT who received/did not receive referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT.
5. n.p. Not available for publication due to small numbers, but included in totals where applicable.
6. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.

- Similar levels of referral for colonoscopy following a positive FOBT result were recorded for all geographic locations.
- Proportions of people referred for colonoscopy in Remote and Very remote locations should be interpreted with caution due to the small number of primary health care practitioner consultations in these locations.

Table 2.3.9: Referrals by primary health care practitioners for colonoscopy or other examination, by reported symptom / no symptoms^(a)

	Referral for colonoscopy or other examination				No referral for colonoscopy or other examination			
	With symptoms		No symptoms		With symptoms		No symptoms	
	Number	Per cent ^(b)	Number	Per cent ^(c)	Number	Per cent ^(d)	Number	Per cent ^(e)
Males								
55 years	425	16.7	2,124	83.3	35	26.1	99	73.9
65 years	410	14.0	2,519	86.0	41	21.2	152	78.8
Total	835	15.2	4,643	84.8	76	23.2	251	76.8
Females								
55 years	446	18.1	2,014	81.9	38	24.5	117	75.5
65 years	446	18.1	2,014	81.9	50	28.4	126	71.6
Total	892	18.1	4,028	81.9	88	26.6	243	73.4
Persons								
55 years	871	17.4	4,138	82.6	73	25.3	216	74.7
65 years	856	15.9	4,533	84.1	91	24.7	278	75.3
Total	1,727	16.6	8,671	83.4	164	24.9	494	75.1

(a) Symptoms include:

- recent onset rectal bleeding (less than or equal to 6 months)
- longer standing rectal bleeding (longer than 6 months)
- significant change in bowel habits
- iron deficiency anaemia
- abdominal pain.

(b) Percentages equal the number of consultations following a positive FOBT and reported symptom(s) that resulted in referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT that resulted in referral for either colonoscopy or other examination.

(c) Percentages equal the number of consultations following a positive FOBT and no reported symptoms that resulted in referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT that resulted in referral for either colonoscopy or other examination.

(d) Percentages equal the number of consultations following a positive FOBT and reported symptom(s) that did not result in referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT that did not result in referral for either colonoscopy or other examination.

(e) Percentages equal the number of consultations following a positive FOBT and no reported symptoms that did not result in referral for either colonoscopy or other examination as a proportion of the total number of consultations following a positive FOBT that did not result in referral for either colonoscopy or other examination.

Notes

1. There were 757 recorded visits to primary health care practitioners where no symptom status was recorded. These records are excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. A participant may have had more than one consultation.

- There were 11,079 consultations which resulted in referrals for colonoscopy or other examination; however, 681 had no details for symptom status. Of the 10,398 consultations available for analysis, 1,727 (16.6%) reported symptoms and 8,671 (83.4%) reported no symptoms.
- There were 734 consultations that did not result in referral for further investigation. After excluding 76 that had no symptom status recorded, 164 (24.9%) reported symptoms and 494 (75.1%) reported experiencing no symptoms. Reasons for non-referral are detailed in Table 2.3.10.

Table 2.3.10: Non-referrals by primary health care practitioners for colonoscopy, by reason

		Reason						All respondents
		Bowel cancer previously diagnosed	Limited life expectancy	Recent colonoscopy (<18 months)	Patient declines colonoscopy	Significant co-morbidity	Other medical condition(s)	
Males								
55 years	Number	3	n.p.	98	78	14	63	222
	Per cent	1.4	n.p.	44.1	35.1	6.3	28.4	..
65 years	Number	6	n.p.	120	91	29	88	295
	Per cent	2.0	n.p.	40.7	30.8	9.8	29.8	..
Total	Number	9	n.p.	218	169	43	151	517
	Per cent	1.7	n.p.	42.2	32.7	8.3	29.2	..
Females								
55 years	Number	4	n.p.	101	111	16	77	279
	Per cent	1.4	n.p.	36.2	39.8	5.7	27.6	..
65 years	Number	7	n.p.	150	98	23	81	307
	Per cent	2.3	n.p.	48.9	31.9	7.5	26.4	..
Total	Number	11	n.p.	251	209	39	158	586
	Per cent	1.9	n.p.	42.8	35.7	6.7	27.0	..
Persons								
55 years	Number	7	n.p.	199	189	30	140	501
	Per cent	1.4	n.p.	39.7	37.7	6.0	27.9	..
65 years	Number	13	n.p.	270	189	52	169	602
	Per cent	2.2	n.p.	44.9	31.4	8.6	28.1	..
Total	Number	20	7	469	378	82	309	1,103
	Per cent	1.8	0.6	42.5	34.3	7.4	28.0	..

Notes

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.
3. n.p. Not available for publication due to small numbers, but included in totals where applicable.

- The three main reasons people were not referred for colonoscopy were:
 1. Recent colonoscopy within the last 18 months (42.5%)
 2. Patient declines colonoscopy (34.3%)
 3. Other medical condition(s) (28.0%).
- Of the 469 consultations that had recently had a colonoscopy performed, 57.6% were aged 65 years and 42.4% were aged 55 years.

2.4 Colonoscopy

This section provides a summary of colonoscopy procedures as part of the NBCSP up to 30 June 2008. Colonoscopies for people who suspended from, or opted off, the NBCSP or were outside the age of 55 or 65 years were excluded from this analysis.

Colonoscopy procedures are identified to the Register through three sources:

- Colonoscopy Report forms (from which colonoscopy quality can be analysed),
- Histopathology Report forms, and
- claims for Medicare benefits for colonoscopic services relating to the NBCSP.

As completion of forms is not mandatory there is the possibility of inconsistent reporting. Colonoscopy Report forms, Histopathology Report forms and Medicare claims for a single colonoscopy can be recorded in the Register in any sequence. Figure 2.4.1 presents the volume of colonoscopies identified from each source, and provides a diagrammatic representation of data completeness.

In order to assess the proportion of people with a positive FOBT that have progressed to colonoscopy on the screening pathway, data from all sources is collated and de-duplicated. Tables 2.4.1a and 2.4.1b present data on the total number of people known to have progressed to colonoscopy after a positive FOBT. Multiple colonoscopies are excluded from this analysis.

The remainder of the tables in this section present data by population subgroups, and analyses of the quality of colonoscopies provided as part of the NBCSP on those colonoscopies reported to the Register via the Colonoscopy Report form.

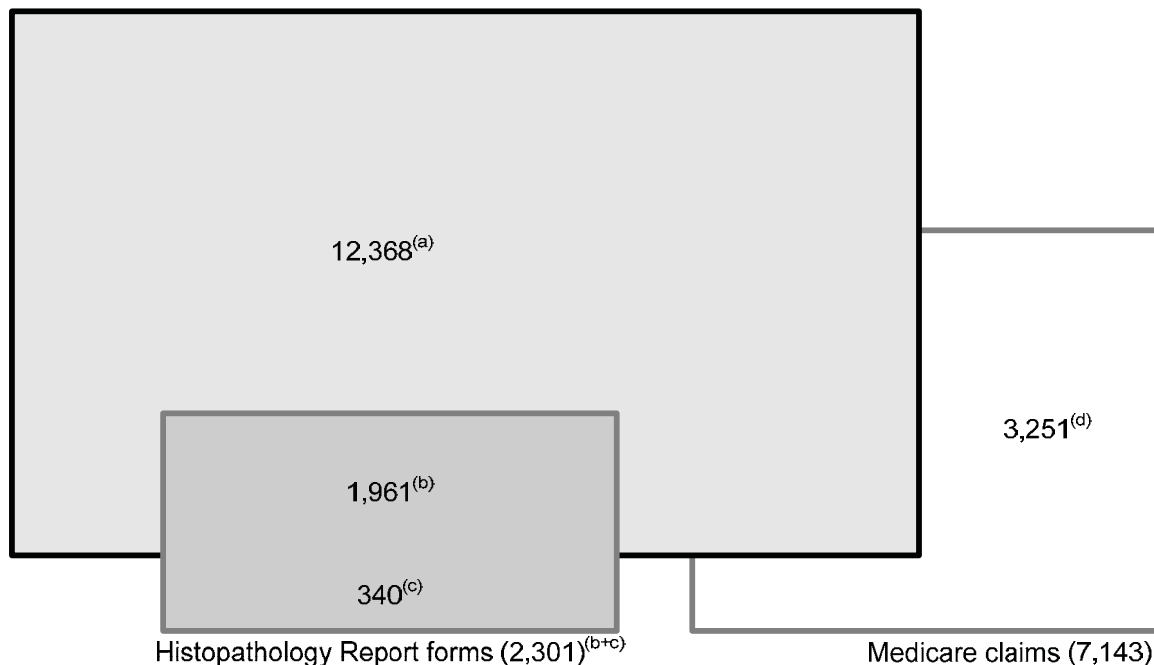
A participant may undergo more than one colonoscopy as part of an investigation of a positive FOBT result for reasons including inadequate bowel preparation, incomplete examination or review of previous excision sites. There were 130 participants who had more than one colonoscopy recorded in the period 7 August 2006 to 30 June 2008.

The colonoscopy data presented in this section underestimate the true proportion of people referred for colonoscopy due to a number of factors:

- The data in this section are sourced from the 14,329 NBCSP Colonoscopy Report forms included in the Register as at 30 June 2008. Tables 2.4.1a and 2.4.1b include all colonoscopies in the colonoscopy follow-up results. Colonoscopies identified only from returned Histopathology Report forms or Medicare claims (Figure 2.4.1) are not included in other analyses.
- Completion of Colonoscopy Report forms by practitioners is not mandatory. As a result, the number of colonoscopies performed may be under-reported.
- Colonoscopies require a referral from a primary health care practitioner. However, as GP attendance is under-reported, the number of positive FOBTs was used as the denominator for tables 2.4.2 to 2.4.7.
- The number of positive FOBT results in the denominator (tables 2.4.2 to 2.4.7) includes all FOBTs processed up to 30 June 2008. However, the number of colonoscopies in the numerator only includes those with a positive FOBT who have had time to visit their primary health care practitioner and undergo a colonoscopy. This underestimation does not affect comparisons between different groups, but it does mean that the absolute levels of follow-up colonoscopies are understated.

**Total NBCSP colonoscopies recorded
7 August 2006–30 June 2008
n = 17,920**

Colonoscopy Report forms (14,329)^(a+b)



- (a) Colonoscopy Report forms recorded in the NBCSP Register (with or without a Medicare claim) for which no Histopathology Report form has been received.
- (b) Colonoscopies undertaken as part of the NBCSP where a Colonoscopy and Histopathology Report form was recorded on which confirmed outcomes can be calculated. The total number of Colonoscopy Report forms recorded in the Register on which colonoscopy analyses can be performed is given by (a) + (b).
- (c) Colonoscopies undertaken as part of the NBCSP where no Colonoscopy Report form was recorded but a Histopathology Report form was recorded.
- (d) Colonoscopies undertaken as part of the NBCSP where a Medicare claim was recorded but no Colonoscopy Report or Histopathology Report form was recorded.

Note: A participant may have had more than one colonoscopy.

Source: National Bowel Cancer Screening Program Register.

Figure 2.4.1: Colonoscopy procedures recorded in the National Bowel Cancer Screening Program Register, by report source

- There were 17,920 colonoscopies recorded in the NBCSP Register for the period 7 August 2006 to 30 June 2008.
- Colonoscopy Report forms had been completed for 14,329 colonoscopies.
- There were 3,251 claims to Medicare for colonoscopies performed as part of the NBCSP without an associated Colonoscopy or Histopathology Report form recorded.
- There were 340 colonoscopies identified from returned Histopathology Report forms, without an associated Colonoscopy Report form.

Colonoscopy follow-up

Table 2.4.1a: Colonoscopy follow-up following a positive FOBT result, by state and territory

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Number	1,190	1,183	908	445	382	140	70	44	4,362
	Per cent	60.0	68.1	67.1	57.0	63.5	59.3	63.6	60.3	63.4
65 years	Number	1,412	1,226	1,094	533	466	182	63	25	5,001
	Per cent	57.3	65.5	68.0	58.4	66.3	62.5	63.0	50.0	62.5
Total	Number	2,602	2,409	2,002	978	848	322	133	69	9,363
	Per cent	58.5	66.7	67.6	57.7	65.0	61.1	63.3	56.1	62.9
	95% CI	57.1– 60.0	65.2– 68.3	65.9– 69.3	55.4– 60.1	62.4– 67.6	56.9– 65.3	56.8– 69.9	47.3– 64.9	62.2–63.7
Females										
55 years	Number	1,092	1,058	816	400	381	132	78	17	3,974
	Per cent	57.8	66.0	69.3	58.7	66.4	59.5	68.4	53.1	63.1
65 years	Number	1,129	1,047	786	362	390	143	62	9	3,928
	Per cent	59.1	66.9	66.6	59.6	69.9	61.6	66.7	50.0	63.8
Total	Number	2,221	2,105	1,602	762	771	275	140	26	7,902
	Per cent	58.5	66.5	67.9	59.2	68.1	60.6	67.6	52.0	63.4
	95% CI	56.9– 60.0	64.8– 68.1	66.1– 69.8	56.5– 61.8	65.4– 70.8	56.1– 65.1	61.3– 74.0	38.2– 65.8	62.6–64.3
Persons										
55 years	Number	2,282	2,241	1,724	845	763	272	148	61	8,336
	Per cent	58.9	67.1	68.1	57.8	64.9	59.4	66.1	58.1	63.3
65 years	Number	2,541	2,273	1,880	895	856	325	125	34	8,929
	Per cent	58.1	66.2	67.4	58.9	67.9	62.1	64.8	50.0	63.0
Total	Number	4,823	4,514	3,604	1,740	1,619	597	273	95	17,265
	Per cent	58.5	66.6	67.7	58.4	66.4	60.9	65.5	54.9	63.2
	95% CI	57.4– 59.6	65.5– 67.7	66.5– 69.0	56.6– 60.1	64.6– 68.3	57.8– 63.9	60.9– 70.0	47.5– 62.3	62.6–63.7

Notes

- Percentages are 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. This includes notification of a colonoscopy by a Colonoscopy Report form, Histopathology Report form or Medicare claim for colonoscopic services as part of the NBCSP.
- Excludes multiple colonoscopies by participants.

- There were 17,265 people who had a follow-up colonoscopy after a positive FOBT recorded as part of the National Program between 7 August 2006 and 30 June 2008. This represents 63.2% of those people with positive FOBT results recorded.
- The proportion of people with a follow-up colonoscopy recorded following a positive FOBT result was highest in Queensland (67.7%), Victoria (66.6%) and South Australia (66.4%).
- The lowest proportion of people having a colonoscopy following a positive FOBT result was recorded in the Northern Territory (54.9%), Western Australia (58.4%) and New South Wales (58.5%). However, the number of colonoscopies recorded for the Northern Territory was small and care must be taken in interpreting these results.

Table 2.4.1b: Kaplan-Meier colonoscopy follow-up rates at 52 weeks since positive FOBT, by state and territory

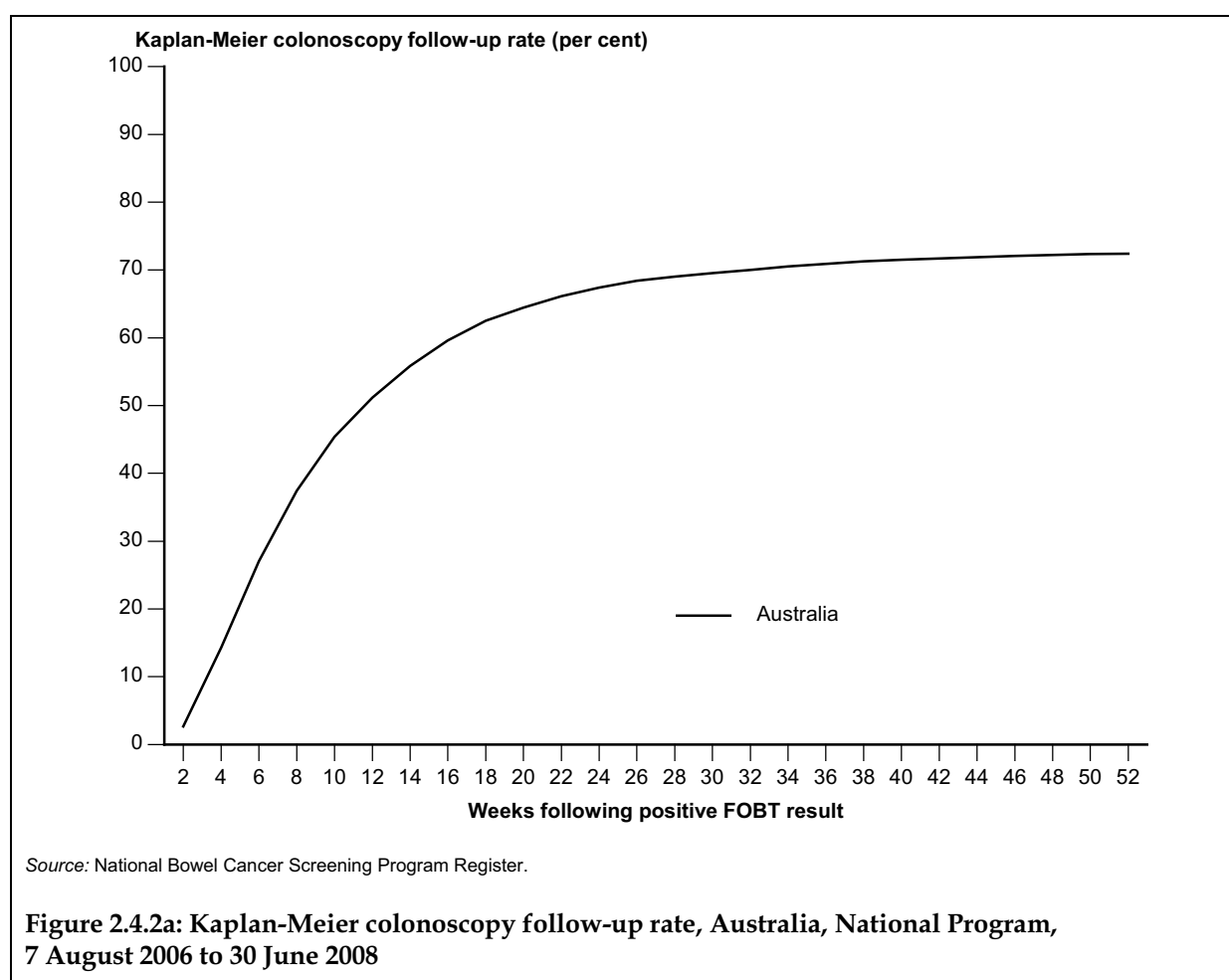
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Colonoscopy follow-up rate	66.7	72.6	81.2	66.0	83.8	72.7	74.8	61.8	72.4
95% CI	65.5–67.8	71.4–73.8	79.9–82.5	64.0–67.9	81.8–85.9	69.2–76.2	70.0–79.5	53.8–69.8	71.8–73.0

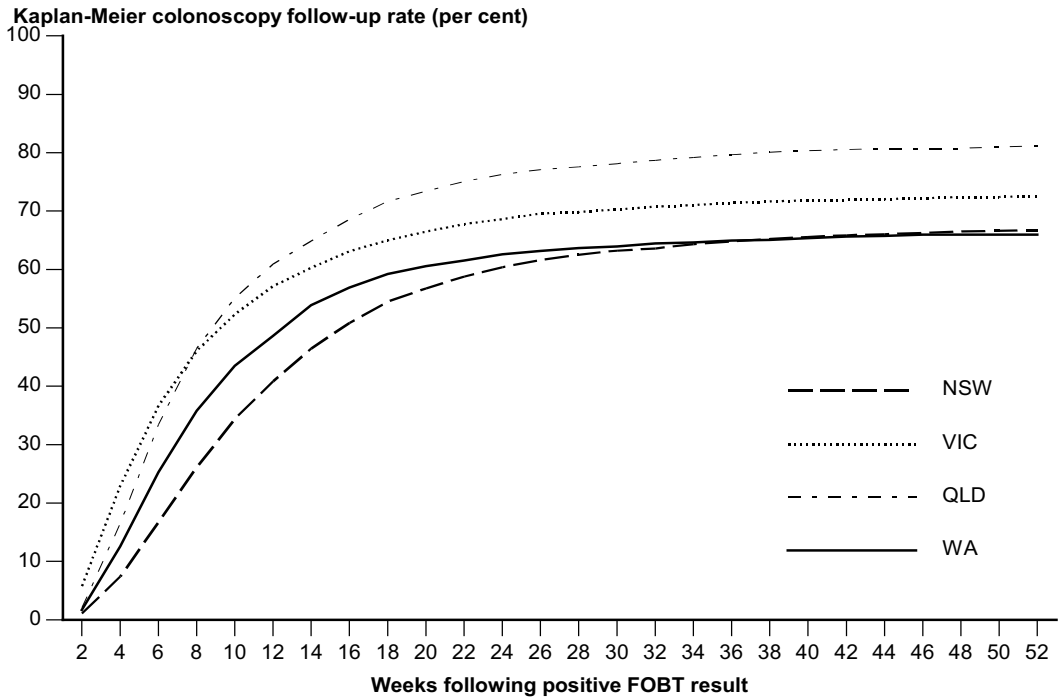
Notes

1. Rates are the estimated number of people who are known to have had a colonoscopy recorded within 52 weeks following a positive FOBT as a percentage of the total number of people with positive FOBT results, using Kaplan-Meier survival analysis methods.
2. Follow-up colonoscopy includes notification of a colonoscopy by a Colonoscopy Report form, Histopathology Report form or Medicare claim for colonoscopic services as part of the NBCSP.
3. Excludes multiple colonoscopies.

- The estimated Australia-wide colonoscopy follow-up rate after 52 weeks from a positive FOBT result was 72.4%. However, this figure is likely to be underestimated as not all colonoscopies conducted as part of the NBCSP are recorded in the Register.
- South Australia (83.8%), Queensland (81.2%) and the ACT (74.8%) had the highest estimated rate of follow-up colonoscopies recorded in the Register.

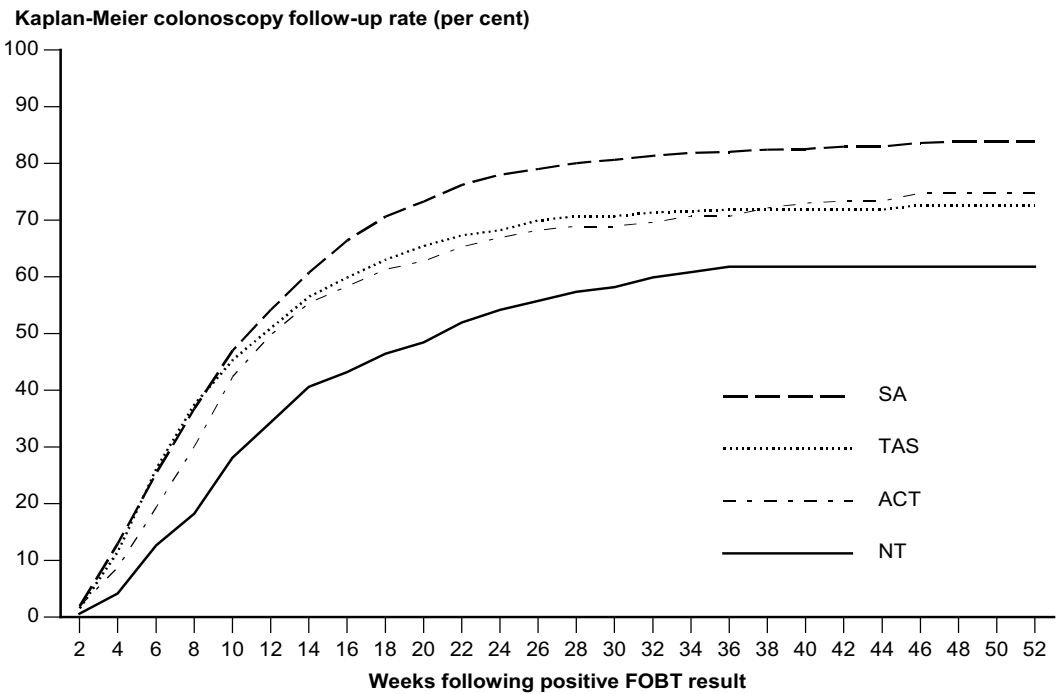
Figures 2.4.2a, b, and c show the Kaplan-Meier colonoscopy follow-up rates up to 52 weeks from a positive FOBT result. For clarity, Kaplan-Meier curves for the states and territories are divided between Figures 2.4.2b and 2.4.2c.





Source: National Bowel Cancer Screening Program Register.

Figure 2.4.2b: Kaplan-Meier colonoscopy follow-up rate, New South Wales, Victoria, Queensland and Western Australia, National Program, 7 August 2006 to 30 June 2008



Source: National Bowel Cancer Screening Program Register.

Figure 2.4.2c: Kaplan-Meier colonoscopy follow-up rate, South Australia, Tasmania, Australian Capital Territory and Northern Territory, National Program, 7 August 2006 to 30 June 2008

Colonoscopy reporting

Table 2.4.2: Colonoscopies reported following a positive FOBT result, by state and territory

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Number	943	990	797	299	359	124	58	37	3,607
	Per cent	47.6	56.9	58.9	38.3	59.6	52.5	52.7	50.7	52.5
65 years	Number	1,122	1,039	964	357	435	155	53	23	4,148
	Per cent	45.5	55.4	59.9	39.1	61.9	53.3	53.0	46.0	51.8
Total	Number	2,065	2,029	1,761	656	794	279	111	60	7,755
	Per cent	46.4	56.2	59.5	38.7	60.8	52.9	52.9	48.8	52.1
	95% CI	45.0– 47.9	54.5– 57.8	57.7– 61.2	36.4– 41.0	58.2– 63.5	48.7– 57.2	46.1– 59.6	39.9– 57.6	51.3–52.9
Females										
55 years	Number	855	922	698	289	359	116	67	14	3,320
	Per cent	45.2	57.5	59.2	42.4	62.4	52.3	58.8	43.8	52.7
65 years	Number	894	888	661	251	372	124	56	8	3,254
	Per cent	46.8	56.8	56.0	41.4	66.7	53.2	60.2	44.4	52.8
Total	Number	1,749	1,810	1,359	540	731	240	123	22	6,574
	Per cent	46.0	57.2	57.6	41.9	64.5	52.7	59.4	44.0	52.8
	95% CI	44.4– 47.6	55.4– 58.9	55.6– 59.6	39.2– 44.6	61.7– 67.3	48.2– 57.3	52.7– 66.1	30.2– 57.8	51.9–53.6
Persons										
55 years	Number	1,798	1,912	1,495	588	718	240	125	51	6,927
	Per cent	46.4	57.2	59.0	40.2	61.0	52.4	55.8	48.6	52.6
65 years	Number	2,016	1,927	1,625	608	807	279	109	31	7,402
	Per cent	46.1	56.1	58.2	40.0	64.0	53.2	56.5	45.6	52.2
Total	Number	3,814	3,839	3,120	1,196	1,525	519	234	82	14,329
	Per cent	46.2	56.6	58.6	40.1	62.6	52.9	56.1	47.4	52.4
	95% CI	45.2– 47.3	55.4– 57.8	57.3– 59.9	38.3– 41.9	60.6– 64.5	49.7– 56.0	51.4– 60.9	40.0– 54.8	51.8–53.0

Notes

1. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded as part of the NBCSP as a proportion of the total number of positive FOBT results.
2. There were 130 people with more than one Colonoscopy Report form recorded in the Register.

- There were 14,329 Colonoscopy Report forms recorded as part of the National Program between 7 August 2006 and 30 June 2008. This represented 52.4% of the number of positive FOBT results recorded.
- The total number of Colonoscopy Report forms recorded in the Register included 130 repeat colonoscopies.

Table 2.4.3: Colonoscopies reported following a positive FOBT result, by geographic location

		Major cities	Inner regional	Outer regional	Remote	Very remote	All regions
Males							
55 years	Number	2,189	917	437	48	15	3,606
	Per cent	51.8	55.9	51.2	43.3	35.1	52.5
65 years	Number	2,467	1,107	501	54	19	4,147
	Per cent	52.4	52.4	48.9	44.5	49.2	51.8
Total	Number	4,655	2,024	938	102	34	7,753
	Per cent	52.1	53.9	49.9	43.9	41.6	52.1
	95% CI	51.1–53.2	52.3–55.5	47.7–52.2	37.5–50.3	30.9–52.3	51.3–52.9
Females							
55 years	Number	2,175	771	331	28	11	3,316
	Per cent	53.5	52.1	50.3	43.3	41.2	52.7
65 years	Number	1,959	866	378	42	8	3,254
	Per cent	53.3	52.8	50.5	53.5	40.5	52.8
Total	Number	4,134	1,637	709	71	19	6,570
	Per cent	53.4	52.5	50.4	48.9	40.9	52.7
	95% CI	52.3–54.5	50.7–54.2	47.8–53.0	40.7–57.0	26.8–55.0	51.9–53.6
Persons							
55 years	Number	4,364	1,688	768	77	26	6,922
	Per cent	52.7	54.1	50.8	43.3	37.3	52.6
65 years	Number	4,426	1,974	879	96	27	7,401
	Per cent	52.8	52.6	49.6	48.1	46.1	52.2
Total	Number	8,790	3,661	1,646	173	53	14,323
	Per cent	52.7	53.2	50.1	45.8	41.3	52.4
	95% CI	52.0–53.5	52.1–54.4	48.4–51.8	40.8–50.9	32.8–49.9	51.8–53.0

Notes

1. A participant's geographic location was classified using the participant's residential postcode according to the Australian Standard Geographic Classification (ASGC) for 2006.
2. There were 6 colonoscopies and 9 positive FOBT results with postcodes that did not correspond with the 2006 ABS remoteness classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the areas may be less than the national total.
3. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded following a positive FOBT result as a proportion of the total number of positive FOBT results.
4. There were 130 people with more than one Colonoscopy Report form recorded in the Register.
5. States and territories using the geographic rollout schedule may have participants that have not progressed as far in the screening pathway in some geographic areas at 30 June 2008. Figures for geographic regions should be interpreted with caution. See Table 1.1.

- The proportion of colonoscopies reported following a positive FOBT result was significantly lower in Remote (45.8%) and Very remote (41.3%) areas than for all regions combined (52.4%). However, the numbers of colonoscopies recorded for these areas were small and care must be taken in interpreting these results.

Table 2.4.4: Colonoscopies reported following a positive FOBT result, by socioeconomic status

		1st quintile (least disadvantaged)	2nd quintile	3rd quintile	4th quintile	5th quintile (most disadvantaged)	Total
Males							
55 years	Number	646	737	686	743	750	3,562
	Per cent	54.3	55.3	53.8	49.9	50.2	52.5
65 years	Number	709	786	810	927	874	4,106
	Per cent	56.5	56.8	52.4	49.4	47.4	51.9
Total	Number	1,355	1,523	1,496	1,670	1,624	7,668
	Per cent	55.4	56.1	53.0	49.6	48.6	52.2
	95% CI	53.5–57.4	54.2–57.9	51.2–54.9	47.9–51.3	46.9–50.3	51.4–53.0
Females							
55 years	Number	653	686	643	662	646	3,290
	Per cent	55.3	57.3	53.3	49.7	49.2	52.8
65 years	Number	513	585	654	712	771	3,235
	Per cent	54.7	54.5	55.1	50.7	51.0	52.9
Total	Number	1,166	1,271	1,297	1,374	1,417	6,525
	Per cent	55.1	56.0	54.2	50.2	50.1	52.9
	95% CI	53.0–57.2	53.9–58.0	52.2–56.2	48.4–52.1	48.3–52.0	52.0–53.7
Persons							
55 years	Number	1,299	1,423	1,329	1,405	1,396	6,852
	Per cent	54.8	56.2	53.6	49.8	49.7	52.7
65 years	Number	1,222	1,371	1,464	1,639	1,645	7,341
	Per cent	55.8	55.8	53.6	49.9	49.0	52.4
Total	Number	2,521	2,794	2,793	3,044	3,041	14,193
	Per cent	55.3	56.0	53.6	49.9	49.3	52.5
	95% CI	53.8–56.7	54.6–57.4	52.2–54.9	48.6–51.1	48.1–50.6	51.9–53.1

Notes

1. A participant's socioeconomic status was classified using the participant's residential postcode according to the ABS Index of Relative Socioeconomic Disadvantage (IRSD) for 2006.
2. There were 136 recorded colonoscopies and 314 positive FOBT results with postcodes that did not correspond with the 2006 ABS IRSD classifications by postal area. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
3. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded following a positive FOBT result as a proportion of the total number of positive FOBTs recorded.
4. There were 130 people with more than one Colonoscopy Report form recorded in the Register.

- The proportion of colonoscopies recorded following a positive FOBT result was highest in people living in less disadvantaged areas (56.0% for quintile 2 and 55.3% for quintile 1) and lowest in people living in the most disadvantaged areas (49.9 for quintile 4 and 49.3% for quintile 5).

Table 2.4.5: Colonoscopies reported following a positive FOBT result, by Aboriginal and Torres Strait Islander status

		Aboriginal and Torres Strait Islander	Non-Indigenous	Total
Males				
55 years	Number	23	3,501	3,524
	Per cent	50.0	53.3	53.3
65 years	Number	23	4,017	4,040
	Per cent	60.5	52.4	52.5
Total	Number	46	7,518	7,564
	Per cent	54.8	52.8	52.8
	95% CI	44.1–65.4	52.0–53.6	52.0–53.7
Females				
55 years	Number	24	3,221	3,245
	Per cent	54.5	53.2	53.2
65 years	Number	13	3,149	3,162
	Per cent	56.5	53.5	53.5
Total	Number	37	6,370	6,407
	Per cent	55.2	53.3	53.3
	95% CI	43.3–67.1	52.4–54.2	52.5–54.2
Persons				
55 years	Number	47	6,722	6,769
	Per cent	52.2	53.2	53.2
65 years	Number	36	7,166	7,202
	Per cent	59.0	52.9	52.9
Total	Number	83	13,888	13,971
	Per cent	55.0	53.1	53.1
	95% CI	47.0–62.9	52.5–53.7	52.5–53.7

Notes

1. There were 358 recorded colonoscopies following a positive FOBT result and 1,016 valid FOBT results where Aboriginal and Torres Strait Islander status was not stated. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. Aboriginal and Torres Strait Islander status was defined by the participant.
3. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded following a positive FOBT result as a proportion of the total number of positive FOBTs recorded.
4. There were 130 people with more than one Colonoscopy Report form recorded in the Register.

- The proportion of colonoscopies recorded following a positive FOBT result was 55.0% for Aboriginal and Torres Strait Islander people compared with 53.1% for non-Indigenous people.
- Numbers of colonoscopies recorded in the Register for Aboriginal and Torres Strait Islander people were too small at this point in the NBCSP to draw any conclusions on colonoscopy rates between Aboriginal and Torres Strait Islander and non-Indigenous people.

Table 2.4.6: Colonoscopies reported following a positive FOBT result, by preferred correspondence language

		Preferred correspondence language		
		Language		Total
		other than English	English	
Males				
55 years	Number	332	3,275	3,607
	Per cent	43.1	53.6	52.5
65 years	Number	378	3,770	4,148
	Per cent	46.0	52.5	51.8
Total	Number	710	7,045	7,755
	Per cent	44.6	53.0	52.1
	95% CI	42.2–47.1	52.2–53.9	51.3–52.9
Females				
55 years	Number	332	2,988	3,320
	Per cent	44.1	53.9	52.7
65 years	Number	338	2,916	3,254
	Per cent	51.8	52.9	52.8
Total	Number	670	5,904	6,574
	Per cent	47.7	53.4	52.8
	95% CI	45.1–50.3	52.5–54.3	51.9–53.6
Persons				
55 years	Number	664	6,263	6,927
	Per cent	43.6	53.8	52.6
65 years	Number	716	6,686	7,402
	Per cent	48.6	52.7	52.2
Total	Number	1,380	12,949	14,329
	Per cent	46.1	53.2	52.4
	95% CI	44.3–47.8	52.6–53.8	51.8–53.0

Notes

1. Preferred correspondence language was self-reported to Medicare Australia through this or other programs. Participants were assumed to prefer to correspond in English unless otherwise indicated.
2. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded following a positive FOBT result as a proportion of the total number of positive FOBTs recorded.
3. There were 130 people with more than one Colonoscopy Report form recorded in the Register.

- The proportion of colonoscopies recorded after a positive FOBT result for people who preferred to correspond in a language other than English was 46.1%. This was significantly lower than the proportion of 53.2% for people who preferred to correspond in English.
- There was not a significant difference between the proportion of colonoscopies reported for males (44.6%) and females (47.7%) who prefer to correspond in a language other than English.

Table 2.4.7: Colonoscopies reported following a positive FOBT result, by reported disability status

		Disability level		Total
		Severe or profound activity limitation	No severe or profound activity limitation	
Males				
55 years	Number	210	3,368	3,578
	Per cent	46.6	55.0	54.4
65 years	Number	335	3,772	4,107
	Per cent	45.3	54.2	53.4
Total	Number	545	7,140	7,685
	Per cent	45.8	54.6	53.8
	95% CI	43.2–48.4	53.6–55.5	52.9–54.7
Females				
55 years	Number	220	3,082	3,302
	Per cent	46.5	54.8	54.1
65 years	Number	228	2,989	3,217
	Per cent	43.3	55.6	54.5
Total	Number	448	6,071	6,519
	Per cent	44.8	55.2	54.3
	95% CI	42.0–47.6	54.2–56.2	53.4–55.3
Persons				
55 years	Number	430	6,450	6,880
	Per cent	46.5	54.9	54.3
65 years	Number	563	6,761	7,324
	Per cent	44.4	54.8	53.9
Total	Number	993	13,211	14,204
	Per cent	45.3	54.9	54.1
	95% CI	43.4–47.2	54.2–55.5	53.4–54.7

Notes

1. There were 125 colonoscopies following positive FOBT results and 1,067 positive FOBT results where disability status was not stated. These were regarded as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.
2. 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.
3. Percentages of colonoscopies performed equal the number of Colonoscopy Report forms recorded following a positive FOBT result as a proportion of the total number of positive FOBTs recorded.
4. There were 130 people with more than one Colonoscopy Report form recorded in the Register.

- The proportion of colonoscopies recorded after a positive FOBT result for people reporting a severe or profound limitation was 45.3%. This was significantly lower than the proportion of 54.9% for people reporting no severe or profound limitation.
- There was not a significant difference in the proportion of colonoscopies performed for males (45.8%) and females (44.8%) reporting a severe or profound limitation.

Colonoscopy quality

As the NBCSP is the first program to collect data regarding colonoscopy procedures and outcomes for people with positive FOBT results, analyses of the quality of the colonoscopy procedures performed may provide a basis for future colonoscopy certification, accreditation and training to ensure continued provision of quality services.

Quality of the colonoscopy result is influenced by a number of factors:

- Adequate bowel preparation is important for the colonoscopist to clearly visualise the colon lining. Inadequate bowel preparation (Table 2.4.8) can result in missed lesions, cancelled procedures, increased procedural time, and a potential increase in complication rates.
- A complete colonoscopy is one which visualises the whole colon and requires unequivocal identification of the caecum (considered to be the start of the colon). A colonoscopy is deemed to have visualised the whole colon if the depth of insertion is recorded as reaching the caecum (Table 2.4.9).
- The American Society for Gastrointestinal Endoscopy (ASGE) and the American College of Gastroenterology (ACG) Taskforce on Quality in Endoscopy (2006) stated that longer withdrawal times have demonstrated improved polyp detection rates, and, conversely, rapid withdrawal of the colonoscope may miss lesions and reduce the effectiveness of colon cancer prevention by colonoscopy. The Pilot Program noted the suggestion of the Taskforce that a standard withdrawal time of an average of at least 6–8 minutes is necessary to ensure that sufficient care has been taken to thoroughly inspect the large bowel for abnormalities. It further recommended that mean withdrawal times be monitored for analysis (tables 2.4.10 and 2.4.11).

Colonoscopies that do not satisfy these factors may require re-examination. Details of colonoscopies flagged for re-examination are included in Table 2.4.12.

Colonoscopy is an invasive procedure performed under sedation that is safe and relatively pain-free. However, there are a range of complications and adverse events associated with colonoscopy and may include the following:

- Intolerance of the bowel preparation. Some people develop dizziness, headaches or vomiting.
- Reaction to the sedatives or anaesthetic. This is very uncommon but is of concern in people who have severe heart disease or lung disease.
- Perforation (making a hole in the bowel wall).
- Major bleeding from the bowel. This can occur as a result of polyps being removed.

The draft report of the Quality Working Group to the NBCSP (QWG) noted that the two main complications arising are perforation and post-colonoscopy bleeding. A literature review by the QWG of studies showed the risk of death associated with colonoscopy to be low, with incidence rates ranging from zero to 0.03 per cent. The incidence rate of perforation also varied between 0.07 and 0.3 per cent and bleeding was found to be associated with an incidence rate between 0.03 and 2 per cent (NBCSP-QWG 2008).

Table 2.4.14 shows adverse events recorded for people invited to participate in the Program for the period 1 January 2008 to 30 June 2008. However, reporting of adverse events as a result of investigation of a positive FOBT is not mandatory and care should be taken in interpreting these figures.

Table 2.4.8: Bowel preparation quality – colonoscopies reported following a positive FOBT result, by adequacy of bowel preparation

	Adequate bowel preparation		Inadequate bowel preparation		All colonoscopies
	Number	Per cent	Number	Per cent	Number
Males					
55 years	3,327	92.2	280	7.8	3,607
65 years	3,796	91.5	352	8.5	4,148
Total	7,123	91.9	632	8.1	7,755
Females					
55 years	3,087	93.0	233	7.0	3,320
65 years	3,016	92.7	238	7.3	3,254
Total	6,103	92.8	471	7.2	6,574
Persons					
55 years	6,414	92.6	513	7.4	6,927
65 years	6,812	92.0	590	8.0	7,402
Total	13,226	92.3	1,103	7.7	14,329

Notes

1. Data were sourced from the Colonoscopy Report form section 4.1.
2. Percentages equal the number of colonoscopies recorded with adequate or inadequate bowel preparation following a positive FOBT result as a proportion of the total number of colonoscopies recorded.
3. Percentages add to 100 across the row.

- Of the 14,329 colonoscopies reported, 13,226 (92.3%) had adequate bowel preparation. The remaining 1,103 examinations (7.7%) were considered by the colonoscopist to have been compromised by poor bowel preparation.
- Inadequate bowel preparation prior to colonoscopy was higher for males (8.1%) than for females (7.2%).

Table 2.4.9: Colonoscopies reported following a positive FOBT result, by depth of colonoscope insertion

		Complete colonoscopy			Incomplete colonoscopy							
		TI	CAEC	Total	ASC	HEP	TRAN	SPLN	DESC	SIG	RECT	Total
Males												
55 years	Number	1,617	1,927	3,544	20	10	4	4	5	17	3	63
	Per cent	44.8	53.4	98.3	0.6	0.3	0.1	0.1	0.1	0.5	0.1	1.7
65 years	Number	1,655	2,393	4,048	31	13	8	7	8	27	6	100
	Per cent	39.9	57.7	97.6	0.7	0.3	0.2	0.2	0.2	0.7	0.1	2.4
Total	Number	3,272	4,320	7,592	51	23	12	11	13	44	9	163
	Per cent	42.2	55.7	97.9	0.7	0.3	0.2	0.1	0.2	0.6	0.1	2.1
Females												
55 years	Number	1,593	1,641	3,234	24	18	4	8	5	24	3	86
	Per cent	48.0	49.4	97.4	0.7	0.5	0.1	0.2	0.2	0.7	0.1	2.6
65 years	Number	1,370	1,762	3,132	35	17	16	7	9	34	4	122
	Per cent	42.1	54.1	96.3	1.1	0.5	0.5	0.2	0.3	1.0	0.1	3.7
Total	Number	2,963	3,403	6,366	59	35	20	15	14	58	7	208
	Per cent	45.1	51.8	96.8	0.9	0.5	0.3	0.2	0.2	0.9	0.1	3.2
Persons												
55 years	Number	3,210	3,568	6,778	44	28	8	12	10	41	6	149
	Per cent	46.3	51.5	97.8	0.6	0.4	0.1	0.2	0.1	0.6	0.1	2.2
65 years	Number	3,025	4,155	7,180	66	30	24	14	17	61	10	222
	Per cent	40.9	56.1	97.0	0.9	0.4	0.3	0.2	0.2	0.8	0.1	3.0
Total	Number	6,235	7,723	13,958	110	58	32	26	27	102	16	371
	Per cent	43.5	53.9	97.4	0.8	0.4	0.2	0.2	0.2	0.7	0.1	2.6

Notes

1. Percentages equal the number of colonoscopies recorded reaching each part of the bowel following a positive FOBT as a proportion of the total number of colonoscopies recorded.
2. Percentages add to 100 across the row (excluding 'Totals').
3. Abbreviations for depth of insertion are as follows:
 - TI terminal ileum
 - CAEC caecum
 - ASC ascending colon
 - HEP hepatic flexure
 - TRAN transverse colon
 - SPLN splenic flexure
 - DESC descending colon
 - SIG sigmoid colon
 - RECT rectum

- Of the 14,329 colonoscopies reported, 97.4% were recorded as visualising the whole colon.
- Females had a higher proportion of incomplete colonoscopies (3.2%) than males (2.1%).

Table 2.4.10: Colonoscopy withdrawal time, by state and territory, in minutes

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Males										
55 years	Mean	10	9	11	13	10	8	9	12	10
	95% CI of mean	10–10	9–9	11–12	12–14	10–11	8–9	8–10	8–16	10–10
	Median	9	8	10	10	10	8	8	8	9
65 years	Mean	11	9	13	13	11	10	10	13	11
	95% CI of mean	10–11	9–10	12–13	12–14	11–12	9–11	8–12	8–17	11–11
	Median	9	8	10	10	10	8	8	10	9
Total	Mean	10	9	12	13	11	9	9	12	11
	95% CI of mean	10–11	9–9	12–12	12–14	10–11	9–10	8–11	10–15	11–11
	Median	9	8	10	10	10	8	8	10	9
Females										
55 years	Mean	9	9	10	12	10	8	10	12	10
	95% CI of mean	9–10	8–9	10–11	11–12	10–10	7–9	8–11	3–21	9–10
	Median	8	8	8	10	9	7	8	8	8
65 years	Mean	10	8	10	11	10	9	9	9	10
	95% CI of mean	9–10	8–9	10–11	11–12	10–11	8–10	8–10	4–15	9–10
	Median	8	8	8	10	10	8	8	7	8
Total	Mean	10	9	10	11	10	9	9	11	10
	95% CI of mean	9–10	8–9	10–11	11–12	10–10	8–9	9–10	6–17	9–10
	Median	8	8	8	10	10	7	8	7	8
Persons										
55 years	Mean	10	9	11	12	10	8	9	12	10
	95% CI of mean	9–10	9–9	10–11	12–13	10–11	8–9	9–10	9–16	10–10
	Median	8	8	9	10	9	7	8	8	8
65 years	Mean	10	9	12	12	11	10	10	12	10
	95% CI of mean	10–11	9–9	11–12	12–13	10–11	9–10	8–11	8–15	10–11
	Median	9	8	9	10	10	8	8	10	9
Total	Mean	10	9	11	12	10	9	9	12	10
	95% CI of mean	10–10	9–9	11–12	12–13	10–11	9–9	9–10	10–15	10–10
	Median	9	8	9	10	10	8	8	8	9

Notes

1. Only complete colonoscopies were included in this analysis.
2. Colonoscopies with missing withdrawal times are coded as 99 minutes by Medicare Australia. There were 618 complete colonoscopies with missing withdrawal times. These were excluded from the analysis.
3. State and territory refers to the residential state or territory of the patient.

- The mean withdrawal time of all complete colonoscopies recorded was 10 minutes, with a median withdrawal time of 9 minutes.
- There was a small significant difference in mean withdrawal times for males (11 mins) and females (10 mins).

Table 2.4.11: Proceduralist mean colonoscopy withdrawal times, by state and territory

Time group (minutes)		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–5	Number	15	13	4	2	1	3	0	1	39
	Per cent	5.8	6.3	3.2	3.5	1.3	15.0	0.0	9.1	5.1
6–10	Number	156	141	62	21	43	12	5	4	444
	Per cent	60.0	68.4	50.0	36.8	54.4	60.0	41.7	36.4	57.7
11–15	Number	58	41	45	17	29	4	5	3	202
	Per cent	22.3	19.9	36.3	29.8	36.7	20.0	41.7	27.3	26.3
16–20	Number	20	10	4	10	2	1	1	0	48
	Per cent	7.7	4.9	3.2	17.5	2.5	5.0	8.3	0.0	6.2
21–98	Number	11	1	9	7	4	0	1	3	36
	Per cent	4.2	0.5	7.3	12.3	5.1	0.0	8.3	27.3	4.7
Total	Number	260	206	124	57	79	20.0	12	11	769
	Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes

1. Only complete colonoscopies were included in this analysis.
2. There were 636 complete colonoscopies with missing withdrawal time, proceduralist provider number or proceduralist state. These were excluded from the analysis.
3. Percentages equal the number of proceduralists with mean colonoscopy withdrawal times falling in each time group as a proportion of the total number of proceduralists who recorded colonoscopies.
4. State and territory refers to the proceduralist.

- The majority of proceduralists (84.0%) had mean complete colonoscopy withdrawal times between 6 and 15 minutes. Only 5.1% of proceduralists had a mean withdrawal time of 5 minutes or less.
- The highest proportion of proceduralists with mean complete colonoscopy withdrawal times of 6–10 minutes was in Victoria (68.4%), New South Wales (60.0%) and Tasmania (60.0%).

Table 2.4.12: Colonoscopies with proceduralist's intention of re-examination due to inadequate colonoscopy, by reason

	Poor bowel preparation		Incomplete colonoscopy		All inadequate colonoscopies
	Number	Per cent	Number	Per cent	Number
Males					
55 years	72	67.9	43	40.6	106
65 years	99	61.9	74	46.3	160
Total	171	64.3	117	44.0	266
Females					
55 years	67	58.3	58	50.4	115
65 years	68	47.9	87	61.3	142
Total	135	52.5	145	56.4	257
Persons					
55 years	139	62.9	101	45.7	221
65 years	167	55.3	161	53.3	302
Total	306	58.5	262	50.1	523

Notes

1. Percentages equal the number of colonoscopies recorded in each category in terms of 'poor bowel preparation' or 'incomplete colonoscopy' with proceduralist's intention of re-examination as a proportion of the total number of intended colonoscopy repeats due to inadequate colonoscopy.
2. As some inadequate colonoscopies were due to both 'poor bowel preparation' and 'incomplete colonoscopy', percentages may add to more than 100 across the row.

- Of the 14,329 colonoscopies reported, there were 523 in which the proceduralist planned to perform another procedure due to an inadequate colonoscopy. Of these, 306 had poor bowel preparation and 262 had an incomplete examination.
- The proportion of intended re-examinations due to poor bowel preparation was 64.3% for males compared with 52.5% for females; and 62.9% for those aged 55 years compared with 55.3% for those aged 65 years.
- An incomplete colonoscopy accounted for 56.4% of intended re-examinations for females compared with 44.0% for males; and 53.3% for those aged 65 years compared with 45.7% for those aged 55 years.
- There were another 859 intended repeats for other reasons, including for review of previous excision sites. Consequently, almost 10% of the total 14,329 colonoscopies reported were flagged for a repeat examination.

Table 2.4.13: Abnormalities found at colonoscopy

	No abnormality found		Abnormality found						All colonoscopies
			Suspected cancers		1 or more polyps		Other non-cancer diagnoses		
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number
Males									
55 years	561	15.6	160	4.4	2,198	61.0	684	19.0	3,603
65 years	452	10.9	263	6.3	2,679	64.6	751	18.1	4,145
Total	1,013	13.1	423	5.5	4,877	62.9	1,435	18.5	7,748
Females									
55 years	909	27.4	120	3.6	1,417	42.7	871	26.3	3,317
65 years	625	19.2	189	5.8	1,558	47.9	878	27.0	3,250
Total	1,534	23.4	309	4.7	2,975	45.3	1,749	26.6	6,567
Persons									
55 years	1,470	21.2	280	4.0	3,615	52.2	1,555	22.5	6,920
65 years	1,077	14.6	452	6.1	4,237	57.3	1,629	22.0	7,395
Total	2,547	17.8	732	5.1	7,852	54.9	3,184	22.2	14,315

Source: Colonoscopy Report form section 4.4–4.7

Notes

1. There were 14 colonoscopies in which one or more abnormalities were found but the type of abnormality was not specified or included unreliable abnormality records.
2. An unreliable abnormality record was a record where an abnormal examination was indicated but no information on suspected cancer, polyps or other diagnoses was included.
3. Percentages equal the number of colonoscopies recorded with/without abnormalities as a proportion of the total number of colonoscopies recorded.
4. Abnormalities are mutually exclusive. Where a participant has multiple abnormalities, classification is made according to risk. Suspected cancers had highest risk, followed by polyps. Other non-cancer diagnoses were classified with lowest risk.

- Of the 14,329 colonoscopy reports recorded (see Table 2.4.2), there were 14,315 with abnormality data recorded. Of these, 732 (5.1%) had suspected cancers detected.
- The proportion of suspected cancers found at colonoscopy was 6.1% for those aged 65 years compared with 4.0% for those aged 55 years.
- There were 7,852 colonoscopies (54.9%) where one or more polyps were detected. The proportion of colonoscopies reported with polyps detected was higher for males (62.9%) than for females (45.3%).
- There were no abnormalities found in 17.8% of the reported colonoscopies; a higher proportion of females had no abnormality (23.4%) compared to males (13.1%).

Table 2.4.14: Adverse outcomes following investigation of positive FOBT by colonoscopy

Colonoscopies performed	Number of colonoscopies recording adverse outcomes	Adverse Outcome								
		Bleeding	Infection/ sepsis	Perforation	Reaction to sedation	Death	Other	Delayed discharge	Unplanned hospital admission within 30 days	Surgery required
14,329	66	31	5	7	6	0	36	24	32	10

Source: Adverse Outcome form sections 2-3

Notes

1. Notification of adverse events as a result of the NBCSP is not mandatory. These data should be interpreted with caution.
2. Adverse outcomes are not mutually exclusive.

- There were 66 reports of adverse outcomes following colonoscopy recorded in the Register between 7 August 2006 and 30 June 2008. Of these there were 31 cases of bleeding, 5 of infection/ sepsis, 7 of perforation, 6 of a reaction to sedation and 36 other events. There were no deaths reported as a result of a procedure as part of the National Program.
- Delayed discharge was experienced 24 times, and there were 32 unplanned hospital admissions within 30 days of the original procedure. Surgery was required for 10 patients.

2.5 Overall outcomes

This section presents participant-level outcomes from the National Program as at 30 June 2008, based on people who returned a positive FOBT result and who proceeded to colonoscopy. This section differs from the previous sections which presented FOBT, primary health care consultation and colonoscopy-level data.

Program outcomes at key pathway points for the National Program are summarised in Figure 2.5.1. The current screening outcomes for all people invited to participate in the National Program are tabulated by state and territory in Table 2.5.1a, and by sex and age in Table 2.5.1b.

For participants who returned more than one FOBT, the result counted was selected according to the following order of precedence: a positive result was selected over any other result, and a negative result was selected over an inconclusive result.

A person who has had a colonoscopy was classified as having confirmed cancer, suspected cancer, adenoma or neither cancer nor adenoma. For participants with more than one polyp or cancer found at colonoscopy the most serious result was counted.

Data for colonoscopy outcomes were derived from information recorded on both the Colonoscopy Report form and the Histopathology Report form. As reporting by clinicians to the NBCSP is not mandatory, a participant may have a Colonoscopy Report form, a Histopathology Report form or both recorded in the Register. Outcomes are classified as follows:

- Confirmed cancers were those cancers confirmed by histopathology with or without a corresponding Colonoscopy Report form. Confirmed cancers are given a higher priority than suspected cancer.
- Suspected cancers were abnormalities detected at colonoscopy that the colonoscopist suspects to be cancer but are not yet confirmed by histopathology.
- Where a person has a confirmed or suspected cancer, this was given higher priority than adenomas. Adenoma classifications are described in Appendix B.
- Polyps awaiting histopathology were those people with polyps detected at colonoscopy that had not yet had an associated Histopathology Report form recorded. It is possible that some of these may be found to be adenomas or cancers. Therefore, final outcome data for all colonoscopies is not possible until all tests awaiting histopathology have been completed and recorded.
- Participants recorded as having no cancer or adenoma were those that had no polyps or suspected cancers detected at colonoscopy, or had polyps detected at colonoscopy that were classified as non-adenomous by histopathology.

Table 2.5.2 presents cancer spread status for those cancers confirmed by histopathology. Due to time lags in the screening pathway, and under-reporting by clinicians, there was a low level of final outcome data available for analysis. Therefore, positive predictive values for FOBT screening cannot be calculated at this time; tables 2.5.1a, 2.5.1b and 2.5.2 are interim tables only.

Summary

- Of the 959,967 invitation packs sent to eligible people since 7 August 2006, there were 366,826 people (39.5%) with a completed FOBT recorded by 30 June 2008.
- Of the people who had returned completed FOBT kits by 30 June 2008, there were 27,333 (7.5%) who had a positive FOBT result, 355,061 (91.3%) who had a negative FOBT result, 557 (0.2%) were inconclusive and 3,855 (1.1%) had no result recorded as the kit was incorrectly completed and could not be analysed. People who returned an incorrectly completed FOBT kit were sent another FOBT kit. People who received an inconclusive FOBT result were also sent another FOBT kit. People listed as having an inconclusive result or no result are those who have not yet returned the subsequent kit.
- Of the 27,333 participants that had a positive FOBT result recorded, 10,068 (36.8%) were not recorded as having a colonoscopy by 30 June 2008. A further 2,836 (10.4%) had undergone a colonoscopy but had no outcome data registered.
- Of the 14,429 participants with a positive FOBT result that had colonoscopy outcome details reported by 30 June 2008, there were 46 confirmed and 706 suspected cancers and 1,784 confirmed adenomas.
- There were 5,955 people with polyps detected at colonoscopy with histopathology results not yet received by the Register. The outcome of these tests may alter the final numbers of adenomas and cancers found.

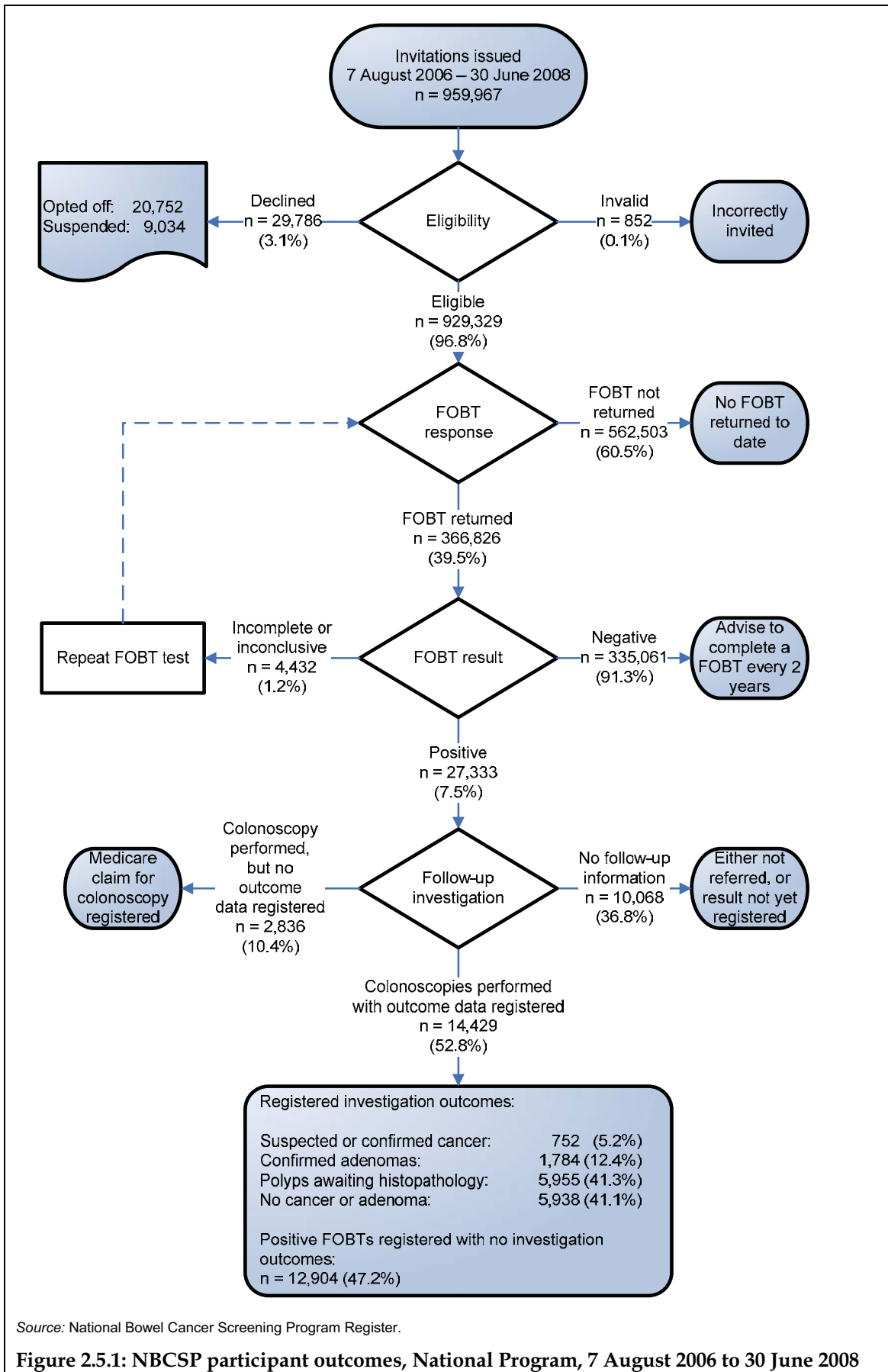


Table 2.5.1a: Preliminary overall participant summary outcomes, by state and territory, National Program, 7 August 2006 to 30 June 2008

State	Colonoscopy outcomes										
	Invitations issued ^(a)	Number screened ^(b)	Total positive FOBT	Colonoscopies with outcome data registered	No cancer or adenoma ^(c)	Polyps awaiting histopathology ^(d)	Confirmed diminutive adenoma ^(e)	Confirmed small adenoma ^(e)	Confirmed advanced adenoma ^(e)	Suspected cancer ^(f)	Confirmed cancer ^(g)
NSW	309,539	115,078	8,246	3,852	1,582	1,815	61	36	154	192	12
Vic	225,584	91,455	6,777	3,851	1,795	1,552	59	50	191	201	3
Qld	183,002	70,778	5,320	3,091	1,118	1,102	113	118	445	176	19
WA	92,330	39,633	2,982	1,259	372	623	44	39	133	44	4
SA	72,015	30,900	2,437	1,529	678	585	28	42	135	58	3
Tas	24,500	10,491	981	531	271	106	25	18	85	21	5
ACT	15,049	6,444	417	233	85	138	0	0	0	10	0
NT	7,310	2,047	173	83	37	34	2	0	6	4	0
Australia	929,329	366,826	27,333	14,429	5,938	5,955	332	303	1,149	706	46

(a) 'Invitations issued' equals the number of eligible people who were issued an invitation to screen in the NBCSP.

(b) 'Number screened' equals the number of people who completed an FOBT kit and had results forwarded to the Register.

(c) No cancers were suspected at colonoscopy or confirmed non-cancerous by histopathology; no polyps identified at colonoscopy, or polyps confirmed as non-adenomatous at histopathology.

(d) Polyps detected at colonoscopy and sent to histopathology for analysis. No Histopathology Report received by Register.

(e) Confirmed adenoma figures were based on a combination of the Colonoscopy and Histopathology Report forms for a person received by the Register.

(f) Cancer suspected at colonoscopy but not yet confirmed by histopathology.

(g) Cancer confirmed by histopathology.

Table 2.5.1b: Preliminary overall participant summary outcomes, by age and sex, National Program, 7 August 2006 to 30 June 2008

		Colonoscopy outcomes										
		Invitations issued ^(a)	Number screened ^(b)	Total positive FOBT	Colonoscopies with outcome data registered	No cancer or adenoma ^(c)	Polyps awaiting histo-pathology ^(d)	Confirmed diminutive adenoma ^(e)	Confirmed small adenoma ^(e)	Confirmed advanced adenoma ^(e)	Suspected cancer ^(f)	Confirmed cancer ^(g)
Males												
55 years	284,228	92,188	6,875	3,635	1,297	1,656	97	94	327	157	7	
65 years	183,717	75,998	8,003	4,186	1,274	2,050	90	91	411	253	17	
Total	467,945	168,186	14,878	7,821	2,571	3,706	187	185	738	410	24	
Females												
55 years	282,650	115,104	6,294	3,325	1,818	1,069	61	66	187	117	7	
65 years	178,734	83,536	6,161	3,283	1,549	1,180	84	52	224	179	15	
Total	461,384	198,640	12,455	6,608	3,367	2,249	145	118	411	296	22	
Persons												
55 years	566,878	207,292	13,169	6,960	3,115	2,725	158	160	514	274	14	
65 years	362,451	159,534	14,164	7,469	2,823	3,230	174	143	635	432	32	
Total	929,329	366,826	27,333	14,429	5,938	5,955	332	303	1,149	706	46	

(a) 'Invitations issued' equals the number of eligible people who were issued an invitation to screen in the NBCSP.

(b) 'Number screened' equals the number of people who completed an FOBT kit and had results forwarded to the Register.

(c) No cancers were suspected at colonoscopy or confirmed non-cancerous by histopathology; no polyps identified at colonoscopy, or polyps confirmed as non-adenomas at histopathology.

(d) Polyps detected at colonoscopy and sent to histopathology for analysis. No Histopathology Report received by Register.

(e) Confirmed adenoma figures were based on a combination of the Colonoscopy and Histopathology Report forms for a person received by the Register.

(f) Cancer suspected at colonoscopy but not yet confirmed by histopathology.

(g) Cancer confirmed by histopathology.

Table 2.5.2: Cancer spread status, by age and sex, National Program, 7 August 2006 to 30 June 2008

	Cancer confirmed by histopathology					All confirmed cancers
	Submucosa or into but not through muscularis propria	Through muscular propria	Lymph node metastasis	Metastatic disease	Not reported	
Males						
55 years	6	n.p.	n.p.	n.p.	n.p.	7
65 years	9	n.p.	n.p.	n.p.	n.p.	17
Total	15	8	n.p.	n.p.	n.p.	24
Females						
55 years	3	n.p.	n.p.	n.p.	n.p.	7
65 years	6	n.p.	n.p.	n.p.	n.p.	15
Total	9	10	n.p.	n.p.	n.p.	22
Persons						
55 years	9	4	n.p.	n.p.	n.p.	14
65 years	15	14	n.p.	n.p.	n.p.	32
Total	24	18	2	1	1	46

Note: n.p. Not available for publication due to small numbers, but included in totals where applicable.

Source: Histopathology Report form section 4C

- Of the 46 cancers confirmed by histopathology by 30 June 2008, 24 (52%) were found to be in the submucosa or into but not through the muscularis propria; 18 (39%) were found to extend through the muscularis propria; 2 (4%) were found to have lymph node metastasis; and 1 case was found with metastatic disease.