

3.03 Early detection and early treatment

The early detection and early treatment of disease among the Indigenous population measured by the health assessment and disease screening of Aboriginal and Torres Strait Islander peoples

Data sources

Data for this measure come from the Medicare database, the AIHW BreastScreen Australia database, the National Bowel Cancer Screening Register, the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the AIHW's National Mortality Database, and the Service Activity Reporting (SAR) database.

Medicare database

Medicare enrolment application forms are lodged by persons wishing to enrol with Medicare at Medicare offices in each state/territory or by mail. Information from these forms is entered directly into the Medicare database, which is held by the DoHA.

In November 2002, the ABS standard question on Indigenous identification was included on this form. Because the Indigenous identifier was only introduced recently, the coverage of Indigenous Australians in this data set is not complete. Aboriginal and Torres Strait Islander persons who had identified as Indigenous in this database as at 1 July 2005 numbered 80,658.

BreastScreen Australia

The BreastScreen Australia program consists of a network of dedicated screening and assessment services throughout urban, rural and remote areas of all states and territories. The program provides free biennial mammographic screening and follow-up of any suspicious lesions identified at screening to the point of diagnosis. It is aimed specifically at asymptomatic women aged 50–69 years, with a participation target of 70%. However, women aged 40–49 years and 70 years and older are able to attend for screening (AIHW 2006). The national program was established in 1991. It is funded through the Australian Government Department of Health and Ageing (DoHA) and each of the state and territory governments, and is administered through state coordination units. The AIHW monitors and reports biennially on the performance of BreastScreen Australia.

The standard ABS question is used to record Indigenous status in this database. 'Not stated' values for Indigenous status are not separately quantified, but are included in the 'non-Indigenous' numbers.

The participation rate for Indigenous women in breast screening should be treated with caution as it is not known how many women do not report their Indigenous status.

Mortality

The National Mortality Database is a national collection of de-identified information for all deaths in Australia and is maintained by the AIHW. Information on the characteristics and causes of death of the deceased is provided by the Registrars of Births, Deaths and Marriages and coded nationally by the ABS. Information on the cause of death is supplied by the medical practitioner who certified the death, or by a coroner. The data are updated each calendar year.

Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. These four jurisdictions represent approximately 60% of the Indigenous population of Australia. Data are presented by state/territory of usual residence rather than state/territory where death occurs.

Deaths for which the Indigenous status of the deceased was not reported have been excluded from the analysis.

National Bowel Cancer Screening Register

The National Bowel Cancer Screening Program (NBCSP) was implemented in August 2006 by the Australian Government, in partnership with state and territory governments, as part of its Strengthening Cancer Care initiative. The goals of the NBCSP are to reduce the incidence of and mortality due to bowel cancer through screening to detect abnormalities of the colon and rectum at an early stage and, where bowel cancer has developed, to detect cancers at an early stage in order to maximise the effectiveness of treatment (AIHW & DoHA 2008).

From 7 August 2006 people across Australia turning 55 or 65 years of age between 1 May 2006 and 30 June 2008 were invited to screen for bowel cancer. Invitation packs, including a faecal occult blood test (FOBT), were sent directly to participants by Medicare Australia. Data are collected about participants and their screening outcomes from a variety of sources and stored in the National Bowel Cancer Screening Register, which is maintained by Medicare Australia. The data are collected on questionnaires completed by participants, general practitioners, colonoscopists, pathologists and other specialists. The AIHW produces monitoring reports for DoHA on a 6-monthly basis to assist in management of the NBCSP. The Australian Government announced in the May 2008 Budget a continuation of this program to provide testing to people aged 50, 55 and 65 years over 3 years commencing in 2008.

Data in this indicator are based on data recorded in the Register for the period 7 August 2006 to 31 July 2007 and presented in the NBCSP monitoring report 2007 (AIHW & DoHA 2008).

National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The 2004–05 NATSIHS collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 NHS. The NATSIHS was conducted in remote and non-remote areas of Australia and collected a range of information from Indigenous Australians about health-related issues including health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. It is planned to repeat the survey at 6-yearly intervals, with the next NATSIHS to be conducted in 2010–11.

Service Activity Reporting (SAR) database

The SAR database collects data from approximately 150 Australian Government-funded Aboriginal and Torres Strait Islander primary health-care services and is held at DoHA. It is estimated that these services provide GP services to around 40% of the Indigenous population. Service-level data on health care and health-related activities are collected by survey questionnaire over a 12-month period.

Response rates to the SAR by Aboriginal and Torres Strait Islander primary health-care services in 2005–06 were around 99%.

Note that the SAR only includes Aboriginal and Torres Strait Islander health organisations that receive at least some Australian Government funding to facilitate access to primary health care.

Analyses

Medicare Benefits Schedule health assessments/checks

Over the last few years, the Australian Government has introduced a number of new Indigenous health checks and health assessments within the Medicare Benefits Schedule (MBS) to help improve early intervention and diagnosis for treatable conditions. The MBS now provides items specifically for regular health checks or assessments for Aboriginal and Torres Strait Islander people of all ages.

A health assessment includes an assessment of a patient's health and physical, psychological and social function and whether preventative health care and education should be offered to the patient. The assessment also includes keeping a record of the health assessment and offering the patient a written report about the health assessment, with recommendations about matters covered by the health assessment.

Data on child and adult health assessments come from the Medicare Database. The Medicare database includes information on the number of health assessments for Indigenous and non-Indigenous Australians of different ages (Item numbers 700, 702, 704, 706, 708 and 710).

- Annual health checks for Aboriginal and Torres Strait Islander children aged 0–14 years were introduced into the MBS in May 2006 (Medicare Item number 708). For the period July 2006 to June 2007, there were 6,315 health assessments of Indigenous children in Australia (a rate of 34 per 1,000 Indigenous children) (Table 3.03.1). The rate at which Indigenous children aged 0–14 years received health assessments under the MBS ranged from 1 per 1,000 in Tasmania to 54 per 1,000 in the Northern Territory.
- Two yearly health checks for Aboriginal and Torres Strait Islanders aged 15–54 years were introduced in the MBS in May 2004 (Medicare Item no. 710). Between July 2006 and June 2007, there were 12,776 health assessments of Indigenous Australians aged 15–54 years, which was a rate of 45 per 1,000 population. The rate at which Indigenous Australians aged 15–54 years received health assessments under the MBS ranged from 1 per 1,000 in Tasmania to 73 per 1,000 in the Northern Territory.
- Annual health assessments for Aboriginal and Torres Strait Islander Australians aged 55 years and over were introduced in November 1999 (Medicare Item numbers 704 and 706). Between July 2006 and June 2007, there were 3,473 health assessments of Indigenous Australians aged 55 years and over (a rate of 93 per 1,000 population). The rate of MBS health assessments for Indigenous Australians aged 55 years and over ranged from 5 per 1,000 in Tasmania to 138 per 1,000 in the Northern Territory.
- Between July 2006 and June 2007, Indigenous Australians aged 55 years and over received MBS health assessments at a rate of 93 per 1,000 (Medicare Item nos. 704 and 706). This was much lower than the rate at which all Australians aged 75 years and over received assessments during this period (208 per 1,000) (Medicare Item numbers 700 and 702) (Table 3.03.2).
- The rate of MBS health assessments for Indigenous Australians aged 55 years and over increased between the first quarter of 2000 and the second quarter of 2007 (from 27 per

1,000 in January to March 2000 to 93 per 1,000 in April to June 2007). The average yearly increase in the rate was around 9 per 1,000. The rate of MBS assessments for Indigenous Australians aged 15–54 years increased between the third quarter 2004 and the second quarter 2007 (from 30 per 1,000 to 47 per 1,000). The rate of MBS assessments for Indigenous Australians aged 0–14 years increased between the second quarter 2006 and the second quarter 2007 (from 9 per 1,000 to 42 per 1,000) (Figure 3.03.1).

Table 3.03.1: Medicare Benefits Schedule health assessments and health checks for Indigenous Australians aged 0–14 years, 15–54 years and 55 years and over, by state/territory, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Aboriginal and Torres Strait Islander child health checks aged 0–14 years (MBS Item 708)^(a)									
Number	1,653	149	2,396	700	200	1	86	1,130	6,315
No. per 1,000	30.3	13.7	45.4	26.9	20.1	0.1	52.8	54.3	34.4
Aboriginal and Torres Strait Islander health checks aged 15–54 years (MBS Item 710)^(b)									
Number	3,043	482	3,750	2,274	509	8	76	2,634	12,776
No. per 1,000	37.9	26.7	47.9	54.8	31.3	0.8	29.4	72.5	44.8
Aboriginal and Torres Strait Islander Health Assessments aged 55 years and older (MBS Item 704/706)^(c)									
Number	995	237	989	461	140	7	15	629	3,473
No. per 1,000	87.3	99.5	100.7	85.2	66.1	5.1	65.9	138.4	92.6

(a) Child health checks commenced in May 2006. Data provided are for the period 1 July 2006 to 30 June 2007. Rates are calculated using the average of 2006 and 2007 Indigenous population projections for those aged 0–14 years. Issues of take-up and administrative requirements will affect these data.

(b) These adult health checks were introduced in May 2004 as a biennial assessment. Data provided are for the period 1 July 2006 to 30 June 2007. Rates are calculated using the average of 2006 and 2007 Indigenous population projections for those aged 15–54 years. Monthly patterns of take-up for this item had become more stable by July 2005.

(c) Health assessments for older patients were introduced in November 1999. Data provided are for the period 1 July 2006 to 30 June 2007. Rates are calculated using the average of 2006 and 2007 Indigenous population projections for those aged 55 years and over.

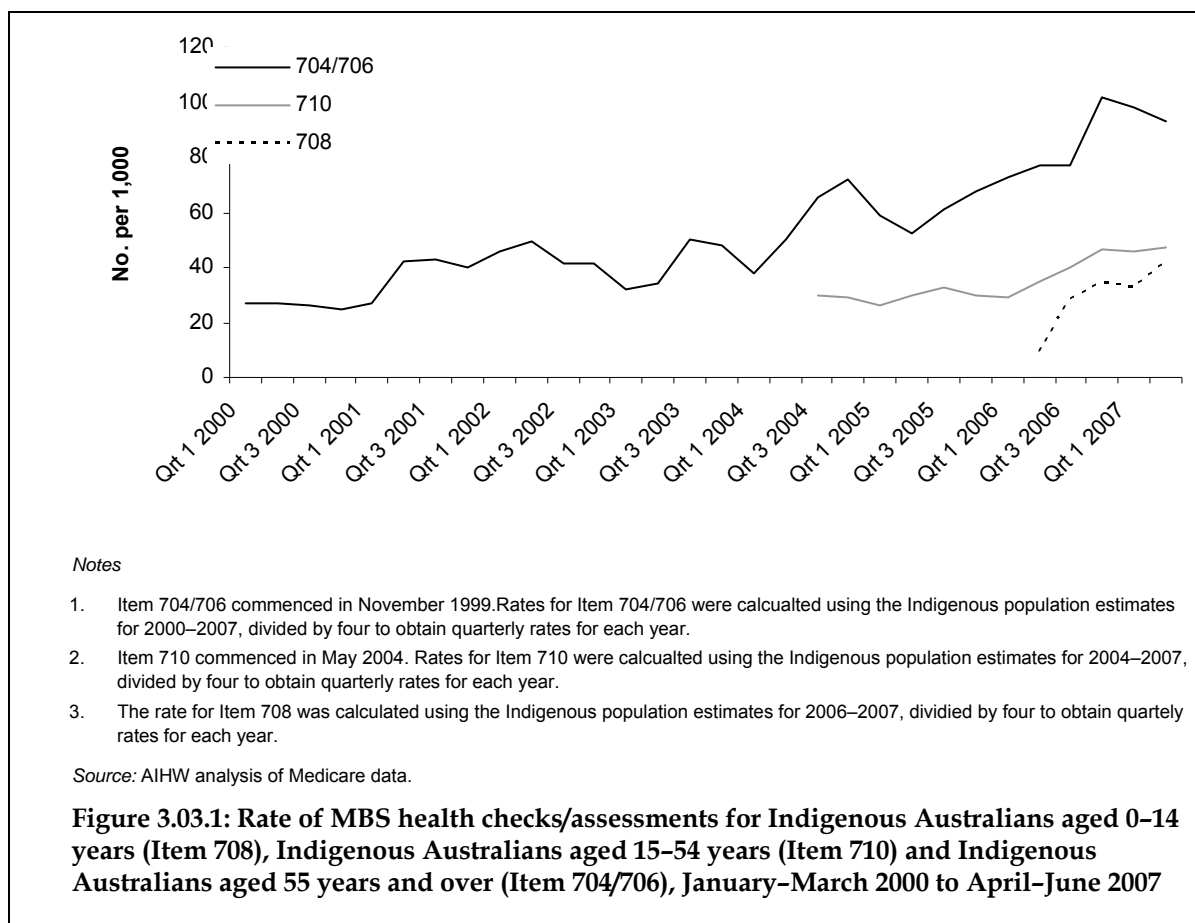
Source: AIHW analysis of Medicare data.

Table 3.03.2: Health assessments for older patients: Indigenous persons 55 years and older and all Australians aged 75 years and older, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Aboriginal and Torres Strait Islander health assessments aged 55 years and older (MBS Item 704/706)									
Number	995	237	989	461	140	7	15	629	3,473
No. per 1,000 ^(a)	87.3	99.5	100.7	85.2	66.1	5.1	65.9	138.4	92.6
All Australian health assessments aged 75 years and older (MBS Item 700/702)									
Number	97,145	64,817	51,188	17,810	24,831	7,918	1,760	183	265,652
No. per 1,000 ^(a)	219.5	196.3	225.9	162.1	209.3	236.0	123.8	60.6	207.7

(a) Data provided are for the period 1 July 2006 to 30 June 2007. Rates are calculated using the average of 2006 and 2007 Indigenous population projections for those aged 55 years and over and the total Australian population estimates for those aged 75 years and over.

Source: AIHW analysis of Medicare data.



Breast cancer screening

BreastScreen Australia – which is jointly funded by the Australian, state and territory governments – undertakes nationwide breast cancer screening. It targets women aged 50–69 years for screening once every 2 years. The program aims to have 70% or more of women aged 50–69 years participating in screening over a 24-month period. All recruitment activities undertaken by BreastScreen Australia specifically focus on women in this age group, although women aged 40–49 years and those over 70 years may also use the service.

- Of the 1,614,871 women aged 40 years and over participating in screening through the BreastScreen Australia program in 2004–2005, 12,580 (0.8%) identified as Aboriginal or Torres Strait Islander. Although 11,898 women in 2004–2005 were classified as not stating their Indigenous status, the true not stated figure is higher because some jurisdictions classified these women as ‘non-Indigenous’ (AIHW 2008a).
- For the 2-year period 2004–2005, the participation rate for BreastScreen Australia programs was highest among those aged 60–69 years for Indigenous women. The participation rate measures the proportion of the eligible population attending the screening program within a 24-month period.
- The age-standardised participation rate for Indigenous women aged 50–69 years was 36%, which was also markedly lower than the national rate for all females in that age group (56%). The participation rate for Indigenous women aged 40 years and over was also lower than for non-Indigenous women of the same age (24% compared with 35% for all women) (Table 3.03.3).

- The breast screening participation rates for Indigenous women aged 50–69 years ranged from 15% in the Northern Territory to 50% in Queensland (Table 3.03.3).
- The participation rate for Indigenous women aged 40 years and over increased slightly between 1999–2000 (22%) to 2005–06 (25%). The participation rate for Indigenous women aged 50–69 years was higher in 2005–2006 (38%) than in 1999–2000 (32%). There was little change in the participation rate for all women over the period 1999–2000 to 2005–2006 (Figure 3.03.2).

Care needs to be taken when comparing Indigenous and non-Indigenous participation rates due to under-identification of Indigenous women in the BreastScreen Australia program. Caution also needs to be taken in comparing data across jurisdictions, given differences in the collection of data by Indigenous status across jurisdictions.

Breast cancer mortality

Data have been combined for the 5-year periods 1996–2000 and 2001–2005 because of the small number of deaths from each year.

- In 2001–2005, the age-standardised breast cancer mortality rate for Indigenous women in the target age group (50–69 years) in Queensland, Western Australia, South Australia and the Northern Territory combined (45 deaths per 100,000 women) was not significantly different from the rate for non-Indigenous women (52 deaths per 100,000 women (AIHW 2008a)).
- From 1996–2000 to 2001–2005, the national breast cancer mortality rate of women in the target age group (50–69 years) decreased significantly from 57 to 53 deaths per 100,000. Over the same time period the breast cancer mortality rate for Indigenous women of all ages in Queensland, Western Australia, South Australia and the Northern Territory combined decreased from 56 in 1996–2000 to 45 deaths in 2001–2005, but this decrease was not significant (AIHW 2008a).

Table 3.03.3: Age-specific participation rates^(a) in BreastScreen Australia programs of Indigenous and all women, by state/territory, 2004–2005

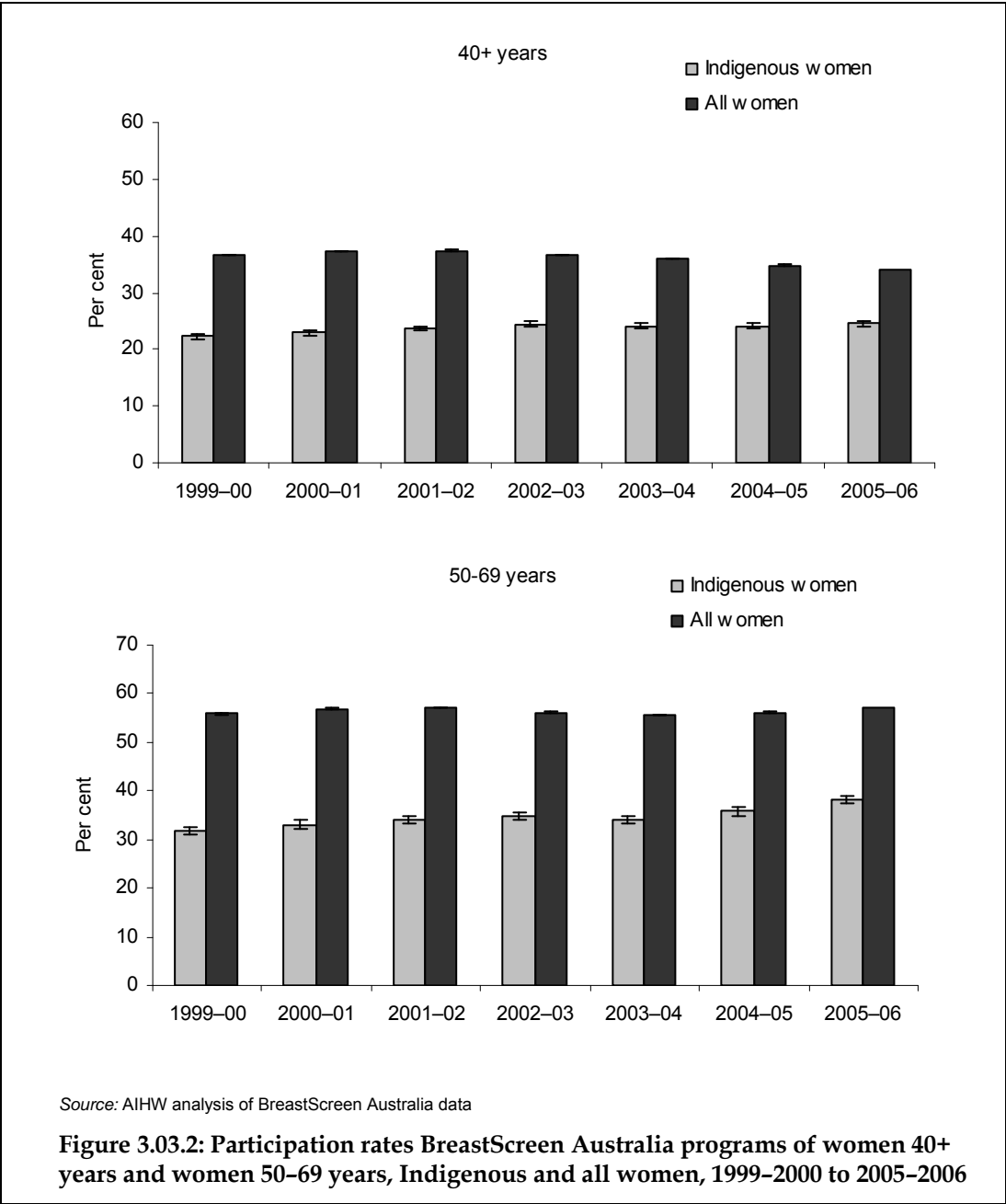
Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT ^(b)	Australia
Per cent									
Indigenous women									
40–49 years	7.7	4.6	27.5	11.0	7.6	17.8	4.4	4.7	13.3
50–59 years	30.2	36.5	49.1	25.9	31.5	37.3	33.9	13.9	33.5
60–69 years	40.5	40.7	52.1	34.7	36.3	32.4	58.6	17.6	39.3
70+	13.9	18.3	25.3	17.1	10.0	18.0	7.5	8.0	16.4
40+ (age-standardised rate)^(c)	21.0	22.7	37.4	20.6	19.8	25.8	22.9	10.2	24.2
50–69 years (age-standardised rate)^(c)	34.3	38.1	50.3	29.4	33.4	35.4	43.7	15.4	35.8
All women									
40–44 years	8.8	6.3	25.3	11.1	10.7	19.7	0.9	6.8	11.9
45–49 years	16.8	11.5	38.3	22.4	21.4	33.4	11.7	16.7	20.9
50–54 years	48.5	55.9	55.3	52.5	60.7	52.3	45.7	36.3	53.0
55–59 years	53.5	57.5	59.5	56.9	61.6	61.0	59.1	45.1	56.9
60–64 years	55.4	61.3	61.0	58.6	63.7	60.3	61.4	45.3	59.1
65–69 years	54.2	58.5	60.8	58.1	62.4	59.1	59.9	41.4	57.7
70–74 years	24.9	51.1	53.3	19.9	23.1	47.6	21.1	17.1	36.6
75–79 years	17.4	15.4	18.4	9.8	12.5	10.4	7.6	10.7	15.7
80–84 years	8.1	2.9	4.9	3.5	4.0	3.4	3.2	7.7	5.2
85+ years	1.8	0.6	1.4	0.8	0.7	0.5	0.8	2.2	1.2
40+ (age-standardised rate)^(c)	31.4	34.2	42.7	33.2	36.1	39.4	29.3	25.0	35.0
50–69 years (age-standardised rate)^(c)	52.3	58.0	58.6	56.0	61.9	57.6	55.2	41.5	56.2

(a) Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 ABS estimated resident population.

(b) BreastScreen Australia services are not provided in some remote areas of the Northern Territory. This may affect the Northern Territory's participation rate.

(c) Rates are directly age-standardised to the Australian 2001 Standard population.

Source: AIHW 2008a; AIHW analysis of BreastScreen Australia data.



Bowel Cancer screening

The NBCSP aims to reduce the incidence of and mortality due to bowel cancer through screening to detect abnormalities of the colon and rectum at an early stage and, where bowel cancer has developed, to detect cancers at an early stage in order to maximise the effectiveness of treatment. From 7 August 2006, people across Australia turning 55 or 65 years of age between 1 May 2006 and 30 June 2008 were invited to screen for bowel cancer. Screening packs, including a FOBT, were sent directly to participants by Medicare Australia between 7 August 2006 and 31 July 2006.

Participation in screening

- Between 7 August 2006 and 31 July 2007, 436,153 eligible Australians were invited to screen for bowel cancer; of these, 149,262 agreed to participate.
- There were 490 people who identified as Indigenous who responded to the invitation to screen. Of these, 303 were aged 55 years and 187 were aged 65 years (Table 3.03.4).

Table 3.03.4: People responding to the National Bowel Cancer screening invitations^(a), by age, sex and Indigenous status

	Indigenous		Non-Indigenous		Total	
	Number	Rate (no. per 100 persons invited) ^(b)	Number	Rate (no. per 100 persons invited) ^(b)	Number	Rate (no. per 100 persons invited) ^(b)
Males						
55 years	127	n.a.	23,133	n.a.	23,260	n.a.
65 years	88	n.a.	19,814	n.a.	19,902	n.a.
Total	215	n.a.	42,947	n.a.	43,162	n.a.
Females						
55 years	176	n.a.	29,847	n.a.	30,023	n.a.
65 years	99	n.a.	21,545	n.a.	21,644	n.a.
Total	275	n.a.	51,392	n.a.	51,667	n.a.
Persons						
55 years	303	n.a.	52,980	n.a.	53,283	n.a.
65 years	187	n.a.	41,359	n.a.	41,546	n.a.
Total	490	n.a.	94,339	n.a.	94,829	n.a.

(a) Respondents to the screening invitation are defined as members of the eligible population who were sent an invitation to screen and who returned a participant details form and/or a completed FOBT kit.

(b) Rates are the number of people responding as a percentage of the total number of the eligible population who were sent an invitation. These are unable to be calculated until the end of the first phase of the NBCSP.

Note: There were 54,433 respondents and 305,910 invitees with Indigenous status 'not stated'. These are treated as missing data and excluded from this analysis. Hence the sum of the columns may be less than the national total.

Source: AIHW & DoHA 2008

FOBT positivity numbers and rates

Only correctly completed FOBT kits were analysed. If no significant blood is found in either of the samples the FOBT result is negative. If significant levels of blood are present in at least one of two samples, the FOBT result is considered positive.

- Positivity rates were higher in people identified as Indigenous (8.6%) than non-Indigenous (6.3%) (Table 3.03.5). However, the number of positive results in Indigenous was very small compared with non-Indigenous, and care must be exercised in interpreting these results (AIHW & DoHA 2008).

Colonoscopy procedures

Table 3.03.6 provides a summary of the number of colonoscopy procedures up to 31 July 2007 as part of the NBCSP.

- At this point in the NBCSP, the numbers of colonoscopies recorded in the Register for Aboriginal and Torres Strait Islander peoples were too small to draw any conclusions on colonoscopy rates (AIHW & DoHA 2008).

Table 3.03.5: FOBT positivity rates from national bowel screening, by age, sex and Indigenous status

		Indigenous	Non-Indigenous	Total
Males				
55 years	Positive results	13	1,415	1,428
	Valid results	124	22,257	22,381
	Per cent	10.5	6.4	6.4
65 years	Positive results	11	1,718	1,729
	Valid results	86	19,102	19,188
	Per cent	12.8	9.0	9.0
Total	Positive results	24	3,133	3,157
	Valid results	210	41,359	41,569
	Per cent	11.4	7.6	7.6
Females				
55 years	Positive results	11	1,287	1,298
	Valid results	170	28,578	28,748
	Per cent	6.5	4.5	4.5
65 years	Positive results	6	1,269	1,275
	Valid results	95	20,687	20,782
	Per cent	6.3	6.1	6.1
Total	Positive results	17	2,556	2,573
	Valid results	265	49,265	49,530
	Per cent	6.4	5.2	5.2
Persons				
55 years	Positive results	24	2,702	2,726
	Valid results	294	50,835	51,129
	Per cent	8.2	5.3	5.3
65 years	Positive results	17	2,987	3,004
	Valid results	181	39,789	39,970
	Per cent	9.4	7.5	7.5
Total	Positive results	41	5,689	5,730
	Valid results	475	90,624	91,099
	Per cent	8.6	6.3	6.3

Notes

1. There were 4,382 positive FOBT results and 52,119 valid FOBT results where Indigenous status was not stated. These are regarded as missing data and are excluded from this table. Hence the sum of the areas may be less than the national total.
2. Indigenous status is defined by the participant.
3. Percentages are the number of FOBT positive results as a proportion of the total number of valid results.
4. A valid result is either positive or negative. Inconclusive results are excluded.

Source: AIHW & DoHA 2008

Table 3.03.6: Colonoscopies reported following a positive FOBT result from National Bowel Cancer Screening, by age, sex and Indigenous status

	Indigenous		Non-Indigenous		Total	
	Number	Rate (no. per 100 positive FOBTs)	Number	Rate (no. per 100 positive FOBTs)	Number	Rate (no. per 100 positive FOBTs)
Males						
55 years	n.p.	n.p.	n.p.	n.p.	417	29.2
65 years	n.p.	n.p.	n.p.	n.p.	488	28.2
Total	7	29.2	898	28.7	905	28.7
Females						
55 years	n.p.	n.p.	n.p.	n.p.	365	28.1
65 years	n.p.	n.p.	n.p.	n.p.	377	29.6
Total	5	29.4	737	28.8	742	28.8
Persons						
55 years	n.p.	n.p.	n.p.	n.p.	782	28.7
65 years	n.p.	n.p.	n.p.	n.p.	865	28.8
Total	12	29.3	1,635	28.7	1,647	28.7

Notes

1. There were 414 recorded colonoscopies following a positive FOBT result and 4,382 valid FOBT results where Indigenous status was not stated. These are regarded as missing data and are excluded from this table. Hence the sum of the areas may be less than the national total.
2. Indigenous status is defined by the participant.
3. Rates of colonoscopies performed are the number of colonoscopies recorded following a positive FOBT as a percentage of the total number of positive FOBTs.

Source: AIHW & DoHA 2008

Mortality from bowel cancer

A major objective of the NBCSP is to reduce mortality from bowel cancer in Australia through early detection and treatment of bowel cancers and through identifying and treating polyps and adenocarcinomas, which might develop into cancer.

- The age-standardised rate of deaths from bowel cancer was significantly lower (7.4 deaths per 100,000 population) in Indigenous in 2001–05 than in non-Indigenous people (21.7 people per 100,000) in Queensland, Western Australia, South Australia and the Northern Territory (AIHW & DoHA 2008).

Cervical cancer screening

A cervical cancer may take 10 or more years to develop, but before this the cervical cells may show pre-cancerous changes. These early changes can be detected by a Pap smear, and if they are promptly treated, cervical cancer can be prevented. Self-reported data from the NATSIHS on the occurrence and regularity of pap smears among Aboriginal and Torres Strait Islander women are presented in the tables and figure below.

- In 2004–05, approximately 85% of Indigenous women aged 18 years and over reported ever having a pap smear test and 58% reported having regular pap smear tests (Table 3.03.7).
- In 2004–05, only 4% of Indigenous women aged 18 years and over reported that they had not heard of a pap smear test.

Pap smears by age and sex

- The 25–34 and 35–44 year age groups had the highest proportion (both 68%), and the 18–24 and 55 years and over age groups had the lowest proportion (both 43%) of Indigenous women who reported having regular pap smear tests (Table 3.03.7).

Table 3.03.7: Indigenous women aged 18 years and over reporting whether had a pap smear test^(a), by age group, 2004–05

	18–24	25–34	35–44	45–54	55 and over	Total
	Per cent					
Has never had a pap smear test	32.1	8.7	6.0	5.5	13.6	13.2
Has had a pap smear test	65.8	90.7	91.9	92.5	82.2	84.9
Only had one pap smear test	17.0	5.0	3.7	4.1	5.8	7.2
More than one pap smear test but not regular	6.3	17.7	20.0	25.3	32.6	18.8
Has regular pap smear tests	42.5	67.8	68.0	61.6	42.9	58.4
At least annually	11.3	20.5	19.3	17.3	9.3	16.4
More than 1 year, up to and including 2 years	28.7	44.4	41.1	38.4	30.4	37.6
More than 2 years apart	2.5	2.9	7.6	5.7	3.2	4.4
All Indigenous women aged 18 and over^(b)	26,193	33,330	29,487	18,831	15,454	123,295

(a) Should exclude data from women who have had a hysterectomy; however, this data was not collected in the NATSIHS.

(b) Excludes women who did not complete the NATSIHS form.

Source: AIHW analysis of 2004–05 NATSIHS

Pap smears by state/territory

- In 2004–05, the proportion of Indigenous women who reported never having had a pap smear test was highest in Western Australia (16%) and lowest in Victoria (11%) (Table 3.03.8).
- The proportion of Indigenous women who reported having regular pap smear tests was highest in the Northern Territory (72%) and lowest in New South Wales and Western Australia (both 52%).

Pap smears by remoteness and time series

- In 2004–05, the proportion of Indigenous women who reported never having had a pap smear test was lowest in Inner Regional areas (7%) and highest in Major Cities and Outer Regional areas (both 15%) (Table 3.03.9).
- The proportion of Indigenous women who reported having regular pap smear tests was highest in the Remote/Very Remote areas (65%) and lowest in Major Cities (54%).
- Over the period 2001 to 2004–05, the proportion of Indigenous women who reported having regular pap smear tests increased in Remote areas (from 56% to 65%) and decreased in non-remote areas (from 52% to 47%), although this difference is not statistically significant (ABS 2006) (Figure 3.03.3).

Table 3.03.8: Indigenous women aged 18 years and over reporting whether had a pap smear test^(a), by state/territory, 2004–05

	NSW	Vic	Qld	WA	SA	NT	Tas/ACT ^(b)	Aust
	Per cent							
Has never had a pap smear test	11.6	10.9	12.7	16.0	14.5	14.8	11.7	13.2
Has had a pap smear test	87.9	89.1	84.9	79.1	82.2	83.8	88.3	84.9
Only had one pap smear test	8.7	7.6	4.0	11.9	7.5	6.0	5.6	7.2
More than one pap smear test but not regular	26.2	18.2	20.3	15.2	15.3	6.0	21.4	18.8
Has regular pap smear tests	52.1	63.4	60.2	52.0	58.4	71.6	60.9	58.4
At least annually	17.7	18.2	17.9	9.2	13.9	17.5	20.0	16.4
More than 1 year, up to and including 2 years	30.3	35.4	39.3	35.2	38.4	51.6	38.0	37.6
More than 2 years apart	4.0	9.2	3.0	7.6	6.2	2.5	3.0	4.4
All Indigenous women aged 18 and over^(c)	34,014	6,607	34,938	18,457	6,770	17,214	5,296	123,295

(a) Should exclude data from women who have had a hysterectomy. However, this data was not collected in the NATSIHS.

(b) Due to confidentiality considerations, the samples from Tasmania and the Australian Capital Territory have been combined.

(c) Excludes women who did not complete the NATSIHS form.

Source: AIHW analysis of 2004–05 NATSIHS

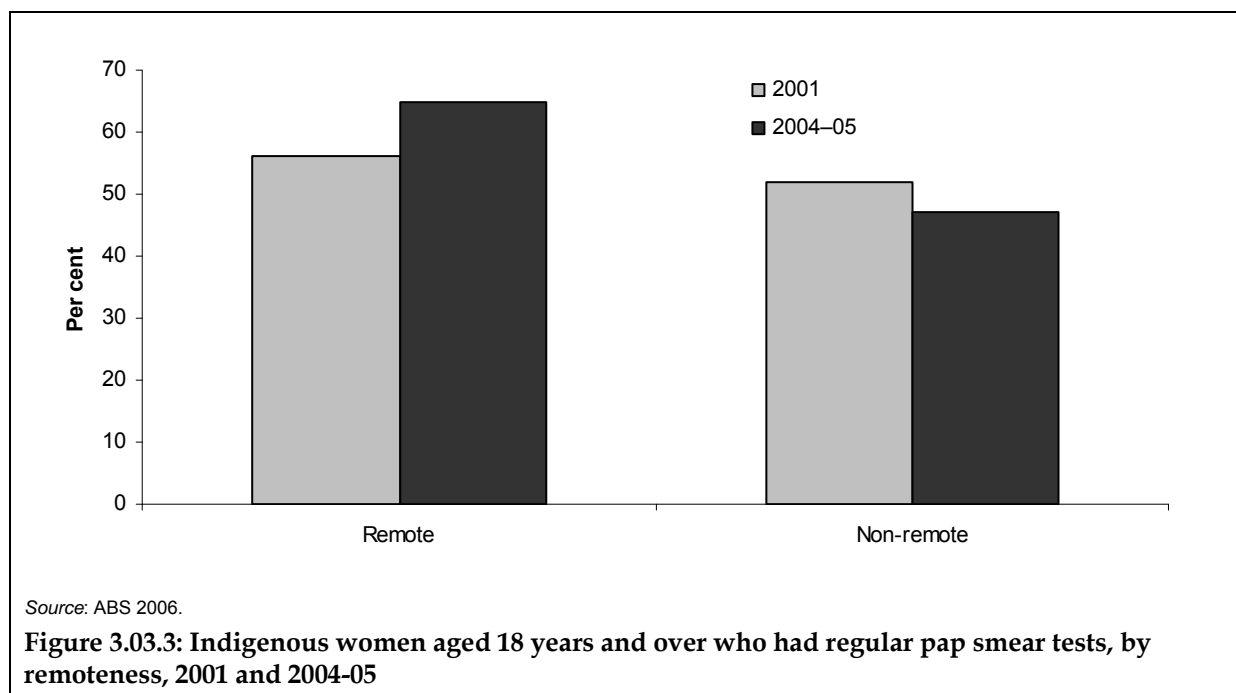
Table 3.03.9: Indigenous women aged 18 years and over reporting whether had a pap smear test^(a), by remoteness, 2004–05

	Major Cities	Inner Regional	Outer Regional	Remote/Very Remote	Aust
	Per cent				
Has never had a pap smear test	15.0	7.2	14.8	13.7	13.2
Has had a pap smear test	84.2	92.8	84.7	81.2	84.9
Only had one pap smear test	9.3	4.6	7.9	6.2	7.2
More than one pap smear test but not regular	20.5	29.1	20.5	10.4	18.8
Has regular pap smear tests	53.8	58.6	55.5	64.6	58.4
At least annually	20.3	15.6	15.1	13.9	16.4
More than 1 year, up to and including 2 years	28.8	39.8	35.7	46.1	37.6
More than 2 years apart	4.7	3.1	4.7	4.6	4.4
All Indigenous women aged 18 and over^(b)	37,224	22,125	25,028	38,917	123,295

(a) Should exclude data from women who have had a hysterectomy. However, this data was not collected in the NATSIHS.

(b) Excludes women who did not complete the NATSIHS form.

Source: AIHW analysis of 2004–05 NATSIHS



Mortality from cervical cancer

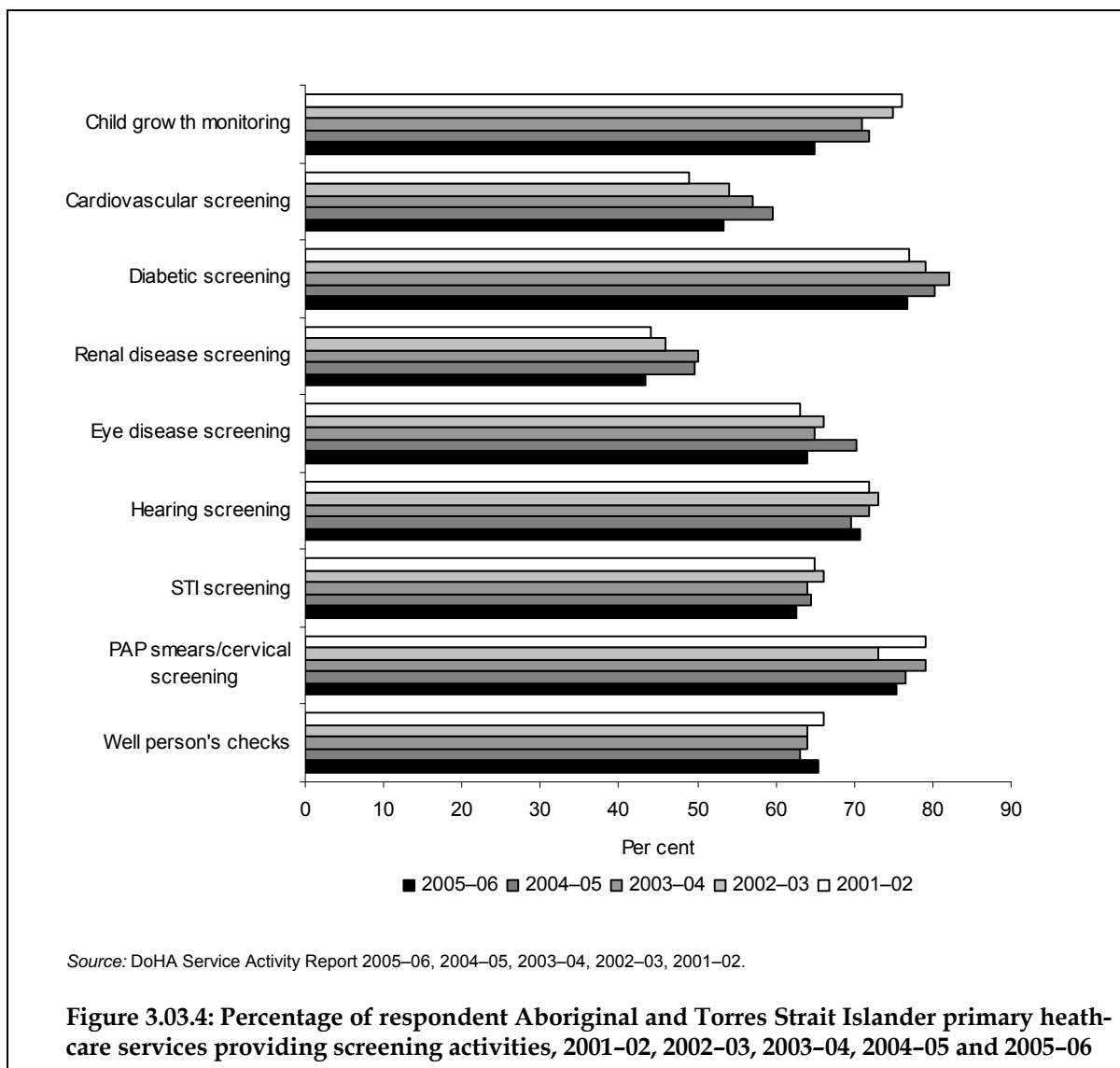
Data on the mortality of Indigenous women from cervical cancer are presented below.

- Over the period 2002–2005 in Queensland, Western Australia, South Australia and the Northern Territory combined there were 23 deaths of Indigenous women from cervical cancer. Indigenous women died at around 5 times the rate of non-Indigenous women in these states and territories (9.4 per 100,000 compared with 2.0 per 100,000) (AIHW 2008b).
- The age-standardised rate for Indigenous women aged 20–69 years, which is the target age for cervical cancer screening, was 8.3 per 100,000 compared with 2.0 per 100,000 for non-Indigenous women of the same age.

Other screening activities

The SAR includes data on health-related activities undertaken or facilitated by Aboriginal and Torres Strait Islander primary health-care services, including a range of ‘screening’ programs.

- In 2005–06, approximately 77% of respondent Aboriginal and Torres Strait Islander primary health-care services provided diabetic screening, 75% provided pap smear/cervical screening, 71% provided hearing screening, 65% provided appropriate well persons checks, 64% provided eye disease screening, 63% provided sexually transmitted infection (STI) screening, 53% provided cardiovascular screening, 43% provided renal disease screening, and 65% provided child growth monitoring (Figure 3.03.4).
- Between 2001–02 and 2005–06, there was little change in the proportion of Aboriginal and Torres Strait Islander primary health-care services providing most screening services.



Additional information

Studies on early detection, diagnosis and survival rates for cancer in Indigenous Australians

There have been a number of studies that have investigated the stage of diagnosis and survival rates for cancer for Indigenous Australians.

A study by Condon et al. (2005) on the stage at diagnosis and cancer survival of Indigenous and non-Indigenous people in the Northern Territory between 1991 and 2000 found that Indigenous people were more likely than non-Indigenous people to be diagnosed with advanced disease for cancers of the colon and rectum, breast, cervix and non-Hodgkin's lymphoma. The difference in the proportion of people diagnosed with localised disease ranged from 13 percentage points for cervical cancer (Indigenous 63% compared with non-Indigenous 76%) to 29 percentage points for non-Hodgkin's lymphoma (6% compared with 35%). However, for cancer of the lung, Indigenous people were more likely to be diagnosed

with localised disease (41% compared with 31%) – possibly because many older Indigenous people have regular chest X-rays for clinical management of chronic respiratory disease and as part of contact-tracing and long-term follow-up by the tuberculosis control program.

Indigenous people had lower cancer survival than non-Indigenous people for all five cancer sites. The difference in age-stage-adjusted 5-year survival rates was greatest for non-Hodgkin's lymphoma (Indigenous 16% compared with non-Indigenous 65%) and least for lung cancer (5% compared with 12%). With few exceptions, Indigenous people had lower survival than non-Indigenous people with the same stage at diagnosis for each cancer site. The relative risk of cancer death (Indigenous compared with non-Indigenous) was greater for people diagnosed at younger than older age for cancers of the colon and rectum, lung and breast, but not for cervical cancer or non-Hodgkin's lymphoma. For colorectal and lung cancers the relative risk was greater for people diagnosed with localised compared with advanced disease; this was not the case for the other three cancer sites.

Compared with non-Indigenous people diagnosed with the same cancer, Indigenous people are doubly disadvantaged because they are not only diagnosed later, with more advanced disease, but also have lower survival for every stage at diagnosis (Condon et al. 2005).

In relation to the cancer survival differential it is relevant to note that the 'absolute difference in cancer survival is greatest for cancers with the highest survival in non-Indigenous people – cancers of the thyroid, breast, prostate and bowel. For cancer of the thyroid, 5-year survival for all Australian cases is over 90% and for breast cancer over 80%, compared with only 60% and 42%, respectively for Indigenous cases in the Northern Territory. These cancers are amenable to early diagnosis, effective treatment and a high probability of cure. Better access to, and higher quality of, health care offers the possibility of disease cure for many Indigenous people with these cancers' (Condon 2004).

A recent study of 815 Indigenous and 810 non-Indigenous patients diagnosed with cancer in Queensland between 1997 and 2002 found that after adjustment for stage at diagnosis, treatment and comorbidities, non-Indigenous Australians had better survival than Indigenous patients (hazard ratio = 1.3, 95% CI 1.1–1.5). The stage at diagnosis was significantly different, with 47% of Indigenous patients with localised cancers compared with 53% of non-Indigenous patients. Comorbidities such as diabetes or chronic renal disease were more common in Indigenous patients. Indigenous patients were less likely to have had treatment for cancer (surgery, chemotherapy or radiotherapy) and waited longer for surgery (hazard ratio = 0.84, 95% CI 0.72–0.97) than non-Indigenous patients (Valery et al. 2006).

Exploring the experience of Indigenous people and their outcomes in relation to cancer incidence, stage of disease at presentation, access to treatment, survival and mortality can help illustrate aspects of Indigenous Australians' access to, and interaction with, the health system. This provides an opportunity to monitor health system performance for Indigenous Australians in relation to both primary care and specialist services, and the interaction between them (Condon 2004).

Data quality issues

Medicare data

MBS items

The MBS items included in this measure have been introduced over the last few years with the child health check item commencing in May 2006. The take-up of new MBS items is influenced by the speed at which practitioners and the population become aware of the new items and how to use them. Also take-up can be influenced by administrative processes and the time taken to change computer systems to incorporate these new items. Analysis of monthly statistics on Items 704 and 706 suggest that it took several years for these statistics to stabilise into a fairly regular pattern. Item 710 was introduced in May 2004 and monthly statistics had become relatively stable within 12 months.

Standard Indigenous status question

In November 2002, the ABS standard question on Indigenous identification was included on Medicare enrolment forms.

Under-identification

Because the Indigenous identifier was only introduced recently, the coverage of Indigenous Australians in this data set is not complete. Aboriginal and Torres Strait Islanders who had identified as Indigenous in this database as at 1 July 2005 numbered 80,658.

Breast screening

Data are available on breast screening from the BreastScreen Australia program by Indigenous status. It would also be useful to have Indigenous data for the other breast cancer indicators monitored nationally, including breast cancer incidence, detection rate of small invasive cancers, interval cancer rate, program sensitivity (screen-detected cancers), detection of ductal carcinoma in situ, recall to assessment and mortality rates for breast cancer.

Under-identification

The AIHW reports that the participation rate for Indigenous women in breast screening should be treated with caution as it is not known how many women did not report their Indigenous status. The comparison of participation rates between Indigenous and non-Indigenous women should therefore be treated with caution (AIHW 2008a).

Mortality data

Deaths

The mortality rate for Indigenous Australians can be influenced by identification of Indigenous deaths, late registration of deaths, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Indigenous status question

All jurisdictions comply with the standard wording for the Indigenous status question and categories for their death registration forms. However, New South Wales, Victoria, South Australia, the Northern Territory and the Australian Capital Territory all have slightly different wording to the national standard for the instruction on those with both Aboriginal and Torres Strait Islander origin (ABS & AIHW 2005). Although the wording is only slightly different, it would be ideal to have all jurisdictions asking the question in exactly the same way.

(continued)

Data quality issues (continued)

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded/recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Aboriginal and Torres Strait Islander population (ABS 1997). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences.

Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer term mortality trend data are limited to three jurisdictions (Western Australia, South Australia and the Northern Territory) with 10 years of adequate identification of Indigenous deaths in their recording systems (ABS & AIHW 2005). The quality of the time series data is also influenced by the late inclusion of a not stated category for Indigenous status in 1998. Before this time, the not stated responses were probably included with the non-Indigenous.

National Bowel Cancer Screening Register

Data on bowel cancer screening are available from the NBCSR by Indigenous status. Data are collected about participants and their screening outcomes from a variety of sources and stored in the Register. The data are collected on questionnaires completed by participants, GPs, colonoscopists, pathologists and other specialists.

The data presented in this indicator are based on data recorded in the Register for the period 7 August 2006 to 31 July 2007. Because of both time lags in reporting and underreporting by clinicians, data on primary health care consultations, colonoscopies and colonoscopy outcomes in this report under-state the true performance of the NBCSP in this period and should be treated with caution (AIHW & DoHA 2008).

National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The NATSIHS uses the standard Indigenous status question. The NATSIHS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians and thus overcomes the problem inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSIHS is subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to establish the accuracy of the estimates and differences.

Information recorded in this survey is essentially 'as reported' by respondents. The ABS makes every effort to collect accurate information from respondents, particularly through careful questionnaire design, pre-testing of questionnaires, use of trained interviewers and assistance from Indigenous facilitators. Nevertheless, some responses may be affected by imperfect recall or individual interpretation of survey questions.

Non-Indigenous comparisons are available through the National Health Survey (NHS). The NHS was conducted in Major Cities, Inner and Outer Regional and Remote areas, but Very Remote areas were excluded from the sample. Time series comparisons are available through the 1995 and 2001 NHS.

In remote communities there were some modifications to the NATSIHS content in order to accommodate language and cultural appropriateness in traditional communities, and help respondents understand the concepts. Some questions were excluded and some reworded. Also, paper forms were used in communities in remote areas and computer-assisted interview (CAI) instruments were used in non-remote areas. The CAI process included built-in edit checks and sequencing.

(continued)

Data quality issues (continued)

Further information on NATSIHS data quality issues can be found in the 2004–05 NATSIHS publication (ABS 2006).

Service Activity Reporting data

Response rates to the SAR by Aboriginal and Torres Strait Islander primary health-care services were around 99% for the 2005–06 period. The SAR collects service-level data on health care and health-related activities by survey questionnaire over a 12-month period. Although this data collection provides valuable information, it needs to be recognised that there are limitations that have to be considered when using these data. Particular issues include:

- *The SAR only includes Aboriginal and Torres Strait Islander health organisations that receive at least some Australian Government funding to facilitate access to primary health care.*
- *The SAR questionnaire collects a broad set of indicators for the services and did not aim to provide a comprehensive set of statistics on the activities of the services or their needs.*
- *These data provide a rough guide to service activity in this area but do not attempt to measure quantity or quality.*
- *These data also do not differentiate between services provided by the service and those facilitated by the service.*

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