

## 3.07 Health promotion

**Interventions provided by clinicians and health promotion initiatives funded by governments and provided by a range of health professionals in the wider community for the Aboriginal and Torres Strait Islander population.**

### Data sources

#### Health expenditure data

The report on expenditures on health services for Aboriginal and Torres Strait Islander peoples is produced every 3 years. The latest report covers expenditure for the 2004–05 financial year and was published in the AIHW report *Expenditures on health for Aboriginal and Torres Strait Islander people 2004–05* (AIHW 2008).

There are a number of difficulties in reporting on this measure, including the issue of under-identification of Indigenous Australians in health databases (such as for hospital separations). Although adjustments are made to the data to allow for under-identification, the adjusted estimates may be an overestimate or underestimate of actual health service use and expenditure by Indigenous people.

In some areas of expenditure, surveys have been used to estimate service use by Indigenous people, which, in turn, have been used in the estimates of expenditure. Consequently, the reliability of the expenditure estimates is affected by sampling error.

There may also be some limitations associated with the scope and definition of health expenditures and there may be inconsistencies in reporting and categorisation of expenditure on health goods and services across data providers.

The attribution of expenditure to Indigenous people either on an overall population or per capita basis should be treated with caution as it is an estimate (AIHW 2008).

Expenditure is a measure of met need. Indigenous Australians have a significantly poorer health status (measured in terms of life expectancy, mortality rates and morbidity) than non-Indigenous Australians. It could therefore be expected that per capita investment of health resources to achieve equality for Aboriginal and Torres Strait Islanders should be higher than for other Australians.

#### Divisions of GP Survey

Since 1997–98, the Annual Survey of Divisions (ASD) has been conducted by the Primary Health Care Research and Information Service (PHC RIS) on behalf of the DoHA. Along with the Annual Report, the ASD forms a component of the reporting requirements for all Divisions of General Practice. The ASD consists of a standardised questionnaire about Division membership, activities and infrastructure.

#### Bettering the Evaluation and Care of Health (BEACH) Survey

Information about encounters in general practice is available from the BEACH survey, which is conducted by the AIHW Australian GP Statistics and Classification Centre, University of Sydney. Information is collected from a random sample of approximately 1,000 general

practitioners (GPs) from across Australia each year. A sample of 100 consecutive encounters is collected from each GP.

The number of Indigenous patients identified in the BEACH survey is likely to be an underestimate. This is because some GPs might not ask about Indigenous status, or the patient may choose not to identify (AIHW 2002). The estimates presented here are also derived from a relatively small sample of GP encounters involving Indigenous Australians.

Due to a late inclusion of a 'not stated' category of Indigenous status in 2001-02 (before which not stated responses were included with non-Indigenous encounters), GP encounters for which Indigenous status was not reported have been included with encounters for non-Indigenous people under the 'other' category.

Data are presented for the 5-year period 2002-03 to 2006-07, during which there were 7,542 GP encounters with Indigenous patients recorded in the survey, representing 1.5% of total GP encounters in the survey.

### **Community Housing and Infrastructure Needs Survey (CHINS)**

The CHINS collects data from all Aboriginal and Torres Strait Islander housing organisations and discrete Indigenous communities in Australia. The ABS conducted the CHINS on behalf of the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Office for Aboriginal and Torres Strait Islander Health (OATSIH) in 1999 and 2001. The most recent CHINS was conducted by the ABS in 2006 on behalf of the Australian Government Department of Families, Community Services and Indigenous Affairs (FaCSIA) through funding from FaCSIA. Results from this survey were published in August 2007. Data from the CHINS is held by FaCSIA and the ABS.

The 2006 information was collected on 496 Indigenous housing organisations, which managed a total of 21,854 permanent dwellings. Information was also collected on 1,187 discrete Indigenous communities, with a combined population of 92,960. Most of these communities were in Very Remote regions of Australia, with 73% (865) having a population of less than 50 people.

In the 2006 CHINS, a community questionnaire collected detailed infrastructure information from all discrete Indigenous communities with a reported usual population of 50 persons or more, as well as for communities, which had a reported usual population of fewer than 50 persons but which were not administered by a larger discrete Indigenous community or Resource Agency (375 communities). The 812 other communities had reported usual populations of fewer than 50 persons and were asked a subset of questions from the community questionnaire form, the short community questionnaire (ABS 2007).

### **Service Activity Reporting (SAR) database**

The SAR collects data from approximately 150 Australian Government-funded Aboriginal and Torres Strait Islander primary health-care services and is held at the Australian Government Department of Health and Ageing (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 Indigenous primary health-care services are usually between 97% and 99%.

Note that the SAR only includes Indigenous health organisations that receive at least some Australian Government funding to facilitate access to primary health care.

## Drug and Alcohol Service Reporting (DASR)

The DASR collects data from approximately 40 Australian Government-funded Indigenous substance use services and is held at the DoHA. Service-level data on substance use and related activities are collected by survey questionnaire over a 12 month period. Response rates to the DASR by Indigenous substance use services are usually between 93% and 100%. Note that the DASR only includes Indigenous health organisations that receive at least some Australian Government funding to facilitate access to substance use services.

## Analyses

### Government expenditure

Government expenditure on selected public health activities for Indigenous and non-Indigenous Australians in 2004–05 is presented in Table 3.07.1 and Figure 3.07.1 below.

- In 2004–05, total government expenditure on selected public health activities (selected health promotion, environmental health, food standards and hygiene, and prevention of hazardous and harmful drug use) was \$31 million for Indigenous Australians and \$511 million for non-Indigenous Australians.
- Total government expenditure per person on selected public health activities was \$63 for Indigenous persons and \$26 for non-Indigenous persons (ratio of 2.4). State/territory government expenditure per person on selected public health activities was higher for Indigenous persons than non-Indigenous persons (\$58 compared with \$19), Australian Government expenditure per person on selected public health activities was lower for Indigenous persons than non-Indigenous persons (\$5 compared with \$7).
- State and territory governments provided the majority of government expenditure for selected health promotion; environmental health; food standards and hygiene; and prevention of hazardous and harmful drug use (Table 3.07.1).
- • The Indigenous share of Australian Government expenditure was around 2% for selected health promotion, environment health, and food standards and hygiene and around 1% for prevention of hazardous and harmful drug use. The Indigenous share of state/territory government expenditure was around 4% for selected health promotion, 9% for environment health, 5% for food standards and hygiene and 11% for prevention of hazardous and harmful drug use.
- Of the four selected public health activities, prevention of hazardous and harmful drug use received the most government expenditure per person for Indigenous Australians (\$29).
- Total government expenditure per person was higher for Indigenous Australians than for non-Indigenous Australians for all four selected public health activities (Figure 3.07.1). The ratio of Indigenous to non-Indigenous per person expenditure was 1.68 for selected health promotion, 3.24 for environmental health, 1.53 for food standards and hygiene and 3.13 for prevention of hazardous and harmful drug use.

**Table 3.07.1: Expenditure for Indigenous Australian and non-Indigenous people on selected public health activities<sup>(a)</sup>, Australian Government, state and territory governments and Total, 2004–05**

Selected public health activities	Expenditure (\$ million)			Expenditure per person (\$)		
	Indigenous	Non-Indigenous	Indigenous share %	Indigenous	Non-Indigenous	Ratio
<b>Australian government expenditure<sup>(b)</sup></b>						
Selected health promotion	1.0	39.4	2.4	2.0	2.0	1.00
Environmental health	0.4	16.6	2.4	0.8	0.8	1.00
Food standards and hygiene	0.3	13.8	1.9	0.5	0.7	0.78
Prevention of hazardous and harmful drug use	0.7	67.3	1.0	1.5	3.4	0.43
<b>Total selected public health activities</b>	<b>2.4</b>	<b>137.1</b>	<b>1.8</b>	<b>4.8</b>	<b>7.0</b>	<b>0.7</b>
<b>State/territory government expenditure<sup>(c)</sup></b>						
Selected health promotion <sup>(d)</sup>	8.3	182.9	4.3	17.0	9.3	1.83
Environmental health	5.8	60.6	8.7	11.8	3.1	3.85
Food standards and hygiene	0.9	17.8	5.0	1.9	0.9	2.11
Prevention of hazardous and harmful drug use	13.3	112.8	10.5	27.2	5.7	4.75
<b>Total selected public health activities</b>	<b>28.3</b>	<b>374.1</b>	<b>7.6</b>	<b>57.9</b>	<b>19.0</b>	<b>3.1</b>
<b>Total expenditure</b>						
Selected health promotion	9.3	222.3	4.2	19.0	11.3	1.68
Environmental health	6.2	77.2	8.0	12.7	3.9	3.24
Food standards and hygiene	1.2	31.6	3.8	2.4	1.6	1.53
Prevention of hazardous and harmful drug use	14.0	180.1	7.8	28.6	9.1	3.13
<b>Total selected public health activities</b>	<b>30.7</b>	<b>511.2</b>	<b>6.0</b>	<b>62.7</b>	<b>25.9</b>	<b>2.4</b>

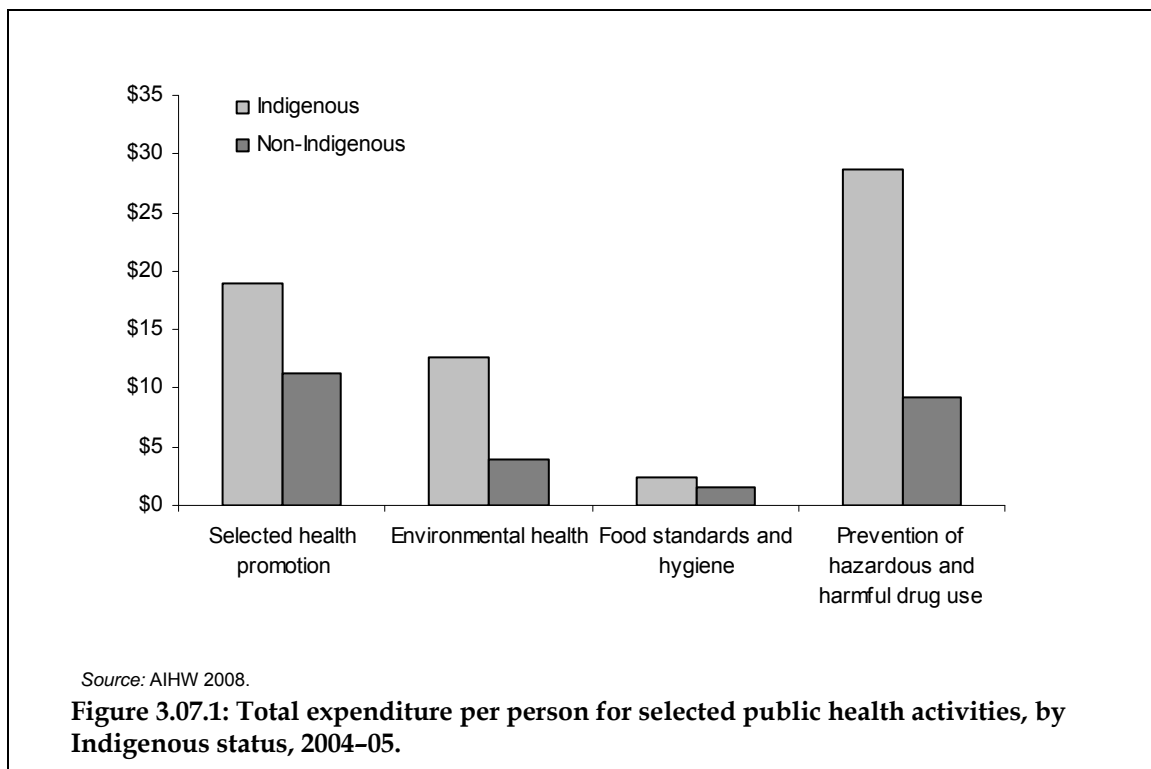
(a) The four selected activities (selected health promotion, environmental health, food standards and hygiene and prevention of hazardous and harmful drug use) are from the nine core public health activities reported in AIHW's national public health expenditure reports.

(b) Australian Government Indigenous expenditure estimates were derived from both Indigenous specific expenditure and Indigenous population proportions.

(c) State and territory jurisdictions used differing methods to estimate the Indigenous expenditure estimates.

(d) Excludes \$1.2 million Indigenous health-related expenditure from Victoria.

Source: AIHW 2008.



## GP prevention and early intervention programs

The Annual Survey of Divisions collects data on prevention and early intervention programs run by Divisions of General Practice. The number and proportion of Divisions of General Practice aiming at Indigenous Australians for selected prevention and early intervention programs and activities in 2005-06 is presented in Table 3.07.2 and Figures 3.07.2a and b.

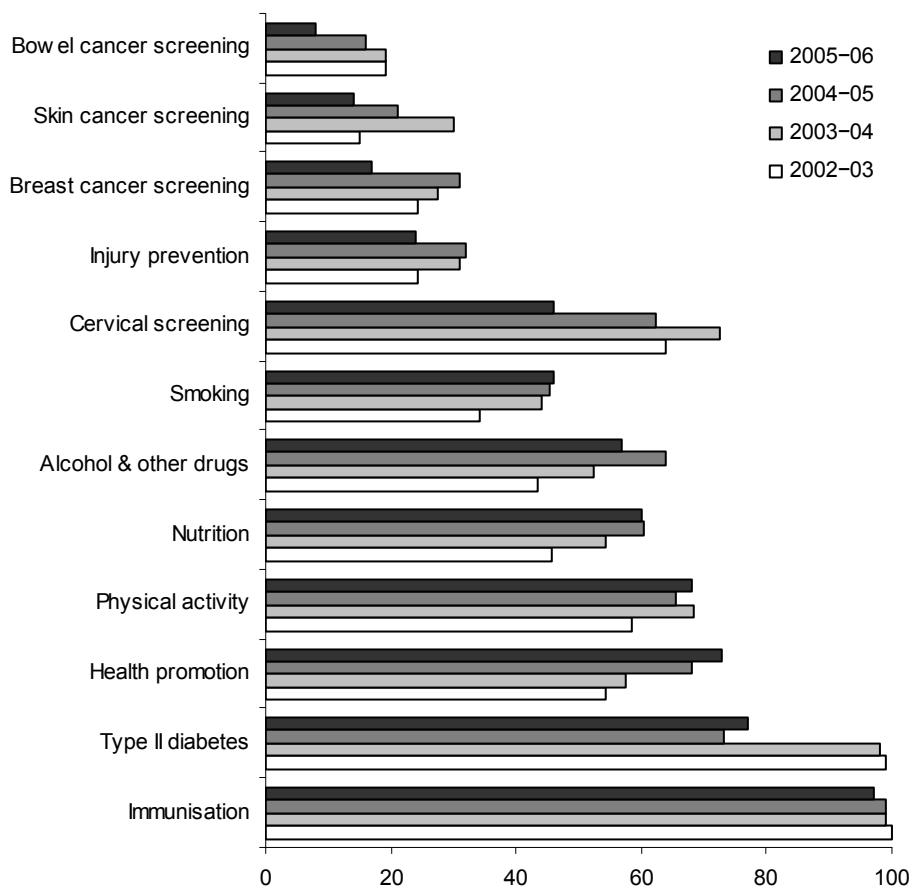
- In 2005-06, around three-quarters of general practice divisions ran programs for Type II diabetes, life-scripts and health promotion; 68% ran programs for physical activity, 60% for nutrition, 57% for alcohol and other drugs, 46% for smoking and 24% for injury prevention.
- In 2005-06, around 28% of Divisions focused on Indigenous Australians in their health promotion programs, 31% in nutrition programs, around one-quarter in their type II diabetes and smoking programs, 16% in their life-scripts programs, 19% in physical activity programs, and 18% in their alcohol and other drugs programs. Only 7% of Divisions with activities or programs for injury prevention aimed at Indigenous Australians.

**Table 3.07.2: Number and proportion of Divisions of General Practice with selected prevention/early intervention programs and number and proportion of Divisions aiming at Indigenous Australians in their prevention and early intervention programs, 2005–06.**

Selected prevention programs	Divisions with program/activity		Indigenous Australians	
	Number	Per cent	Number	Per cent
Type II diabetes	92	77	24	26
Life-scripts	91	76	15	16
Health promotion	87	73	24	28
Physical activity	81	68	15	19
Nutrition	71	60	22	31
Alcohol and other drugs	68	57	12	18
Smoking	55	46	13	24
Injury prevention	28	24	2	7
<b>Total</b>	<b>119</b>	<b>100</b>	<b>119</b>	<b>100</b>

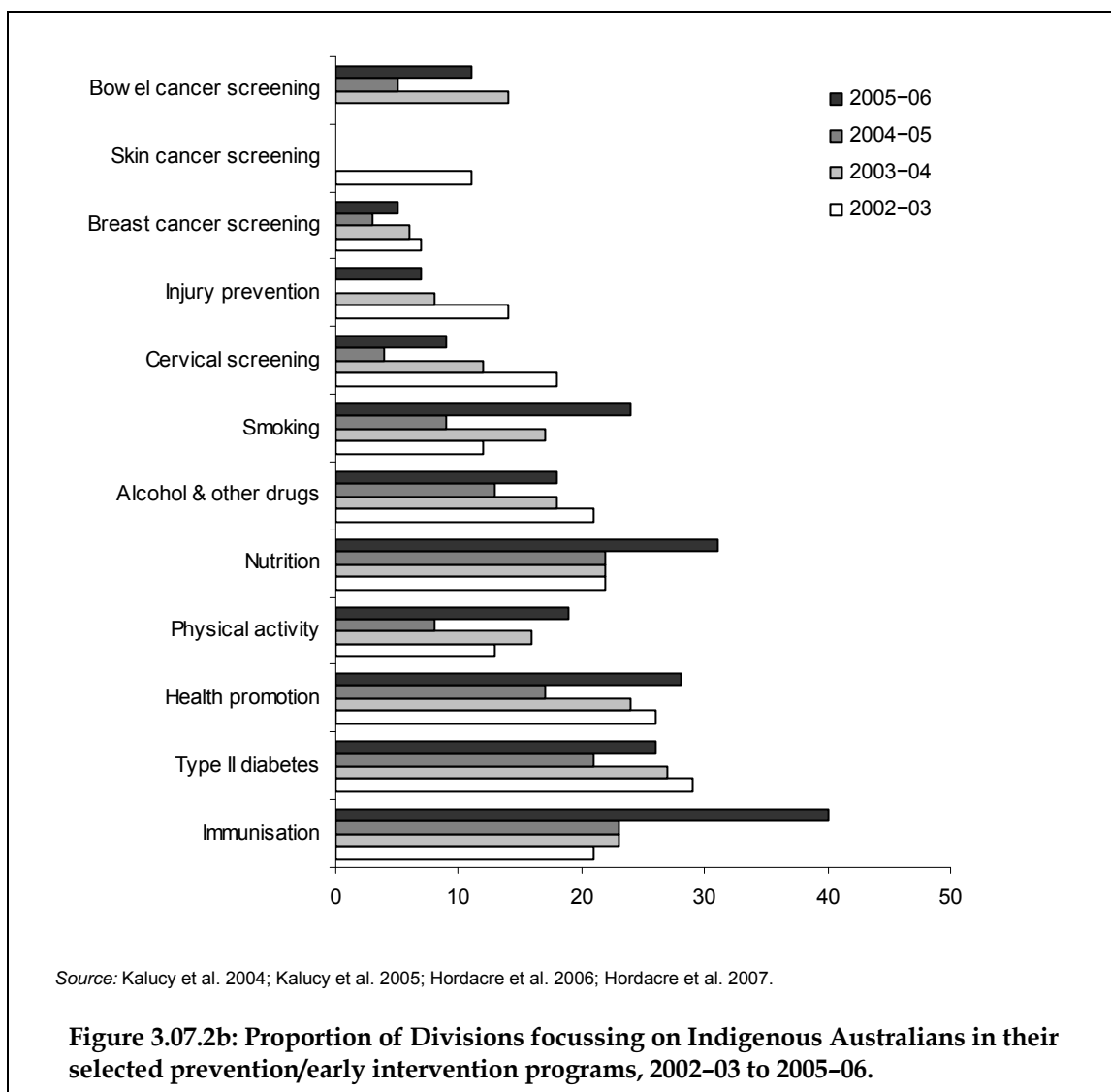
Source: Hordacre et al. 2007.

- Between 2002–03 and 2005–06 there has been a decrease in the proportion of Divisions with Type II diabetes programs and bowel cancer screening and an increase in the number of Divisions with health promotion, physical activity, nutrition, alcohol and other drugs and smoking programs (Figure 3.07.2a).
- Over the same period, there has been an increase in the proportion of Divisions that focussed on Indigenous Australians in their immunisation, physical activity, nutrition and smoking programs and a decrease in the proportion of Divisions that focussed on Indigenous Australians in their Type II diabetes, alcohol and other drugs, cervical cancer, injury prevention, and breast cancer screening programs (Figure 3.07.2b).



Source: Kalucy et al. 2004; Kalucy et al. 2005; Hordacre et al. 2006; Hordacre et al. 2007.

**Figure 3.07.2a: Proportion of Divisions of General Practice with selected prevention/early intervention programs, 2002-03 to 2005-06.**



## Clinical treatments provided by general practitioners

Information on clinical treatments provided by general practitioners such as advice, education and counselling for factors such as smoking, alcohol, nutrition, weight, exercise and lifestyle are available from the BEACH survey. Data for the 5-year period 2002-03 to 2006-07 are provided below.

- Over the period 2002-03 to 2006-07, of the 4,441 clinical treatments provided to Indigenous patients surveyed in the BEACH, 9% were for advice/education, 7% were for advice/education related to treatment, 7% were for counselling/advice related to nutrition and weight, 3% were for counselling/advice related to smoking, 2% were for counselling/advice related to exercise or alcohol, 1% were for counselling/advice related to lifestyle or family planning and 0.5% were for counselling/advice related to relaxation (Table 3.07.3).
- The selected clinical treatments related to health promotion outlined above were provided at a rate of 19.5 per 100 encounters for Indigenous patients. Of these general advice/education was the most common treatment provided (6 per 100 encounters)

followed by advice/education related to treatment and counselling/advice related to nutrition and weight (4 per 100 encounters) (Table 3.07.3).

- Indigenous patients were more likely than other patients to receive clinical treatments of counselling/advice related to alcohol and smoking (both ratio of 3). For the other selected clinical treatments related to health promotion provided, Indigenous patients were less likely than, or equally as likely as, other patients to receive these from general practitioners (Figure 3.07.3).
- At encounters with Indigenous patients, some clinical treatments were provided more often in 2006–07 than in 1998–99, including for general advice/education, counselling/advice related to nutrition and weight, lifestyle, alcohol, relaxation and family planning. Advice and education related to treatment was provided less often in 2006–07 than in 1998–99 for Indigenous patients (Table 3.07.4).
- Over the period 1998–99 to 2006–07, clinical treatments related to health promotion were most commonly provided by GPs to Indigenous patients in the management of endocrine/metabolic disorders (29 per 100 problems managed), followed by psychological problems (13 per 100 problems managed). For other patients, the clinical treatments related to health promotion most commonly provided by GPs were in the management of endocrine/metabolic problems (31 per 100 problems managed) and cardiovascular problems (13 per 100 problems managed) (Table 3.07.5).

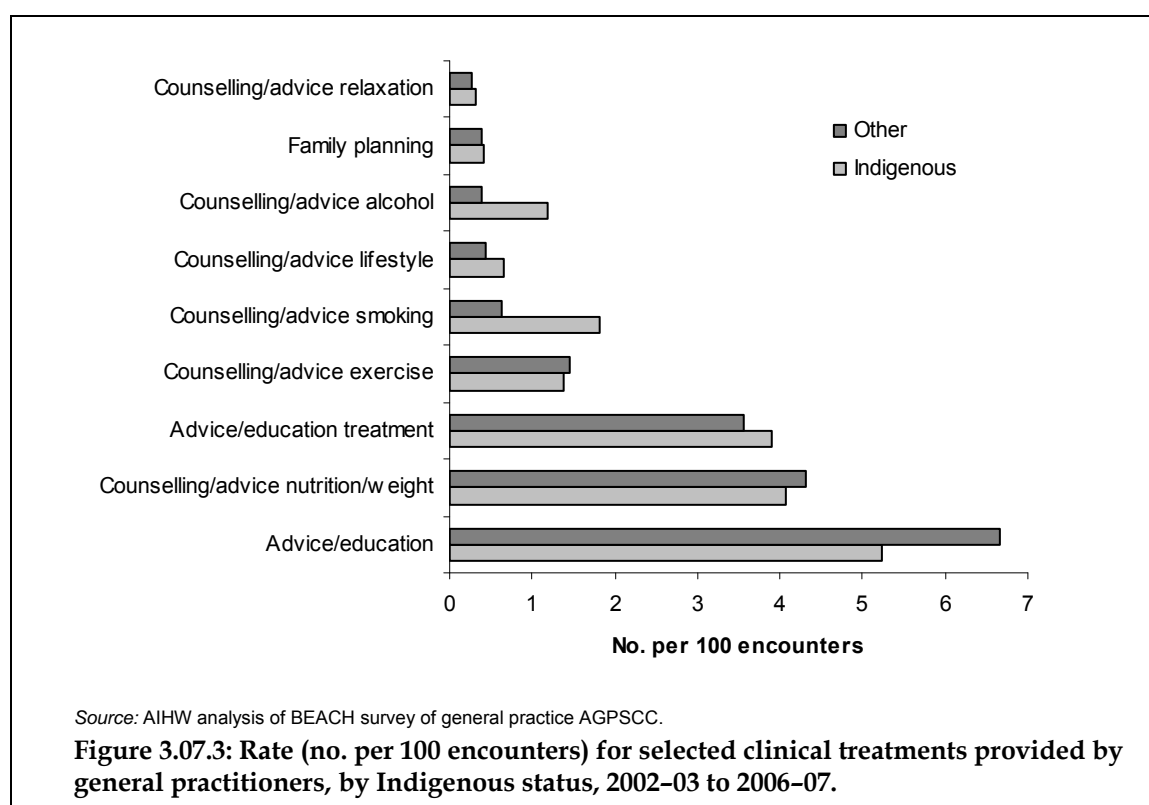


Table 3.07.3: Selected clinical treatments provided by general practitioners, by Indigenous status, 2002–03 to 2006–07<sup>(a)</sup> <sup>(b)</sup>

	Number		Proportion		Crude rate (no. per 100 encounters)						Age standardised rate (no. per 100 encounters) <sup>(c)</sup>		Rate ratio <sup>(f)</sup>
	Indig	Other	Indig	Other	Indig	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Other	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Indig	Other	
Advice/education	419	32,377	9.4	12.4	5.6	4.3	6.8	6.7	6.4	7.0	5.2	6.7	0.8
Counselling/advice— nutrition/weight	287	20,987	6.5	8.0	3.8	3.0	5.2	4.3	3.4	3.7	4.1	4.3	0.9
Advice/education— treatment	309	17,311	7.0	6.6	4.1	1.2	2.4	3.6	0.6	0.7	3.9	3.6	1.1
Counselling/advice— exercise	105	7,133	2.4	2.7	1.4	0.9	1.8	1.5	0.4	0.4	1.4	1.5	0.9
Counselling/advice— smoking	134	3,034	3.0	1.2	1.8	1.0	1.8	0.6	1.4	1.6	1.8	0.6	2.9
Counselling/advice— life style	44	2,147	1.0	0.8	0.6	0.3	0.9	0.4	0.4	0.5	0.7	0.4	1.5
Counselling/advice— alcohol	102	1,890	2.3	0.7	1.4	3.0	4.6	0.4	4.2	4.5	1.2	0.4	3.1
Family planning	44	1,901	1.0	0.7	0.6	0.2	0.5	0.4	0.3	0.3	0.4	0.4	1.0
Counselling/advice— relaxation	24	1,326	0.5	0.5	0.3	0.4	0.8	0.3	0.4	0.4	0.3	0.3	1.1
<b>Total selected clinical treatments</b>	<b>1,468</b>	<b>88,106</b>	<b>33.1</b>	<b>33.7</b>	<b>19.5</b>	<b>14.2</b>	<b>24.7</b>	<b>18.2</b>	<b>17.4</b>	<b>19.1</b>	18.9	18.1	1.0
Other clinical treatments	2,973	173,055	66.9	66.3	39.4	31.8	47.0	35.8	35.2	36.4	39.2	35.5	1.1
<b>Total</b>	<b>4,441</b>	<b>261,161</b>	<b>100.0</b>	<b>100.0</b>	<b>58.9</b>	<b>46.0</b>	<b>71.8</b>	<b>54.0</b>	<b>52.5</b>	<b>55.5</b>	58.2	53.6	1.1

(a) These survey results are likely to undercount the number of visits to GPs by Indigenous Australians.

(b) Combined financial year data for 5 years.

(c) Directly age-standardised rate using the total number of encounters for the period as the standard.

(d) LCL = Lower confidence limit

(e) UCL = Upper confidence limit

(f) Rate for Indigenous divided by rate for other Australians.

Source: AIHW analysis of BEACH survey of general practice AGPSCC.

Table 3.07.4: Selected clinical treatments provided by general practitioners, by Indigenous status, 1998–99 and 2006–07<sup>(a)(b)</sup>

Selected clinical treatments	1998–99									2006–07								
	Crude rate (no. per 100 encounters)						Age-standardised rate (no. per 100 encounters) <sup>(c)</sup>			Crude rate (no. per 100 encounters)						Age-standardised rate (no. per 100 encounters)		
	Indig.	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Other	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Indig	Other	Rate ratio	Indig	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Other	95% LCL <sup>(d)</sup>	95% UCL <sup>(e)</sup>	Indig	Other	Rate ratio
Advice/education	2.4	1.1	3.6	3.7	3.2	4.2	1.9	3.7	0.5	4.5	2.3	6.8	6.2	5.4	6.9	3.5	6.1	0.6
Counselling/advice—nutrition/weight	3.5	3.8	8.6	3.7	5.8	6.8	3.8	3.7	1.0	3.8	0.9	4.1	3.5	2.5	3.1	3.9	3.5	1.1
Advice/education—treatment	6.2	0.5	1.9	6.3	0.6	0.7	5.5	6.2	0.9	2.5	0.6	2.3	2.8	0.5	0.6	2.6	2.8	0.9
Counselling/advice—exercise	1.1	0.3	1.3	1.5	0.3	0.4	2.1	1.4	1.5	1.3	0.4	2.5	1.2	0.3	0.4	1.3	1.1	1.1
Counselling/advice—smoking	1.2	0.4	1.8	0.6	1.2	1.7	1.6	0.6	2.6	1.4	0.5	2.0	0.5	1.0	1.3	1.7	0.5	3.2
Counselling/advice—life style	0.2	0.0	0.4	0.3	0.3	0.4	0.1	0.3	0.4	0.6	0.0	1.1	0.4	0.3	0.5	0.7	0.4	1.6
Counselling/advice—alcohol	0.8	2.3	4.7	0.4	3.4	4.0	0.8	0.4	2.2	1.4	2.0	5.5	0.3	3.2	3.9	1.5	0.3	4.4
Family planning	0.3	0.1	0.8	0.3	0.3	0.4	0.2	0.3	0.7	0.8	0.1	1.8	0.4	0.3	0.4	0.6	0.4	1.4
Counselling/advice—relaxation	0.4	0.0	0.6	0.4	0.2	0.3	0.4	0.4	1.1	1.0	0.2	1.4	0.4	0.3	0.5	1.0	0.3	2.8
<b>Total selected clinical treatments</b>	<b>16.1</b>	<b>8.4</b>	<b>23.8</b>	<b>17.1</b>	<b>15.2</b>	<b>18.9</b>	<b>16.5</b>	<b>16.9</b>	<b>1.0</b>	<b>17.3</b>	<b>7.1</b>	<b>27.5</b>	<b>15.7</b>	<b>13.8</b>	<b>17.7</b>	<b>16.5</b>	<b>15.6</b>	<b>1.1</b>
Other clinical treatments	23.0	17.3	28.8	27.8	26.7	28.9	23.4	27.6	0.8	38.1	19.5	56.7	35.1	33.7	36.6	39.2	34.9	1.1
<b>Total</b>	<b>39.1</b>	<b>25.8</b>	<b>52.5</b>	<b>44.9</b>	<b>41.9</b>	<b>47.8</b>	<b>39.9</b>	<b>44.5</b>	<b>0.9</b>	<b>55.4</b>	<b>26.5</b>	<b>84.2</b>	<b>50.9</b>	<b>47.5</b>	<b>54.3</b>	<b>55.7</b>	<b>50.5</b>	<b>1.1</b>

**Table 3.07.4 (continued): Selected clinical treatments provided by general practitioners, by Indigenous status, 1998–99 and 2006–07<sup>(a)(b)</sup>**

- (a) These survey results are likely to undercount the number of visits to GPs by Indigenous Australians.
- (b) Combined financial year data for 5 years.
- (c) Directly age-standardised rate using total encounters in the period as the standard.
- (d) LCL = Lower confidence limit
- (e) UCL = Upper confidence limit

*Source:* AIHW analysis of BEACH survey of general practice AGPSCC.

**Table 3.07.5: Selected clinical treatments provided by general practitioners: rate (no. per problems managed), by Indigenous status, 1998–99 to 2006–07<sup>(a)(b)</sup>**

Selected clinical treatments	Indigenous							Other						
	Respiratory	Musculo-skeletal	Cardio-vascular	Endocrine/metabolic	Psychological	Other <sup>(c)</sup>	Total	Respiratory	Musculo-skeletal	Cardio-vascular	Endocrine/metabolic	Psychological	Other <sup>(c)</sup>	Total
	No. per 100 problems managed <sup>(d)</sup>													
Advice/education	3.2	4.7	2.9	1.6	2.7	3.8	3.3	4.3	5.6	3.9	2.7	3.6	4.9	4.5
Counselling/advice—nutrition/weight	0.0	0.3	2.3	14.9	0.4	1.5	2.5	0.2	0.7	4.7	19.5	0.5	1.9	2.9
Advice/education—treatment	2.9	2.7	1.2	4.9	1.3	2.0	2.5	4.8	2.9	1.0	1.7	0.7	2.1	2.4
Counselling/advice—exercise	0.1	1.1	1.0	4.9	0.1	0.2	0.9	0.1	1.7	2.1	5.7	0.3	0.3	1.0
Counselling/advice—smoking	3.7	0.0	0.9	0.3	4.8	0.3	1.1	1.1	0.0	0.4	0.1	2.0	0.1	0.4
Counselling/advice—lifestyle	0.1	0.3	0.6	1.5	0.2	0.2	0.4	0.0	0.1	1.0	1.2	0.2	0.2	0.3
Counselling/advice—alcohol	0.2	0.1	0.6	0.6	2.8	0.5	0.7	0.0	0.0	0.2	0.2	1.6	0.2	0.3
Family planning	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.3
Counselling/advice—relaxation	0.2	0.1	0.1	0.0	0.9	0.1	0.2	0.0	0.0	0.1	0.0	1.6	0.1	0.2
<b>Total selected clinical treatments</b>	<b>10.3</b>	<b>9.3</b>	<b>9.5</b>	<b>28.6</b>	<b>13.3</b>	<b>9.1</b>	<b>11.9</b>	<b>10.7</b>	<b>11.1</b>	<b>13.3</b>	<b>31.1</b>	<b>10.5</b>	<b>10.1</b>	<b>12.1</b>
Other clinical treatments	22.9	26.7	14.4	15.9	35.7	27.8	24.8	20.4	26.6	12.5	12.8	36.2	27.1	23.7
<b>Total treatments</b>	<b>33.2</b>	<b>36.0</b>	<b>23.9</b>	<b>44.5</b>	<b>49.0</b>	<b>36.9</b>	<b>36.7</b>	<b>31.1</b>	<b>37.7</b>	<b>25.9</b>	<b>43.9</b>	<b>46.7</b>	<b>37.2</b>	<b>35.8</b>
No treatments/not stated	66.8	64.0	76.1	55.5	51.0	63.1	63.3	68.9	62.3	74.1	56.1	53.3	62.8	64.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(continued)

**Table 3.07.5 (continued): Selected clinical treatments provided by general practitioners: rate (no. per problems managed), by Indigenous status, 1998–99 to 2006–07<sup>(a)(b)</sup>**

(a) These survey results are likely to undercount the number of visits to GPs by Indigenous Australians.

(b) Combined financial year data for 5 years.

(c) 'Other clinical treatments' include: skin, general and unspecified, digestive, female genital system, ear, pregnancy and family planning, neurological, urology, eye, male genital system, blood and social.

(d) Directly age-standardised rate using total encounters in the period as the standard.

*Source:* AIHW analysis of BEACH survey of general practice, AGPSCC.

## Indigenous communities

### Health promotion programs

Health promotion programs are defined in the CHINS as 'a series of planned group activities conducted by a health professional within the community'. They are designed to change knowledge, attitudes, beliefs, behaviours or susceptibility to disease through a combination of educational and environmental measures, screening or immunisation (ABS 2007).

For the 2006 CHINS, data on health promotion programs were only collected from communities which completed the long community questionnaire. The health promotion questions in the CHINS do not collect information on the extent or quality of these activities – only that they have occurred. Therefore, these data are limited in their contribution to our understanding of the health promotion activities occurring in these discrete Indigenous communities.

- In 2006, most discrete Indigenous communities reported that one or more health promotion programs (67%) had been conducted, with women's health programs reported by 58%, well babies programs by 54%, immunisation programs by 54% and men's health programs by 52% of communities (Table 3.07.6; Figure 3.07.4).
- The proportion of discrete Indigenous communities reporting at least one health promotion program varied across jurisdictions. Queensland had the highest proportion (89%) and New South Wales the lowest proportion (50%) of communities who reported one or more health promotion programs had been conducted (Table 3.07.7).
- The proportion of discrete Indigenous communities, with a population of 50 or more located more than 10 kilometres from a hospital, that reported conducting at least one health promotion program conducted decreased from 82% in 2001 to 75% in 2006 (Table 3.07.8; Figure 3.07.5).
- The three programs run in the most communities in 2001 and 2006 were women's health, well babies and immunisation (Table 3.07.8; Figure 3.07.5).

**Table 3.07.6: Discrete Indigenous communities<sup>(a)</sup> located 10 kilometres or more from a hospital: selected health promotion programs conducted in community, 2006**

	Health promotion program conducted		Health promotion program not conducted	
	Communities (No.)	Communities (%)	Communities (No.)	Communities %
Well babies	155	53.8	132	45.8
Women's health	168	58.3	119	41.3
Men's health	149	51.7	138	47.9
Youth's health	88	30.6	199	69.1
Sexual health	119	41.3	168	58.3
Substance misuse	89	30.9	198	68.8
Immunisation	154	53.5	133	46.2
Trachoma control	69	24.0	218	75.7
Eye health	91	31.6	196	68.1
Ear health	107	37.2	180	62.5
Nutrition	129	44.8	158	54.9
Stop smoking	74	25.7	213	74.0
Domestic and personal hygiene	92	31.9	195	67.7
Emotional and social wellbeing or mental health	84	29.2	203	70.5
<i>Sub-total</i>	<i>194<sup>(b)</sup></i>	<i>67.4</i>	<i>93<sup>(c)</sup></i>	<i>32.3</i>
Not stated	1	0.3	1	0.3
<b>Total no. communities<sup>(d)</sup></b>	<b>288</b>	<b>100.0.</b>	<b>288</b>	<b>100.0.</b>

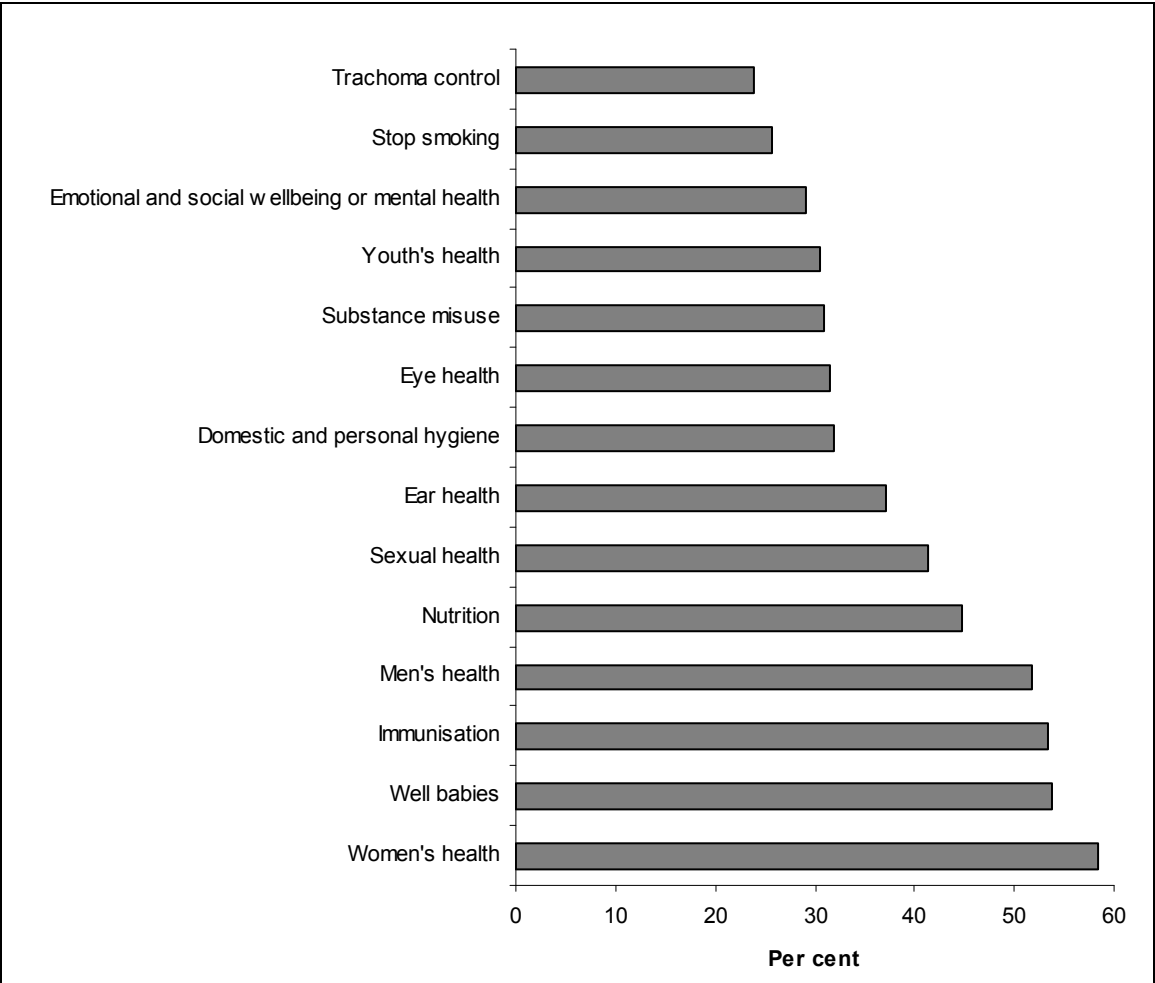
(a) With a population of 50 or more, or a reported usual population of less than 50 but which were not linked to a parent community or resource agency.

(b) Number of communities where at least one health promotion program was conducted.

(c) Number of communities where no health promotion programs were conducted.

(d) Excludes communities where distance to nearest hospital was not stated.

Source: AIHW analysis of 2006 CHINS.



Source: AIHW analysis of 2006 CHINS.

**Figure 3.07.4: Proportion of discrete Indigenous communities located 10 kilometres or more with each type of health promotion program conducted, 2006.**

**Table 3.07.7: Discrete Indigenous communities<sup>(a)</sup> located 10 kilometres or more from a hospital: selected health promotion programs conducted in community, by state/territory, 2006**

	NSW		Qld		WA		SA		NT		Australia <sup>(b)</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Well babies	10	33.3	19	70.4	29	40.8	14	42.4	80	64.5	155	53.8
Women's health	14	46.7	23	85.2	34	47.9	17	51.5	77	62.1	168	58.3
Men's health	10	33.3	17	63.0	28	39.4	16	48.5	75	60.5	149	51.7
Youth's health	9	30.0	10	37.0	19	26.8	9	27.3	39	31.5	88	30.6
Sexual health	10	33.3	19	70.4	27	38.0	4	12.1	57	46.0	119	41.3
Substance misuse	10	33.3	13	48.1	20	28.2	5	15.2	39	31.5	89	30.9
Immunisation	13	43.3	20	74.1	37	52.1	15	45.5	67	54.0	154	53.5
Trachoma control	2	6.7	4	14.8	25	35.2	1	3.0	36	29.0	69	24.0
Eye health	4	13.3	12	44.4	21	29.6	5	15.2	46	37.1	91	31.6
Ear health	9	30.0	12	44.4	31	43.7	4	12.1	48	38.7	107	37.2
Nutrition	10	33.3	14	51.9	28	39.4	4	12.1	70	56.5	129	44.8
Stop smoking	2	6.7	11	40.7	23	32.4	3	9.1	33	26.6	74	25.7
Domestic and personal hygiene	4	13.3	9	33.3	23	32.4	4	12.1	50	40.3	92	31.9
Emotional and social wellbeing or mental health	7	23.3	13	48.1	24	33.8	6	18.2	31	25.0	84	29.2
<b>Total with at least one health promotion program</b>	<b>15</b>	<b>50.0</b>	<b>24</b>	<b>88.9</b>	<b>43</b>	<b>60.6</b>	<b>18</b>	<b>54.5</b>	<b>91</b>	<b>73.4</b>	<b>194</b>	<b>67.4</b>
<b>Total with no health promotion programs</b>	<b>15</b>	<b>50.0</b>	<b>2</b>	<b>7.4</b>	<b>28</b>	<b>39.4</b>	<b>15</b>	<b>45.5</b>	<b>33</b>	<b>26.6</b>	<b>93</b>	<b>32.3</b>
Not stated	—	—	1	3.7	—	—	—	—	—	—	1	0.3
<b>Total<sup>(c)</sup></b>	<b>30</b>	<b>100.0</b>	<b>27</b>	<b>100.0</b>	<b>71</b>	<b>100.0</b>	<b>33</b>	<b>100.0</b>	<b>124</b>	<b>100.0</b>	<b>288</b>	<b>100.0</b>

(a) With a population of 50 or more, or a reported usual population of less than 50 but which were not linked to a parent community or resource agency

(b) Victoria and Tasmania included in Australia for confidentiality reasons.

(c) Excludes communities where distance to nearest hospital was not stated.

Source: AIHW analysis of 2006 CHINS.

**Table 3.07.8: Discrete Indigenous communities with a population of 50 or more located 10 kilometres or more from a hospital: selected health promotion programs conducted in community, 2001 and 2006**

	Health promotion program conducted		Health promotion program not conducted	
	2001	2006	2001	2006
	%	%	%	%
Well babies	66	61	33	39
Women's health	72	65	27	35
Men's health	62	58	36	42
Youth's health	52	34	47	66
Sexual health	65	46	33	54
Substance misuse	52	34	47	66
Immunisation	74	61	26	39
Eye health inc. trachoma <sup>(a)</sup>	60	44	39	37
Ear health	64	42	35	58
Nutrition <sup>(b)</sup>	n.a.	49	n.a.	51
Stop smoking <sup>(b)</sup>	n.a.	29	n.a.	71
Domestic and personal hygiene <sup>(b)</sup>	n.a.	35	n.a.	65
Emotional and social wellbeing or mental health	50	32	49	68
<b>Sub-total</b>	<b>82<sup>(c)</sup></b>	<b>75<sup>(c)</sup></b>	<b>17<sup>(d)</sup></b>	<b>25<sup>(d)</sup></b>
Not stated	1	—	1	—
<b>Total no. communities<sup>(e)</sup></b>	<b>242</b>	<b>237</b>	<b>242</b>	<b>237</b>

(a) 2006 data is the sum of communities with health promotion programs for eye health and/or trachoma. In 2001 data was not collected separately for Eye health and Trachoma control programs.

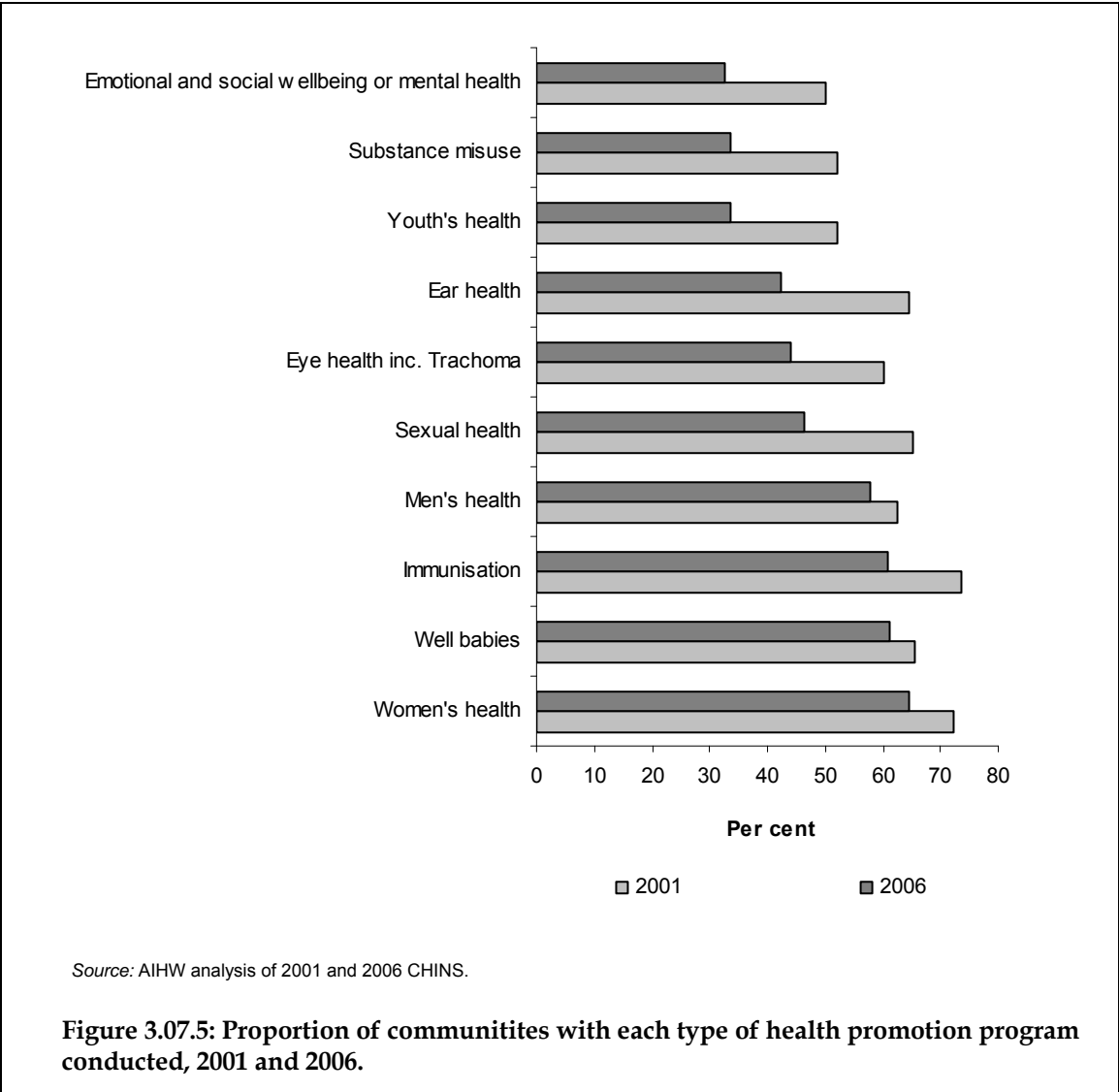
(b) Data on nutrition, stop smoking and domestic and personal hygiene programs were not collected in 2001.

(c) Number of communities where at least one health promotion program was conducted.

(d) Number of communities where no health promotion programs were conducted.

(e) Excludes communities where distance to nearest hospital was not stated.

Source: ABS 2002; AIHW analysis of 2006 CHINS.



**Frequency of health promotion programs**

- The frequency with which health promotion programs were conducted varied. The majority of programs were most likely to be conducted weekly or monthly, except for trachoma control and eye health, both of which were most likely to be conducted less than three monthly (Table 3.07.9).

**Table 3.07.9: Discrete Indigenous communities<sup>(a)</sup> located 10 kilometres or more from a hospital: frequency of selected health promotion programs conducted in community, 2006**

Health promotion programs	Frequency of program						All communities <sup>(b)(c)</sup>
	Weekly	Fortnightly	Monthly	Three monthly	Less than three monthly	Not conducted	
	<b>Number</b>						
Well babies	66	7	39	28	15	132	288
Women's health	49	10	44	39	26	119	288
Men's health	42	5	35	34	33	138	288
Youth's health	32	1	23	13	19	199	288
Sexual health	36	6	26	16	35	168	288
Substance misuse	30	5	19	12	23	198	288
Immunisation	59	8	42	26	19	133	288
Trachoma control	11	4	8	8	38	218	288
Eye health	15	4	11	27	34	196	288
Ear health	32	6	24	15	30	180	288
Nutrition	36	11	27	27	28	158	288
Stop smoking	29	4	15	13	13	213	288
Domestic and personal hygiene	34	6	17	9	26	195	288
Emotional and social wellbeing or mental health	26	5	21	12	20	203	288

(a) With a population of 50 or more, or a reported usual population of less than 50 but which were not linked to a parent community or resource agency.

(b) Includes 'whether selected health promotion program conducted' not stated.

(c) Excludes communities where distance to nearest hospital not stated.

Source: AIHW analysis of 2006 CHINS.

## **Service Activity Reporting data**

### **Programs/activities provided**

All Indigenous primary health-care services undertake a number of extended care roles to support their communities. The data in this section refer to the proportion of Indigenous primary health-care services included in the SAR data collection that undertake these roles through the provision of programs and activities but not the extent to which they are undertaken or the amount of resources used to carry out these activities.

In 2005–06, there were 150 respondent Indigenous primary health-care services included in the SAR. Figure 3.07.6a shows the proportion of Indigenous primary health-care services that offered selected preventative health-care programs in 2005–06. Figure 3.07.6b shows the proportion of Indigenous primary health-care services that offered selected traditional health-care programs, substance use programs, mental health/emotional and social wellbeing activities and health-related and community support services in 2005–06.

### **Preventative health care**

- In 2005–06, a majority of Indigenous primary health-care services undertook each of the preventative care programs: 91% offered health promotion/education programs, 84% offered women's health programs, around three quarters (74%) offered dietary and nutrition programs and 69% offered men's health programs. The two programs offered by less than half of Indigenous primary health-care services were working with food stores to encourage healthy eating (25%) and advice and advocacy in relation to environmental health issues (39%) (Figure 3.07.6a).

### **Traditional health care**

- In 2005–06, 18% of Aboriginal and Torres Strait Islander primary health-care services offered bush tucker nutrition programs (Figure 3.07.6b).

### **Substance use programs**

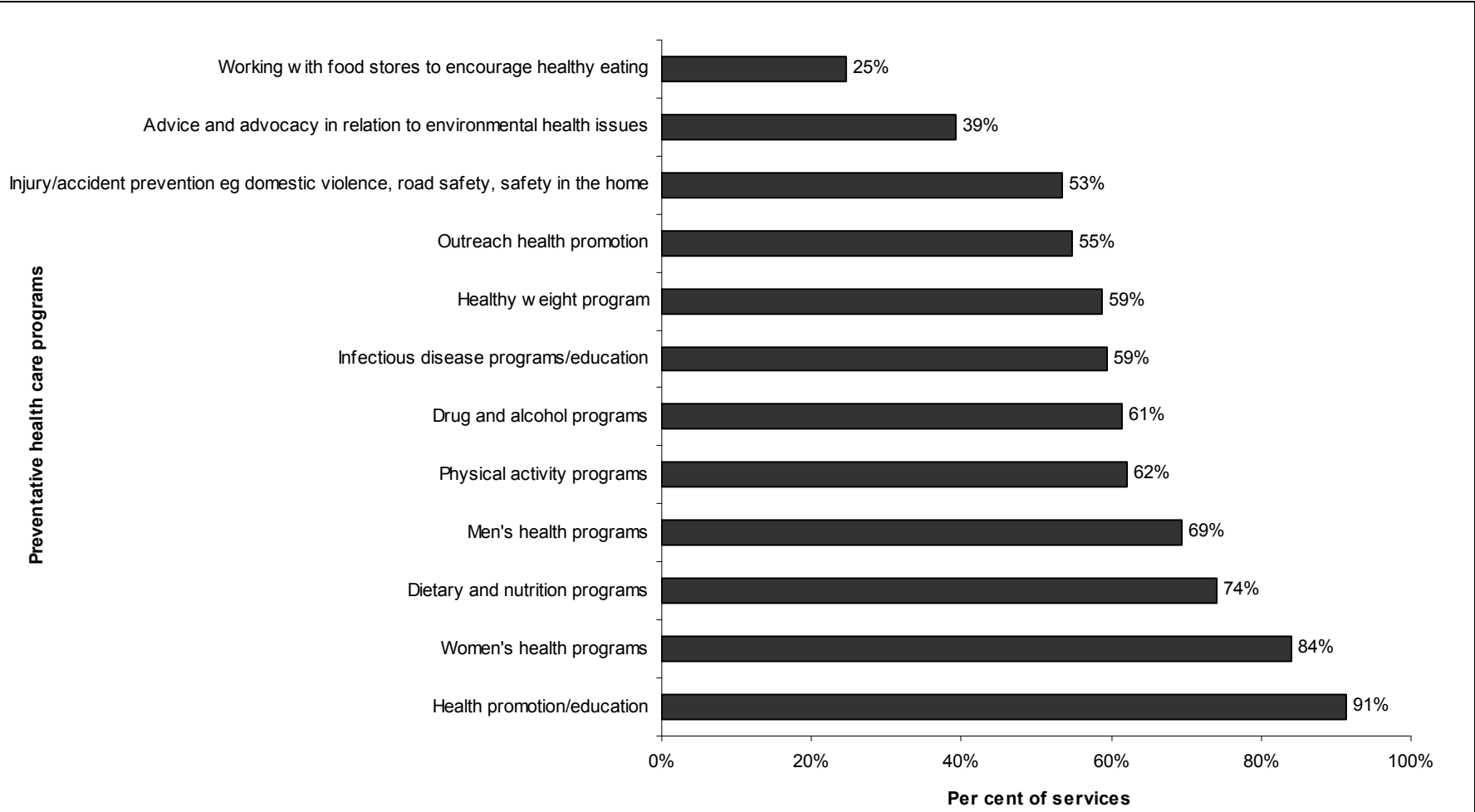
- In 2005–06, 82% of Aboriginal and Torres Strait Islander primary health-care services offered information/education about substance use programs, 69% offered community education/activities and 52% offered mental health promotion activities (Figure 3.07.6b).

### **Mental health/emotional and social wellbeing activities**

- In 2005–06, 82% of Indigenous primary health-care services offered information/education about substance use programs, 69% offered community education/activities and 52% offered mental health promotion activities (Figure 3.07.6b).

### **Health-related and community support services**

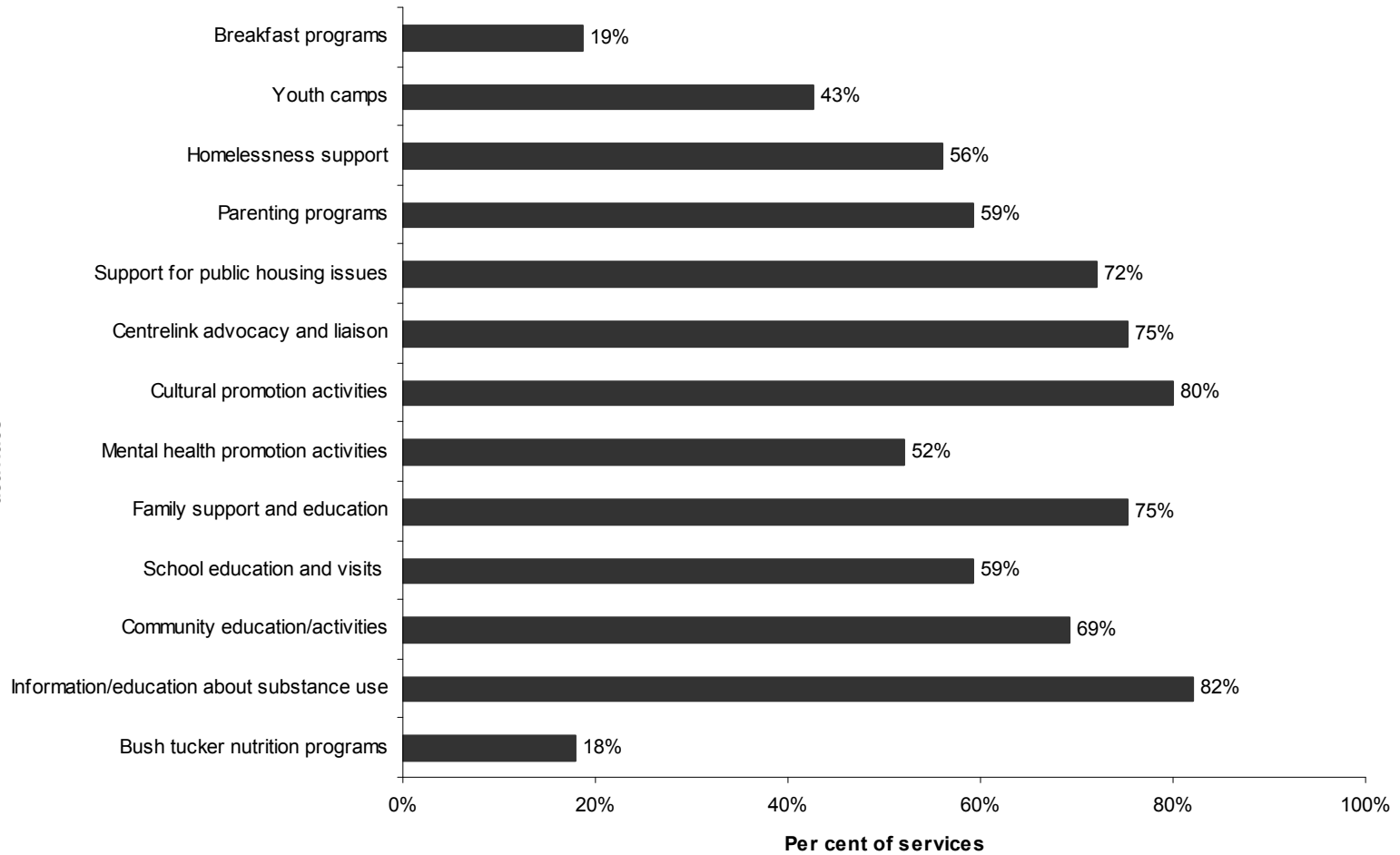
- In 2005–06, only two of the six health-related and community support services were not offered by the majority of Indigenous primary health-care services; 43% offered youth camps and 19% offered breakfast programs (Figure 3.07.6b).



Source: Service Activity Reporting 2005-06

**Figure 3.07.6a: Proportion of Aboriginal and Torres Strait Islander primary health-care services that undertake selected preventative health care and screening activities, 2005-06**

Health related and community support services  
Mental health activities  
Substance use programs  
Traditional health care

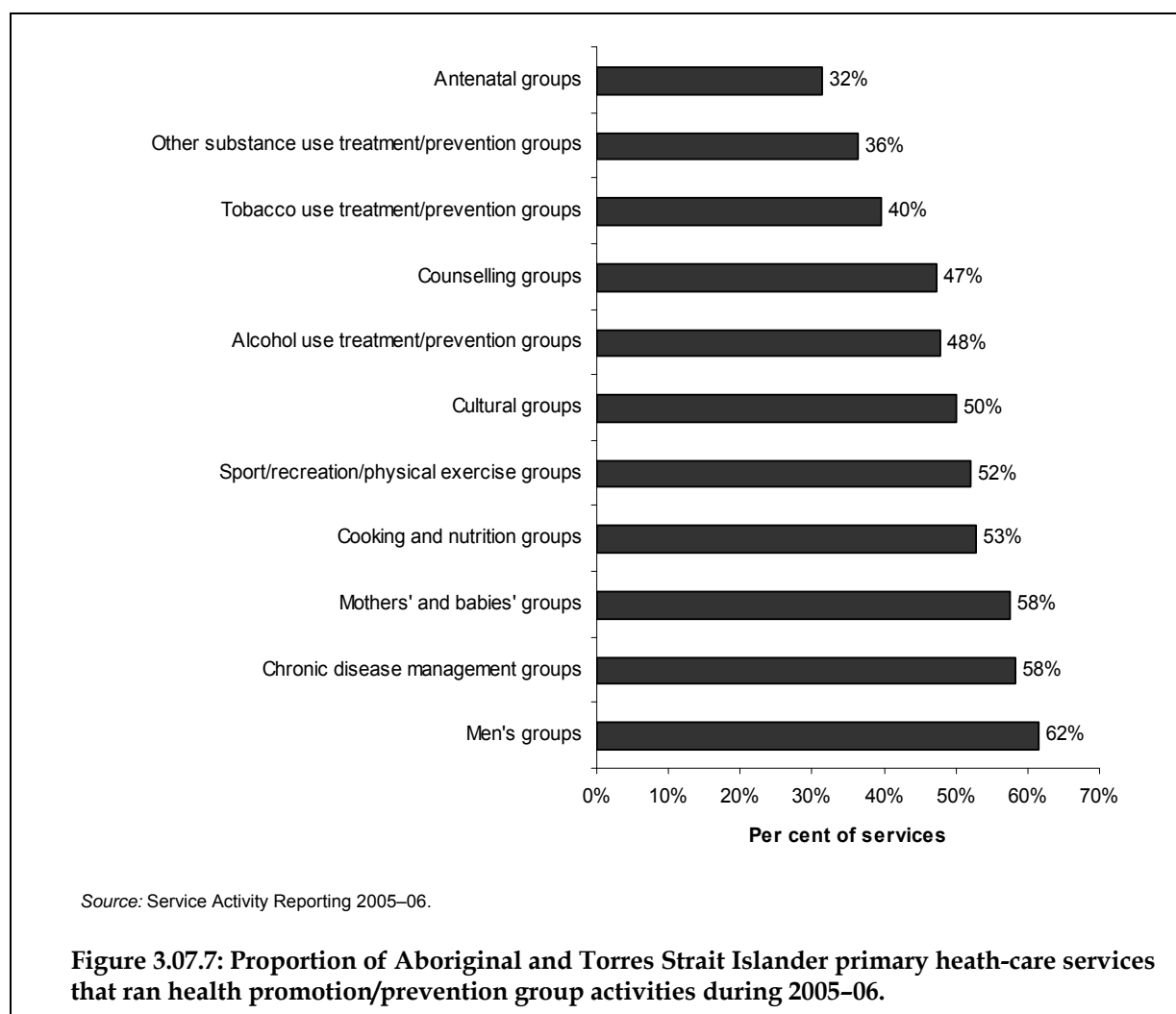


Source: Service Activity Reporting 2005-06

**Figure 3.07.6b: Proportion of Aboriginal and Torres Strait Islander primary health-care services that undertake selected health care and screening activities, 2005-06**

### Health promotion/prevention group activities

- In 2005–06, 62% of services ran at least one health promotion/prevention group activity.
- In 2005–06, the most common health promotion/prevention group activity run by Aboriginal and Torres Strait Islander primary health-care services was men’s groups (62%), followed by chronic disease managements groups (58%) and mothers and babies groups (58%) (Figure 3.07.7).
- Less than half of services ran alcohol use treatment / prevention groups (48%), counselling groups (47%), tobacco use/treatment prevention groups (40%), other substance use treatment/prevention groups (36%) and antenatal groups (32%).



## Drug and Alcohol Service Reporting data

### Programs/Activities Provided

In 2006–07, there were 41 Australian Government-funded Aboriginal and Torres Strait Islander substance-use-specific services, including 29 residential and 11 non-residential services. Forty (98%) responded to the 2006–07 DASR.

The 2006–07 DASR collected information about types of care provided by services under four main categories: cultural activities; community activities, lifestyle training/activities and social health programs. Figure 3.07.8 shows the proportion of Aboriginal and Torres Strait Islander substance-use-specific services that offered selected health promotion programs.

### Residential services

#### *Cultural activities*

- Bush outings were the most common type of cultural activity provided by residential services in 2006–07 (93%), followed by traditional arts and crafts (79%) and mentor programs (55%).

#### *Community activities*

- Community-based education was the most common type of community activity provided by residential services in 2006–07 (72%). About 41% of services provided school education and visits and 38% of services provided youth programs.

#### *Healthy lifestyle training/activities*

- In 2006–07, a majority of residential services provided each of the five lifestyle training/activities; 100% provided living skills training, 90% offered sport and recreation/physical exercise, 90% provided nutrition/cooking, 83% provided help with budgeting and 79% offered work skills training.

#### *Social health programs*

- In 2006–07, education about the health consequences of substance use was provided by 79% of residential services. Around two-thirds of residential services provided education about safe sex (66%). Only 31% of services offered information about safe injecting practices, and 14% helped clients access methadone management and helped clients to access needle exchange programs.

### Non-Residential services

#### *Cultural activities*

- Bush outings and mentor program were the most common types of cultural activities provided by non-residential services in 2006–07 (73%), followed by traditional arts and crafts (46%).

#### *Community activities*

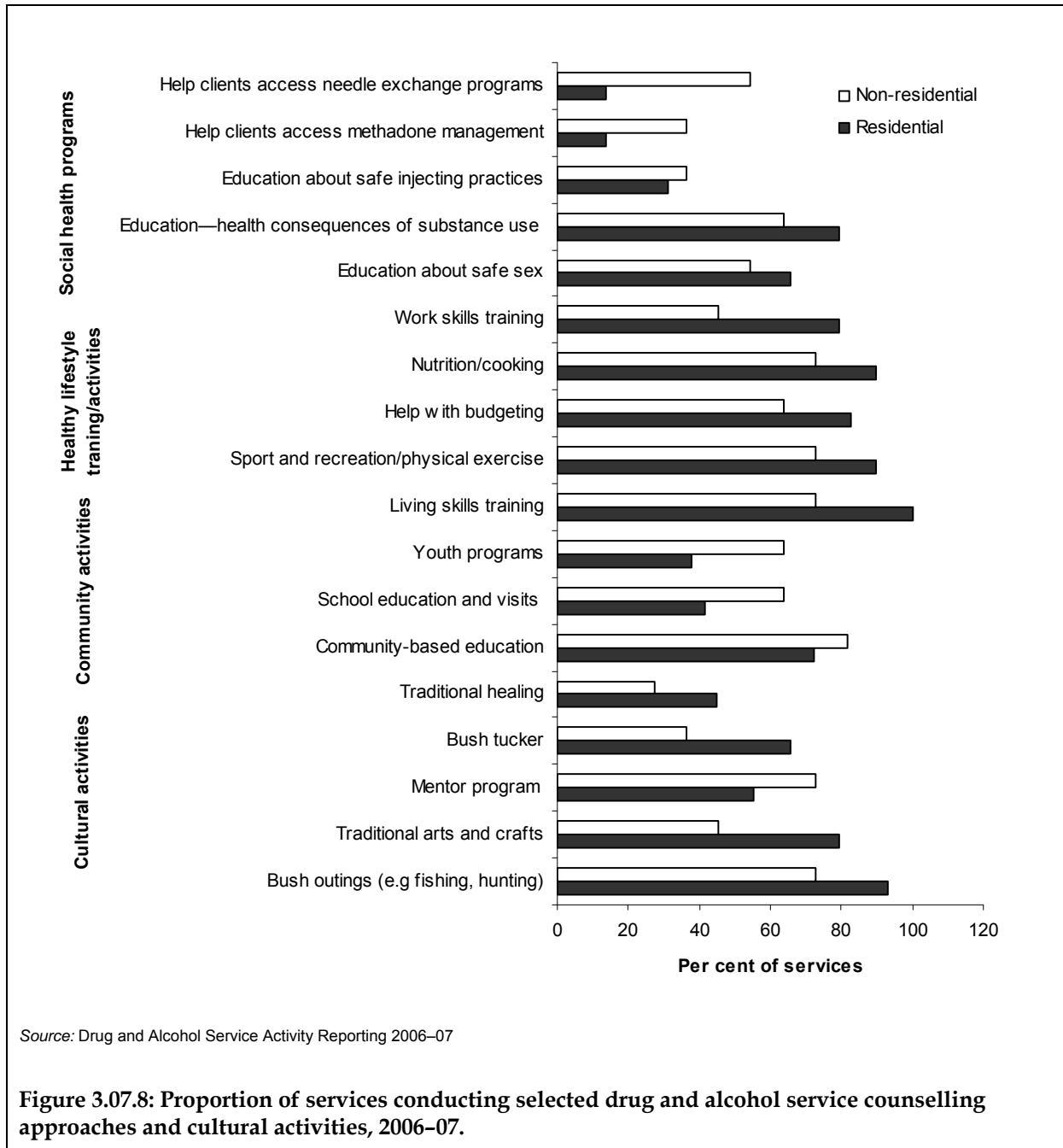
- Community-based education was the most common type of community activity provided by non-residential services in 2006–07 (82%). Approximately 64% of services provided school education/visits and youth programs.

#### *Healthy lifestyle training/activities*

- In 2006–07, almost three-quarters of non-residential services provided living skills training, sport and recreation, and nutrition/cooking (73%). Approximately 64% of services provided help with budgeting and 46% offered work skills training.

*Social health programs*

- In 2006–07, education about the health consequences of substance use was provided by 64% of non-residential services. Just over half of non-residential services provided education about safe sex, and helped clients to access needle exchange programs (55%). Only 36% of services offered information about safe injecting practices, and helped clients access methadone management.



## **Health promotion program information**

### **Residential**

- In 2006–07, approximately 21 residential Aboriginal and Torres Strait Islander substance-use-specific services ran community-based education programs (72%).

### **Non-residential**

- In 2006–07, 11 non-residential Indigenous substance-use-specific services ran community-based education programs (100%).

## **Health promotion Groups**

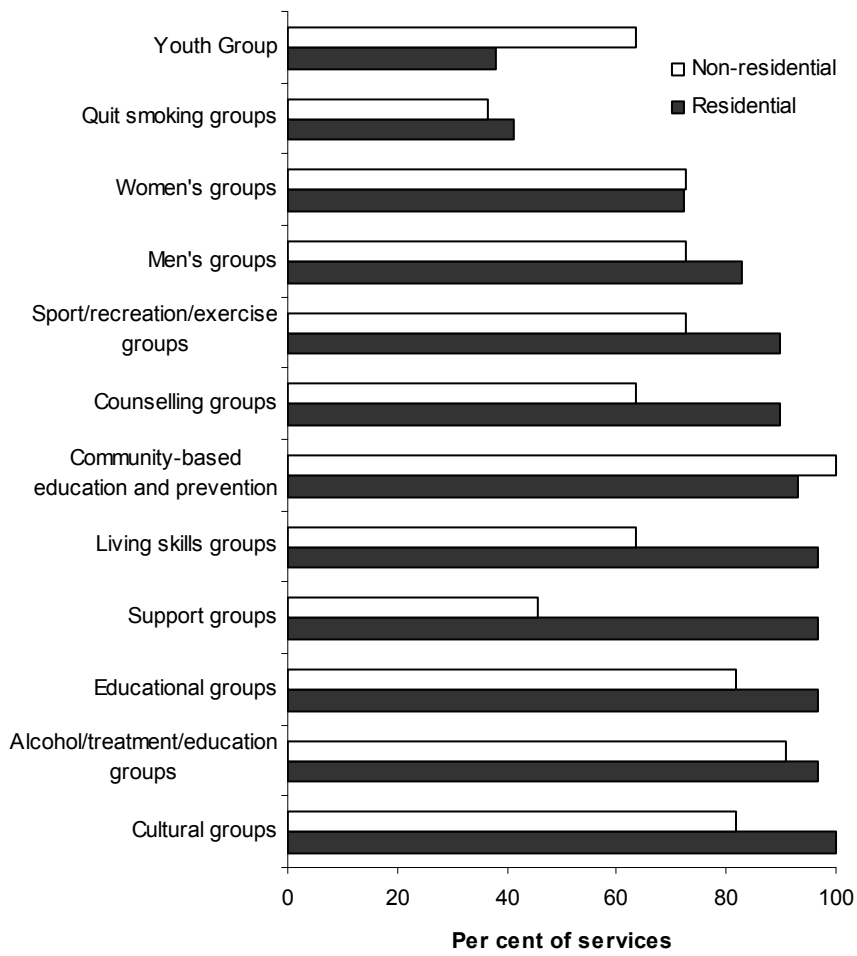
The DASR also collects information on the types of groups run by Aboriginal and Torres Strait Islander substance-use-specific services.

### **Residential**

- In 2006–07, cultural groups was the most common type of group ran by residential Indigenous substance use services (100%), followed by alcohol/treatment/education groups, education groups, support groups, and living skills groups (97%) (Figure 3.07.9).
- Less than 50% of residential Aboriginal and Torres Strait Islander substance use services ran youth groups or quit smoking groups in 2006–07.

### **Non-Residential**

- In 2006–07, alcohol/treatment/education groups was the most common type of group ran by non-residential Indigenous substance use services (91%), followed by cultural groups and education groups (both 82%) (Figure 3.07.9).
- Less than 50% of non-residential Indigenous substance use services ran quit smoking groups and support groups in 2006–07.



Source: Drug and Alcohol Service Activity Reporting 2006-07.

**Figure 3.07.9: Proportion of Aboriginal and Torres Strait Islander substance-use-specific services that ran selected groups during 2006-07.**

## Additional information

Information on services funded through the HFL program that had health promotion programs for behavioural risk reduction is available from the AIHW Healthy For Life data collection.

- In 2006–07, of the 59 services that were included in the HFL program and reported information on health promotion programs, 76% provided brief intervention programs for smoking and 70% provided other advice on smoking.
- Three-quarters of services funded through the HFL program provided brief intervention programs for alcohol and two-thirds provided other advice on alcohol.
- About 75% of HFL Services provided programs for nutrition and physical activity and 70% provided emotional wellbeing advice.

**Table 3.07.10: Proportion of services funded through the Healthy For Life program that had health promotion programs, 2006–07**

Health promotion program	Yes	No	No response
	Per cent		
<b>Behavioural risk reduction</b>			
Smoking			
Brief intervention	76.3	6.8	16.9
Other advice	69.5	11.9	18.6
Nutrition	74.6	6.8	18.6
Alcohol			
Brief intervention	74.6	8.5	16.9
Other advice	66.1	13.6	20.3
Physical activity	74.6	8.5	16.9
Emotional wellbeing	69.5	11.9	18.6
Other <sup>(a)</sup>	28.8	30.5	40.7

(a) Includes drugs (kava and gunja); alcohol; mental health; men's and women's support; environmental exposures, decreasing social isolation; hygiene; home issues, pregnancies, men's issues (impotence) and welfare (budgeting and finances).

Note: Data were provided by 59 services

Source: AIHW, Healthy for Life data collection.

## **Data quality issues**

### **Health expenditure data**

*Health expenditure data is affected by most of the reservations about data relating to Aboriginal and Torres Strait Islander peoples. The issue of poor Indigenous identification means that the attribution of expenditure to Indigenous people either on a population or per capita basis must be treated with caution. This single factor is arguably the major important data quality issue, affecting as it does nearly all health and population based measures. Reliable Indigenous status data is a major requirement to produce reliable, consistent and valid information on most aspects of Indigenous health. The "completeness of identification of Indigenous Australians varies significantly across states and territories" and in administrative health data collections (SCRGSP 2006).*

### **Quality of data on Indigenous service use**

*For many publicly funded health services, there are few details available about service users and, in particular, about their Indigenous status. For privately funded services, this information is frequently unavailable. For those services that do collect this information, recording Indigenous status accurately for all people does not always occur. The result is that there is some margin of error in the estimations of health expenditure for Indigenous people and their corresponding service use.*

### **Expenditure estimates**

*There may be some limitations associated with the scope and definition of health expenditures included in this measure. Other (non-health) agency contributions to health expenditure, such as 'health' expenditures incurred within education departments and prisons, are not included.*

*Furthermore, although every effort has been made to ensure consistent reporting and categorisation of expenditure on health goods and services, in some cases there may be inconsistencies across data providers. These may result from limitations of financial reporting systems, and/or different reporting mechanisms (AIHW 2005).*

### **Divisions of GP Survey**

*The data in the Survey are self-reported by Divisions and represent estimates and answers to questions about Division activities, staffing and other matters. Although validity checks are implemented as part of the data collection and cleaning processes, the accuracy and quality is ultimately determined by Division data collection methods and influenced by Division staff turnover and skills (Hordacre et al. 2007).*

### **General Practitioner data (BEACH)**

*Information about general practitioner encounters is available from the 'Bettering the Evaluation and Care of Health' (BEACH) survey. The BEACH data on Indigenous Australians should be treated with care. First, the sample frame has not been designed to produce statistically significant results for population subgroups such as Indigenous Australians. Second, the identification of Indigenous Australians is not complete. In the BEACH survey, 'not stated' responses to the Indigenous identification question are often higher than the 'yes' responses. It can be assumed, therefore, that the survey consistently undercounts the number of Indigenous Australians visiting general practitioners, but the extent of this undercount is not measurable.*

*(continued)*

## **Data quality issues (continued)**

### **Community Housing and Infrastructure Needs Survey (CHINS)**

*The 2006 CHINS collected information on a variety of topics from discrete Aboriginal and Torres Strait Islander communities throughout Australia and on Indigenous organisations that provide rental housing to Indigenous people. In 2006, CHINS information was collected on 496 Indigenous organisations, which managed a total of 21,854 permanent dwellings. The majority of those dwellings were located in the Northern Territory (6,448), Queensland (6,230), New South Wales (4,176) and Western Australia (3,462) (ABS 2007).*

*The CHINS survey covers only discrete Indigenous communities. In 2006 the CHINS collected information from 1,187 discrete indigenous communities which included approximately 92,960 Aboriginal and Torres Strait Islanders or 18% of the total Indigenous population. CHINS data is collected every 5 years. The data are collected from key personnel in Indigenous communities and housing organisations that are knowledgeable about housing and infrastructure issues.*

*The estimates are not subject to sampling error because the CHINS was designed as a complete enumeration of discrete Indigenous communities. However, data could not be obtained from a small number of communities. In addition, the community population was often estimated by community representatives without reference to records.*

*Further information on the CHINS can be found in the publication Housing and infrastructure in Aboriginal and Torres Strait Islander communities (ABS 2007).*

### **Service Activity Reporting (SAR) and Drug and Alcohol Service Reporting (DASR)**

*Response rates to the SAR and DASR are usually above 90%. The SAR and DASR collect 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 and DASR only include Aboriginal and Torres Strait Islander health organisations that receive at least some Australian Government funding.*

*The SAR and DASR questionnaires collect a broad set of indicators for the services and do not aim to provide a comprehensive set of statistics on the activities of the services or their needs.*

*Data provided are often estimates and, although these are thought to be reasonable, there has been no audit to check the accuracy of these figures.*

*In relation to the statistics for this performance measure – these data provide a rough guide to service activity in this area, but do not attempt to measure quantity or quality. They also do not differentiate between service provided by the service and those facilitated by the service.*

## **References**

- ABS (Australian Bureau of Statistics) 2002. Housing and infrastructure in Aboriginal and Torres Strait Islander communities, Australia 2001. ABS cat. no. 4710.0. Canberra: ABS.
- ABS 2007. Housing and infrastructure in Aboriginal and Torres Strait Islander communities, Australia 2006. ABS cat. no. 4710.0. Canberra: ABS.
- AIHW (Australian Institute of Health and Welfare) 2002. Australia's children 2002. Cat. no. PHE 36. Canberra: AIHW.
- AIHW 2005. Expenditures on health for Aboriginal and Torres Strait Islander People 2001–02. Health and welfare expenditure series no. 23. Cat. no. HWE 30. Canberra: AIHW.

AIHW 2008. Expenditures on health for Aboriginal and Torres Strait Islander people 2004–05. Health and welfare expenditure series no. 32. Cat. no. HWE 40. Canberra: AIHW.

Hordacre A, Howard S, Moretti C & Kalucy E 2007. Making a difference. Report of the 2005–2006 Annual Survey of Divisions of General Practice. Adelaide: Primary Health Care Research and Information Service, Department of General Practice, Flinders University, and Australian Government Department of Health and Ageing.

Hordacre A, Keane M, Kalucy E & Moretti C 2006. Making the connections. Report of the 2004–2005 Annual Survey of Divisions of General Practice. Adelaide: Primary Health Care Research and Information Service, Department of General Practice, Flinders University, and Australian Government Department of Health and Ageing.

Kalucy E, Hann K & Whaites L 2004. Divisions: a matter of balance: report of the 2002–03 Annual Survey of Divisions of General Practice. Adelaide: Primary Health Care Research and Information Service, Department of General Practice, Flinders University, and Commonwealth Department of Health and Ageing.

Kalucy E, Hann K & Guy S 2005. Divisions: the network evolves: report of the 2003–2004 Annual Survey of Divisions of General Practice. Adelaide: Primary Health Care Research and Information Service, Department of General Practice, Flinders University, and Commonwealth Department of Health and Ageing.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2006, Report on Government Services 2006. Vol. 2. , Canberra: Productivity Commission.