CHAPTER 10 HEALTH SERVICES PROVISION, ACCESS AND USE

INTRODUCTION

Information on Indigenous people's access to and use of health services is important because of the link between health services and health outcomes. Lack of access to services can adversely impact on health outcomes and there is some evidence that Indigenous people do not have the same level of access to many health services as other Australians.

Health services include primary care services such as those provided by general practitioners (GPs), nurses and allied health professionals. They also include acute care provided in hospitals and specialist services, such as those provided by obstetricians and eye specialists. These services may be provided in a range of settings including community health centres and clinics, doctors' rooms and hospitals.

There are a number of difficulties in quantifying the provision of, access to, and use of health services by Aboriginal and Torres Strait Islander peoples. The quality of administrative data sources is affected by the accuracy with which Indigenous people are identified in health service records. Administrative data are collected by providers of health services including the Australian, state, territory and local governments, community organisations and some private sector providers. For these reasons, it is difficult to accurately quantify the impact of access to services, or lack thereof, on the overall health status of people living in non-remote and remote areas.

This chapter draws on information from a number of data collections. Health expenditure patterns are used to examine health service provision by governments and utilisation of services by clients. Other aspects of access to health services include the distances clients must travel to services and facilities, financial barriers, cultural factors, such as language and communication issues, and the participation of Indigenous people in the health and welfare workforce. The chapter also provides information on the use of health services, including Australian Government funded Aboriginal primary health care services, services provided by GPs, alcohol and other drug treatment services, community mental health services and hospital services.

Further information on service utilisation is presented in chapters 4, 7 and 11.

PROVISION OF HEALTH SERVICES

Expenditure on goods and services

Examining expenditure on health goods and services is one way of understanding the ways in which health resources are delivered and utilised. Expenditures reflect needs on which resources have been spent, rather than met needs or overall needs, but they can cast some light on the differing ways in which the health needs of Indigenous and other Australians are met (through, say, a different mix of primary care and other health services). Expenditures can also provide some broad insights into the utilisation of health services. But any such interpretation must be undertaken with care, because the amount of expenditure incurred for a given level of utilisation can also be affected by

Expenditure on goods and services continued

factors such as the demographic composition of the population and its geographic distribution. Thus information about expenditure must be considered alongside the information about the numbers and types of services that are presented in this and other chapters.

In 2001–02 estimated expenditure on health goods and services for Aboriginal and Torres Strait Islander people was $1,788.6 million (table 10.1) or 2.8% of total health expenditure. Almost three-quarters of this (72%) related to two major program areas—services provided in hospitals ($849.5 million) and community health services ($439.9 million). The expenditure on community health services included $186.3 million on Aboriginal Community Controlled Health Services that were funded by the Australian Government.

On a per person basis, average expenditure on health goods and services for Aboriginal and Torres Strait Islander people was $3,901, which was 18% higher than the expenditure for non-Indigenous Australians ($3,308). There has been little change in this relative position since the previous estimates for 1998–99.

10.1 EXPENDITURE ON HEALTH GOODS AND SERVICES, by area of expenditure, current prices, Australia—2001–02

	TOTAL EXPENDITURE($M)		AVERAGE PER PERSON EXPENDITURE($)		
Health goods and services type	*Indigenous*	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*	*Ratio*(a)
Hospitals	849.5	21 456.9	1 853	1 132	1.6
Total admitted patient services	682.5	17 927.4	1 488	946	1.6
Non-admitted patient services	142.4	3 116.5	311	164	1.9
Public hospitals	24.7	413.0	54	22	2.5
Medical services	99.6	11 112.5	217	586	0.4
Dental services(b)	21.8	3 734.2	48	197	0.2
Pharmaceuticals	66.2	9 011.6	144	475	0.3
Public health	72.5	1 029.9	158	54	2.9
Community health services(c)	439.9	2 810.5	959	148	6.5
High-level residential aged care	49.9	4 591.6	109	242	0.5
Other health services(d)	189.2	8 961.7	413	473	0.9
Total	**1 788.6**	**62 708.9**	**3 901**	**3 308**	**1.2**

(a) Average per person expenditure on Indigenous Australians divided by the average per person expenditure on non-Indigenous Australians.

(b) Excludes state and territory government expenditure on dental services.

(c) Community health services includes state and territory government expenditure on dental services.

(d) Includes, health administration n.e.c., patient transport, aids and appliances, other professional services and other health services n.e.c.

Source: AIHW 2005j

In four major program areas, average expenditure on services for Indigenous people was greater than that for non-Indigenous Australians. These were community health services, which had an Indigenous to non-Indigenous person ratio of 6:1, public health (which includes services such as alcohol and drug treatment services, cancer screening and environmental health) with a ratio of 3:1 and admitted and non-admitted patient services in acute-care hospitals, with a ratio of 2:1 (table 10.1).

Expenditure on goods and services continued

In contrast, average expenditure on goods and services provided outside public hospitals was much lower for Indigenous people than for non-Indigenous people. For example, average expenditure on high level residential aged care, medical services, pharmaceuticals, and dental services were, on average, less than half that for non-Indigenous Australians.

ACCESS TO HEALTH SERVICES

Aboriginal and Torres Strait Islander people have low levels of access to, and use of, health services such as Medicare, the Pharmaceutical Benefits Scheme (PBS) and private GPs (Bell et al. 2000; Keys Young 1997). They face a number of barriers to accessing services including distance from services, lack of transport (particularly in remote areas), financial difficulties and proximity of culturally appropriate services. The relatively low proportion of Indigenous people involved in health-related professions can also affect use of health services by Aboriginal and Torres Strait Islander people.

Availability of health professionals, services and facilities

The supply of medical professionals per head of population decreased with increasing geographic remoteness. In 2002, there were about twice as many medical practitioners per person in major cities as in the most remote areas, however, the supply of nurses was similar across remoteness categories. The supply of medical specialists per person in capital cities was more than ten times that in remote areas (table 10.2). This limits access to health professionals for people in rural and remote areas, where a high proportion of Indigenous Australians live. They therefore are more likely to have to move or travel substantial distances in order to get access to specialists, or may be forced to visit specialists less regularly than other Australians.

10.2 HEALTH PROFESSIONALS PER 100,000 PERSONS(a)—2001 and 2002

Medical practitioners (2002)	*Major cities*	*Inner regional*	*Outer regional*	*Remote*	*Very remote*	*Australia*(b)
Clinicians	288	169	138	130	134	254
Primary care	105	90	80	86	93	111
Hospital non-specialist	29	14	15	19	28	25
Specialist	114	55	35	19	10	90
Specialist in training	40	10	8	6	3	28
Non-clinician	24	78	8	10	7	21
Total	**312**	**176**	**146**	**140**	**141**	**275**
Nurses (2001)	1 059	1 109	1 058	1 034	959	1 176

(a) Based on full-time equivalent (FTE) rate.
(b) Includes medical practitioners who did not report the regions in which they worked.
Note: The geographical classification used to present data has changed since the previous edition of this publication. The 2003 edition used the Rural, Remote and Metropolitan Areas (RRMA) classification to differentiate between regions.
Source: AIHW 2004d, 2003c

The availability of health professionals, health promotion programs and health training courses can be a challenge to Aboriginal and Torres Strait Islander communities. Detailed information about the availability of health services for people living in discrete Indigenous communities is collected in the Community Housing and Infrastructure Needs Survey (CHINS). The 2001 CHINS collected data on a total of 1,216 discrete

Availability of health professionals, services and facilities continued

communities with a combined population of approximately 109,000 (ABS 2002a). Approximately 85% of these people lived in very remote areas of Australia.

Distance to health services

Indigenous Australians are more likely to live outside urban areas, and are therefore more likely to live further from health services, than are other Australians. Aboriginal Community Controlled Health Services, operating in many parts of the country, including remote areas, go some way to addressing the gaps in health service provision for a more geographically dispersed population.

In 2001, more than three-quarters of all discrete Indigenous communities (943 communities or 78%) were located 50km or more from the nearest hospital. These represented 62% (67,131) of the reported population living in discrete Indigenous communities. The Northern Territory, Western Australia and South Australia had the highest proportion of communities located 50km or more from the nearest hospital.

One-half of all discrete Indigenous communities (606 communities with a combined population of 11,581 people) were located 25km or more from the nearest community health centre and 10km or more from the nearest hospital (table 10.3). States and territories with the highest proportion of Indigenous communities located 25km or more from the nearest community health centre were the Northern Territory (54%), Queensland (51%) and Western Australia (49%).

10.3 DISTANCE TO NEAREST HOSPITAL AND COMMUNITY HEALTH CENTRE—2001

		NSW	*Qld*	*SA*	*WA*	*NT*	*Australia*
Discrete communities located less than 10km from nearest hospital	no.	33	22	11	27	34	127
Discrete communities located 10km or more from nearest hospital							
Distance to nearest community health centre							
Less than 25km	no.	17	48	43	117	254	481
25km or more	no.	10	72	42	139	342	606
Total	no.	27	120	85	256	596	1 087
Total number of communities(a)	no.	**60**	**142**	**96**	**283**	**632**	**1 216**
Total population(a)	no.	**7 771**	**30 961**	**5 226**	**16 558**	**47 233**	**108 085**
Proportion 10km or more from nearest hospital and 25km or more from nearest community health centre							
Communities	%	16.7	50.7	43.8	49.1	54.1	49.8
Population	%	9.9	3.0	14.7	17.4	12.7	10.7

(a) There are no discrete Indigenous communities in the ACT. Tasmania and Victoria are included in the total.

Source: ABS, 2001 CHINS

Of the 109,000 Indigenous people (in 1,216 communities) that were surveyed, 3,255 people (174 communities) were located 100km away from either a hospital or a community health centre.

Transport

While distance to various health services provides one measure of access, lack of transport can often mean that even comparatively short distances are an impediment to service use. Data are available from the 2001 Census on the number of vehicles per household and from the 2002 National Aboriginal and Torres Strait Islander Social

Transport continued

Survey(NATSISS)—a survey of 9,400 Indigenous people aged 15 years or over—on access to motor vehicles and difficulties with transport.

The Census shows that households with Indigenous person(s) were more likely than other households to be without a vehicle in 2001. The proportion of households with Indigenous person(s) without a vehicle was 23%, compared with 10% for other households. Households with Indigenous person(s) in the remote and very remote regions were most likely to report having no vehicle.

Data from the 2002 NATSISS reveal that around 60% of Indigenous people aged 18 years or over had access to a motor vehicle to drive compared to 85% of non-Indigenous people (table 10.4). Around 12% of Indigenous Australians reported that they could not or often had difficulty getting to places needed, compared with only 4% of non-Indigenous Australians.

10.4 TRANSPORT ACCESS, Persons aged 18 years or over—2002

		INDIGENOUS			NON-INDIGENOUS
		Remote	*Non-remote*	*Total*	*Total*
Transport access					
Has access to motor vehicles to drive	%	47.5	64.4	59.7	85.2
Difficulty with transport(a)					
Can easily get to places needed	%	65.2	73.5	71.2	84.4
Cannot get to places needed	%	16.4	9.8	11.6	3.6
Persons aged 18 years or over	no.	**69 300**	**182 100**	**251 400**	**14 353 800**

(a) Not all categories are shown for this data item. *Source: ABS, 2002 NATSISS and 2002 GSS.*

Indigenous Australians in every state and territory were less likely to report having access to a motor vehicle(s), and more likely to report having difficulty getting to places needed, than non-Indigenous Australians. Indigenous people living in the Northern Territory were five times as likely, and in Western Australia four times as likely, to be without access to a motor vehicle as non-Indigenous people in these states and territories (ABS, 2002 NATSISS).

The data on vehicles per household and per person suggest that non-Indigenous people generally have better access to personal transport than Indigenous people and would therefore be more readily able to reach a health facility or service. Public transportation may compensate for the lack of personal transport, and clinics may provide a transport service for their patients, but these services are not available everywhere.

Other factors affecting access

In this section, information is presented about some of the economic and cultural factors which can affect one's access to services, including affordability, having private health insurance, proficiency in English, communication with service providers and possession of a working telephone.

Other factors affecting access continued

AFFORDABILITY

Many health services provided outside of public hospitals involve direct out-of-pocket payments by patients. These impact more on people with limited economic means and, given the generally poorer economic position of Aboriginal and Torres Strait Islander peoples (Chapter 2), the effect is likely to be greater on Indigenous people than on other Australians. Examples of this are services provided by dentists, physiotherapists and other health professionals not covered by Medicare, and pharmaceuticals not covered by the PBS. These do not attract subsidies from governments and, therefore, patients meet out-of-pocket fees when these services are accessed.

If medical services subsidised under Medicare are not bulk-billed, patients can face co-payments. In the September quarter 2004, 69% of medical services were bulk-billed (DoHA 2004). Bulk-billing rates are generally lower in rural and remote areas than in capital cities or other metropolitan centres (SCRGSP 2003). Patients who are not bulk-billed are usually required to pay the full fee at the time of service and can then seek a refund from Medicare. This, however, means that they must first be able to pay for the service. This difficulty is further exacerbated by the fact that some practitioners charge fees above the Medicare Benefits Schedule fee, requiring larger gap payments, which are generally borne by the patients. Aboriginal Community Controlled Health Services are covered by Medicare and patients using these services are bulk-billed.

People for whom drugs are prescribed under the PBS are also required to make out-of-pocket co-payments. The amount that a patient needs to find is adjusted to some extent in accordance with the patient's ability to pay. Different co-payments apply to concession card holders, pensioners and general patients. The PBS also has safety net provisions that protect individuals and families from large overall expenses for PBS medicines.

PRIVATE HEALTH INSURANCE

Lack of health insurance is a barrier to accessing private hospitals and the services of those health professionals who work solely or primarily within the private health system. In the 2001 National Health Survey (NHS), non-Indigenous people aged 18 years or over living in non-remote areas were three times more likely to report having private health insurance (including hospital and/or ancillary cover) than Indigenous people in non-remote areas (51% compared with 17%). The large gap between the Indigenous and non-Indigenous populations is due, at least in part, to the relative economic disadvantage of Indigenous Australians, as discussed in Chapter 2.

CULTURAL BARRIERS

Measurement of the accessibility of health services involves factors other than the distance people must travel and the financial costs incurred (Ivers et al. 1997). Many Indigenous people or communities do not have adequate access to either culturally appropriate services or to other suitable arrangements, and where culturally appropriate services exist they are often under-resourced or unable to meet community needs (Bell et al. 2000). The perception of cultural barriers may cause Aboriginal and Torres Strait Islander people to travel substantial distances in order to access health services delivered in a more appropriate manner than those available locally (Ivers et al. 1997). The willingness of Indigenous peoples to access health services may be affected by such

Other factors affecting access continued

CULTURAL BARRIERS *continued*

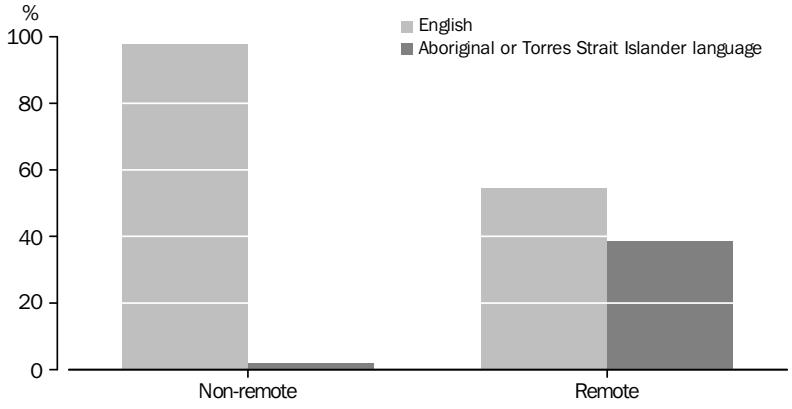
factors as community control of the service, the gender of health service staff, and the availability of Aboriginal and Torres Strait Islander staff, particularly where the patient's proficiency in spoken and written English is limited (Ivers et al. 1997). Some Indigenous people do not feel comfortable attending services such as a private general practice because of educational, cultural, linguistic and lifestyle factors, and will do so only when there is no alternative or their health problem has worsened (Bell et al. 2000).

LANGUAGE

Not being able to speak, read and write English proficiently can mean that some Indigenous Australians find it difficult to approach health and welfare services. They may therefore miss out on important information and entitlements and may have difficulty reading and completing forms (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1993).

In the 2002 NATSISS, about 14% of Indigenous people aged 15 years or over reported that they spoke a language other than English as their main language at home. This figure includes 12% who said they spoke an Indigenous language at home (Chapter 2) and 2% who said they spoke another language or for whom the language was not adequately described. Indigenous people living in remote areas of Australia were much more likely to report speaking an Aboriginal or Torres Strait Islander language as their main language at home (39%) than those living in non-remote areas (2%) (graph 10.5).

10.5 MAIN LANGUAGE SPOKEN AT HOME, Indigenous persons aged 15 years and over—2002



Source: ABS, 2002 NATSISS

COMMUNICATING WITH SERVICE PROVIDERS

The 2002 NATSISS collected information on whether Indigenous Australians had difficulty communicating with service providers. Approximately 11% of males and females aged 18 years or over reported that they had difficulty understanding and/or being understood by service providers (table 10.6). Indigenous people living in remote areas were more likely to report experiencing difficulty (19%) than those in non-remote areas of Australia (8%). Indigenous Australians aged 55 years or over had the most difficulty understanding and/or being understood by services providers (14%) (ABS, 2002 NATSISS).

10.6 COMMUNICATION WITH SERVICE PROVIDERS, Indigenous persons aged 18 years or over—2002

		NON-REMOTE		REMOTE		TOTAL	
		Males	*Females*	*Males*	*Females*	*Males*	*Females*
Has difficulty understanding service providers	%	2.6	3.7	3.9	4.2	3.0	3.8
Has difficulty being understood by service providers	%	3.0	1.8	4.6	*3.8	3.5	2.4
Has difficulty understanding and being understood by service providers	%	2.2	2.3	9.7	11.3	4.3	4.8
Total experiencing difficulty	%	***7.8***	***7.8***	***18.2***	***19.3***	***10.7***	***10.9***
No difficulties	%	92.2	92.2	81.5	80.1	89.2	88.9
Total(a)	%	100.0	100.0	100.0	100.0	100.0	100.0
Indigenous persons aged 18 years or over	no.	**85 800**	**96 200**	**33 400**	**35 900**	**119 200**	**132 200**

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Includes not stated responses.

Source: ABS, 2002 NATSISS

Other factors affecting access continued

COMMUNICATING WITH SERVICE PROVIDERS *continued*

The proportion of Indigenous Australians who reported difficulty communicating with services providers varied by state and territory. Indigenous people in Western Australia (18%), South Australia (17%) and the Northern Territory (15%) were approximately twice as likely to experience difficulty communicating with service providers as those in New South Wales (8%), Victoria (9%) and Queensland (9%) (ABS, 2002 NATSISS).

TELEPHONE ACCESS

A working telephone in the home is often considered a necessity in cases of emergency so that health services such as hospitals, ambulances and doctors can be contacted quickly. People without a working telephone in the home are less equipped to seek urgent medical help when required.

In 2002, 71% of Indigenous Australians aged 18 years or over reported having a working telephone in the home. Those living in non-remote areas were more likely to have a working telephone (82%) than those living in remote areas (43%).

The proportion who had a working telephone varied by state and territory. The Northern Territory had the lowest proportion of Indigenous Australians with a working telephone (37%), which reflects the high proportion of Indigenous people in the Northern Territory who live in remote areas. Approximately 61% of people in Western Australia and 71% in South Australia were without a working telephone (ABS, 2002 NATSISS).

INDIGENOUS HEALTH AND WELFARE SERVICES WORKFORCE

The numbers and availability of Aboriginal and Torres Strait Islander staff is an important factor in whether or not Indigenous peoples are able to effectively access health services (Ivers et al. 1997; Kowanko et al. 2003).

There are a number of sources of information about the participation of Indigenous Australians in the health workforce and in higher education courses in health and welfare-related fields. These include the Census, the Australian Government Department of Education, Science and Training's Student Statistics Collection, the AIHW Medical and Nursing Labour Force Surveys and the Australian Government Department of Health and Ageing's Service Activity Report (SAR). However these sources vary in coverage and not all of these data sources have accurate and consistent recording of Indigenous status. For

INDIGENOUS HEALTH AND WELFARE SERVICES WORKFORCE *continued*

example, Queensland is the only state to use the standard ABS question on Indigenous status in the Medical Labour Force Survey, whereas all other jurisdictions use a simpler version of the question (yes/no response). There has also not been consistency in the recording of Indigenous status across jurisdictions in the Nursing Labour Force Survey until the 2003 survey, for which data are not yet available. Because of issues surrounding the data, information from these two AIHW surveys is not presented here. Data in this section therefore comes from the Census, SAR and the Higher Education Student Statistics Collection.

The health workforce

At the time of the 2001 Census, Indigenous people comprised 2% of the Australian population aged 20 years or over and accounted for around 1% of all people employed in selected health-related occupations (table 10.7). Aboriginal and Torres Strait Islander people comprised 0.8% of all nursing workers, 0.6% of dental workers, 0.5% of allied health workers, 0.3% of medical workers, and 0.1% of pharmacists.

10.7 INDIGENOUS PERSONS AGED 20 YEARS OR OVER, employment in selected health related occupations—2001

	Indigenous	*All persons*	*Proportion who were Indigenous*
	no.	no.	%
Aboriginal and Torres Strait Islander Health Workers	838.0	900	93.1
Medical workers			
Health Services Managers	73	6 538	1.1
Medical practitioners	88	48 180	0.2
Medical Imaging Professionals	17	8 319	0.2
Total	***178***	***63 037***	***0.3***
Dental workers			
Dental Practitioners	12	8 189	0.1
Dental Associate Professionals	17	4 517	0.4
Dental Assistants	107	11 602	0.9
Total	***136***	***24 308***	***0.6***
Nursing workers			
Nurse Managers	29	7 389	0.4
Registered Nurses	782	141 855	0.6
Personal Care and Nursing Assistants	776	49 511	1.6
Enrolled Nurses	200	19 337	1.0
Other nurses	94	22 009	0.4
Total	***1 881***	***240 101***	***0.8***
Pharmacists	8	13 742	0.1
Allied health workers			
Ambulance Officers and Paramedics	83	6 708	1.2
Physiotherapists	29	10 235	0.3
Psychologists	22	9 330	0.2
Dietitians	17	1 996	0.9
Other	22	9 972	0.2
Total	***173***	***38 241***	***0.5***
Total	**3 214**	**380 329**	**0.8**

Source: ABS, Census of Population and Housing

The health workforce continued

In 2001, there were 88 Indigenous people working as medical practitioners and 1,881 Indigenous people working as nurses, 982 of whom were registered or enrolled nurses. After nursing, Indigenous people were most commonly employed as Aboriginal and Torres Strait Islander health workers (838 people). Aboriginal and Torres Strait Islander health workers may be employed as specialists in such areas as alcohol, mental health, diabetes, eye and ear health, and sexual health, or they may work as generalist members of primary care teams, or as hospital liaison officers.

In 2002–03, 64% of the 'full time equivalent' positions paid by Australian Government funded Aboriginal and Torres Strait Islander primary health care Services were held by Aboriginal or Torres Strait Islander people. All traditional healers and most Aboriginal and Torres Strait Islander Health Workers (97%), drivers/field officers (96%) and environmental health workers (83%) were Indigenous people. Most doctors (98%), dentists (92%), allied health professionals (86%), and nurses (79%) were non-Indigenous people (DoHA, 2002–03 SAR).

The welfare and community services workforce

People employed in welfare and community service-related occupations such as counselling, disability and social work often support the work of other health professionals, and may also be working within the health industries (AIHW 2003b).

In 2001, Indigenous people were more likely to have been employed in selected welfare and community service-related occupations than in health-related occupations. About 3% of people employed in community and welfare service-related occupations were Indigenous (table 10.8). Within this sector, Aboriginal and Torres Strait Islander people accounted for 5.5% of all welfare and community workers, 4.5% of welfare associate professionals, 2.6% of counsellors, 2.1% of special care workers and 2.0% of all child care workers (table 10.8).

10.8 EMPLOYMENT IN SELECTED WELFARE AND COMMUNITY SERVICE-RELATED OCCUPATIONS, Indigenous persons aged 20 years or over—2001

	Indigenous	*All persons*	*Proportion who were Indigenous*
	no.	no.	%
Child care coordinators	70	6 401	1.1
Children's care workers	1 217	60 754	2.0
Welfare and community workers	1 444	26 304	5.5
Welfare associate professionals	813	18 038	4.5
Counsellors	311	11 997	2.6
Social workers	166	9 116	1.8
Special care workers	1 182	56 143	2.1
Other	534	35 978	1.5
Total	**5 737**	**224 731**	**2.6**

Source: ABS, 2001 Census of Population and Housing

Undergraduate studies in health, welfare and community service-related courses

The future involvement of Indigenous people in health and welfare services will be influenced by their current participation in health and welfare-related education. In 2003, Indigenous students made up a larger proportion of all undergraduate students enrolled in welfare-related courses (2.5%) than of those enrolled in health-related courses (1.5%)

Undergraduate studies in health, welfare and community service-related courses continued

(table 10.9). In the health-related field, most Indigenous enrolments were in nursing(29%) and public health (e.g. environmental health and Indigenous health) (23%). Most enrolments of Indigenous students in welfare-related courses were in the fields of early childhood education (36%), social work (32%) and behavioural studies (17%), which includes psychology.

Overall in 2003, 167 Indigenous students completed health-related undergraduate courses, and 105 completed welfare-related courses, representing 1.0% and 1.5% of all students completing undergraduate courses in these fields respectively. In 2003, 10 Indigenous students completed a degree in medicine, 61 in nursing and 40 in public health.

The numbers of Indigenous students completing health and welfare-related courses in 2003 had increased slightly since 2000; but enrolments had decreased. It is difficult to determine if this is a real increase and decrease in numbers or if it is due to a change in classification from 'field of study' to 'field of education'.

10.9 HEALTH AND WELFARE-RELATED COURSES, Undergraduate students—2003

	ENROLLED			COMPLETED		
	Indigenous	*Total*	*Indigenous as a proportion of total*	*Indigenous*	*Total*	*Indigenous as a proportion of total*
	no.	no.	%	no.	no.	%
Health						
Medical Studies	27	2 016	1.3	10	1 726	0.6
Nursing	117	10 594	1.1	61	7 496	0.8
Pharmacy	. .	1 114	. .	1	769	0.1
Dental studies	2	387	0.5	2	306	0.7
Optical science	. .	141	. .	2	120	1.7
Public health(a)	94	1 130	8.3	40	648	6.2
Radiography	3	707	0.4	. .	468	. .
Rehabilitation therapies	9	3 070	0.3	12	2 187	0.5
Complementary therapies(b)	4	717	0.6	. .	408	. .
Other health(c)	148	3 944	3.8	39	1 955	2.0
Total health	**404**	**23 820**	**1.7**	**167**	**16 083**	**1.0**
Welfare						
Early childhood education	103	2 746	3.8	45	1 971	2.3
Special education	. .	230	. .	3	253	1.2
Social work	62	2 192	2.8	19	1 213	1.6
Counselling	20	264	7.6	4	146	2.7
Behavioural science(d)	48	4 944	1.0	24	3 048	0.8
Other welfare(e)	52	846	6.1	10	445	2.2
Total welfare	**285**	**11 222**	**2.5**	**105**	**7 076**	**1.5**

. . not applicable

(a) Includes occupational health and safety, environmental health, Indigenous health, health promotion, community health, epidemiology and public health n.e.c.

(b) Includes naturopathy, acupuncture, traditional Chinese medicine, complementary therapies n.e.c.

(c) Includes nutrition and dietetics, human movement, paramedical studies, first aid and health n.e.c.

(d) Includes psychology and behavioural science n.e.c.

(e) Includes children's services, youth work, care for the aged, care for the disabled, residential client care, welfare studies and human welfare studies and services n.e.c.

Source: AIHW analysis of Department of Education, Science and Training data, Higher Education Student Statistics Collection

USE OF HEALTH SERVICES

Self-reported information on the use of health services is available from the 2001 NHS, including information for Indigenous people from the NHS Indigenous component (NHS(I)) (ABS 2002b, 2002c). After adjusting for age differences, in 2001 Indigenous people were more likely to have taken at least one health-related action (53%) than non-Indigenous people (47%). For both Indigenous and non-Indigenous Australians, the most commonly reported recent health action was a consultation with a doctor. Indigenous people were more likely than non-Indigenous people to consult with a health professional other than a doctor or dentist, to attend hospital (either as admitted patients or outpatients), or to seek emergency or day clinic services.

Indigenous people in remote areas were more likely to have been admitted to hospital (21%) or to have visited an emergency or outpatients department (9%) than Indigenous people in non-remote areas (19% and 5% respectively).

The Western Australian Aboriginal Child Health Survey (WAACHS), a large-scale survey of the health of 5,289 Western Australian Aboriginal children aged 0–17 years in 2001 and 2002, collected information on the use of health services. About 49% of Aboriginal children had visited a doctor in the six months prior to the survey, 25% had visited a nurse and 21% had visited a dentist. Indigenous children with a non-Indigenous primary carer were more likely to have visited a doctor, dentist, specialist and hospital emergency than were children with an Indigenous primary carer. On the other hand, a higher proportion of children with an Indigenous carer had seen an Aboriginal Health Worker and visited an Aboriginal Medical Service than children with a non-Indigenous carer.

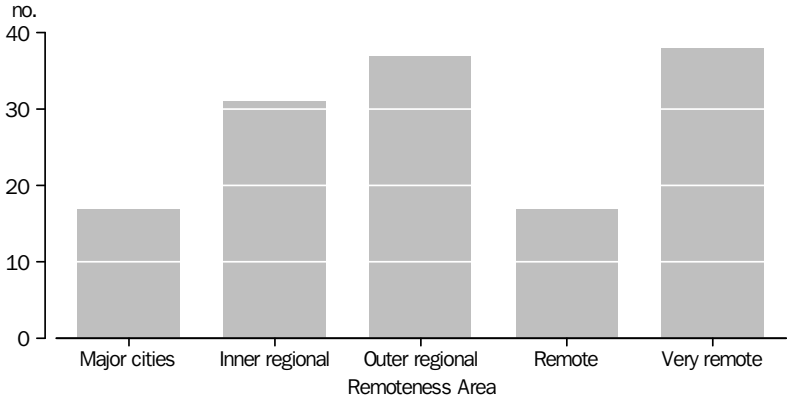
Community controlled primary health services

Health services that are initiated, controlled and operated by the Indigenous community have the potential to increase the level of access to health services for Aboriginal and Torres Strait Islander peoples by providing holistic and culturally appropriate care. A review of the Australian Government's Aboriginal and Torres Strait Islander Primary Health Care Program (Primary Health Care Review, undertaken through an inter-departmental committee) was completed in 2003–04. The Review found that access to comprehensive primary health care is an essential component of action to improve health status and that the Australian Government had made significant progress in increasing the provision of such services. It found that in areas where these services were adequately developed, more Aboriginal and Torres Strait Islander people were having disease detected and treated as well as taking part in programs to improve health. In these areas, reductions in communicable disease such as pneumococcal disease, improved detection and management of chronic disease such as diabetes, and better child and maternal health outcomes including reductions in preterm births and increases in birthweight were evident (Dwyer et al. 2004).

In 2003–04, the Office for Aboriginal and Torres Strait Islander Health (OATSIH) in the Australian Government Department of Health and Ageing funded 140 services to provide or facilitate access to primary health care for Aboriginal and Torres Strait Islander people. Two-thirds of these services (92) were in outer regional, remote or very remote locations (graph 10.10).

Community controlled primary health services continued

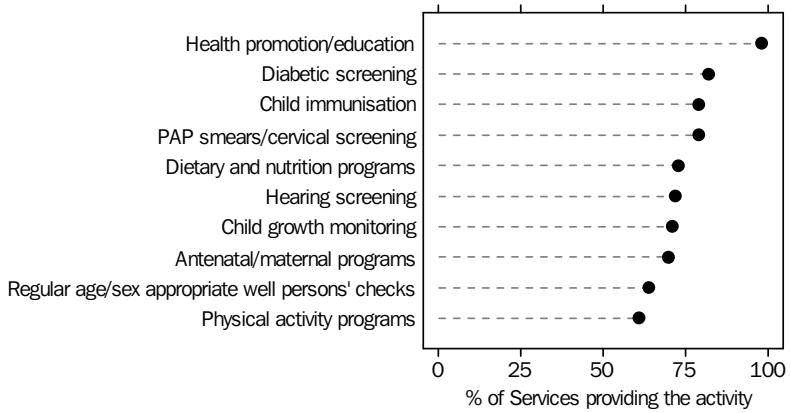
10.10 AUSTRALIAN GOVERNMENT-FUNDED ABORIGINAL AND TORRES STRAIT ISLANDER PRIMARY HEALTH CARE SERVICES—2003–04



Source: Department of Health and Ageing, 2003–04 SAR. Data available on request

Aboriginal and Torres Strait Islander primary health care services offer clinical care, screening programs, and a wide range of preventative health care activities, and health-related and community support activities. Health promotion and education, diabetic screening and child immunisation were among the common activities undertaken or facilitated by these services in 2003–04 (graph 10.11). In addition to these roles and activities, Aboriginal and Torres Strait Islander primary health care services provide social and emotional wellbeing support, substance use treatment, counselling and health-related community support roles, such as men's and women's support groups, transport to medical appointments, and school-based activities.

10.11 AUSTRALIAN GOVERNMENT FUNDED ABORIGINAL AND TORRES STRAIT ISLANDER PRIMARY HEALTH CARE SERVICES, Selected health-related activities undertaken/facilitated—2003–04



Source: Department of Health and Ageing, 2003–04 SAR. Data available on request

In 2003–04, an estimated 1,600,000 episodes of health care were provided by Australian Government funded Aboriginal and Torres Strait Islander primary health care services, 87% of which were to Indigenous clients. Approximately 40% of all episodes of care were provided to males and around 60% to females.

General practice

In addition to access to community controlled health services, Indigenous Australians also consult with private GPs. Information about the extent to which GPs are used by both Indigenous and other Australians is available from the survey of general practice activity in Australia known as the Bettering the Evaluation And Care of Health (BEACH) survey. The results of the consultations between Indigenous people and GPs for the period 1998–99 to 2002–03 are presented in Chapter 7 (table 7.8). The most commonly managed problems at GP consultations with Indigenous patients were respiratory conditions, skin problems, musculoskeletal problems, psychological problems, circulatory problems and endocrine, metabolic and nutritional diseases (including diabetes).

Over the five-year period 1998–99 to 2002–03, there were 5,476 GP consultations with Aboriginal and Torres Strait Islander patients, representing 1.1% of total GP consultations. This rate of consultation is low, relative to the proportion of Indigenous peoples in the total population (2.4% at 30 June 2001). These lower figures may be the result of: the geographic distribution of GPs not reflecting that of the Indigenous population; lower use of private GP services by Indigenous peoples where other services such as Aboriginal primary health care services exist; Indigenous peoples' lower use of hospital emergency departments or pharmacists, especially in remote areas; failure by GPs to record the Indigenous status of patients; or reluctance of patients to identify as Indigenous. Supplementary surveys in recent years, together with investigations of the means for better ascertaining the Indigenous status of patients in the BEACH survey, have suggested ways for improving such data in the future.

Other reasons for the relatively low proportion of total consultations with Aboriginal Torres Strait Islander patients may also include or Indigenous peoples using other services such as hospital emergency departments or pharmacists, especially in remote areas.

Alcohol and other drug treatment services

Information on the use of alcohol and other drug treatment services by Aboriginal and Torres Strait Islander people is available from the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS). The information collected by the AODTS-NMDS is a nationally agreed set of common data items collected by government-funded services for alcohol and other drug treatments (AIHW 2005a). Data for 2003–04, the fourth year of collection, are presented here.

There were 13,238 (10%) closed treatment episodes involving clients who identified themselves as being of Aboriginal and/or Torres Strait Islander origin in the 2003–04 collection (table 10.12). This is higher than the overall proportion of Indigenous people in the total Australian population. For a number of reasons the data on Aboriginal and Torres Strait Islander clients in the AODTS treatment population should be interpreted with caution. The identification of Indigenous users of these services may not be complete. Further, the majority of dedicated substance use services for Aboriginal and Torres Strait Islander people are not included in the AODTS-NMDS collection.

Alcohol and other drug treatment services continued

10.12 CLOSED TREATMENT EPISODES, by Indigenous status—2003–04

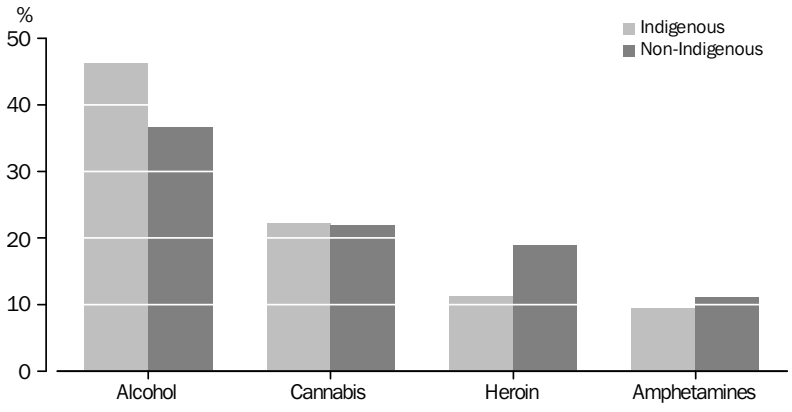
	Indigenous		Other(a)		Total	
Age (years)	no.	%	no.	%	no.	%
10–19	2 625	1.9	14 434	10.5	17 059	12.5
20–29	4 124	3.0	40 560	29.6	44 684	32.6
30–39	3 963	2.9	34 203	25.0	38 166	27.9
40–49	1 859	1.4	21 705	15.9	23 564	17.2
50–59	445	0.3	8 662	6.3	9 107	6.7
60 or over	89	0.1	3 051	2.2	3 140	2.3
Not stated	133	0.1	1 016	0.7	1 149	0.8
Total episodes	**13 238**	**9.7**	**123 631**	**90.3**	**136 869**	**100.0**

(a) Includes closed treatment episodes for clients for whom Indigenous status was not stated.

Source: AIHW 2005a

Overall, closed treatment episodes involving Aboriginal and Torres Strait Islander clients were most likely to involve alcohol (46%), cannabis (22%), heroin (11%) and amphetamines (9%)—that is, the same four principal drugs of concern as for other Australians—but with alcohol much more likely to be nominated (46%, compared with 37%) and heroin less so (11%, compared with 19% (graph 10.13).

10.13 CLOSED TREATMENT EPISODES, by selected principal drug of concern—2003–04



Source: AIHW 2005a

Reported numbers in the 2003–04 annual report on the AODTS-NMDS do not include the majority of Australian Government funded Aboriginal and Torres Strait Islander substance use-specific services or Aboriginal and Torres Strait Islander primary health care services. These services are generally not under the jurisdiction of the state or territory health authority and are not included in the specific program under which the Australian Government currently reports AODTS–NMDS data. Data are collected in relation to these services from the Drug and Alcohol Service Report (DASR) and the SAR collections.

Alcohol and other drug treatment services continued

The Drug and Alcohol Service Report (DASR) is coordinated by OATSIH. The DASR collects information from all Australian Government-funded Aboriginal and Torres Strait Islander substance use specific services. In 2003–04, 41 services (98% of funded services) provided DASR data. Of these, 29 were classified as residential substance use services and 12 were classified as non-residential.

Some data from this collection are presented below to provide a broader picture of the types of treatments being accessed by the Indigenous population for drug and alcohol problems. It should be noted that the DASR and AODTS-NMDS have different collection purposes, scope and counting rules. For example, the DASR collect service-level estimates for client numbers and episodes of care while the AODTS-NMDS collects unit records for closed treatment episodes (and some data on client registrations).

In 2003–04, an estimated 24,864 clients were seen by Australian Government funded Aboriginal and Torres Strait Islander substance use-specific services, some 21,242 or 85% of whom were Indigenous clients. Residential treatment/rehabilitation was the most common treatment type for both Indigenous males and females (table 10.14). Approximately 84% of clients receiving residential treatment or rehabilitation were Indigenous and 95% of clients receiving sobering-up or residential respite care were Indigenous. A greater number of males were seen by Australian Government funded Aboriginal and Torres Strait Islander substance use specific services than females across all treatment types.

For the same period, Australian Government funded Indigenous substance use-specific services provided 4,013 episodes of care for residential treatment/rehabilitation and 6,554 episodes of care for sobering up/residential respite care, of which 83% and 98% were for Indigenous clients. Around two-thirds (65%) of all episodes of care involving Indigenous clients for these two treatment types were for Indigenous males.

In addition, there were 34,986 episodes of care for counselling and therapy, after-care follow-up and preventative care, all of which are not residential based. Of these, 83% were episodes of care for Indigenous clients.

Alcohol and other drug treatment services continued

10.14 USE OF GOVERNMENT-FUNDED ABORIGINAL AND TORRES STRAIT ISLANDER SUBSTANCE-USE SERVICES, by Indigenous status—2003–04

Treatment type	NUMBER OF CLIENTS			PROPORTION OF CLIENTS WITHIN EACH TREATMENT TYPE		
	Male	*Female*	*Persons*	*Male*	*Female*	*Persons*
	no.	no.	no.	%	%	%
RESIDENTIAL TREATMENT/REHABILITATION (N=29) (a)						
Indigenous	1 947	919	2 866	81.0	89.3	83.5
Non-Indigenous	456	110	566	19.0	10.7	16.5
Total	2 403	1 029	3 432	100.0	100.0	100.0
SOBERING-UP/RESIDENTIAL RESPITE (N=10) (b)						
Indigenous	1 931	782	2 713	94.6	97.1	95.3
Non-Indigenous	110	23	133	5.4	2.9	4.7
Total	2 041	805	2 846	100.0	100.0	100.0
OTHER CARE (N=38) (c)						
Indigenous	7 279	1 993	9 272	61.5	66.9	62.6
Non-Indigenous	4 550	985	5 535	38.5	33.1	37.4
Total	11 829	2 978	14 807	100.0	100.0	100.0
TOTAL (N=40) (d)						
Indigenous	13 429	7 813	21 242	84.2	87.6	85.4
Non-Indigenous	2 519	1 103	3 622	15.8	12.4	14.6
Total	15 948	8 916	24 864	100.0	100.0	100.0

(a) Includes people who were officially clients of the service, that is, people who received treatment/rehabilitation in a residential setting and had their own file/record.

(b) Sobering-up clients are in residential care overnight to sober-up and do not receive formal rehabilitation. Respite clients spend one to seven days in residential care for the purpose of respite and do not receive formal rehabilitation.

(c) Clients receiving 'other care' received non-residential care (e.g. counselling, assessment, treatment, education, support, home visits, and/or Mobile Assistance Patrol/Night Patrol) or follow-up from residential services after discharge.

(d) 'Total' refers to the number of clients of a Service. It does not always equate to total number of clients in all programs as some clients may be in multiple programs. The total number of services reported (40) does not include one service which closed during the 2003–2004 financial year.

Note: 1. In 2003–04, a small number of agencies in in the DASR and SAR data collections (three DASR, six SAR) were also included in the AODTS–NMDS.

2. N = number of services.

Source: DASR, Department of Health and Ageing, unpublished data

In 2003–04, all Australian Government-funded Aboriginal and Torres Strait Islander substance use specific services provided treatment or assistance for alcohol use and 88% of services indicated that alcohol was the one substance/drug that affected the largest number of their clients. In the same period, 93% of services provided assistance or treatment for cannabis use, 78% for multiple drug use, 66% for amphetamine use, 56% for tobacco use and 54% for heroin use. Less than half of all services provided treatment

Alcohol and other drug treatment services continued

or assistance for the use of other drugs such as benzodiazepines, inhalants, petrol and barbiturates.

Aboriginal and Torres Strait Islander primary health care services also provide support in relation to substance use issues. In 2003–04, 98% of Australian Government funded Aboriginal and Torres Strait Islander primary health care services (SAR) provided one or more substance use services. It is not possible to estimate the number of clients that attended Aboriginal and Torres Strait Islander primary health care services and received alcohol or other drug treatment. Similarly, it is not possible to estimate the number of reported episodes of care that related solely or partially to alcohol or other drug treatment.

Community mental health services

Information on the use of community mental health services by Aboriginal and Torres Strait Islander people is available from the AIHW National Community Mental Health Care Database (NCMHCD). The information collected in the database is a nationally agreed set of common data elements. Data for 2002–03 are presented here.

Community mental health care is defined as care which is provided by specialised public mental health services dedicated to the assessment, treatment, rehabilitation and care of non-admitted clients. This excludes specialised mental health care for admitted patients, support that is not provided by specialised mental health care services, care provided by non-government organisations, and residential care.

In 2002–03, there were 147,531 service contacts (3%) for clients who identified themselves as being of Aboriginal and/or Torres Strait Islander origin (table 10.15). After adjusting for age, the rate at which community mental health services were accessed by Aboriginal and Torres Strait Islander peoples was 1.4 times that of other Australians (342 and 236 service contacts per 1,000 population respectively).

These rates should be interpreted with caution, however, as there is likely to be an under-estimate of the actual number of service contacts for Indigenous clients. Indigenous clients may have been reported as non-Indigenous or they may have been represented within the service contacts with a 'not stated' Indigenous status (8%). In addition, some of the data reported for the 'Both Aboriginal and Torres Strait Islander' category are suspected to be affected by misinterpretation of this category to include non-Aboriginal and Torres Strait Islander peoples (e.g. Maoris and South Sea Islanders). All state and territory health authorities, excluding Tasmania, provided information on the quality of 2002–03 NCMHCD data. With the exception of the Northern Territory, the quality of Indigenous status data was considered to be in need of improvement in all states and territories (AIHW 2004e).

Aboriginal and Torres Strait Islander peoples had higher proportions of service contacts for the younger age groups than did other Australians, and lower proportions in the older age groups, reflecting differences in the age structure of these populations. For example, 24% of service contacts for Indigenous Australian males were for clients aged 15–24 years compared with 16% of service contacts for other Australian males (table 10.15). Proportions of service contacts for females showed a similar pattern (21% and 16% respectively).

Community mental health services continued

10.15 COMMUNITY MENTAL HEALTH SERVICE CONTACTS(a)—2002–03

	Indigenous		*Other*(b)		*Total*	
	no.	%	no.	%	no.	%
Males						
Less than 15 years	10 647	13.8	256 792	11.1	267 439	11.2
15–24 years	18 539	24.1	373 800	16.2	392 339	16.5
25–34 years	26 396	34.3	551 115	23.9	577 511	24.2
35–44 years	12 380	16.1	482 709	20.9	495 089	20.8
45–54 years	5 609	7.3	312 105	13.5	317 714	13.3
55–64 years	1 849	2.4	148 984	6.5	150 833	6.3
65 years or over	1 315	1.7	179 279	7.8	180 594	7.6
Total(c)	76 951	100.0	2 306 864	100.0	2 383 815	100.0
Females						
Less than 15 years	5 184	7.4	150 183	6.9	155 367	6.9
15–24 years	15 098	21.4	356 391	16.3	371 489	16.5
25–34 years	20 534	29.1	401 079	18.4	421 613	18.7
35–44 years	17 038	24.2	417 366	19.1	434	404.0
45–54 years	7 246	10.3	334 253	15.3	341 499	15.2
55–64 years	3 432	4.9	197 948	9.1	201 380	8.9
65 years or over	1 889	2.7	321 973	14.8	323 862	14.4
Total(c)	70 453	100.0	2 181 529	100.0	2 251 982	100.0
All contacts(c)	**147 531**	. .	**4 524 892**	. .	**4 672 423**	. .

. . not applicable

(a) These data should be interpreted with caution due to likely under-identification of Indigenous Australians.

(b) Includes service contacts for clients for whom Indigenous status was not stated.

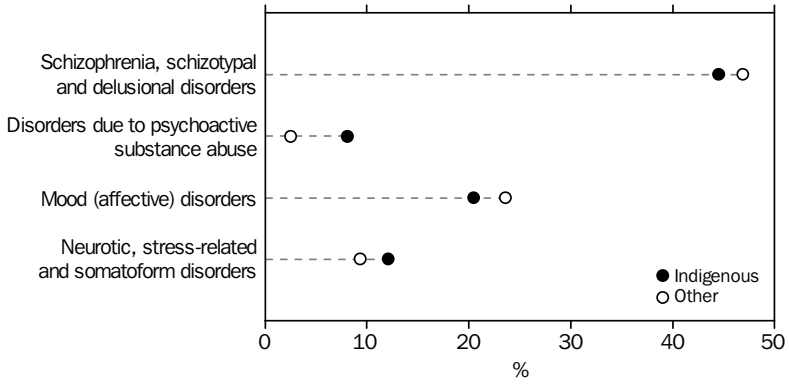
(c) Includes service contacts for clients for whom age or sex was not stated.

Source: AIHW 2004e

There were differences in the principal diagnoses most commonly reported for Aboriginal and Torres Strait Islander people and those for other Australians. A smaller proportion of Indigenous people had principal diagnoses of 'schizophrenia, schizotypal and delusional disorders' (45%) and 'mood (affective) disorders' (21%), than did other Australians (47% and 24% respectively) (graph 10.16). However, Indigenous people were more likely to have a principal diagnosis of disorders due to psychoactive substance use (8%) than other Australians (3%).

Community mental health services continued

10.16 SERVICE CONTACTS FOR WHICH A SPECIFIC PRINCIPAL DIAGNOSIS WAS REPORTED, by selected principal diagnosis—2002–03



Note: Specific principal diagnosis was not reported for more than 35% of service contacts.

Source: AIHW 2004e

Hospital services

Hospital services are a major component of expenditure on health services for Aboriginal and Torres Strait Islander people.

While information on hospitalisation can provide insights into the health of the population they represent, the reasons for which people are hospitalised and the procedures they may undergo in hospital are not necessarily indicative of the health of the total population. Hospitalisation statistics are limited to information about the conditions for which people are admitted to hospital, thereby excluding information regarding those who have made use of other health services, such as GPs and community health clinics, and those who have not accessed health care at all. The number and pattern of hospital admissions can also be affected by the variation between hospitals in decisions about whether to admit patients or to treat them as non-admitted patients; information concerning non-admitted patients is not routinely reported. Other factors, such as the availability of, and access to, other medical services, may influence hospital utilisation. A rising rate of hospitalisation, for example, could mean that health status has deteriorated, or that access to hospitals has improved, or both.

HOSPITALISATIONS

Measures of hospitalisation among the Indigenous population are influenced by the quality of the data on Indigenous status, which is likely to vary between the states and territories (see Chapter 7, box 7.9 for more detail). They are also influenced by variation among the jurisdictions in the health status of Indigenous people and in their access to hospital services (AIHW 2005b). The identification of Aboriginal and Torres Strait Islander patients in hospital records is considered to be in need of improvement in New South Wales, Victoria, Queensland, Tasmania and the Australian Capital Territory (AIHW 2005b) and thus true hospitalisation rates for Aboriginal and Torres Strait Islander people are likely to be higher than those reported in this chapter.

In Australia during 2003–04, there were 6.8 million hospitalisations recorded. Of these, 216,142 or 3% were recorded as Indigenous. The same patient may have been hospitalised more than once during this period. After adjusting for age, Indigenous males and females were about twice as likely to be hospitalised as other males and females.

In 2003–04, about 94% of hospitalisations involving Indigenous patients were recorded in public hospitals, compared with 60% for other Australians. While Indigenous patients are probably not usually identified well in private hospitals compared to public hospitals, the much lower proportion of hospitalisations of Indigenous patients in private hospitals probably largely reflects lower attendance at private hospitals by Indigenous patients.

In 2003–04 and for many diagnoses, the hospitalisation rates for Indigenous patients were higher than for other patients (table 10.17). Hospitalisation rates for a diagnosis of care involving dialysis were around nine times as high for Indigenous males and 17 times as high for Indigenous females. Similarly, Indigenous males and females were around three times as likely as other males and females to be hospitalised for endocrine, nutritional and metabolic diseases, which includes diabetes.

Hospital services continued

HOSPITALISATIONS *continued*

Hospitalisation rates for some diagnoses such as diseases of the digestive system were lower among Indigenous Australians than other Australians. At present it is not possible to ascertain the extent to which this is due to under-identification of Indigenous patients or to genuinely lower rates of hospital use for these conditions.

10.17 HOSPITALISATIONS OF INDIGENOUS PERSONS, by principal diagnosis—2003–04

	HOSPITALISATIONS OF INDIGENOUS PERSONS		PROPORTION OF HOSPITALISATIONS INVOLVING INDIGENOUS PERSONS		RATIO(a)	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
	no.	no.	%	%		
Injury poisoning and certain other consequences of external causes (S00–T98)	9 633	7 685	10.3	6.2	1.7	2.3
Pregnancy, childbirth and the puerperium (O00–O99)	. .	16 783	. .	13.6	. .	1.4
Diseases of the respiratory system (J00–J99)	8 005	8 035	8.6	6.5	2.0	2.4
Diseases of the digestive system (K00–K93)	5 775	5 829	6.2	4.7	0.9	0.8
Mental and behavioural disorders (F00–F99)	4 954	4 604	5.3	3.7	2.1	1.5
Symptoms, signs and abnormal clinical and laboratory findings, n.e.c. (R00–R99)	4 199	5 118	4.5	4.2	1.5	1.4
Factors influencing health status and contact with health services (Z00–Z99)	3 302	4 425	3.5	3.6	0.7	0.7
Diseases of the circulatory system (I00–I99)	3 845	3 415	4.1	2.8	1.8	2.1
Diseases of the genitourinary system (N00–N99)	1 475	4 474	1.6	3.6	0.9	1.1
Diseases of the skin and subcutaneous tissue (L00–L99)	2 731	2 499	2.9	2.0	2.4	2.7
Certain infectious and parasitic diseases (A00–B99)	2 581	2 488	2.8	2.0	1.9	2.0
Endocrine, nutritional and metabolic diseases (E00–E90)	2 003	2 288	2.2	1.9	3.1	2.8
Other	8 949	8 863	9.6	7.2	1.0	0.8
Total excluding care involving dialysis	***57 562***	***76 596***	***61.8***	***62.3***	***1.3***	***1.3***
Care involving dialysis (Z49)	35 560	46 423	38.2	37.7	8.9	17.0
Total(b)	**93 122**	**123 019**	**100.0**	**100.0**	**1.9**	**2.0**

. . not applicable

(a) Ratio is observed hospitalisations divided by expected hospitalisations. Expected hospitalisations are calculated based on the age, sex and cause-specific rates of other Australians.

(b) Includes hospitalisations for which no principal diagnosis was recorded.

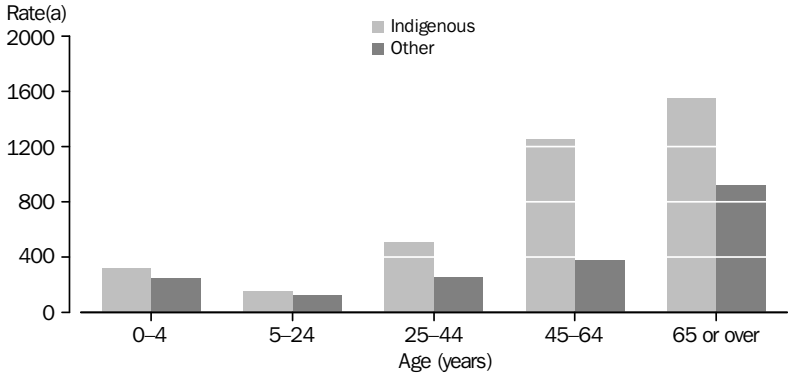
Source: AIHW, National Hospital Morbidity Database

Age-specific hospitalisation rates are shown in graph 10.18. Overall, higher hospitalisation rates were recorded for Indigenous patients than for other patients in all age groups. The highest difference in rates occurred in the age groups between 25 and 64 years.

Hospital services continued

HOSPITALISATIONS *continued*

10.18 AGE-SPECIFIC HOSPITALISATION RATES, by Indigenous status—2003–04



(a) Per 1,000 population.

Source: AIHW, National Hospital Morbidity Database

POTENTIALLY PREVENTABLE HOSPITALISATIONS

In 2003–04, care involving dialysis, was recorded for 38% of hospitalisations for Indigenous patients and 10% of hospitalisations for other patients. In addition to dialysis, a number of conditions contribute to hospitalisations which are potentially preventable if people have adequate access to a primary health care services (table 10.19). These potentially preventable chronic conditions include diabetes complications, chronic obstructive pulmonary diseases, angina, congestive cardiac failure and asthma.

Overall, Indigenous Australians were seven times as likely as other Australians to be hospitalised for potentially preventable chronic conditions. Of these chronic conditions, diabetes complications had the highest hospitalisation rate, with Indigenous Australians almost fourteen times as likely as other Australians to be hospitalised as a result of this condition. Indigenous Australians were hospitalised for chronic obstructive pulmonary diseases at six times the rate, and for hypertension, at five times the rate, of other Australians.

Hospital services continued

POTENTIALLY PREVENTABLE HOSPITALISATIONS *continued*

10.19 HOSPITALISATIONS FOR POTENTIALLY PREVENTABLE CHRONIC DISEASES—2003–04

	INDIGENOUS		OTHER(a)	
	Observed	*Expected*	*Observed*	*Ratio*(b)
	no.	no.	no.	%
Diabetes complications	20 547	1 494	173 589	13.8
Chronic obstructive pulmonary diseases	2 260	353	55 655	6.4
Asthma	2 032	1 241	35 957	1.6
Angina	1 300	330	44 334	3.9
Congestive cardiac failure	997	211	41 895	4.7
Iron deficiency anaemia	334	192	18 990	1.7
Hypertension	285	58	6 348	4.9
Nutritional deficiencies(c)	24	3	119	8.3
Total chronic diseases(d)	**26 971**	**3 802**	**364 190**	**7.1**

(a) Includes hospitalisations of non-Indigenous people and hospitalisations of people for whom Indigenous status was not stated.
(b) Ratio is observed hospitalisations divided by expected hospitalisations. Expected hospitalisations are calculated based on the age, and cause-specific rates of other Australians.
(c) The Indigenous nutritional deficiencies standardised rate is based on only 20 separations and should be used with caution.
(d) The total is not the sum of the individual conditions because diabetes complications may be treated in conjunction with other conditions based on the principal diagnosis.

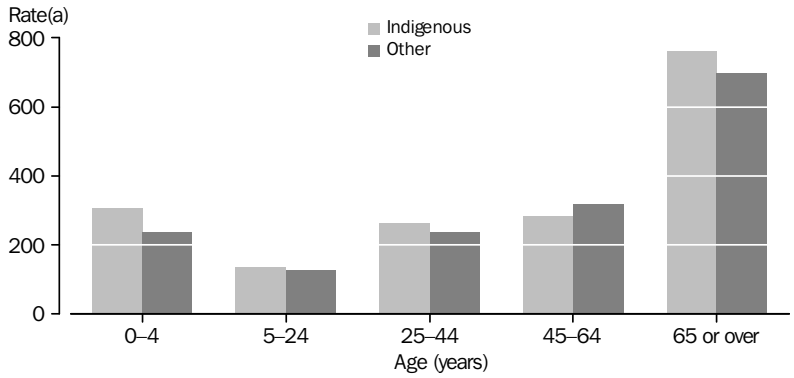
Source: AIHW, National Hospital Morbidity Database

Indigenous Australians were more likely to be hospitalised for potentially preventable chronic diseases than other Australians. In the age group where chronic conditions are usually most prevalent (45–64 years), the hospitalisation rate for Indigenous Australians for potentially preventable chronic conditions was 16 times that for other Australians. Much of the difference in hospitalisation rates between Indigenous and other Australians is due to hospitalisations from dialysis and other potentially preventable chronic diseases (graph 10.20). Dialysis and other potentially preventable conditions represented approximately 72% of all hospitalisations of Indigenous people aged 45 years or over compared with 21% of hospitalisations for other Australians of the same age.

Hospital services continued

POTENTIALLY PREVENTABLE HOSPITALISATIONS *continued*

10.20 HOSPITALISATION RATES FOR ALL CONDITIONS EXCLUDING DIALYSIS AND OTHER POTENTIALLY PREVENTABLE CHRONIC DISEASES, by Indigenous status—2003–04



(a) Per 1,000 population.

Source: AIHW, National Hospital Morbidity Database

HOSPITALISATIONS WITH A PROCEDURE RECORDED

There were 5.5 million hospitalisations with a procedure recorded in 2003–04, of which 2.7% (149,874) were for Indigenous patients. Over one-half of all hospitalisations involved more than one procedure being performed, totalling about 13.2 million procedures.

While Indigenous Australians were more likely to be hospitalised than other Australians, they were less likely to undergo a procedure while in hospital. In 2003–04, 72% of hospitalisation episodes involving Indigenous patients included the performance of a procedure, compared with 81% of other hospitalisation episodes. When care involving dialysis was excluded, 54% of Indigenous hospitalisation episodes included a procedure being performed compared with 79% of other hospitalisation episodes.

In 2003–04, the proportion of hospitalisations with a procedure recorded, excluding care involving dialysis, was highest for Indigenous patients aged 55–64 years (table 10.21). Patients who lived in remote areas were less likely to undergo a procedure (43% of Indigenous and 55% of other patients) than those living in major cities (68% and 72% for Indigenous and other patients respectively).

Hospital services continued

HOSPITALISATIONS WITH A PROCEDURE RECORDED *continued*

10.21 HOSPITALISATIONS WITH A PROCEDURE RECORDED(a), Australian public hospitals—2003–04

	Indigenous(b)	*Other*(b)
	%	%
Overall	54.1	69.7
Sex		
Males	53.5	69.5
Females	54.6	69.9
Age (years)		
Less than 1	40.1	45.7
1–14	47.2	56.7
15–34	49.3	64.0
35–54	50.6	72.1
55–64	56.7	76.6
65 or over	55.0	75.2
Place of residence(c)		
Major cities	69.9	72.2
Regional	53.4	66.5
Remote	43.9	55.3
Unknown	56.1	56.6
Same-day admission		
Yes	58.0	73.6
No	53.0	67.0
Patient accommodation		
Private	64.9	74.8
Public	54.3	68.9

(a) Hospitalisations with a principal diagnosis of care involving dialysis (Z49) have been excluded.
(b) All proportions have been indirectly age-standardised using the age-specific rates for other Australians.
(c) Differences in Indigenous identification by place of residence will affect the estimated rates.

Source: AIHW, National Hospital Morbidity Database

Some of the differences in the overall procedure rate could be due to different diagnosis patterns between the two population groups. Nevertheless, for almost all principal diagnoses, Indigenous patients were less likely than other patients to have one or more procedure recorded (table 10.22). Principal diagnoses of certain infectious and parasitic diseases, certain conditions originating in the perinatal period and factors influencing health status and contact with health services were the only exceptions to this.

10.22 HOSPITALISATIONS WITH A PROCEDURE RECORDED, by principal diagnosis—2003–04

	PROPORTION WITH A PROCEDURE(a)	
	Indigenous	*Other*
	%	%
Factors influencing health status and contact with health services (Z00–Z99)	96.1	95.0
Congenital malformations deformations and chromosomal abnormalities (Q00–Q99)	89.0	91.7
Neoplasms (C00–D48)	86.8	95.5
Diseases of the eye and adnexa (H00–H59)	85.3	98.2
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	84.1	93.2
Diseases of the ear and mastoid process (H60–H95)	73.2	86.0
Certain conditions originating in the perinatal period (P00–P96)	71.0	67.0
Diseases of the musculoskeletal system and connective tissue (M00–M99)	66.5	91.2
Diseases of the digestive system (K00–K93)	61.5	88.6
Pregnancy childbirth and the puerperium (O00–O99)	60.7	74.9
Endocrine, nutritional and metabolic diseases (E00–E90)	60.4	78.3
Diseases of the genitourinary system (N00–N99)	60.2	85.4
Injury poisoning and certain other consequences of external causes (S00–T98)	57.0	70.1
Diseases of the skin and subcutaneous tissue (L00–L99)	55.8	73.7
Diseases of the circulatory system (I00–I99)	48.0	72.0
Diseases of the nervous system (G00–G99)	41.7	78.5
Certain infectious and parasitic diseases (A00–B99)	37.6	37.7
Diseases of the respiratory system (J00–J99)	33.2	58.2
Mental and behavioural disorders (F00–F99)	33.1	47.2
Symptoms signs and abnormal clinical and laboratory findings n.e.c. (R00–R99)	30.3	55.9
Total	**71.5**	**80.9**

(a) Proportions are indirectly age-standardised using the age and cause-specific rates for other Australians.

Source: AIHW, National Hospital Morbidity Database

Hospital services continued

HOSPITALISATIONS WITH A PROCEDURE RECORDED *continued*

Aboriginal and Torres Strait Islander people who are admitted to hospital are less likely to have a procedure recorded for a number of possible reasons. These include communication difficulties due to language, institutional factors such as under-servicing in remote areas which disproportionately affects Indigenous people as they are more likely to live in remote areas, and systematic/discriminatory differences in the treatment of patients identified as Indigenous in terms of access to services, diagnosis, referral and treatment (Cunningham 2002).

A recent study by Coory and Walsh (2005), which followed patients admitted to Queensland hospitals for acute myocardial infarction (AMI) between 1998 and 2002, found that rates of coronary procedures among Indigenous patients were significantly lower (by 22%) than among other patients with AMI.

PROCEDURES

In 2003–04, approximately 2% of all procedures were performed on Indigenous patients (264,169). The most common types of procedures recorded for Indigenous people in 2003–04 were procedures on the urinary system, the majority of which were for haemodialysis (table 10.23). Some 32% of procedures for Indigenous males and females were for haemodialysis, a procedure which artificially performs the work of the kidneys in patients with end-stage renal disease. For more detail on dialysis and end-stage renal disease, see the section in Chapter 7 on chronic kidney disease. Non-invasive, cognitive

Hospital services continued

PROCEDURES *continued*

and other interventions, not elsewhere classified, were the second most common type of procedure for both males and females. A large proportion of procedures in this group were for allied health interventions such as physiotherapy and social work and for general anaesthesia and sedation.

For Indigenous males, hospital procedure rates for the urinary system and the respiratory system were higher than for other Australian males (approximately seven and two times as high respectively). For Indigenous females, hospital procedure rates on the respiratory system, cardiovascular system and urinary system were higher than for other females (two, two and 12 times as high respectively).

10.23 HOSPITAL PROCEDURES, Indigenous persons—2003–04

	HOSPITAL PROCEDURES PERFORMED ON INDIGENOUS PERSONS		PROPORTION OF PROCEDURES PERFORMED ON INDIGENOUS PERSONS		RATIO(a)	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
ICD-10-AM procedure chapter	no.	no.	%	%	%	%
Non-invasive cognitive and other interventions n.e.c. (1820–1916)	37 471	47 142	32.8	31.5	1.0	1.0
Obstetric procedures (1330–1347)	. .	12 141	. .	8.1	. .	1.0
Imaging services (1940–2016)	5 462	5 036	4.8	3.4	1.3	1.4
Procedures on digestive system (850–1011)	4 208	5 733	3.7	3.8	0.6	0.6
Dermatological and plastic procedures (1600–1718)	5 393	4 235	4.7	2.8	1.1	1.0
Dental services (450–490)	4 777	4 811	4.2	3.2	0.7	0.6
Procedures on musculoskeletal system (1360–1579)	6 020	3 520	5.3	2.3	0.9	0.9
Procedures on cardiovascular cystem (600–767)	4 347	3 759	3.8	2.5	1.4	1.8
Gynaecological procedures (1240–1299)	. .	6 659	. .	4.4	. .	0.6
Procedures on respiratory system (520–569)	3 014	2 342	2.6	1.6	1.7	2.0
Procedures on urinary system (1040–1129)(b)	1 420	1 506	1.2	1.0	0.9	1.1
Other procedures	6 072	5 621	5.3	3.8	0.6	0.6
Total excluding haemodialysis	***78 184***	***102 505***	***68.4***	***68.4***	***0.9***	***0.9***
Haemodialysis (1060)	36 171	47 309	31.6	31.6	8.9	17.1
Total(c)	**114 355**	**149 814**	**100.0**	**100.0**	**1.3**	**1.3**

. . not applicable

(a) Ratio is observed procedures divided by expected procedures. Expected procedures are based on the age, sex and cause-specific rates for other Australians.

(b) Excludes haemodialysis.

(c) Includes procedures for which no procedure code was recorded. Excludes procedures performed on persons for whom Indigenous status was not stated.

Source: AIHW, National Hospital Morbidity Database

SUMMARY

Overall, estimated expenditure on health services provided to Aboriginal and Torres Strait Islander peoples during 2001–02 was $3,901 per head. This was 18% higher (ratio 1.18:1) than the estimated expenditure on services delivered to non-Indigenous Australians. The ratio of per capita expenditure on Indigenous Australians to non-Indigenous Australians varies considerably by type of service. Aboriginal and Torres Strait Islander peoples were more intensive users of community health centres (where the per capita expenditure rate ratio was 6.5, public health (2.9) and admitted and non-admitted patient services within the public hospital system (1.6 and 1.9 respectively) compared with medical services (0.4) and pharmaceuticals (0.3).

SUMMARY *continued*

Access to services is affected by a number of factors including the proximity of the service, availability of transport, affordability, availability of culturally appropriate services and the involvement of Indigenous people in the delivery of health services. Approximately one in five Indigenous people living in remote areas have difficulty understanding and/or being understood by service providers and around one-half do not have a working telephone in the home.

Indigenous participation in the delivery of services is considered an important issue in improving access to services. In 2001, Indigenous people were under-represented in selected health-related occupations, comprising around 1% of Australians employed in this area. Aboriginal and Torres Strait Islander people were somewhat better represented in welfare and community-related occupations, accounting for 2.6% of all people employed in this sector. Indigenous students remained under-represented among those completing graduate courses in health (1.0%) in 2003. However, higher proportions of Indigenous people were commencing health and welfare-related courses in 2003 (1.7% and 2.3% respectively).

Despite likely under-counting of Aboriginal and Torres Strait Islander people in hospital records, in 2003–04, Indigenous males and females were about twice as likely to be hospitalised as other males and females, with the greatest differences in rates being in the age groups 35–44 years, 45–54 years and 55–64 years. Once in hospital, however, Indigenous patients were less likely to undergo a procedure than other patients.

For all age groups, hospitalisation rates for Indigenous Australians were higher than for other Australians. While hospitalisation rates for Indigenous Australians are several times those for other Australians, most of the difference is due to high rates of care involving dialysis and hospitalisations for other potentially preventable chronic conditions. Indigenous males and females were hospitalised for care involving dialysis at nine and 17 times the rate of other Australian males and females, and for potentially preventable chronic conditions they were hospitalised at seven times the rate of other Australians.