

3.10 Aboriginal and Torres Strait Islander people in the health workforce

Number and proportion of Aboriginal and Torres Strait Islander Australians in the health workforce

Data sources

Census of Population and Housing

The ABS Census of Population and Housing is conducted by the ABS at 5-yearly intervals, with 2006 being the most recent, and is designed to include all Australian households. The Census uses the ABS standard Indigenous status question and it is asked for each household member.

Although the Census data are adjusted for undercounts at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide adjusted household estimates.

The 1996 and 2001 Census used the Australian Standard Classification of Occupations, but this was replaced by the Australian and New Zealand Standard Classification of Occupations for the 2006 Census.

Analyses

Aboriginal and Torres Strait Islander health workforce

Data on the number and proportion of Indigenous Australians employed in health-related occupations in 2006 are presented in the Table 3.10.1 below.

- In 2006, there were approximately 4,891 Indigenous Australians employed in health-related occupations, which represented 1% of the total health workforce.

Health workforce by occupation

- Indigenous people comprised 2.4% of all health and welfare support workers, 1.3% of all health diagnostic and promotion professionals, 0.6% of all midwifery and nursing professions, 0.5% of all health therapy professionals (including dentists), 0.2% of all medical practitioners (Table 3.10.1). Indigenous people comprised 96% of all Aboriginal and Torres Strait Islander health workers.
- In 2006, there were 100 Indigenous people working as medical practitioners and 1,223 Indigenous people working as nurses or midwives. After nursing, Indigenous people were most commonly employed as Aboriginal and Torres Strait Islander health workers (965 people). Aboriginal and Torres Strait Islander health workers may be employed as specialists in areas such as alcohol, mental health, diabetes, eye and ear health, sexual health, or they may work as generalist members of primary care teams, or as hospital liaison officers.

Table 3.10.1: Employment in health-related occupations (health workforce), 2006^(a)

Health-related occupation	Indig.	All persons	Proportion who were Indig.	Proportion of Indig. health workforce	Proportion of total health workforce
	No.	No.	%	%	%
Aboriginal and Torres Strait Islander health worker	965	1,010	95.5	19.7	0.2
Health and welfare services managers ^(b)	141	10,807	1.3	2.9	2.2
Psychologists ^(c)	39	13,437	0.3	0.8	2.7
Health diagnostic and promotion professionals					
Medical imaging professionals ^(d)	18	10,147	0.2	0.4	2.1
Environmental health officer	98	3,907	2.5	2.0	0.8
Occupational health and safety adviser	50	6,840	0.7	1.0	1.4
Health promotion officer	437	3,898	11.2	8.9	0.8
Other health diagnostic and promotion professionals ^(e)	45	23,287	0.2	0.9	4.7
Total	648	48,079	1.3	13.2	9.8
Health therapy professionals					
Dental practitioners ^(f)	16	9,065	0.2	0.3	1.8
Dental hygienists, technicians and therapists ^(g)	22	5,169	0.4	0.4	1.0
Dental assistant	171	15,378	1.1	3.5	3.1
Physiotherapist	54	12,286	0.4	1.1	2.5
Other health therapy professionals ^(h)	58	22,699	0.3	1.2	4.6
Total	321	64,597	0.5	6.6	13.1
Medical practitioners					
General medical practitioner	60	29,920	0.2	1.2	6.1
Other medical practitioners, internal medicine ⁽ⁱ⁾ specialists, psychiatrists and surgeons	40	25,155	0.2	0.8	5.1
Total	100	55,075	0.2	2.0	11.2
Midwifery and nursing professionals					
Midwives ^(j)	53	13,164	0.4	1.1	2.7
Nurse educators and researchers ^(k)	17	3,762	0.5	0.3	0.8
Nurse manager	46	10,899	0.4	0.9	2.2
Registered nurse (aged care)	239	25,070	1.0	4.9	5.1
Registered nurse (community health)	51	8,771	0.6	1.0	1.8
Registered nurse (critical care and emergency)	44	9,917	0.4	0.9	2.0
Registered nurse (mental health)	48	7,712	0.6	1.0	1.6
Registered nurse (perioperative)	46	10,009	0.5	0.9	2.0
Other registered nurses ^(l)	679	111,096	0.6	13.9	22.6
Total	1,223	200,400	0.6	25.0	40.7

(continued)

Table 3.10.1 (continued): Employment in health-related occupations (health workforce), 2006^(a)

Health-related occupation	Indig.	All persons	Proportion who were Indig.	Proportion of Indig. health workforce	Proportion of total health workforce
	No.	No.	%	%	%
Health and welfare support workers					
Ambulance officers and paramedics	153	9,098	1.7	3.1	1.8
Diversional therapist	41	4,078	1.0	0.8	0.8
Enrolled and mothercraft nurses	215	19,397	1.1	4.4	3.9
Massage therapist	54	8,200	0.7	1.1	1.7
Hospital orderly	165	9,939	1.7	3.4	2.0
Nursing support worker	442	22,380	2.0	9.0	4.5
Personal care assistant	339	21,956	1.5	6.9	4.5
Other nursing support and personal care workers ^(m)	39	3,899	1.0	0.8	0.8
Total	2,413	99,957	2.4	49.3	20.3
Total⁽ⁿ⁾	4,891	492,342	1.0	100.0	100.0

(a) Aged 15 years and over.

(b) Comprises health and welfare services managers n.f.d., medical administrator, nursing clinical director, primary health organisation manager, health and welfare services managers n.e.c..

(c) Comprises psychologists n.f.d., clinical psychologist, educational psychologist, organisational psychologist, psychotherapist and psychologists n.e.c..

(d) Comprises medical imaging Professionals n.f.d., medical diagnostic radiographer, medical radiation therapist, nuclear medicine technologist and sonographer.

(e) Comprises health professionals n.f.d., health diagnostic and promotion professionals n.f.d., dietician, occupational and environmental health professionals n.f.d., optometrists and orthoptists n.f.d., optometrist, orthoptist, pharmacists n.f.d., hospital pharmacist, industrial pharmacist, retail pharmacist, other health diagnostic and promotion professionals n.f.d., orthotist or orosthetist, health diagnostic and promotion professionals n.e.c..

(f) Comprises dental practitioners n.f.d., dental specialist and dentist.

(g) Comprises dental hygienists, technicians and therapists n.f.d., dental hygienist, dental prosthetist, dental technician and dental therapist.

(h) Comprises health therapy professionals n.f.d., chiropractors and osteopaths n.f.d., chiropractor, osteopath, complementary health therapists n.f.d., acupuncturist, homeopath, naturopath, traditional Chinese medicine practitioner, complementary health therapists n.e.c., occupational therapist, podiatrist, speech professionals and audiologists n.f.d., audiologist and speech pathologist.

(i) Comprises medical practitioners n.f.d., generalist medical practitioners n.f.d., resident medical officer, anaesthetist, internal medicine specialists n.f.d., specialist physician (general medicine), cardiologist, clinical haematologist, clinical oncologist, endocrinologist, gastroenterologist, intensive care specialist, neurologist, paediatrician, renal medicine specialist, rheumatologist, thoracic medicine specialist, internal medicine specialists n.e.c., psychiatrist, surgeons n.f.d., surgeon (general), cardiothoracic surgeon, neurosurgeon, orthopaedic surgeon, otorhinolaryngologist, paediatric surgeon, plastic and reconstructive surgeon, urologist, vascular surgeon, other medical practitioners n.f.d., dermatologist, emergency medicine specialist, obstetrician and gynaecologist, ophthalmologist, pathologist, radiologist, medical practitioners n.e.c..

(j) Comprises midwifery and nursing professionals n.f.d. and midwife.

(k) Comprises nurse educators and researchers n.f.d., nurse educator and nurse researcher.

(l) Comprises registered nurses n.f.d., nurse practitioner, registered nurse (child and family health), registered nurse (developmental disability), registered nurse (disability and rehabilitation), registered nurse (medical), registered nurse (medical practice), registered nurse (surgical), registered nurses n.e.c..

(m) Comprises nursing support and personal care workers n.f.d., therapy aide.

(n) Components may not add to total because of perturbation of component data.

Source: ABS and AIHW analysis of 2006 Census data.

Health workforce by age and sex

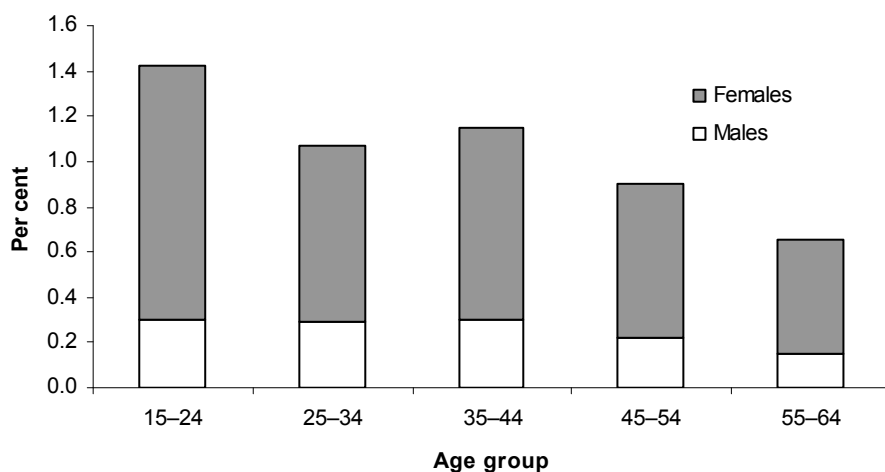
- In 2006, the majority of Indigenous people employed in the health workforce were aged 35–44 years (1,486 people). The proportion of health workers who were Indigenous was highest among those aged 15–24 years (1.4%) and lowest among those aged 55–64 years (0.7%) (Table 3.10.2; Figure 3.10.1).
- Indigenous females represented a higher proportion of the health workforce than Indigenous males across all age groups.
- The highest number of people employed in the total health workforce were aged 45–54 years. Females represented over three-quarters (76%) of the total health workforce (Table 3.10.2).

Table 3.10.2: Aboriginal and Torres Strait Islander health workforce^(a), by age and sex, 2006

	Age group					Total
	15–24	25–34	35–44	45–54	55–64	
Indigenous health workforce						
	Number					
Male	108	301	388	314	104	1,223
Female	406	803	1,100	984	347	3,666
Total	518	1,098	1,486	1,290	453	4,891
	Proportion of Indigenous health workforce (%)					
Male	20.8	27.4	26.1	24.3	23.0	25.0
Female	78.4	73.1	74.0	76.3	76.6	75.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Proportion of total health workforce (%)					
Male	0.3	0.3	0.3	0.2	0.2	0.2
Female	1.1	0.8	0.9	0.7	0.5	0.7
Total	1.4	1.1	1.2	0.9	0.7	1.0
Total health workforce						
	Number					
Male	5,604	24,496	31,374	32,748	19,048	119,386
Female	30,549	78,498	97,751	110,928	49,611	372,961
Total	36,150	102,996	129,125	143,676	68,658	492,342
	Proportion of total health workforce (%)					
Male	15.5	23.8	24.3	22.8	27.7	24.2
Female	84.5	76.2	75.7	77.2	72.3	75.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) Occupation as defined by the Australian and New Zealand Classification of Occupations (ANZSCO).

Source: ABS and AIHW analysis of 2006 Census data.



Source: ABS and AIHW analysis of 2006 Census data.

Figure 3.10.1: Indigenous health workforce as a proportion of the total health workforce, by age group and sex, 2006

Indigenous health workforce by state/territory

- In 2006, the Northern Territory had the highest proportion of Indigenous persons in the health workforce (9%), and Victoria had the lowest (0.3%) (Table 3.10.3; Figure 3.10.2). This was well below the proportion of the state/territory population that was Indigenous in 2006.
- The proportion of Indigenous Australians who were employed in health-related occupations in 2006 ranged from 0.9% in the Northern Territory to 1.8% in New South Wales and Victoria (Figure 3.10.3).

Table 3.10.3: Indigenous health workforce^(a), by state/territory, 2006

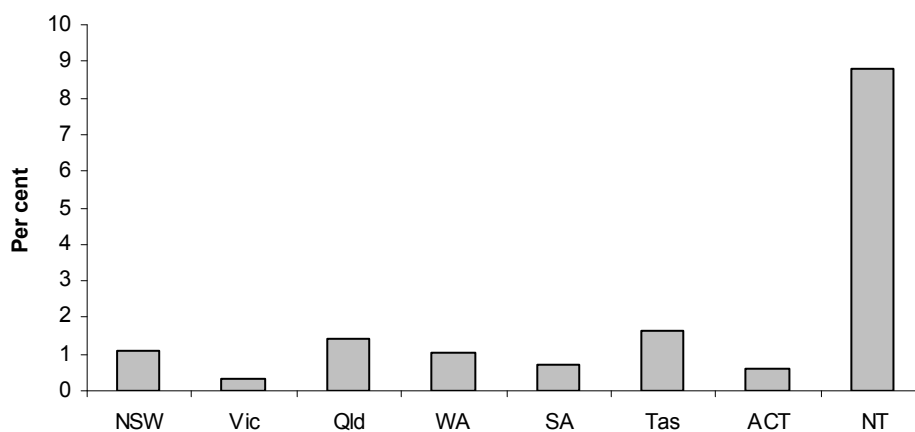
	NSW ^(b)	Vic	Qld	WA ^(c)	SA	Tas	ACT	NT	Australia
Number of Indigenous Australians in health workforce	1,743	381	1,343	486	302	196	47	390	4,891
Indigenous health workforce as a proportion of total health workforce	1.1	0.3	1.4	1.0	0.7	1.7	0.6	8.8	1.0
Indigenous health workforce as a proportion of the Indigenous population	1.8	1.8	1.5	1.1	1.7	1.7	1.7	0.9	1.5
Proportion of state/territory population that is Indigenous	2.2	0.7	3.5	3.4	1.8	3.8	1.3	30.4	2.5

(a) Occupation as defined by the Australian Standard Classification of Occupation.

(b) Includes Territory of Jervis Bay.

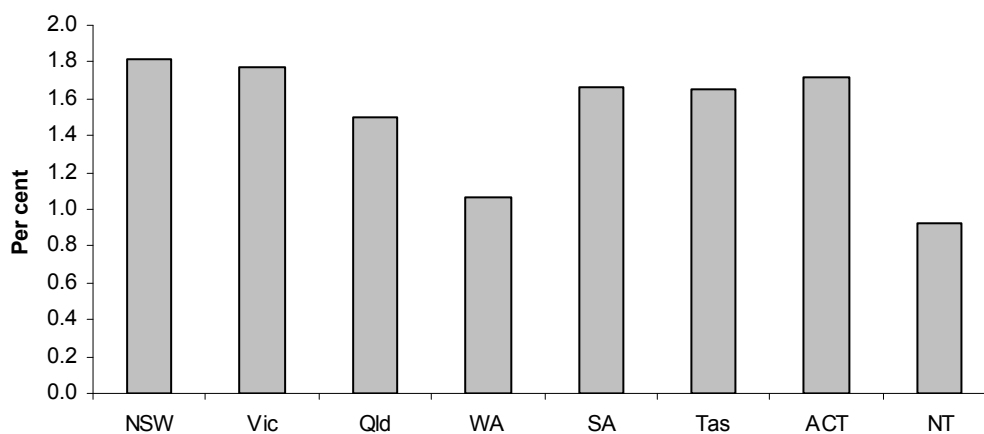
(c) Includes Territories of Christmas Island and Cocos Islands.

Source: ABS and AIHW analysis of 2006 Census data.



Source: ABS and AIHW analysis of 2006 Census data.

Figure 3.10.2: Indigenous health workforce as a proportion of total health workforce, by state/territory, 2006



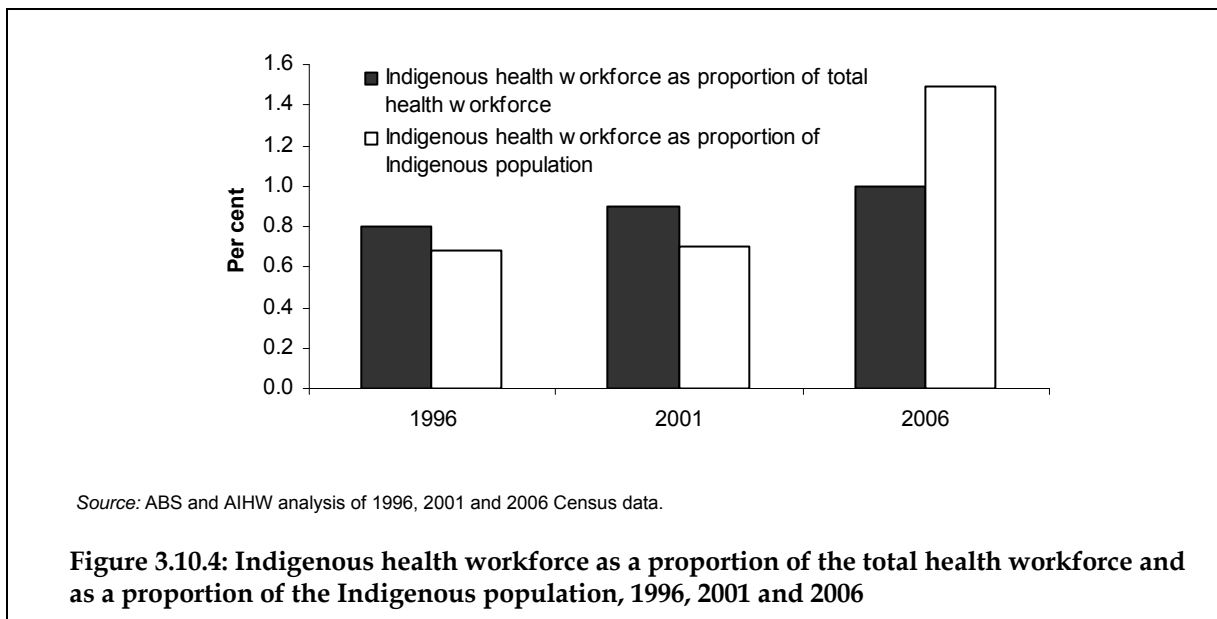
Source: ABS and AIHW analysis of 2006 Census data.

Figure 3.10.3: Indigenous health workforce as a proportion of the Indigenous population, by state/territory, 2006

Time series analyses

Figure 3.10.4 shows the proportion of the Australian health workforce that are Indigenous persons and the proportion of the Indigenous Australian population employed in the health workforce in 1996, 2001 and 2006.

- In 2006 there were approximately 4,891 Indigenous Australians employed in health-related occupations, representing 1.0% of the total health workforce. The proportion of Indigenous Australians in the health workforce has increased slightly since 2001 (0.9%) and 1996 (0.8%) (Figure 3.10.4; Table 3.10.4).
- The proportion of the Indigenous population who were employed in the health workforce increased from around 0.7% in 1996 to 1.5% in 2006.



- In 1996, 2001 and 2006, the highest number of Indigenous people employed in the health workforce were aged 35–44 years. In all three years the proportion of health workers who were Indigenous was highest among those aged 15–24 years and lowest among those aged 55–64 years (Table 3.10.5).
- In 1996, 2001 and 2006, Indigenous females represented a higher proportion of the health workforce than Indigenous males across all age groups (Table 3.10.5).
- Females represented over three-quarters (76%) of the total health workforce in 1996, 2001 and 2006 (Table 3.10.6).

Table 3.10.4: Employment in selected health-related occupations (health workforce)^(a), 1996, 2001 and 2006

	1996			2001			2006		
	Indig.	All persons	Indig.	Indig.	All persons	Indig.	Indig.	All persons	Indig.
	No.	No.	%	No.	No.	%	No.	No.	%
Aboriginal and Torres Strait Islander health worker	667	704	94.7	844	906	93.2	965	1,010	95.5
Psychologists	14	6,784	0.2	23	9,105	0.3	39	13,437	0.3
Medical imaging professionals	8	6,718	0.1	17	8,279	0.2	18	10,147	0.2
Dental	146	22,714	0.6	155	25,339	0.6	209	29,612	0.7
Medical practitioners	60	41,169	0.1	87	45,079	0.2	100	55,075	0.2
Nurse manager	13	6,148	0.2	29	7,328	0.4	46	10,899	0.4
Registered nurse	608	133,199	0.5	782	140,781	0.6	1,107	172,575	0.6
Ambulance officers and paramedics	48	5,952	0.8	82	6,689	1.2	153	9,098	1.7
Total	2,831	346,856	0.8	3,260	376,743	0.9	4,891	492,342	1.0

(a) For 1996 and 2001 data, occupation as defined by the Australian Standard Classification of Occupation (ASCO). For 2006 data, occupation as defined by the Australian and New Zealand Standard Classification of Occupations (ANZSCO).

Source: ABS and AIHW analysis of 1996, 2001 and 2006 Census data.

Table 3.10.5: Aboriginal and Torres Strait Islander health workforce^(a), by age and sex, 1996, 2001 and 2006

	Age group					Total
	15–24	25–34	35–44	45–54	55–64	
1996						
Number						
Male	119	227	230	90	30	696
Female	283	585	736	422	109	2,135
Total	402	812	966	512	139	2,831
Proportion of total health workforce (per cent)						
Male	0.4	0.2	0.2	0.1	0.1	0.2
Female	0.8	0.6	0.6	0.5	0.4	0.6
Total	1.2	0.9	0.8	0.7	0.5	0.8
2001						
Number						
Male	83	255	250	160	49	797
Female	268	628	797	611	148	2,452
Total	351	883	1,047	771	197	3,249
Proportion of total health workforce (per cent)						
Male	0.3	0.3	0.2	0.2	0.1	0.2
Female	1.0	0.7	0.7	0.6	0.4	0.7
Total	1.3	1.0	0.9	0.7	0.5	0.9
2006						
Number						
Male	108	301	388	314	104	1,223
Female	406	803	1,100	984	347	3,666
Total	518	1,098	1,486	1,290	453	4,891
Proportion of total health workforce (per cent)						
Male	0.3	0.3	0.3	0.2	0.2	0.2
Female	1.1	0.8	0.9	0.7	0.5	0.7
Total	1.4	1.1	1.2	0.9	0.7	1.0

(a) For 1996 and 2001 data, occupation as defined by the Australian Standard Classification of Occupation (ASCO). For 2006 data, occupation as defined by the Australian and New Zealand Standard Classification of Occupations (ANZSCO).

Source: ABS and AIHW analysis of 1996, 2001 and 2006 Census data.

Table 3.10.6: Total health workforce^(a), by age and sex, 1996, 2001 and 2006

	Age group					Total
	15–24	25–34	35–44	45–54	55–64	
1996						
Number						
Male	5,436	21,874	27,102	18,964	9,771	83,147
Female	28,074	71,171	88,298	58,649	17,517	263,709
Total	33,510	93,045	115,400	77,613	27,288	346,856
Proportion of total health workforce (per cent)						
Male	16.2	23.5	23.5	24.4	35.8	24.0
Female	83.8	76.5	76.5	75.6	64.2	76.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
2001						
Number						
Male	4,573	21,342	27,233	23,814	12,318	89,280
Female	22,767	67,127	90,468	79,857	27,244	287,463
Total	27,340	88,469	117,701	103,671	39,562	376,743
Proportion of total health workforce (per cent)						
Male	16.7	24.1	23.1	23.0	31.1	23.7
Female	83.3	75.9	76.9	77.0	68.9	76.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
2006						
Number						
Male	5,604	24,496	31,374	32,748	19,048	119,386
Female	30,549	78,498	97,751	110,928	49,611	372,961
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Proportion of total health workforce (per cent)						
Male	15.5	23.8	24.3	22.8	27.7	24.2
Female	84.5	76.2	75.7	77.2	72.3	75.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) For 1996 and 2001 data, occupation as defined by the Australian Standard Classification of Occupation (ASCO). For 2006 data, occupation as defined by the Australian and New Zealand Standard Classification of Occupations (ANZSCO).

Source: ABS and AIHW analysis of 1996, 2001 and 2006 Census data.

Additional information

Indigenous Doctors and Nurses

- According to the Australian Indigenous Doctors' Association, there are currently an estimated 120 Indigenous doctors in Australia (AIDA 2008). This represents only about 0.2% of the medical profession – well below the proportion (2.4%) of the Australia population that is Indigenous. To increase the rate of Indigenous doctors working in Australia to be equivalent to the rate of non-Indigenous doctors, the Australian Medical Association estimate that around 928 more doctors need to be trained (AMA 2004). In 2007 there were approximately 113 Indigenous medical graduates and 124 Indigenous medical students in Australian medical schools (Lawson et al. 2007).
- In 2005 there were an estimated 60,252 medical practitioners working in medicine in Australia (AIHW 2008a). There were also an estimated 244,360 employed nurses, 1,063 (0.4%) of whom were Aboriginal or Torres Strait Islander Australians (AIHW 2008b).

Health workforce in rural and regional Australia

A recent report on an audit of the health workforce in rural and regional Australia in 2008 found that:

- Supply of the medical workforce – when considered as the number of doctors in comparison to the population of the area in which those doctors practise – is low to very poor in many rural and regional areas of Australia.
- The nursing workforce – when considered as a ratio of nurses to population – is relatively evenly distributed throughout rural and regional Australia.
- The supply of other health professions – particularly dental practitioners – as a ratio of professional to population, is low to poor.
- The Aboriginal health workforce is relatively small – predominantly working in Outer Regional and Remote locations.
- The supply of medical and nursing professionals varies considerably across jurisdictions. The Northern Territory, Western Australia, and the Australian Capital Territory, have lower proportions of GPs in the population and Queensland and New South Wales have the lowest proportion of nurses.
- The supply and the distribution of health professionals – in particular throughout rural and regional areas – largely correspond with the distribution of state and territory-funded health services across Australia (DoHA 2008).

Aboriginal and Torres Strait Islander primary health-care services

- In 2004–05, a total of 215 full-time equivalent (FTE) doctors were employed by Indigenous primary health-care services. The majority of doctors, nurses, allied health professionals and dentists employed by Indigenous primary health-care services were non-Indigenous. Most traditional healers, environmental health workers, Indigenous health workers, substance use workers and drivers/field officers were Indigenous Australians (OATSIH & NACCHO 2008).
- In 2004–05, there were a small number of FTE health staff positions in Indigenous primary health-care services that were not funded by the service. These positions may be funded by state/territory health departments or through programs such as More Allied Health Services (MAHS) Program and Community Development Employment Projects

(CDEP). A very small proportion of the FTE Indigenous health worker positions were held by non-Indigenous staff, and a very small proportion of FTE medical specialist/allied health professional, doctor and nurse positions were held by Indigenous staff (OATSIH & NACCHO 2008).

Data quality issues

Census of population and housing

The Census uses the National health data dictionary standard Indigenous status question and it is asked for each household member. Measures that are drawn from Census data are subject to broad data concerns relating to the unexplainable growth in the Aboriginal and Torres Strait Islander population since the 1991 Census, and the limitations of self-identification. Other Census data issues relate to the accuracy of the Census count itself, for example, whether people are counted more than once, or are undercounted (ABS 1996).

For the 2002 NATSISS, it was estimated that there were 165,700 Indigenous households compared with 144,700 enumerated in the 2001 Census. Although the Census data are adjusted for undercounts at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide adjusted household estimates.

Occupation data

Census data for the health labour force are the counts of people as recorded in the Census (raw counts), without adjustment for non-response or under-enumeration.

The ABS routinely rounds up small numbers in its Census data in order to protect the confidentiality of individuals. This leads to small discrepancies in total values between tables. Unfortunately, this process may have altered the accuracy of data regarding Indigenous participation in health and community services occupations – where participation is low, the small estimates reported for many occupations might actually seem to increase participation.

The Census is a point-in-time measure. The health workforce is subject to reductions through retention problems and increases in numbers through training. These changes will need to be considered in any interpretation of changes over time.

Recording errors (for example, difficult to read) or inaccurate coding (misinterpretation of role) of occupation may also affect results.

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