
A Statistical appendix

This appendix contains contextual information to assist the interpretation of the performance indicators presented in the Report. It also contains a discussion of the statistical concept of age standardisation and its application to Indigenous and all people's use of aged care services.

Most of the service areas covered by the *Report on Government Services 2007* (2007 Report) use population data from tables AA.1 and AA.2 for descriptive information (such as expenditure per person in the population) or performance indicators (such as participation rates for vocational education and training (VET)).

Indigenous data in the statistical appendix

The statistical appendix in the 2007 Report contains the following data items on Indigenous people:

- population profile, 30 June 2001
- proportion with weekly income of \$199 or less, August 2001
- proportion who had completed year 12 or equivalent, August 2001
- proportion who had attended higher education, August 2001
- standardised incidence ratio for use of Community Aged Care Packages (CACP) and permanent residential aged care (combined), 30 June 2001
- age-specific usage rates of CACPs and permanent residential aged care (per 1000 people), 30 June 2005
- ratio of CACP residents and permanent residents (combined) to 1000 persons in target population, 30 June 2001.

Supporting tables

Supporting tables for data within the statistical appendix of this compendium are contained in attachment A of the compendium. These tables are identified in references throughout this chapter by an 'AA' suffix (for example, table AA.3 is table 3 in the statistical appendix attachment). As the data are directly sourced from the 2007 Report, the compendium also notes where the original table, figure or text

in the 2007 Report can be found. For example, where the compendium refers to ‘2007 Report, p. A.15’ this is page 15 of the statistical appendix of the 2007 Report, and ‘2007 Report, table AA.2’ is attachment table 2 of the statistical appendix attachment of the 2007 Report.

Population

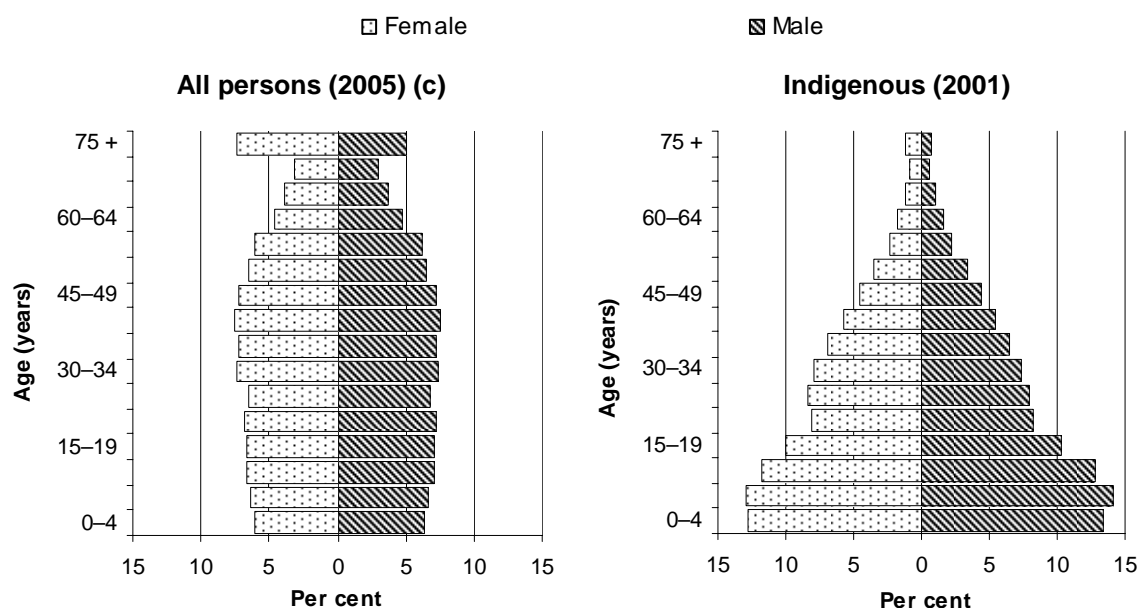
More than three quarters of Australia’s 20.3 million people lived in the eastern states as at 30 June 2005, with NSW, Victoria and Queensland accounting for 33.3 per cent, 24.7 per cent and 19.5 per cent respectively of the nation’s population. Western Australia and SA accounted for a further 9.9 per cent and 7.6 per cent respectively of the population, while Tasmania, the ACT and the NT accounted for the remaining 2.4 per cent, 1.6 per cent and 1.0 per cent respectively (table AA.1).

As in most other developed economies, greater life expectancy and declining fertility have contributed to an ‘ageing’ of Australia’s population. The experiences of Indigenous Australians, however, are markedly different (figure A.1). At 30 June 2005, 9.3 per cent of Australia’s population was aged 70 years or over, in contrast to 1.7 per cent of Australia’s Indigenous population at 30 June 2001 (tables AA.1 and AA.6). Across jurisdictions, the proportion of people aged 70 years or over ranged from 11.1 per cent in SA to 2.7 per cent in the NT (table AA.1).

The Australian population is highly urbanised, with 66.2 per cent of the population located in major cities as at 30 June 2005 (figure A.2). Across jurisdictions, this proportion ranged from 99.8 per cent in the ACT to 52.7 per cent in Queensland (table AA.5). Tasmania and the NT by definition have no major cities. In Tasmania, 97.7 per cent of the population lived in regional areas. Australia-wide, 2.5 per cent of people lived in remote areas. The NT was markedly above this average, with 45.1 per cent of people living in remote areas.

The most and least common languages other than English spoken in people’s homes varied across jurisdictions in August 2001. The most extreme variation was in the NT, where 15.4 per cent of people spoke an Australian Indigenous language (67.6 per cent of the total persons who spoke a language other than English in their homes) (table AA.4).

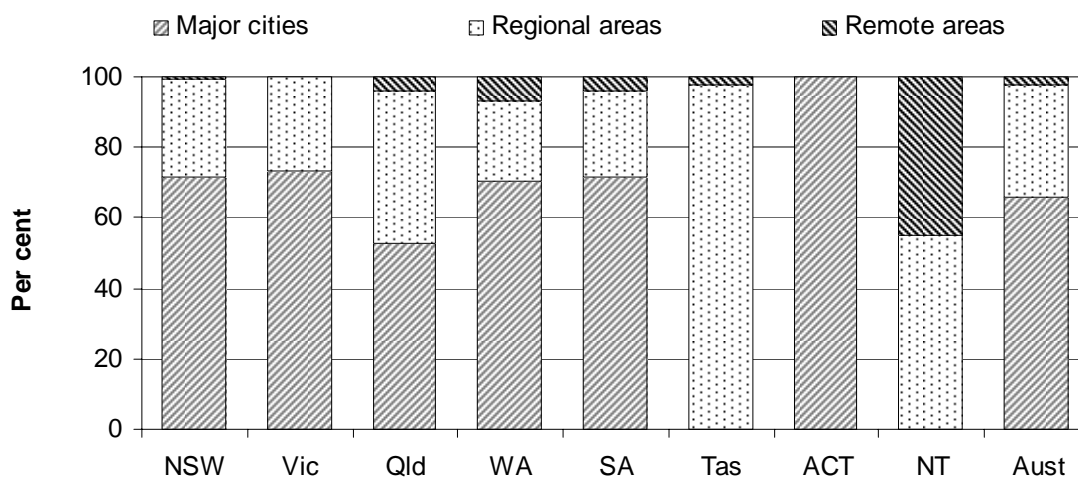
Figure A.1 Population distribution, Australia, by age and sex, 30 June^{a, b}



^a Totals may not add as a result of rounding. ^b Includes other territories. ^c Preliminary data.

Source: ABS (2001); ABS Australian Demographic Statistics (unpublished); tables AA.1 and AA.6; 2007 Report, figure A.1, p. A.3.

Figure A.2 Estimated residential population, by geographic location, June 2005^{a, b, c}



^a Preliminary data. ^b Geographic location is based on the Remoteness Structure outlined in the 2001 Australian Standard Geographic Classification (ASGC). ^c 'Australia' includes other territories.

Source: ABS Australian Demographic Statistics (unpublished); table AA.5; 2007 Report, figure A.4, p. A.6.

Indigenous population profile

There were an estimated 458 520 (230 994 female and 227 526 male) Indigenous people in Australia at 30 June 2001, accounting for approximately 2.4 per cent of the population (tables AA.2 and AA.6). The proportion of people who were Indigenous was significantly higher in the NT (28.8 per cent) than in any other jurisdiction. Across the other jurisdictions, the proportion ranged from 3.7 per cent in Tasmania to 0.6 per cent in Victoria (figure A.3). Nationally, the Indigenous population is projected to grow to 528 645 people in 2009 (table AA.7).

The majority of Indigenous people (79.8 per cent) at August 2001 spoke only English at home, while 8.8 per cent spoke an Indigenous language and English very well or well. However, 3 per cent spoke English not well or not at all (5.6 per cent did not state proficiency in any specific language) (table AA.8).

Figure A.3 **Indigenous people as a proportion of the population, 30 June 2001^a**



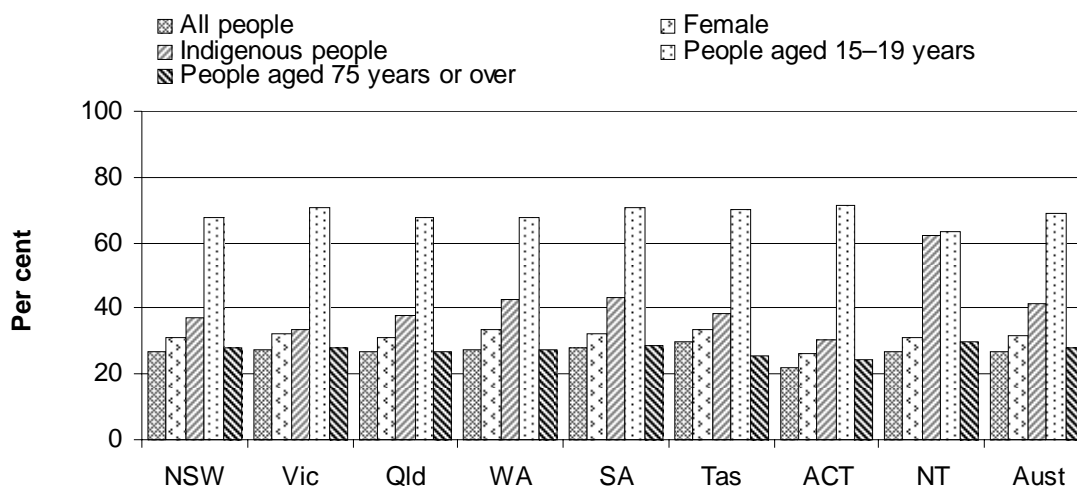
^a 'Australia' includes other territories.

Source: ABS (2001); ABS Australian Demographic Statistics (unpublished); tables AA.2 and AA.6; 2007 Report, figure A.5, p. A.7.

Income

Nationally, 27.1 per cent of people aged 15 years or over in August 2001 had a weekly individual income of \$199 or less (table AA.12). The proportion was considerably higher for younger people (68.8 per cent for people aged 15–19 years), Indigenous people (41.6 per cent), females (31.8 per cent) but similar for older people (27.7 per cent for people aged 75 years or over) (figure A.4).

Figure A.4 Weekly individual income of \$199 or less, by sex, Indigenous status and age, August 2001^a



^a 'Australia' includes other territories.

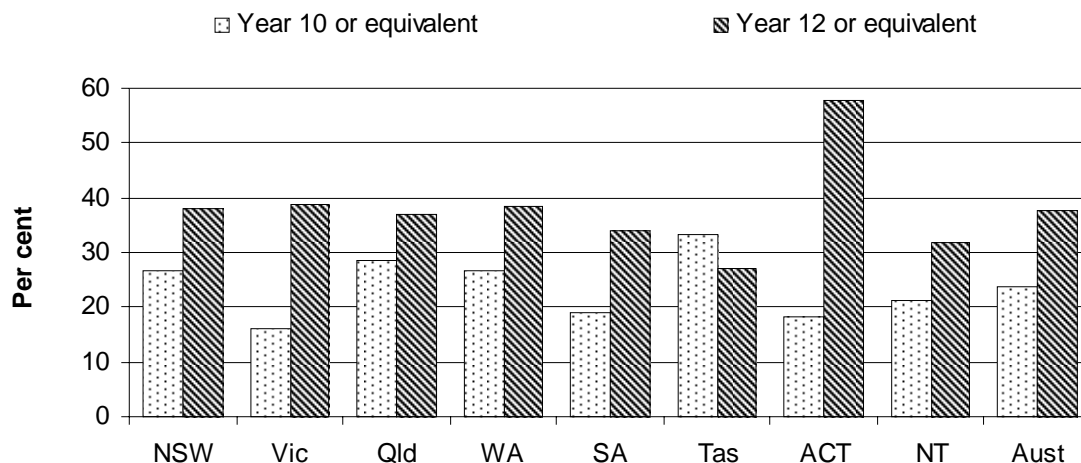
Source: ABS (2002a); ABS (2002b); tables AA.12–AA.14; 2007 Report, figure A.8, p. A.10.

Educational attainment

Employment outcomes and income are closely linked to the education and skill levels of individuals. At August 2001, 37.7 per cent of people aged 15 years and over (approximately 5.6 million people) had completed year 12 or equivalent as the highest level of schooling. A further 23.8 per cent (3.5 million people) had completed year 10 or equivalent schooling, excluding the 3.4 per cent (500 000 people) who were still at school (many of whom were studying in year 11 or 12, and had completed year 10). Across jurisdictions, the proportion of people aged 15 years and over who had completed year 12 or equivalent schooling ranged from 57.8 per cent in the ACT to 27.2 per cent in Tasmania (figure A.5).

The proportion of non-Indigenous people aged 15 years or over who had completed year 12 or equivalent schooling (39.5 per cent) was considerably higher than the proportion of Indigenous people (16.8 per cent) in August 2001. Across jurisdictions, the proportion of Indigenous people aged 15 years or over who had completed year 12 or equivalent schooling ranged from 36.4 per cent in the ACT to 7.1 per cent in the NT. The proportion of non-Indigenous people who had completed year 12 or equivalent was highest in the ACT (59.8 per cent) and lowest in Tasmania (28.4 per cent) (figure A.6).

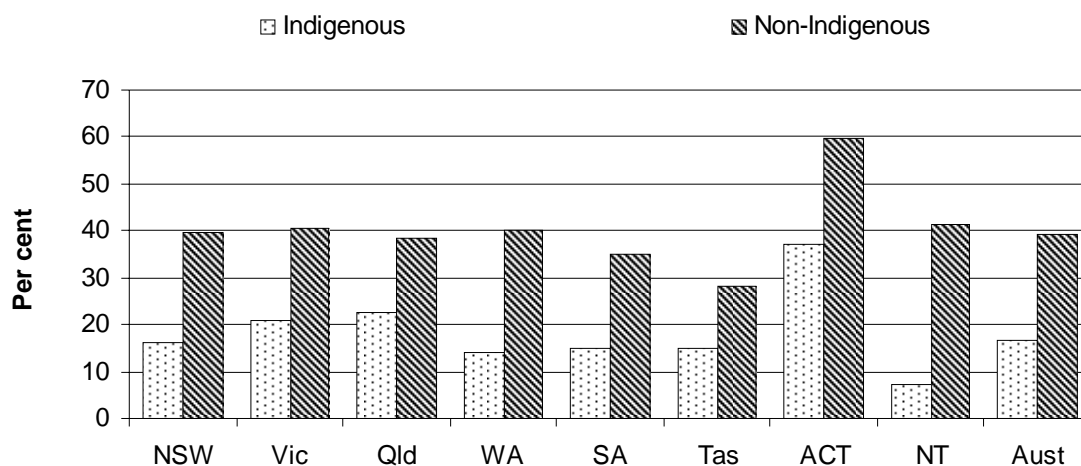
Figure A.5 People aged 15 years or over, by highest year of school completed, August 2001^{a, b, c}



^a Refers to primary or secondary schooling. ^b 'Australia' includes other territories. ^c 'All persons' includes Indigenous status not stated.

Source: ABS (2002b); table AA.15; 2007 Report, figure A.10, p. A.11.

Figure A.6 People aged 15 years or over who had completed year 12 or equivalent, by Indigenous status, August 2001^{a, b}



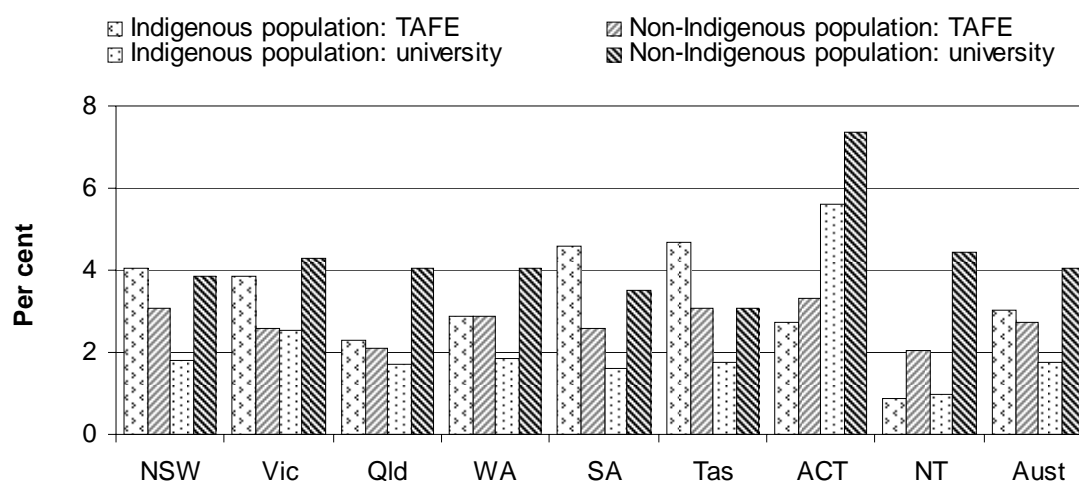
^a Refers to primary and secondary schooling. ^b 'Australia' includes other territories.

Source: ABS (2002b); table AA.15; 2007 Report, figure A.11, p. A.12.

The proportion of the Indigenous population who were attending TAFE in August 2001 was greater than the proportion of the non-Indigenous population in all jurisdictions except WA, the ACT and the NT. Conversely, the proportion of the

Indigenous population attending university was less than that of the non-Indigenous population in all jurisdictions (figure A.7).

Figure A.7 Proportion of population attending higher education, by Indigenous status, August 2001^{a, b}



^a 'Australia' includes other territories. ^b 'University' includes other tertiary institutions.

Source: ABS (2002b); table AA.16; 2007 Report, figure A.13, p. A.13.

Statistical concepts used in the Report — age standardisation of data

How age profiles can distort observed service usage patterns

The age profile of Australians varies across jurisdictions and across different cultural and linguistic backgrounds (see for example the different age profiles of Indigenous and all Australians, figure A.1). Variations in age profiles are important because the likelihood of needing certain services (such as aged care services) increases with age. As a result, observed differences in service usage rates by different cohorts within the community may arise from different age profiles, rather than from different usage patterns. One method of eliminating this distortion from the data is to standardise for the age profiles of different groups.

Method of standardisation

Either direct or indirect standardisation can be used. Indirect standardisation is presented here because it is more appropriate when comparing small populations. This method applies standard age-specific usage rates (in this case, average Australian rates) to actual populations (different groups within states and

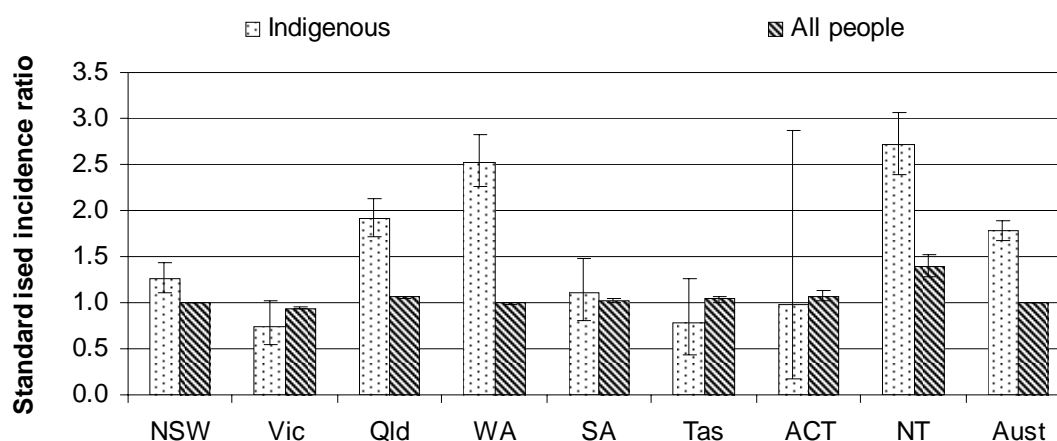
territories), and compares observed numbers of clients with the numbers that would have been expected if average rates had applied. Comparisons are made via the standardised incidence ratio. A value greater than 1.0 in this ratio means that use is higher than would be expected if the particular group had the same usage rate as that of the Australian population as a whole. A value below 1.0 means use is lower than expected. Age standardisation generally covers use by all age groups, so the resulting standardised incidence ratios compare use by complete population groups.

Application of indirect standardisation

In the following illustration, the combined use of permanent residential aged care and CACPs by Indigenous people is compared with average service use by all Australians (using 2001 data). The resulting standardised incidence ratios are presented in figure A.8. The error bars in the figure show how accurate the comparisons are—if an error bar goes across the value of 1.0, then the usage rate by that population group is not significantly different from the average use by all Australians.

Figure A.8 shows that Indigenous people had a higher than average combined use of CACPs and permanent residential aged care — nationally, about 80 per cent higher. This result reflects the higher age-specific usage rates of CACPs for Indigenous people at all ages, and of permanent residential aged care for those Indigenous people aged under 75 years (table A.1). Results vary across jurisdictions.

Figure A.8 Standardised incidence ratio for use of CACP and permanent residential aged care (combined), 30 June 2001^{a, b, c}



^a The Indigenous ratio is per 1000 Indigenous people aged 50 or over, the all people ratio is per 1000 Indigenous people aged 50 or over and non-Indigenous people aged 70 or over. ^b The calculations use indirect age standardisation against use by all people Australia-wide. ^c ACT data are based on a very small Indigenous population and have high standard errors.

Source: AIHW (unpublished); table AA.17; 2007 Report, figure A.15, p. A.21.

Table A.1 Age-specific usage rates of CACPs and permanent residential aged care (per 1000 people), 30 June 2005^{a, b}

Age (years)	CACP recipients		Permanent aged care residents	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
50-54	4.1	0.1	2.5	0.7
55-59	9.8	0.3	5.8	1.4
60-64	19.2	0.8	8.8	2.8
65-69	36.3	1.8	15.4	5.9
70-74	48.5	3.9	28.7	13.5
75+	82.1	17.8	106.8	102.0

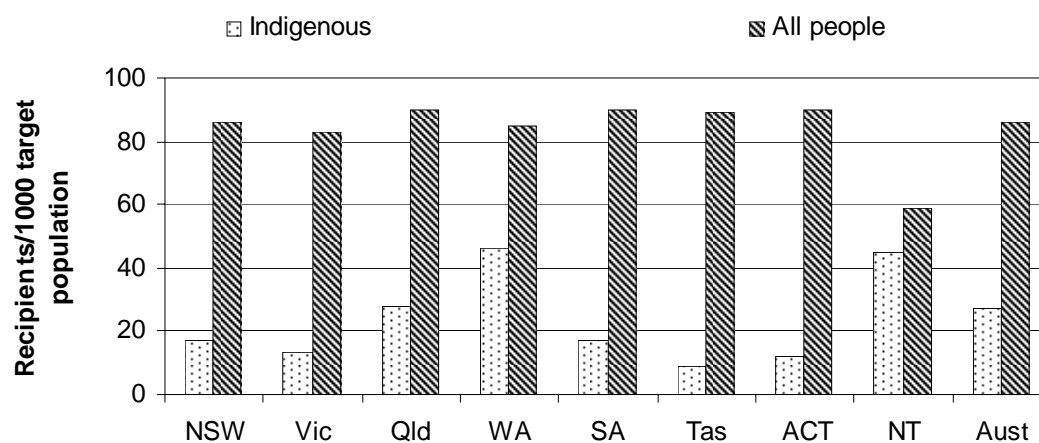
^a Excludes clients of multipurpose and flexible services. ^b Cases with missing data on Indigenous status have been pro rated within gender/age groups.

Source: AIHW (2006a), AIHW (2006b); 2007 Report, table A.1, p. A.21.

The age standardised rates are quite different from those that result from comparing use with the target group population (clients per 1000 in the target group). The target group measure (figure A.9) suggests that combined use of CACPs and permanent residential aged care is much lower for Indigenous people than for all people. Figure A.9 also suggests that use of the two services for all people is much lower in the NT than in other jurisdictions; this difference is not apparent after age standardisation (figure A.8), indicating that the difference in this measure is the

result of the relatively young age structure of the NT (even within the two subgroups of people 70 years and over and Indigenous people 50 years and over).

Figure A.9 Ratio of CACP recipients and permanent residents (combined) to 1000 persons in target population, 30 June 2001^a



^a Indigenous ratio is per 1000 Indigenous people aged 50 years or over, 'all people' ratio is per 1000 Indigenous people aged 50 years or over and non-Indigenous people aged 70 years or over.

Source: AIHW (unpublished); table AA.17; 2007 Report, figure A.16, p. A.22.

Supporting tables

Supporting tables for data within this chapter are contained in the attachment to the compendium. These tables are identified in references throughout this chapter by an 'AA' suffix (for example, table AA.3 is table 3 in the statistic appendix attachment). The tables included in the attachment are listed below.

Population

Table AA.1	Estimated resident population by age and sex, 30 June 2005 ('000)
Table AA.2	Estimated resident population by calendar and financial year
Table AA.3	Persons by country of birth, August 2001 ('000)
Table AA.4	Persons by language spoken at home, August 2001 ('000)
Table AA.5	Estimated resident population by geographic location, 30 June 2005
Table AA.6	Preliminary estimated resident Indigenous population by age and sex, 30 June 2001
Table AA.7	Experimental projection of the Indigenous population, 2000 to 2009 (number)
Table AA.8	Language spoken at home by Indigenous people and proficiency in spoken English, by sex, August 2001 (number)

Family and household

Table AA.9	Families and persons in families in occupied private dwellings by Indigenous status and family type, August 2001
Table AA.10	Household structure, 2001–2005
Table AA.11	Occupied private dwellings by tenure type and landlord type, August 2001 ('000)

Income and employment

Table AA.12	Persons aged 15 years and over, by weekly individual income and sex, August 2001
Table AA.13	Persons aged 15 years and over by weekly individual income and Indigenous status, August 2001
Table AA.14	Persons aged 15 years and over, by weekly individual income and age, August 2001
Table AA.15	People aged 15 years or over, by highest level of schooling completed and Indigenous status, August 2001 ('000)
Table AA.16	Type of educational institution attending by Indigenous status, August 2001 ('000)

Statistical concepts

Table AA.17	Age standardisation data, June 2001
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References

- ABS (Australian Bureau of Statistics) 2001, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0, Canberra.
- 2002a, *Census of Population and Housing: Basic Community Profiles*, Australia, Cat. no. 2002.0, DX Database, viewed 18 July 2002, unpublished.
- 2002b, *Census of Population and Housing: Indigenous Community Profiles*, Australia, Cat. no. 2002.0, DX Database, viewed 18 July 2002, unpublished.
- AIHW (Australian Institute of Health and Welfare) 2006a, *Residential Aged Care in Australia 2004-05: A Statistical Overview*, Cat. no. AGE 45, Aged Care Statistics Series no. 22, Canberra.
- 2006b, *Community Aged Care Packages in Australia 2004-05: A Statistical Overview*, Cat. no. AGE 47, Aged Care Statistics Series no. 23, Canberra.