1.02 Top reasons for hospitalisation

This measure reports on the leading causes of hospitalisation (using disease chapters in the International Classification of Diseases and Related Health Problems 10th Revision, Australian Modification (ICD–10 AM)) for Aboriginal and Torres Strait Islander Australians compared with non-Indigenous Australians.

Introduction

This is no. 2 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Hospital Morbidity Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Hospitalisation rates are based on the number of hospital episodes rather than on the number of individual people who are hospitalised. A person who has frequent hospitalisations for the same disease is counted multiple times in the hospitalisation rate for that disease. For this reason, hospitalisations for dialysis (treatment for end-stage kidney disease, generally undertaken 3 times per week) are often excluded from analyses looking at overall hospitalisations, or considered separately, as this is by far the most common reason for hospitalisation in Australia. This is noted below and in other measures where relevant.

At the time this report was compiled, data on the rate of hospitalisations for Indigenous Australians were available for July 1998 to June 2013 for Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions were considered to have adequate levels of Indigenous identification in hospital separations data over this period. For the period July 2004 to June 2013, data for New South Wales and Victoria are also available. From 2010–11 onwards, data for all states and territories are considered of sufficient quality for reporting by Indigenous status (AIHW 2013).

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

For more information about hospitalisations, see measures 1.10, 1.22 and 3.07. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Total hospitalisations, see tables 1.02.1–1.02.6
- Hospitalisations by principal and additional diagnosis, see tables 1.02.7–9.

Principal diagnosis is the diagnosis that is established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care or an attendance at a health care establishment.

Additional diagnosis is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment.

Total hospitalisations

Current period

During the period July 2011 to June 2013:

- The hospitalisation rate for Indigenous Australians was 331 per 1,000 population, a total of about 453,000 hospitalisations (after being adjusted for estimated Indigenous under-identification).
  - After adjusting for age and Indigenous under-identification, Indigenous Australians were hospitalised at 1.3 times the rate of non-Indigenous Australians. The rate

difference between Indigenous and non-Indigenous Australians was 94 hospitalisations per 1,000 over the 2-year period (Table 1.02.1).

- Across all age groups except those aged 65+, Indigenous Australians have higher hospitalisation rates than non-Indigenous Australians. This is the case for males, females and all persons (Table 1.02.2).
- *Remote* and *Very remote* regions had the largest rate differences between Indigenous and non-Indigenous Australian hospitalisation rates (304 per 1,000 and 191 per 1,000 respectively). The rate differences in *Major cities* and *Inner regional* areas were close to zero (Table 1.02.4).

Trend

- From July 1998 to June 2013, the rate of hospitalisations of Indigenous Australians was available for Queensland, Western Australia, South Australia and the Northern Territory. For these 4 jurisdictions combined, the rate increased from 389 per 1,000 to 441 per 1,000 (a 14% increase).
  - The rate difference between hospitalisations for Indigenous and non-Indigenous Australians did not change over the period (Table 1.02.5, Figure 1.02.1).
- For the period July 2004 to June 2013, data for New South Wales and Victoria were also available. For this period, there was a 27% increase in hospitalisation rates of Indigenous Australians, from 317 per 1,000 to 404 per 1,000 in the 6 jurisdictions combined (Table 1.02.6).
- Non-Indigenous Australian hospitalisation rates also increased in the period July 1998 to June 2013 (22%) and the period July 2004 to June 2013 (11%). The rate difference between Indigenous and non-Indigenous Australians increased by 311% over the period July 2004 to June 2013 (tables 1.02.5–6, Figure 1.02.2).
  - The rate difference between Indigenous and non-Indigenous Australians increased more substantially for males than for females (tables 1.02.5–6).

Hospitalisations by principal diagnosis

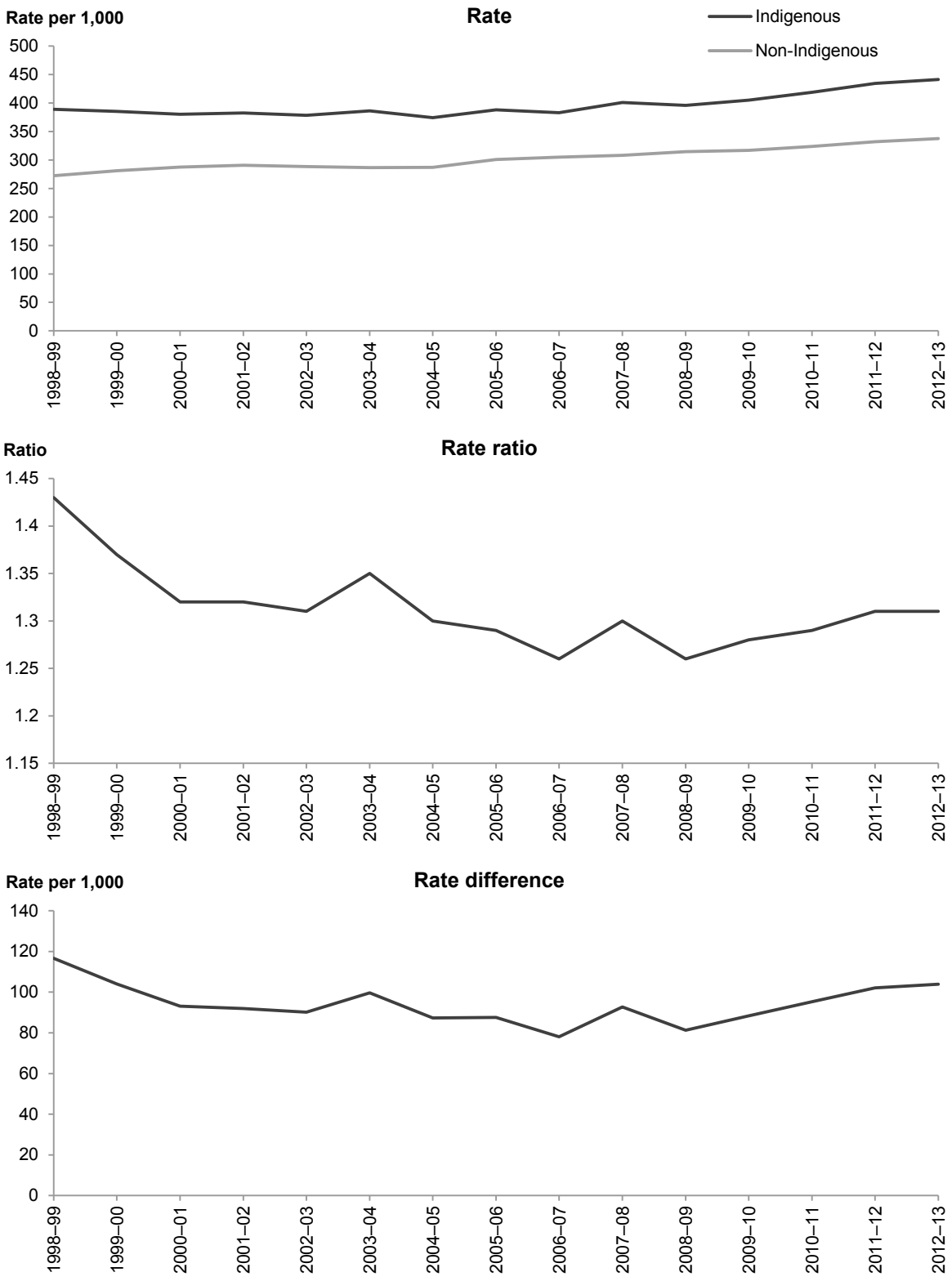
Current period

During the period July 2011 to June 2013:

- Care involving dialysis represented 44% of the total hospitalisations of Indigenous Australians, compared to 12% of hospitalisations for non-Indigenous Australians.
- The second largest cause of hospitalisations for Indigenous Australians was injury and poisoning (7%), followed by pregnancy and childbirth (6%), diseases of the respiratory system (6%) and diseases of the digestive system (5%).
- Indigenous Australians had higher rates of hospitalisation than non-Indigenous Australians for all major principal diagnosis groups other than 'diseases of the digestive system' and 'other'. The largest rate differences were for diseases of the respiratory system (23 per 1,000), injury and poisoning (20 per 1,000) and pregnancy and childbirth (14 per 1,000) (Table 1.02.7).

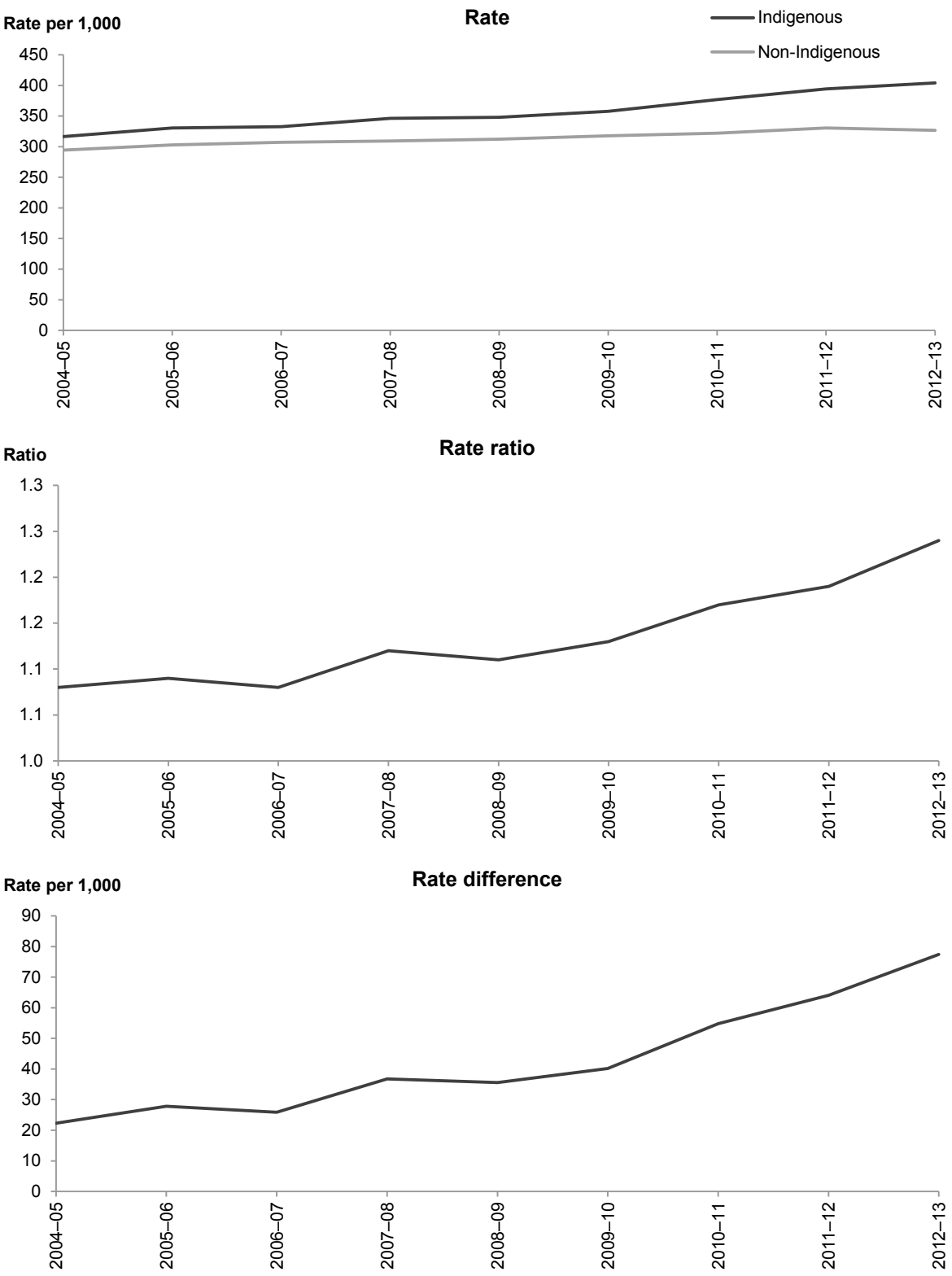
Trend

- Indigenous hospitalisation rates increased from July 2004 to June 2013 for all principal diagnoses.
  - The rate difference decreased for diseases of the digestive system and diseases of the genitourinary system, but increased for all other principal diagnosis groups.
  - Data for endocrine, nutritional and metabolic diseases are not comparable over time due to changes in ICD-10-AM coding for diabetes (Table 1.02.9).



Source: Table 1.02.5.

Figure 1.02.1: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13



Source: Table 1.02.6

Figure 1.02.2: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.02.1: Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13[a][b][c]

	Indigenous			Non-Indigenous			Indigenous status not stated	ASR rate ratio[e]	ASR rate difference[f]
	Number	Crude rate per 1,000	ASR Rate per 1,000[d]	Number	Crude rate per 1,000	ASR Rate per 1,000[d]			
NSW									
Males	49,735	234.5	318.6	2,170,756	308.1	291.7	41,839	1.1	26.9
Females	63,412	297.9	368.7	2,573,493	360.1	330.4	48,723	1.1	38.3
Persons[g]	113,148	266.2	343.2	4,744,272	334.3	310.2	90,562	1.1	33.0
Vic									
Males	10,128	209.2	307.8	1,827,319	330.5	320.3	17,198	0.96	–12.5
Females	14,023	288.5	374.8	2,234,012	395.8	368.6	20,847	1.0	6.2
Persons[g]	24,152	248.9	341.0	4,061,371	363.5	343.1	38,045	1.0	–2.1
Qld									
Males	47,999	249.0	366.8	1,435,394	328.8	321.8	60,336	1.1	45.1
Females	64,202	330.4	420.9	1683261	384.0	366.3	69,155	1.1	54.6
Persons[g]	112,201	289.9	392.4	3118660	356.4	343	129,491	1.1	49.4
WA									
Males	30,622	342.5	467.5	761529	321.4	327	179	1.4	140.5
Females	39,060	430.5	523.5	890440	383.5	368.5	141	1.4	155.0
Persons[g]	69,682	386.8	493.2	1651969	352.1	345.4	320	1.4	147.8
SA									
Males	11,168	295.1	397.3	513,413	320.4	292.8	35,657	1.4	104.5
Females	14,400	373.7	449.9	604454	370.2	332	34,356	1.4	118.0
Persons[g]	25,568	334.8	422.9	1117893	345.5	310.8	70,013	1.4	112.1

(continued)

Table 1.02.1 (continued): Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13[a][b][c]

	Indigenous			Non-Indigenous			Indigenous status not stated	ASR rate ratio[e]	ASR rate difference[f]
	Number	Crude rate per 1,000	ASR Rate per 1,000[d]	Number	Crude rate per 1,000	ASR Rate per 1,000[d]			
Tas									
Males	n.p.	125.9	177.5	n.p.	287.2	251.3	8,723	0.7	–73.8
Females	n.p.	185.6	236.1	n.p.	335.2	303.5	14,518	0.8	–67.3
Persons[g]	n.p.	155.7	207.7	n.p.	311.3	277	23,244	0.7	–69.4
NT									
Males	n.p.	353.9	450.0	n.p.	218.7	250.7	7,330	1.8	199.3
Females	n.p.	489.8	561.6	n.p.	248.7	265.3	6,914	2.1	296.3
Persons[g]	n.p.	421.6	505.7	n.p.	232.7	257.7	14,244	2.0	248.0
ACT									
Males	n.p.	208.8	310.4	n.p.	217.0	231.5	2,394	1.3	78.9
Females	n.p.	220.6	298.4	n.p.	268.6	265.4	3,412	1.1	33.0
Persons[g]	n.p.	214.5	302.8	n.p.	242.9	247.9	5,806	1.2	54.9
Australia[h]									
Males	**179,740**	**263.4**	**363.8**	**6,996,039**	**318.8**	**307.6**	**176,898**	**1.2**	**56.2**
Females	**235,807**	**343.8**	**423.9**	**8,313,937**	**375.4**	**350.1**	**201,740**	**1.2**	**73.7**
Persons[g]	**415,549**	**303.7**	**393.1**	**15,310,084**	**347.2**	**327.6**	**378,653**	**1.2**	**65.5**
Adjusted Australia[h][i]									
Males	**195,917**	**287.1**	**396.5**	**7,156,760**	**326.1**	**314.5**	**. .**	**1.3**	**82.0**
Females	**257,030**	**374.7**	**462.0**	**8,494,454**	**383.6**	**357.6**	**. .**	**1.3**	**104.5**
Persons[g]	**452,948**	**331.0**	**428.5**	**15,651,338**	**355.0**	**334.8**	**. .**	**1.3**	**93.7**

(continued)

Table 1.02.1 (continued): Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13[(a)(b)(c)]

(a) Data include public and private hospitals in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Age standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age standardised by 5 year age groups to 75+. Age standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(f) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(g) Persons data include sex not stated and indeterminate.

(h) Data includes public and private hospitals in all jurisdictions as well as Other Territories and Residence State not applicable (e.g. overseas, at sea, no fixed address) data.

(i) There are missing hospitalisations with Indigenous status not-stated. For Indigenous Australians, the hospitalisation numbers and rates have been adjusted for Indigenous under-identification using a national adjustment factor of 1.09. By applying this factor, the number of Indigenous hospitalisations was increased by 9% and these additional hospitalisations then subtracted from the number of hospitalisations with Indigenous status not-stated. The rest of the hospitalisations with Indigenous status 'not stated' were then added to the non-Indigenous hospitalisations. For further information see Indigenous identification in hospitals separations data (AIHW 2013).

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.2: Age-specific hospitalisation rates (excluding dialysis) (per 1,000 population), by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	All ages[c] Crude	All ages[c] Age std.[d]
Males										
Indigenous	324.1	106.1	142.7	227.5	348.8	459.5	543.3	793.7	263.4	363.8
Non-Indigenous	263.8	96.5	130.6	137.3	191.8	281.0	473.4	980.2	318.8	307.6
Rate ratio[e]	1.2	1.1	1.1	1.7	1.8	1.6	1.1	0.8	0.8	1.2
Rate difference[f]	60.4	9.6	12.1	90.2	157.0	178.5	69.9	–186.5	–55.4	56.2
Females										
Indigenous	263.5	91.7	352.8	467.3	424.0	445.9	546.6	752.5	343.8	423.9
Non-Indigenous	201.6	79.6	225.4	358.5	331.2	325.3	449.2	837.4	375.4	350.1
Rate ratio[e]	1.3	1.2	1.6	1.3	1.3	1.4	1.2	0.9	0.9	1.2
Rate difference[f]	61.9	12.2	127.4	108.8	92.8	120.7	97.4	–84.9	–31.7	73.7
Persons[g]										
Indigenous	294.4	99.0	245.0	348.4	387.8	452.5	545.0	770.8	303.7	393.1
Non-Indigenous	233.6	88.3	176.9	247.0	261.9	303.3	461.2	903.4	347.2	327.6
Rate ratio[e]	1.3	1.1	1.4	1.4	1.5	1.5	1.2	0.9	0.9	1.2
Rate difference[f]	60.9	10.8	68.1	101.5	125.9	149.1	83.8	–132.5	–43.5	65.5

(a) Data includes public and private hospitals in all jurisdictions.

(b) Financial year reporting.

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio Indigenous: non-Indigenous Australians.

(f) Rate difference Indigenous minus non-Indigenous Australians.

(g) Persons data include sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.3: Adjusted hospitalisations (excluding dialysis), by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000[e]	Number	No. per 1,000[e]	Ratio[f]	Difference[g]
Australia						
Males	179,740	363.8	6,996,039	307.6	1.2	56.2
Females	235,807	423.9	8,313,937	350.1	1.2	73.7
Persons[h]	415,549	393.1	15,310,084	327.6	1.2	65.5
Adjusted Australia[i]						
Males	195,917	396.5	7,156,760	314.5	1.3	82.0
Females	257,030	462.0	8,494,454	357.6	1.3	104.5
Persons[h]	452,948	428.5	15,651,338	334.8	1.3	93.7

(a) Data includes public and private hospitals in all jurisdictions.

(b) Financial year reporting.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Includes all separations in all jurisdictions as well as Other Territories and Residence State not applicable (for example, overseas, at sea, no fixed address).

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio Indigenous: non-Indigenous.

(g) Rate difference Indigenous minus non-Indigenous.

(h) Persons data include sex not stated and indeterminate.

(i) There are 381,653 (176,898 males, 201,740 females, 15 sex missing) hospitalisations with Indigenous status not-stated. For Indigenous Australians, the hospitalisation numbers and rates have been adjusted for Indigenous under-identification using a national adjustment factor of 1.09. This factor was derived from a study undertaken by the AIHW in 2011 & 2012 that assessed the level of Indigenous under-identification in hospital data in all states and territories by comparing information gathered from face-to face interviews in public hospitals with results from hospital records. By applying this factor, the number of Indigenous hospitalisations was increased by 9% and these additional hospitalisations then subtracted from the number of hospitalisations with Indigenous status not-stated. The rest of the hospitalisations with Indigenous status 'not stated' were then added to the non-Indigenous hospitalisations. For further information see Indigenous identification in hospitals separations data (AIHW 2013).

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.4: Hospitalisations (excluding dialysis) by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[a][b]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**[c]	**Number**	**No. per 1,000**[c]	**Ratio**[d]	**Difference**[e]
Major cities	112,448	318.6	10,569,063	323.5	1.0	–4.9
Inner regional	77,974	346.4	3,088,214	344.0	1.0	2.4
Outer regional[f]	95,307	411.8	1,353,168	325.9	1.3	85.9
Remote[g]	53,783	622.3	172,048	318.8	2.0	303.5
Very remote	73,305	470.6	59,949	279.8	1.7	190.9
Total[h]	**415,549**	**393.1**	**15,310,084**	**327.6**	**1.2**	**65.5**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2010).

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(e) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Standard Geographical Classification (ASGC) and Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5a: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous separations			Non-Indigenous separations		
	Males	Females	Persons[c]	Males	Females	Persons[c]
1998–99	36,701	49,015	85,716	815,922	970,129	1,786,064
1999–00	36,972	49,399	86,373	859,779	1,016,118	1,875,915
2000–01	37,259	50,845	88,106	894,175	1,057,403	1,951,590
2001–02	38,486	51,835	90,328	922,319	1,092,752	2,015,092
2002–03	38,325	51,982	90,310	930,197	1,111,116	2,041,335
2003–04	39,820	53,444	93,264	946,455	1,126,695	2,073,151
2004–05	39,710	54,425	94,136	970,433	1,148,754	2,119,191
2005–06	42,032	56,928	98,960	1,040,185	1,232,620	2,272,808
2006–07	41,999	58,958	100,957	1,084,409	1,279,174	2,363,591
2007–08	45,514	61,210	106,724	1,131,855	1,319,876	2,451,744
2008–09	46,504	62,760	109,266	1,178,279	1,391,379	2,569,670
2009–10	49,063	65,563	114,626	1,217,146	1,437,337	2,654,499
2010–11	52,695	70,577	123,272	1,282,471	1,493,308	2,775,788
2011–12	56,263	74,240	130,503	1,344,150	1,572,758	2,916,928
2012–13	58,117	77,254	135,371	1,399,459	1,638,140	3,037,610
Annual change[d]	1,512.0	1,973.9	3,485.7	40,502.8	46,183.4	86,686.1
Per cent change over period[e]	63.4	60.9	61.9	72.3	69.1	70.6

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data include sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 & 10 for 2001 on ward (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5b: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	Females	Persons[c]	Males	Females	Persons[c]
1998–99	342.3	436.0	389.0	260.8	287.5	272.3
1999–00	342.7	427.1	385.3	270.0	296.2	281.3
2000–01	337.9	421.5	380.4	275.0	302.9	287.3
2001–02	341.4	422.2	382.7	277.1	307.4	290.8
2002–03	338.4	417.2	378.5	273.1	306.7	288.4
2003–04	353.9	419.1	386.5	271.4	305.1	286.8
2004–05	339.7	409.0	374.3	271.5	305.2	286.9
2005–06	356.1	421.0	388.3	283.5	321.0	300.7
2006–07	341.8	423.7	383.1	287.5	325.7	305.1
2007–08	368.1	434.1	400.8	291.7	327.6	308.1
2008–09	362.0	430.1	395.8	295.8	336.5	314.6
2009–10	374.9	437.4	405.2	297.8	339.1	316.9
2010–11	385.5	454.3	419.0	306.4	344.5	323.8
2011–12	407.5	464.7	434.3	313.1	354.5	332.2
2012–13	405.8	478.0	441.3	317.4	360.4	337.4
Annual change[d]	4.7	3.0	3.7	3.6	4.8	4.2
Per cent change over period[e]	20.0	10.0	13.9	19.5	23.5	21.8

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data include sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 & 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5c: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Rate ratio[c]			Rate difference[d]		
	Males	**Females**	**Persons**[e]	**Males**	**Females**	**Persons**[e]
1998–99	1.3	1.5	1.4	81.5	148.5	116.6
1999–00	1.3	1.4	1.4	72.7	130.8	104.0
2000–01	1.2	1.4	1.3	63.0	118.6	93.1
2001–02	1.2	1.4	1.3	64.3	114.8	91.9
2002–03	1.2	1.4	1.3	65.3	110.5	90.2
2003–04	1.3	1.4	1.3	82.5	114.0	99.7
2004–05	1.3	1.3	1.3	68.2	103.8	87.4
2005–06	1.3	1.3	1.3	72.6	100.0	87.6
2006–07	1.2	1.3	1.3	54.3	98.1	78.0
2007–08	1.3	1.3	1.3	76.4	106.5	92.7
2008–09	1.2	1.3	1.3	66.2	93.6	81.2
2009–10	1.3	1.3	1.3	77.1	98.3	88.4
2010–11	1.3	1.3	1.3	79.1	109.9	95.3
2011–12	1.3	1.3	1.3	94.4	110.2	102.1
2012–13	1.3	1.3	1.3	88.4	117.6	103.9
Annual change[f]	n.a.	n.a.	n.a.	1.0	–1.9	–0.6
Per cent change over period[g]	n.a.	n.a.	n.a.	21.6	–20.9	–7.9

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(d) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(e) Persons data include sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00 and separations with care types 7.3, 9 & 10 for 2001 on ward (Newborn – unqualified days only; organ procurement and hospital boarder) and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.6: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	% change over period[d]
Indigenous separations											
Males	57,142	61,402	62,297	66,729	69,199	73,338	79,158	84,943	89,300	3,993.1	57.5
Females	77,170	81,519	85,560	89,115	92,269	96,646	104,547	112,043	116,886	4,932.4	52.4
Persons[e]	134,317	142,922	147,857	155,844	161,470	169,984	183,706	196,987	206,187	8,925.2	54.6
Non-Indigenous Australian separations											
Males	2,558,488	2,674,107	2,771,236	2,868,347	2,958,016	3,076,238	3,207,154	3,352,497	3,389,127	107,290.9	33.6
Females	3,080,242	3,225,292	3,333,753	3,429,500	3,547,414	3,691,869	3,798,674	3,984,761	4,033,602	121,401.0	31.5
Persons[e]	5,638,787	5,899,426	6,105,015	6,297,882	6,505,466	6,768,189	7,005,877	7,337,314	7,422,767	228,693.6	32.4
Indigenous rate (separations per 1,000)											
Males	287.2	303.0	296.9	314.6	316.6	329.6	345.9	366.3	373.3	10.8	30.5
Females	345.6	358.1	367.6	377.4	378.9	386.9	408.5	424.7	436.6	10.9	25.4
Persons[e]	316.6	330.6	332.8	346.2	347.9	357.8	376.8	394.5	404.3	10.7	27.3
Non-Indigenous Australian rate (separations per 1,000)											
Males	278.4	285.2	288.9	291.7	293.6	298.0	303.9	310.6	306.5	3.7	10.7
Females	313.1	323.0	327.8	330.1	333.9	340.0	342.9	353.0	349.7	4.6	11.7
Persons[e]	294.3	302.7	307.0	309.5	312.3	317.7	322.0	330.5	326.9	4.2	11.3
Rate ratio[f]											
Males	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.2	1.2	n.a.	n.a.
Females	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	n.a.	n.a.
Persons[e]	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	n.a.	n.a.

(continued)

Table 1.02.6 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change over period[(d)]
Rate difference[(g)]											
Males	8.9	17.8	8.0	22.9	23.0	31.6	42.1	55.7	66.9	7.0	n.p[(h).]
Females	32.6	35.1	39.7	47.3	45.0	46.9	65.6	71.8	86.8	6.3	186.2
Persons[(e)]	22.3	27.9	25.8	36.7	35.6	40.1	54.8	64.1	77.5	6.5	311.4

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data include sex not stated and indeterminate.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Per cent change more than 1,000 per cent.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.7: Hospitalisations, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13[a]

	Number		Per cent		No. per 1,000[b]			
Principal diagnosis	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio**[c]	**Rate difference**[d]
Injury & poisoning & certain other consequences of external causes	54,079	1,127,633	7.2	6.5	45.0	24.8	1.8	20.2
Pregnancy, childbirth and the puerperium[e]	44,331	927,595	5.9	5.3	58.1	43.9	1.3	14.2
Diseases of the respiratory system	42,209	751,829	5.6	4.3	39.4	16.5	2.4	23.0
Diseases of the digestive system	37,612	1,763,402	5.0	10.1	36.1	38.0	0.9	–2.0
Symptoms, signs and abnormal clinical and laboratory findings	36,054	1,253,580	4.8	7.2	37.1	26.6	1.4	10.5
Mental and behavioural disorders	31,402	637,976	4.2	3.6	27.7	14.2	2.0	13.5
Diseases of the circulatory system	22,580	1,001,879	3.0	5.7	31.3	20.4	1.5	10.9
Diseases of the genitourinary system	19,735	831,528	2.6	4.8	20.7	18.0	1.2	2.7
Diseases of the skin & subcutaneous tissue	16,304	285,513	2.2	1.6	13.8	6.2	2.2	7.6
Certain infectious and parasitic diseases	12,591	266,122	1.7	1.5	10.2	5.8	1.7	4.4
Endocrine, nutritional and metabolic diseases	11,066	248,967	1.5	1.4	12.3	5.4	2.3	7.0
Other[f]	87,586	6,214,060	11.7	35.5	90.5	129.9	0.7	–39.4
Subtotal	*415,549*	*15,310,084*	*55.3*	*87.6*	*393.1*	*327.6*	*1.2*	*65.5*
Care involving dialysis	334,265	2,155,803	44.5	12.3	431.9	43.8	9.9	388.1
Total[g]	**751,698**	**17,479,869**	**100.0**	**100.0**	**826.6**	**371.7**	**2.2**	**454.9**

(continued)

Table 1.02.7 (continued): Hospitalisations, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13[(a)]

(a) Data include public and private hospital in all jurisdictions.

(b) Directly age-standardised using the Australian 2001 standard population.

(c) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(d) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(e) Rates and rate ratios are for females only.

(f) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

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

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.8: Hospitalisations of Indigenous persons: principal diagnosis chapter by additional diagnosis chapter of hospitalisation, Australia, 2011–12 to 2012–13[a][b]

	Principal diagnosis														
Additional diagnosis of hospitalisation	**(S00–T98)**	**(O00–O99)**	**(J00–J99)**	**(K00–K93)**	**(R00–R99)**	**(F00–F99)**	**(I00–I99)**	**(N00–N99)**	**(L00–L99)**	**(A00–B99)**	**(E00–E90)**	**(Z49)**	**Other**[c]	***Total (excl. dialysis)***	**Total**
								Per cent[c]							
Injury & poisoning (S00–T98)	43.3	0.8	2.4	2.9	2.8	7.1	5.2	4.0	14.0	3.8	6.1	0.1	6.0	9.6	5.3
Pregnancy, childbirth (O00–O99)	0.2	66.2	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.1	0.2	0.0	0.3	7.2	4.0
Respiratory diseases (J00–J99)	2.8	1.7	19.8	3.5	3.8	2.6	11.9	4.3	2.8	9.7	8.4	0.0	4.7	5.9	3.3
Digestive diseases (K00–K93)	3.3	2.1	4.1	25.4	7.9	3.9	6.8	5.2	2.6	8.2	10.3	0.0	5.6	6.8	3.8
Symptoms, signs and abnormal findings (R00–R99)	10.4	8.3	12.9	10.7	16.9	18.0	17.2	12.0	8.0	17.4	17.9	0.0	10.7	12.4	6.9
Mental and behavioural disorders (F00–F99)	23.9	3.4	11.5	17.8	15.3	51.5	11.5	5.8	6.9	8.1	12.2	0.0	6.9	14.7	8.1
Diseases of the circulatory system (I00–I99)	6.8	1.7	12.3	9.8	11.1	2.9	56.5	14.8	8.1	11.9	35.1	0.9	8.6	11.6	6.8
Genitourinary diseases (N00–N99)	6.0	4.4	8.2	6.4	8.2	2.5	17.3	26.2	7.2	18.2	37.9	14.6	6.8	9.0	11.5
Skin diseases (L00–L99)	4.8	0.8	3.2	1.9	1.5	1.6	3.9	3.3	18.8	8.6	10.2	0.0	3.8	3.9	2.2
Infectious and parasitic diseases (A00–B99)	9.9	5.9	14.7	7.9	5.8	3.3	8.0	23.7	47.3	19.5	17.7	0.0	7.1	10.8	6.0
Endocrine, nutritional & metabolic (E00–E90)	10.7	4.4	21.4	16.5	17.8	8.6	37.2	24.7	18.1	36.6	55.3	4.9	13.6	17.1	11.6
Other[d]	43.6	77.4	46.5	50.0	51.0	59.1	71.4	52.2	53.6	42.6	68.9	1.2	60.0	56.3	31.7
Total number[e]	**54,079**	**44,331**	**42,209**	**37,612**	**36,054**	**31,402**	**22,580**	**19,735**	**16,304**	**12,591**	**11,066**	**334,265**	**87,586**	**415,549**	**749,814**

(continued)

Table 1.02.8 (continued): Hospitalisations of Indigenous persons: principal diagnosis chapter by additional diagnosis chapter of hospitalisation, Australia, 2011–12 to 2012–13[(a)(b)]

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Percentage is the total number of each additional diagnosis divided by the total of principal diagnosis in each column.

(d) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

(e) Total number of hospitalisations for each principal diagnosis.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Sum of components may exceed 100% as more than one additional diagnosis can be reported for each hospitalisation.
3. Excludes separations with care types 7.3, 9 & 10 (newborn – unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.9: Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[b]	Per cent change[c]
	Indigenous no. per 1,000[d]										
Injury & poisoning & certain other consequences of external causes	35.9	37.4	37.9	37.7	39.8	41.2	43.9	45.6	46.7	1.4	31.7
Pregnancy, childbirth and the puerperium	54.2	56.7	58.8	58.8	58.3	57.8	58.4	59.5	59.0	0.4	6.2
Diseases of the respiratory system	35.8	36.8	33.7	36.7	36.7	37.5	39.9	41.5	39.6	0.7	16.3
Diseases of the digestive system	29.8	31.0	31.2	33.0	30.7	31.5	34.5	35.8	37.2	0.8	22.3
Symptoms, signs and abnormal clinical and laboratory findings	25.7	26.9	27.5	29.0	29.9	32.2	35.0	37.2	38.5	1.7	54.0
Mental and behavioural disorders	20.7	20.8	21.3	22.1	22.1	22.6	25.4	27.2	28.8	1.0	41.5
Diseases of the circulatory system	28.0	29.1	28.3	29.8	29.8	28.7	29.6	31.8	31.6	0.4	11.6
Diseases of the genitourinary system	16.1	16.5	16.2	16.0	16.8	17.7	19.9	20.1	21.9	0.7	37.9
Diseases of the skin & subcutaneous tissue	10.8	11.1	11.1	11.9	11.1	11.6	13.6	14.2	14.1	0.5	35.3
Certain infectious and parasitic diseases	5.3	6.1	5.6	6.1	7.0	8.0	7.9	7.9	8.5	0.4	63.1
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other[e]	66.9	70.1	73.8	77.3	77.3	80.4	85.7	91.2	94.9	3.4	40.7
Subtotal	*316.6*	*330.6*	*332.8*	*346.2*	*347.9*	*357.8*	*376.8*	*394.5*	*404.3*	*10.7*	*27.3*
Dialysis	314.9	344.6	357.6	374.5	382.4	392.7	411.1	446.3	455.9	16.6	41.4
Total (includes not stated)[f]	**631.7**	**675.4**	**690.5**	**720.7**	**730.4**	**750.5**	**788.1**	**841.6**	**861.0**	**27.3**	**34.5**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[b]	Per cent change[c]
	Non-Indigenous no. per 1,000[d]										
Injury & poisoning & certain other consequences of external causes	22.0	22.7	23.2	23.3	23.8	24.0	24.6	25.1	24.4	0.3	12.2
Pregnancy, childbirth and the puerperium	44.9	46.6	47.6	46.8	45.6	44.5	43.4	44.2	43.8	–0.4	–6.4
Diseases of the respiratory system	15.6	15.8	15.2	16.3	16.3	16.2	16.6	16.8	16.3	0.1	6.9
Diseases of the digestive system	38.2	38.9	39.4	39.1	37.5	37.9	38.0	38.5	37.8	–0.1	–2.3
Symptoms, signs and abnormal clinical and laboratory findings	20.4	21.4	22.7	23.0	23.8	24.9	26.4	27.2	26.5	0.8	32.7
Mental and behavioural disorders	13.9	13.8	13.9	13.8	14.2	14.7	13.7	14.0	14.2	0.0	2.5
Diseases of the circulatory system	20.8	21.1	21.0	20.7	20.2	20.0	20.8	20.9	20.1	–0.1	–2.9
Diseases of the genitourinary system	17.0	17.4	17.1	16.9	17.0	17.3	17.8	18.2	17.9	0.1	6.1
Diseases of the skin & subcutaneous tissue	5.6	5.7	5.6	5.7	5.7	5.8	6.2	6.3	6.1	0.1	13.2
Certain infectious and parasitic diseases	2.6	3.0	3.0	2.6	3.8	4.2	4.3	4.4	4.4	0.3	82.2
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other[e]	110.3	113.8	115.8	118.0	120.4	123.5	127.1	132.0	132.0	2.8	20.5
Subtotal	*294.3*	*302.7*	*307.0*	*309.5*	*312.3*	*317.7*	*322.0*	*330.5*	*326.9*	*4.2*	*11.3*
Dialysis	35.0	37.7	38.6	39.5	40.4	42.3	43.5	44.2	43.9	1.1	25.0
Total (includes not stated)[f]	**329.5**	**340.5**	**345.9**	**349.1**	**352.9**	**360.2**	**365.7**	**374.8**	**370.9**	**5.3**	**12.8**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[b]	Per cent change[c]
	Ratio[g]										
Injury & poisoning & certain other consequences of external causes	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.8	1.9	n.a.	n.a.
Pregnancy, childbirth and the puerperium	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	n.a.	n.a.
Diseases of the respiratory system	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.5	2.4	n.a.	n.a.
Diseases of the digestive system	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	n.a.	n.a.
Symptoms, signs and abnormal clinical and laboratory findings	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.4	1.5	n.a.	n.a.
Mental and behavioural disorders	1.5	1.5	1.5	1.6	1.6	1.5	1.9	1.9	2.0	n.a.	n.a.
Diseases of the circulatory system	1.3	1.4	1.3	1.4	1.5	1.4	1.4	1.5	1.6	n.a.	n.a.
Diseases of the genitourinary system	0.9	1.0	0.9	0.9	1.0	1.0	1.1	1.1	1.2	n.a.	n.a.
Diseases of the skin & subcutaneous tissue	1.9	2.0	2.0	2.1	1.9	2.0	2.2	2.3	2.3	n.a.	n.a.
Certain infectious and parasitic diseases	2.0	2.1	1.8	2.3	1.8	1.9	1.8	1.8	1.9	n.a.	n.a.
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.a.	n.a.
Other[e]	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	n.a.	n.a.
Subtotal	*1.1*	*1.1*	*1.1*	*1.1*	*1.1*	*1.1*	*1.2*	*1.2*	*1.2*	*n.a.*	*n.a.*
Dialysis	9.0	9.1	9.3	9.5	9.5	9.3	9.5	10.1	10.4	n.a.	n.a.
Total (includes not stated)[f]	**1.9**	**2.0**	**2.0**	**2.1**	**2.1**	**2.1**	**2.2**	**2.2**	**2.3**	**n.a.**	**n.a.**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[b]	Per cent change[c]
	Difference[h]										
Injury & poisoning & certain other consequences of external causes	13.9	14.7	14.7	14.3	15.9	17.3	19.3	20.4	22.3	1.0	65.7
Pregnancy, childbirth and the puerperium	9.3	10.1	11.2	11.9	12.6	13.3	15.0	15.3	15.3	0.8	68.1
Diseases of the respiratory system	20.2	21.0	18.5	20.4	20.4	21.3	23.4	24.8	23.3	0.6	23.9
Diseases of the digestive system	–8.4	–7.9	–8.3	–6.1	–6.8	–6.4	–3.4	–2.7	–0.6	0.9	–79.8
Symptoms, signs and abnormal clinical and laboratory findings	5.3	5.5	4.8	6.0	6.0	7.3	8.6	10.0	12.0	0.8	163.8
Mental and behavioural disorders	6.8	7.0	7.5	8.3	8.0	7.9	11.7	13.2	14.6	1.0	138.0
Diseases of the circulatory system	7.2	8.0	7.3	9.0	9.6	8.7	8.8	10.9	11.6	0.5	54.6
Diseases of the genitourinary system	–0.9	–0.8	–0.9	–0.9	–0.2	0.4	2.1	2.0	4.0	0.6	–256.9
Diseases of the skin & subcutaneous tissue	5.3	5.4	5.5	6.2	5.4	5.8	7.4	7.9	8.0	0.4	60.1
Certain infectious and parasitic diseases	2.7	3.1	2.5	3.5	3.1	3.8	3.6	3.5	4.1	0.2	45.2
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other[e]	–43.4	–43.7	–42.1	–40.8	–43.1	–43.1	–41.3	–40.8	–37.1	0.6	–10.1
Subtotal	*22.3*	*27.9*	*25.8*	*36.7*	*35.6*	*40.1*	*54.8*	*64.1*	*77.5*	*6.5*	*311.4*
Dialysis	279.8	306.9	319.0	335.1	342.0	350.3	367.7	402.1	412.0	15.4	43.5
Total (includes not stated)[f]	**302.3**	**334.8**	**344.6**	**371.7**	**377.4**	**390.3**	**422.4**	**466.8**	**490.1**	**22.0**	**58.6**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)]

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory. Data are reported by place of residence of the patient.

(b) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(c) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

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

(g) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(h) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 & 10 (newborn – unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions.

Source: AIHW analysis of National Hospital Morbidity Database.

Data sources and quality

National Hospital Morbidity Database (NHMD)

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

. .	not applicable
n.a.	not available
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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