

CHAPTER 3

OVERVIEW OF HOSPITAL UTILISATION

HOSPITAL SEPARATIONS

In Australia during 1999–2000 there were 5.9 million hospital separations recorded. Separations where patients were recorded as Indigenous accounted for 170,862 or 2.9% of total separations. Males identified as Indigenous accounted for 2.7% of all male separations. Females identified as Indigenous accounted for 3.1% of all female separations. As at 30 June 2001, Indigenous peoples made up 2.4% of Australia's population (ABS 2002).

Hospital sector Two-thirds of separations for both the total population and the non-Indigenous population occur in public hospitals and private hospitals account for the remainder. However, public hospitals accounted for more than 97% of both male and female separations identified as Indigenous (table 3.1). While Indigenous patients may be correctly identified less frequently in private hospitals than in public hospitals, the much lower proportions of separations identified as Indigenous patients in private hospitals largely reflects lower attendance at private hospitals by Indigenous patients.

3.1 HOSPITAL SEPARATIONS, BY HOSPITAL SECTOR(a)

	<u>Separations identified as Indigenous</u>			<u>Non-Indigenous separations(b)</u>			<i>Proportion of separations identified as Indigenous</i>	
	<i>no.</i>	<i>%</i>	<i>rate(c)</i>	<i>no.</i>	<i>%</i>	<i>rate(c)</i>	<i>rate ratio(d)</i>	<i>%</i>
MALES								
Public hospitals(e)	70 217	97.1	511	1 751 453	65.9	188	2.7	3.9
Private hospitals(f)(g)	2 114	2.9	33	906 485	34.1	96	0.3	0.2
Total	72 331	100.0	544	2 657 938	100.0	283	1.9	2.6
FEMALES								
Public hospitals(e)	96 073	97.5	643	1 955 020	63.7	199	3.2	4.7
Private hospitals(f)(g)	2 458	2.5	26	1 114 911	36.3	110	0.2	0.2
Total	98 531	100.0	669	3 069 931	100.0	309	2.2	3.1

(a) Data are for the financial year 1999–2000.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) Rate ratio is equal to the rate of separations identified as Indigenous divided by the rate of non-Indigenous separations.

(e) Includes public psychiatric hospitals.

(f) No data were available for a number of small private and private free-standing day hospital facilities.

(g) Includes private free-standing day hospitals.

Age-specific hospital separation rates The principal diagnosis, 'care involving dialysis', used in the treatment of kidney failure, was recorded for 29% of all separations among patients identified as Indigenous and 8% of all separations among non-Indigenous patients. It is therefore useful to look at Indigenous/non-Indigenous comparisons of hospital separations both including and excluding 'care involving dialysis'.

'Care involving dialysis' was most common for separations for adult patients identified as Indigenous, although the age onset of the disease is younger than in the general population (ABS & AIHW 2001). The associated procedure — haemodialysis — is mostly performed on a same day basis and patients may regularly have several treatments weekly. Further information on 'care involving dialysis' and haemodialysis are presented in chapters 4 and 5.

Age-specific hospital separation rates including separations for which 'care involving dialysis' was recorded, in table 3.2 and graph 3.3 indicate that at all ages, and for both sexes, patients recorded as Indigenous had higher separation rates than non-Indigenous rates. The smallest difference was between the ages 5–14 years, for both males and females, with much higher rate ratios for both males over age 24 and females over age 14.

After excluding separations where the principal diagnosis was 'care involving dialysis', the Indigenous rate ratio showed a similar pattern of falling through childhood age groups, rising through early and mid adulthood age groups (to the mid 50s) and declining again in older age groups. However, from age 35 years onwards, excluding 'care involving dialysis' substantially lowers the rate ratios (see table 3.4 and graph 3.5).

3.2 AGE-SPECIFIC HOSPITAL SEPARATION RATES(a)

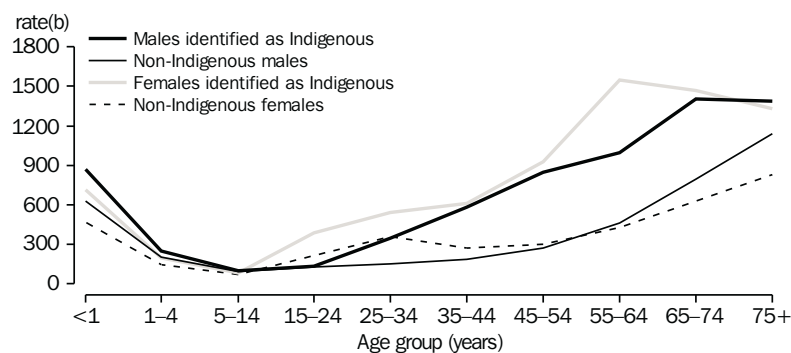
Age group (years)	Males			Females		
	Indigenous rate(a)	Non-Indigenous rate(a)(b)	Rate ratio(c)	Indigenous rate(a)	Non-Indigenous rate(a)(b)	Rate ratio(c)
Under 1	869	627	1.4	716	468	1.5
1–4	251	201	1.3	197	144	1.4
5–14	101	94	1.1	83	73	1.1
15–24	136	128	1.1	386	213	1.8
25–34	348	152	2.3	542	361	1.5
35–44	585	189	3.1	614	274	2.2
45–54	848	273	3.1	930	299	3.1
55–64	999	462	2.2	1 546	425	3.6
65–74	1 408	796	1.8	1 465	628	2.3
75 and over	1 385	1 142	1.2	1 332	832	1.6

(a) Per 1,000 population. Data are for the financial year 1999–2000.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

(c) Rate ratio is equal to the rate of separations identified as Indigenous divided by the rate of non-Indigenous separations.

3.3 HOSPITAL SEPARATIONS(a)



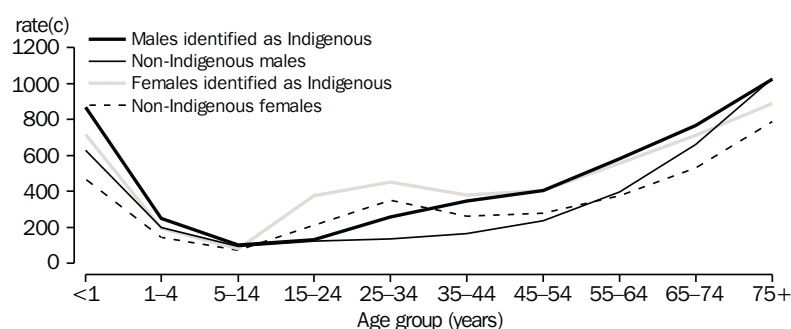
(a) Data are for the financial year 1999-2000.
 (b) Per 1,000 population.

3.4 AGE-SPECIFIC HOSPITAL SEPARATION RATES EXCLUDING CARE INVOLVING DIALYSIS(a)

Age group (years)	Males			Females		
	Indigenous rate(a)	Non-Indigenous rate(a)(c)	Rate ratio(d)	Indigenous rate(a)	Non-Indigenous rate(a)(c)	Rate ratio(d)
Under 1	869	627	1.4	716	468	1.5
1-4	251	200	1.3	197	144	1.4
5-14	101	94	1.1	83	73	1.1
15-24	132	123	1.1	378	211	1.8
25-34	259	137	1.9	451	352	1.3
35-44	346	166	2.1	380	263	1.4
45-54	406	238	1.7	406	279	1.5
55-64	581	397	1.5	557	375	1.5
65-74	766	663	1.2	714	532	1.3
75 and over	1 023	1 029	1.0	888	788	1.1

(a) Per 1,000 population. Data are for the financial year 1999-2000.
 (b) Excludes all records with a principal diagnosis of 'care involving dialysis'.
 (c) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.
 (d) Rate ratio is equal to the rate of separations identified as Indigenous divided by the rate of non-Indigenous separations.

3.5 HOSPITAL SEPARATIONS(a) EXCLUDING CARE INVOLVING DIALYSIS(b)



(a) Data are for the financial year 1999-2000.
 (b) Excludes all records with a principal diagnosis of 'care involving dialysis'.
 (c) Per 1,000 population.

Separations by State and Territory of usual residence

Males and females identified as Indigenous had higher separation rates when compared with non-Indigenous males and females in most States and Territories. The rate of hospitalisation was, overall, two to four times higher for people identified as Indigenous living in the Northern Territory, Western Australia, South Australia and Queensland compared to non-Indigenous people for these jurisdictions (table 3.6). As noted in Chapter 2, caution is needed in comparing data across jurisdictions as some public and private hospitals are omitted from the data for some jurisdictions. For example, the restriction of Northern Territory data to only public hospitals is likely to understate the non-Indigenous hospitalisation rates and overstate the Indigenous to non-Indigenous separation rate ratios for that jurisdiction.

3.6 HOSPITAL SEPARATIONS(a) IDENTIFIED AS INDIGENOUS BY STATE/ TERRITORY OF USUAL RESIDENCE

State and Territory	Separations identified as Indigenous		Non-Indigenous separations(b)		rate ratio(e)	Proportion of separations identified as Indigenous	Proportion of the population identified as Indigenous(f)
	no.	rate(c)(d)	no.	rate(c)(d)		%	%
MALES							
New South Wales	14 905	420	859 420	267	1.6	1.7	1.8
Victoria	2 323	270	690 478	291	0.9	0.3	0.5
Queensland	19 683	552	514 912	300	1.8	3.7	3.2
South Australia	5 511	715	229 570	296	2.4	2.3	1.6
Western Australia(g)	14 832	700	251 287	285	2.5	5.6	3.1
Tasmania	470	133	58 279	250	0.5	0.8	3.5
Northern Territory(h)	13 868	827	12 553	214	3.9	52.5	26.9
Australian Capital Territory	504	479	29 199	215	2.2	1.7	1.1
Australia(i)	72 331	544	2 657 938	283	1.9	2.6	2.2
FEMALES							
New South Wales	19 349	456	991 983	292	1.6	1.9	1.8
Victoria	3 728	414	815 272	319	1.3	0.5	0.5
Queensland	27 184	693	576 750	324	2.1	4.5	3.3
South Australia	7 316	915	271 959	336	2.7	2.6	1.6
Western Australia(g)	20 571	914	288 433	312	2.9	6.7	3.3
Tasmania	779	141	69 394	285	0.5	1.1	3.4
Northern Territory(h)	19 084	976	12 891	220	4.4	59.7	30.0
Australian Capital Territory	383	1275	33 743	225	5.7	1.1	1.1
Australia(i)	98 531	669	3 069 931	309	2.2	3.1	2.2

(a) Based on place of usual residence. Data are for the financial year 1999–2000 for public and private hospitals.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) The true rate of hospitalisation of Indigenous people in States and Territories will be underestimated to the extent that Indigenous people are under-identified in the hospital records of those jurisdictions (refer chapter 2, Methods and data quality).

(e) Rate ratio is equal to the rate of separations identified as Indigenous divided by the rate of non-Indigenous separations.

(f) As estimated for 31 December 1999.

(g) The Health Department of Western Australia suggests a correction factor of 1.09 for state level Indigenous counts, although this has not been applied to data presented in this table.

(h) Public hospitals only.

(i) Includes those usually resident in other Australian territories or overseas, and those for whom place of usual residence was not stated.

Same day separations In 1999–2000 about half of all hospital separations occurred on a same day basis, that is, patients were admitted and discharged on the same day. Indigenous patients were less likely than non-Indigenous patients to have a same day separation. The principal diagnosis for same day separations for Indigenous patients was more likely to be coded as ‘care involving dialysis’ than for non-Indigenous patients.

Males and females identified as Indigenous respectively experienced 45% and 46% of separations on a same day basis, compared with 51% for non-Indigenous males and 48% for non-Indigenous females (table 3.7). ‘Care involving dialysis’ was reported for over a quarter of all Indigenous separations (table 4.1) and for 63% and 65% of same day separations for Indigenous male and female patients respectively (table 3.7). In comparison, ‘care involving dialysis’ was reported for 21% of non-Indigenous male same day separations and 13% of non-Indigenous female same day separations. When separations for which ‘care involving dialysis’ are excluded, 17% of Indigenous male and 16% of Indigenous female separations were on a same day basis, compared with 40% of non-Indigenous male and 42% of non-Indigenous female same day separations (table 3.7).

3.7 SAME DAY SEPARATIONS(a)

	<i>Separations for patients identified as Indigenous</i>			<i>Non-Indigenous separations(b)</i>		
	<i>no.</i>	<i>% of same day separations</i>	<i>% of all separations</i>	<i>no.</i>	<i>% of same day separations</i>	<i>% of all separations</i>
MALES						
Same day separations for care involving dialysis	20 339	63	28	290 309	21	11
Same day separations for all other principal diagnoses	11 994	37	17	1 069 735	79	40
<i>Total same day separations</i>	<i>32 333</i>	<i>100</i>	<i>45</i>	<i>1 360 044</i>	<i>100</i>	<i>51</i>
FEMALES						
Same day separations for care involving dialysis	29 524	65	30	193 176	13	6
Same day separations for all other principal diagnoses	15 822	35	16	1 272 342	87	42
<i>Total same day separations</i>	<i>45 346</i>	<i>100</i>	<i>46</i>	<i>1 465 518</i>	<i>100</i>	<i>48</i>

(a) Data are for the financial year 1999–2000.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

Average length of stay For separations which did not occur on a same day basis, the average length of stay was about 5.6 days for Indigenous patients, and 6.5 days for non-Indigenous patients. Apart from patients aged less than one, the length of stay generally increased with age group. For most age-groups, the average length of stay for patients identified as Indigenous was longer than for non-Indigenous patients (table 3.8).

3.8 AVERAGE LENGTH OF STAY(a)

Age groups (years)	Males		Females	
	Identified as Indigenous	Non-Indigenous(b)	Identified as Indigenous	Non-Indigenous(b)
	no. of days	no. of days	no. of days	no. of days
Less than 1	6.3	6.0	6.9	6.4
1-4	3.5	2.4	4.0	2.4
5-14	3.5	2.7	3.7	2.9
15-24	6.1	5.3	4.3	3.8
25-34	6.8	5.8	4.2	4.2
35-44	5.7	5.8	4.8	4.9
45-54	7.3	5.8	5.3	5.7
55-64	6.9	6.5	7.7	6.2
65-74	10.8	7.7	8.8	8.0
75 and over	14.1	9.6	14.1	11.3
Average all age groups	6.3	6.7	5.2	6.5

(a) Excludes same-day separations. Data are for the financial year 1999-2000.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

Mode of separation

There are several ways in which a patient can leave a hospital. These include when the patient is discharged and goes home; is transferred to another facility; leaves against medical advice; dies; or leaves for other, or unspecified reasons. Patients returning home accounted for 92% of all separations. Indigenous patients were more likely than non-Indigenous patients to have their separation mode recorded as having left against medical advice, and less likely to have their separation mode recorded as having died while in hospital (table 3.9).

3.9 HOSPITAL SEPARATIONS BY MODE OF SEPARATION(a)

	Identified as Indigenous			Non-Indigenous(b)		
	Males	Females	Total	Males	Females	Total
	%	%	%	%	%	%
Went home	87.4	89.7	88.7	92.1	92.7	92.5
Transferred to another facility	7.1	6.3	6.6	5.1	5.0	5.1
Left against medical advice	4.1	2.9	3.4	0.5	0.3	0.4
Died	0.7	0.5	0.6	1.4	1.0	1.2
Other(c)	0.8	0.7	0.7	0.9	1.0	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) Data are for the financial year 1999-2000.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was not reported.

(c) Includes statistical discharge, unknown or not supplied.

Indigenous identification In 1999–2000, there were 72,332 separations for males identified as Indigenous, and 98,532 for females identified as Indigenous. Of these 92.3% were identified as Aboriginal, 5.2% as Torres Strait Islander, 1.9% as both Aboriginal and Torres Strait Islander and 0.5% were identified as Indigenous without further specification (table 3.10).

3.10 HOSPITAL SEPARATIONS BY INDIGENOUS GROUP(a)

	<i>Identified as Indigenous</i>					
	<i>Males</i>		<i>Females</i>		<i>Total</i>	
	no.	%	no.	%	no.	%
Aboriginal	66 912	92.5	90 823	92.2	157 735	92.3
Torres Strait Islander	3 350	4.6	5 569	5.7	8 919	5.2
Both Aboriginal & Torres Strait Islander origin	1 432	2.0	1 846	1.9	3 278	1.9
Indigenous not further specified	638	0.9	294	0.3	932	0.5
Total	72 332	100.0	98 532	100.0	170 864	100.0

(a) Data are for the financial year 1999–2000. Includes separations for which age was not stated.

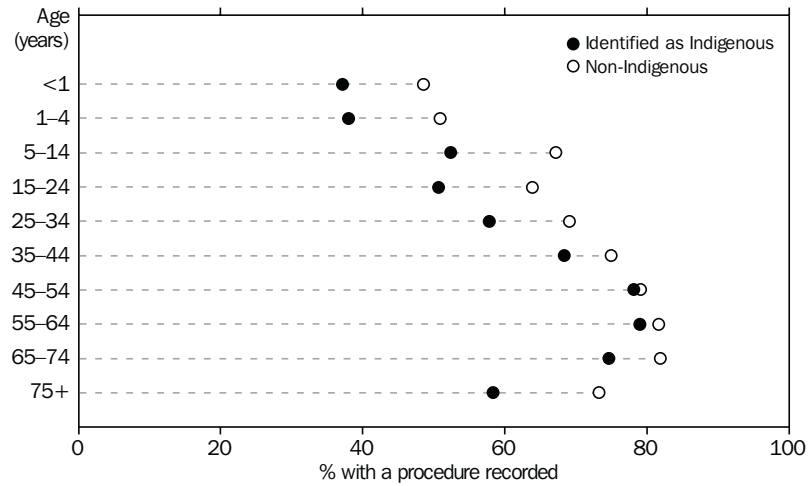
PROCEDURES

Procedures can be analysed as either the number reported per 1,000 total population, or the number reported per 100 separations. Peoples identified as Indigenous were more likely to undergo a procedure than the non-Indigenous population (table 5.4). However, hospitalised Indigenous patients were less likely than non-Indigenous patients to have a procedure reported (graph 5.19). This was evident for every age group and for both males and females.

It is important to note that this publication is not comparable with the previous edition, which only considered the formerly recognised concept of 'principal procedure', rather than all procedures. The total of all procedures documented in separation records is higher than the number of principal procedures in 1999–2000 by 50% for Indigenous females, 54% for Indigenous males, 73% for non-Indigenous males and 78% for non-Indigenous females. Because the changes in recording increase the non-Indigenous procedure rates to a greater extent than the Indigenous rates, rate ratios overall will be lower than those calculated using principal procedures only. Therefore the procedure rates and ratios presented in this issue cannot be compared with the rates and ratios appearing in the previous edition of this publication. As noted in the publication summary, further analysis of the disparities in principal procedure rates between the Indigenous and non-Indigenous population has been conducted recently, for separations reported by public hospitals (Cunningham, 2002).

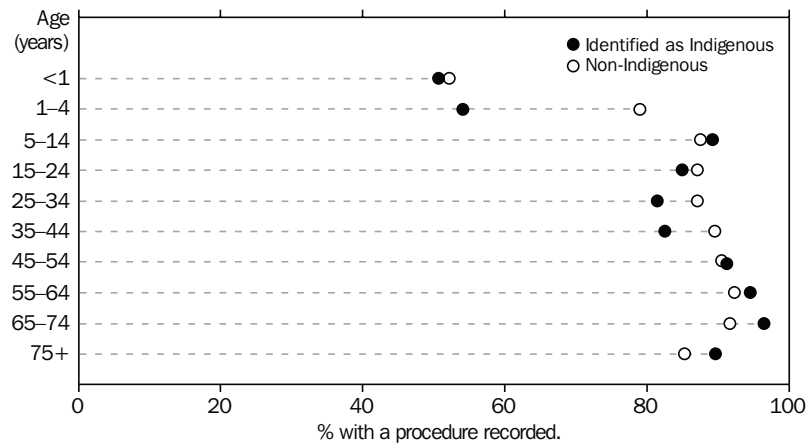
Hospital sector The proportion of separations with one or more procedures differed between public and private hospitals (graphs 3.11 and 3.12). Patients separating from a private hospital were more likely than those separating from a public hospital to have had a procedure recorded, independent of their Indigenous status or age.

3.11 PUBLIC HOSPITAL SEPARATIONS WITH A PROCEDURE RECORDED(a)



(a) Data are for the financial year 1999-2000.

3.12 PRIVATE HOSPITAL SEPARATIONS WITH A PROCEDURE RECORDED(a) (b)



(a) Data are for the financial year 1999-2000.

(b) No data were available for a number of small private and private free-standing day hospital facilities.

As a proportion of all procedures, patients identified as Indigenous were less likely than non-Indigenous patients to have a procedure performed in a private hospital. Procedures performed in public hospitals accounted for 96% of all procedures for patients identified as Indigenous, compared to 62% of procedures recorded for non-Indigenous patients (table 3.13).

3.13 PROCEDURES BY HOSPITAL SECTOR(a)

	<i>Public hospitals(b)</i>		<i>Private hospitals(c)(d)</i>		<i>Total</i>	
	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>%</i>
PROCEDURES FOR SEPARATIONS IDENTIFIED AS INDIGENOUS						
Males	65 448	95.5	3 072	4.5	68 520	100.0
Females	92 379	96.5	3 331	3.5	95 710	100.0
<i>Total</i>	<i>157 827</i>	<i>96.1</i>	<i>6 403</i>	<i>3.9</i>	<i>164 230</i>	<i>100.0</i>
PROCEDURES FOR NON-INDIGENOUS SEPARATIONS(e)						
Males	2 284 647	62.9	1 350 301	37.1	3 634 948	100.0
Females	2 639 690	61.6	1 647 476	38.4	4 287 166	100.0
<i>Total</i>	<i>4 924 337</i>	<i>62.2</i>	<i>2 997 777</i>	<i>37.8</i>	<i>7 922 114</i>	<i>100.0</i>

(a) Data are for the financial year 1999–2000.

(b) Includes public psychiatric hospitals.

(c) Includes private free-standing day clinics.

(d) No data were available for a number of small private and private free-standing day hospital facilities.

(e) Includes procedures identified as non-Indigenous and those for whom Indigenous status was not reported.

Further analysis of procedures is provided in chapter 5 of this publication.