9 Surgery in Australian hospitals

This chapter presents information on surgery in Australian hospitals.

It includes an overview of surgery in public and private hospitals, based on information for almost 2.5 million acute separations involving surgery in 2012–13, sourced from the NHMD. It then presents more detailed information on surgery for separations with an *Emergency* or *Elective* urgency of admission that includes:

- demographic information on the patients' age, sex, Indigenous status, remoteness area and SES of area of usual residence
- administrative information, including the modes of admission and separation and funding source for the episode
- clinical information, including the principal diagnoses and procedures performed.

This chapter also includes waiting times information for about 651,000 patients admitted from public hospital elective surgery waiting lists in 2012–13, for which additional demographic information has been sourced from the NHMD.

Timely provision of the NESWTDC data by state and territory health authorities allowed overall waiting times information to be reported in *Australian hospital statistics* 2012–13: elective surgery waiting times (AIHW 2013d) in October 2013.

Information on public hospital elective surgery waiting times for the calendar year 2013 is also reported in this chapter as this is already available.

What data are reported?

Admissions involving surgery

Information on admitted patient care for both *Emergency* and *Elective* admissions involving surgery is derived from the NHMD (see Appendix A). Terms relevant to admitted patient care data are summarised in Box 6.1.

As the NHMD includes information on admitted patient care for essentially all public and private hospitals, it can provide an overview of 'elective' surgery that is beyond the scope of the NESWTDC, which is restricted to waiting lists managed by public hospitals.

Elective surgery waiting times

The scope of the NESWTDC is patients on waiting lists for elective surgery that are managed by public hospitals. This may include *Public patients* treated in private hospitals and patients other than *Public patients* treated in public hospitals.

For the NESWTDC, the data reported are for patients removed from elective surgery waiting lists in public hospitals between 1 July 2012 and 30 June 2013. It is estimated that the NESWTDC data covers about 96% of all elective surgery in public hospitals. Waiting times data are not available for private hospitals. See Appendix A for more information.

For 2012–13, data from the NESWTDC were linked to the patient's admitted patient record by the state or territory health authorities. These linked records were provided to the AIHW as part of the NHMD.

The elective surgery data in the NHMD allowed analysis of public hospital waiting times for elective surgery by remoteness area and socioeconomic status of the patient's usual residence. Estimates of the separation rates for indicator procedures and for cancer-related principal diagnoses are included.

Box 9.1: Definitions

How are admissions involving surgery defined in this chapter?

Separations were included for which the care type was reported as *Acute*, *Newborn* (with at least one qualified day) and records where the care type was not reported.

Admissions involving surgery are defined as acute care separations with a 'surgical procedure' reported, based on the procedures used to define 'surgical' DRGs in AR-DRG version 6.0x (DoHA 2010). Separations for *Specialist mental health care* and *Childbirth* were excluded (see Chapter 6).

Admissions involving surgery are presented in this chapter as **emergency** and **elective admissions involving surgery**. *Emergency admissions* includes separations for which the Urgency of admission was reported as *Emergency* (about 300,000 records nationally). *Elective admissions* includes separations for which the Urgency of admission was reported as *Elective* (about 2 million records nationally). A relatively small number of separations involving surgery had an Urgency of admission that was *Not assigned* or *Not reported* (about 26,000 records nationally). These records are in Table 9.1 but are not included in subsequent tables in this chapter.

The **elective admissions involving surgery** using admitted patient care data from the NHMD is not necessarily the same as **elective surgery** as defined for the NESWTDC.

Waiting times data for elective surgery

For the NESWTDC, elective surgery comprises elective care (admission could be delayed by at least 24 hours), where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (AIHW 2013i).

Box 9.2: What are the limitations of the data?

Admitted patient care data

- Limitations of the data on admitted patient care are outlined in Chapter 6 and Appendix A.
- The quality of Indigenous status data in the NHMD is variable and these data should be used with caution. For more information, see Appendix A.
- In the Northern Territory, urgency of admission for private hospital separations was
 missing for all records. For the purposes of this chapter, all separations involving
 surgery have been categorised as elective admissions involving surgery. Therefore,
 these counts may not agree with counts presented for non-emergency surgery in other
 chapters in this report.

(continued)

Box 9.2 (continued): What are the limitations of the data? Linked NHMD and NESWTDC data

- For 2012-13, the linked data accounted for about 96% of public hospital elective admissions involving surgery. There was some variation in the linked data coverage between states and territories. For some states, the number of linked records exceeded the number of elective admissions involving surgery because the linked data include emergency admissions for elective surgery or because some patients may receive more than one awaited surgery during one admission.
- Coverage of the linked data by remoteness area ranged from 86% in *Inner regional* areas to 100% in Major cities. Coverage by SES group ranged from 89% for the second most disadvantaged group to 100% for the least disadvantaged group (5- Highest). These variations in coverage should be considered when interpreting the waiting times and the age-standardised rates in this chapter.
- Methods to calculate waiting times have varied across states and territories and over time (see Australian hospital statistics 2012–13: elective surgery waiting times, AIHW 2013d).
- In 2012-13, for patients who were admitted after being transferred from another hospital's waiting list, New South Wales, South Australia and the Northern Territory reported the total time waited on all hospital waiting lists. This could have an effect of increasing the waiting times reported for overall removals for those jurisdictions relative to others.
- From 2009-10, the Victorian Department of Health has reported data for the Albury Base Hospital as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria whereas New South Wales formerly reported these data and included in statistics.

How has surgery activity changed over time?

Between 2011-12 and 2012-13, separations involving surgery increased by 1.4% to almost 2.5 million.

Between 2008–09 and 2012–13, the number of separations involving surgery rose by an average of 2.8% per year (Table 9.1). Over the same period, the number of emergency admissions involving surgery increased by an average of 3.9% per year and the number of elective admissions involving surgery rose by an average of 3.0% per year. The average annual rise in elective admissions involving surgery was higher in private hospitals (3.9%) than in public hospitals (1.3%).

States and territories

Between 2008-09 and 2012-13, the number of emergency admissions involving surgery increased for public hospitals in most states and territories (Table 9.2). Emergency admissions involving surgery in private hospitals also rose in most states and territories.

Over this period, public hospitals accounted for the majority (87% to 88%) of emergency admissions involving surgery.

Victoria had the highest increase in emergency admissions involving surgery (5.9%) in private hospitals between 2011–12 and 2012–13.

Table 9.1: Separations involving surgery by urgency of admission, public and private hospitals, 2008–09 to 2012–13

						Chan	ge (%)
	2008–09	2009–10	2010–11	2011–12	2012–13	Average since 2008–09	Since 2011–12
Public hospitals							
Emergency admissions	226,469	229,707	243,771	256,804	260,803	3.6	1.6
Elective admissions	644,175	656,741	669,884	676,148	679,084	1.3	0.4
Sub-total	870,644	886,448	913,655	932,952	939,887	1.9	0.7
Childbirth-related surgery	62,537	64,347	65,993	69,039	70,844	3.2	2.6
Urgency not assigned	15,597	15,849	15,760	17,461	17,429	2.8	-0.2
Urgency not reported ^(a)	2	3,327	284	218	238	n.p.	n.p.
All surgery	948,780	969,971	995,692	1,019,670	1,028,398	2.0	0.9
Private hospitals							
Emergency admissions	30,575	33,069	36,556	38,634	39,173	6.4	1.4
Elective admissions	1,172,326	1,245,704	1,279,501	1,339,422	1,363,566	3.9	1.8
Sub-total	1,202,901	1,278,773	1,316,057	1,378,056	1,402,739	3.9	1.8
Childbirth-related surgery	35,474	37,097	35,698	36,812	37,500	1.4	1.9
Urgency not assigned ^(a)	34,278	18,745	9,206	8,075	8,381	n.p.	n.p.
Urgency not reported ^(a)	0	330	2,110	1,253	78	n.p.	n.p.
All surgery	1,272,653	1,334,945	1,363,071	1,424,196	1,448,698	3.3	1.7
All hospitals							
Emergency admissions	257,044	262,776	280,327	295,438	299,976	3.9	1.5
Elective admissions	1,816,501	1,902,445	1,949,385	2,015,570	2,042,650	3.0	1.3
Sub-total	2,073,545	2,165,221	2,229,712	2,311,008	2,342,626	3.1	1.4
Childbirth-related surgery	98,011	101,444	101,691	105,851	108,344	2.5	2.4
Urgency not assigned ^(a)	49,875	34,594	24,966	25,536	25,810	n.p.	n.p.
Urgency not reported ^(a)	2	3,657	2,394	1,471	316	n.p.	n.p.
All surgery	2,221,433	2,304,916	2,358,763	2,443,866	2,477,096	2.8	1.4

⁽a) The average change per year is not shown due to low numbers or known data quality issues.

Between 2008–09 and 2012–13, the number of elective admissions involving surgery for public hospitals increased in all states and territories (Table 9.3), with the highest increase in Tasmania (4.3%). Western Australia had the highest average annual rise in elective admissions involving surgery (5.5%) in private hospitals.

Over this period, private hospitals accounted for the majority (65% to 67%) of elective admissions involving surgery.

Between 2011–12 and 2012–13, there were increases in the numbers of elective admissions involving surgery for public hospitals in New South Wales, Western Australia, the Australian Capital Territory and the Northern Territory.

Table 9.2: Emergency admissions involving surgery, public and private hospitals, states and territories, 2008-09 to 2012-13

						Chan	nange (%)	
	2008–09	2009–10	2010–11	2011–12	2012–13	Average since 2008–09	Since 2011–12	
New South Wales								
Public hospitals	77,185	77,905	79,858	84,980	86,019	2.7	1.2	
Private hospitals	4,278	4,204	4,046	4,296	4,175	-0.6	-2.8	
All hospitals	81,463	82,109	83,904	89,276	90,194	2.6	1.0	
Victoria								
Public hospitals	54,716	57,817	59,997	62,528	61,784	3.1	-1.2	
Private hospitals	6,964	7,874	8,964	9,988	10,574	11.0	5.9	
All hospitals	61,680	65,691	68,961	72,516	72,358	4.1	-0.2	
Queensland								
Public hospitals	35,794	36,979	39,814	42,632	45,608	6.2	7.0	
Private hospitals	9,649	10,533	11,241	11,047	11,162	3.7	1.0	
All hospitals	45,443	47,512	51,055	53,679	56,770	5.7	5.8	
Western Australia								
Public hospitals	25,101	26,076	28,025	29,296	29,945	4.5	2.2	
Private hospitals	3,717	4,842	5,501	5,433	5,441	10.0	0.1	
All hospitals	28,818	30,918	33,526	34,729	35,386	5.3	1.9	
South Australia								
Public hospitals	18,945	18,720	19,531	20,238	20,675	2.2	2.2	
Private hospitals	5,201	5,013	6,233	7,331	7,207	8.5	-1.7	
All hospitals	24,146	23,733	25,764	27,569	27,882	3.7	1.1	
Tasmania ^(a)								
Public hospitals	5,711	2,500	5,770	5,902	5,819	0.5	-1.4	
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Australian Capital Territory								
Public hospitals	5,238	5,788	6,377	6,600	6,522	5.6	-1.2	
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Northern Territory								
Public hospitals	3,779	3,922	4,399	4,628	4,431	4.1	-4.3	
Private hospitals ^(b)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Total								
Public hospitals	226,469	229,707	243,771	256,804	260,803	3.6	1.6	
Private hospitals	30,575	33,069	36,556	38,634	39,173	6.4	1.4	
All hospitals	257,044	262,776	280,327	295,438	299,976	3.9	1.5	

⁽a) For Tasmania in 2009–10, urgency of admission was not reported for a large number of records.

⁽b) For private hospitals in the Northern Territory, urgency of admission was missing for all records. All Northern Territory private hospital separations involving surgery have been categorised as elective admissions. Therefore, the counts of emergency admissions involving surgery are likely to be under-estimated.

Table 9.3: Elective admissions involving surgery, public and private hospitals, states and territories, 2008–09 to 2012–13

					2011–12 2012–13	Change (%)	
	2008–09	2009–10	2010–11	2011–12		Average since 2008–09	Since 2011–12
New South Wales							
Public hospitals	183,554	184,325	189,681	193,730	196,926	1.8	1.6
Private hospitals	363,722	382,465	391,822	409,531	410,613	3.1	0.3
All hospitals	547,276	566,790	581,503	603,261	607,539	2.6	0.7
Victoria							
Public hospitals	196,717	201,661	202,715	199,876	198,973	0.3	-0.5
Private hospitals	284,616	306,155	313,182	331,335	337,107	4.3	1.7
All hospitals	481,333	507,816	515,897	531,211	536,080	2.7	0.9
Queensland							
Public hospitals	108,311	112,458	114,288	115,709	114,334	1.4	-1.2
Private hospitals	253,890	270,111	275,223	288,108	295,551	3.9	2.6
All hospitals	362,201	382,569	389,511	403,817	409,885	3.1	1.5
Western Australia							
Public hospitals	65,128	65,452	69,188	70,892	73,498	3.1	3.7
Private hospitals	127,671	132,185	145,057	153,090	157,876	5.5	3.1
All hospitals	192,799	197,637	214,245	223,982	231,374	4.7	3.3
South Australia							
Public hospitals	63,054	63,060	64,087	65,644	64,458	0.6	-1.8
Private hospitals	98,106	101,183	100,106	101,816	105,699	1.9	3.8
All hospitals	161,160	164,243	164,193	167,460	170,157	1.4	1.6
Tasmania ^(a)							
Public hospitals	11,662	14,349	13,832	13,945	13,818	4.3	-0.9
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory							
Public hospitals	10,018	9,522	10,149	10,317	10,421	1.0	1.0
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Northern Territory							
Public hospitals	5,731	5,914	5,944	6,035	6,656	3.8	10.3
Private hospitals ^(b)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total							
Public hospitals	644,175	656,741	669,884	676,148	679,084	1.3	0.4
Private hospitals	1,172,326	1,245,704	1,279,501	1,339,422	1,363,566	3.9	1.8
All hospitals	1,816,501	1,902,445	1,949,385	2,015,570	2,042,650	3.0	1.3

⁽a) For Tasmania in 2009–10, urgency of admission was not reported for a large number of records.

⁽b) For private hospitals in the Northern Territory, urgency of admission was missing for all records. All Northern Territory private hospital separations involving surgery have been categorised as elective admissions. Therefore, the counts of elective admissions involving surgery are likely to be over-estimated.

How much activity was there in 2012–13?

In 2012–13, there were almost 300,000 emergency admissions involving surgery and more than 2 million elective admissions involving surgery (Table 9.4).

Nationally, there were 99 separations involving surgery per 1,000 population, with emergency admissions accounting for 13 per 1,000 population. There was some variation among states and territories in the proportion of separations involving surgery that were emergency admissions, ranging from 12% in Victoria to 40% in the Northern Territory (public hospitals only).

Table 9.4: Separations involving surgery per 1,000 population, by urgency of admission, all hospitals, states and territories, 2012–13

	NSW	Vic	Qld	WA	SA	Tas ^(a)	ACT ^(a)	NT ^(a)	Total ^(b)
Emergency admissions									
Separations	90,194	72,358	56,770	35,386	27,882	5,819	6,522	4,431	299,976
Separations per 1,000 population	11.8	12.3	12.3	14.5	15.3	10.9	17.7	19.8	12.8
Elective admissions									
Separations	607,539	536,080	409,885	231,374	170,157	13,818	10,421	6,656	2,042,650
Separations per 1,000 population	78.1	90.8	87.5	94.5	93.5	24.9	29.3	33.2	85.9
Total									
Separations	697,733	608,438	466,655	266,760	198,039	19,637	16,943	11,087	2,342,626
Separations per 1,000 population	89.9	103.0	99.8	108.9	108.8	35.8	47.0	53.0	98.6

⁽a) For Tasmania, Australian Capital Territory and Northern Territory, data are for public hospitals only.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

How urgent was the care?

In 2012–13, public hospitals provided 40 separations involving surgery per 1,000 population and private hospitals provided about 59 per 1,000 (Table 9.5).

There was some variation in the rates of separations involving surgery by urgency of admission. Public hospitals provided about 11 emergency admissions involving surgery per 1,000 population and private hospitals provided fewer than 2 per 1,000. For elective admissions involving surgery, public hospitals provided about 29 per 1,000 population and private hospitals provided about 57 per 1,000.

There were also variations in the rates of separations involving surgery by Indigenous status, remoteness area and SES of area of residence (see 'Who used these services?').

⁽b) The total includes private hospital data for Tasmania, Australian Capital Territory and Northern Territory.

Table 9.5: Separations involving surgery per 1,000 population by urgency of admission, Indigenous status, remoteness area and socioeconomic status of area of residence, public and private hospitals, 2012–13

	Public h	ospitals	Private	hospitals		Total	
	Emergency admissions	Elective admissions	Emergency admissions	Elective admissions	Emergency admissions	Elective admissions	Number
Indigenous status	3						
Indigenous	26.4	48.3	0.3	10.6	26.7	58.9	36,549
Other Australians	11.1	28.9	1.7	59.1	12.8	88.0	2,306,077
Remoteness area	of residence						
Major cities	10.4	25.4	1.8	59.4	12.2	84.8	1,593,732
Inner regional	11.9	35.2	1.3	55.4	13.2	90.5	477,195
Outer regional	12.9	39.1	0.9	46.7	13.8	85.8	219,071
Remote	15.9	40.6	0.9	37.0	16.8	77.7	29,655
Very remote	20.2	34.1	0.7	24.8	20.9	58.8	14,466
Socioeconomi	c status of area	of residence					
1-Lowest	13.2	37.6	0.8	41.3	14.0	78.9	451,469
2	11.9	34.7	1.1	47.9	13.0	82.6	466,210
3	11.5	30.0	1.5	58.1	13.0	88.2	482,099
4	10.0	23.8	2.2	65.1	12.2	88.9	464,934
5-Highest	8.3	16.2	2.4	71.7	10.8	87.8	456,257
Total	11.2	28.8	1.6	57.0	12.8	85.9	2,342,626

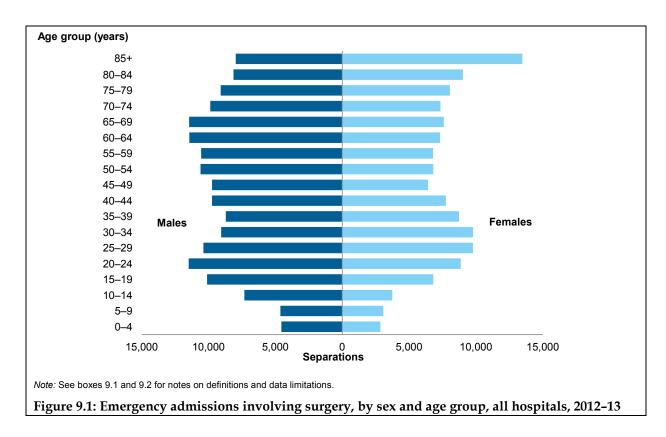
Who used these services?

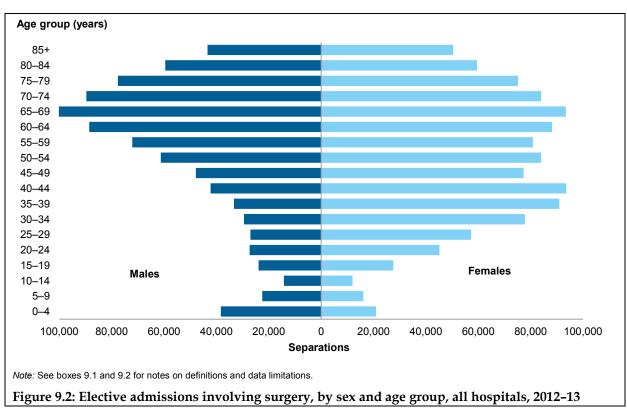
Sex and age group

Males accounted for more than half (55%) of emergency admissions involving surgery (Figure 9.1). There were more emergency admissions involving surgery for males than females in almost all age groups except 30 to 39 and those aged 80 and over. Persons aged 15 to 29 accounted for about 19% of all emergency admissions involving surgery.

For children aged 10 to 14, there were almost twice as many emergency admissions for boys as for girls.

Females accounted for more than half (56%) of elective admissions involving surgery (Figure 9.2). There were more elective admissions involving surgery for females than males in the age groups from 15 to 59 and 85 and over. In particular, for the age groups from 30 to 39, there were more than two and half times as many elective admissions involving surgery for females as for males.





Aboriginal and Torres Strait Islander people

Separations for Aboriginal and Torres Strait Islander people are likely to be under-counted. The quality of the data provided for Indigenous status in 2012–13 for admitted patient care varied by jurisdiction. See Chapter 6 and Appendix A for more information on the quality of Indigenous data in the NHMD.

There were more than 36,500 separations involving surgery for Indigenous Australians in 2012–13, a rate of 86 per 1,000 population for Indigenous Australians compared to 101 per 1,000 for other Australians (Table 9.5).

About one-third of separations involving surgery for Indigenous Australians were emergency admissions (35%), and the rate of emergency admissions involving surgery for Indigenous Australians was about 27 per 1,000 population, more than twice the rate for other Australians (13 per 1,000).

The separation rate for elective admissions involving surgery for other Australians (88 per 1,000) was about 1.5 times of the rate for Indigenous Australians (58 per 1,000).

Indicator procedures

Indicator procedures are those of high volume and are often associated with long waits.

The SRRs presented in Figure 9.3 compare the separation rates for indicator procedures for Indigenous Australians with the rates for other Australians for public hospitals in 2012–13. An SRR greater than 1.0 indicates that the separation rate for the indicator procedure for Indigenous Australians was higher than for other Australians admitted for the same indicator procedure.

The SRR is not shown for indicator procedures for which there were fewer than 100 separations for Indigenous Australians.

For 8 of the 12 indicator procedures, the data suggest that the separation rates for Indigenous Australians were markedly different from the rates for other Australians. The rates were not notably different for *Cystoscopy*, *Septoplasty*, *Inguinal herniorrhaphy*, and *Total hip replacement*.

The highest SRRs were reported for *Myringoplasty* (9.5) and *Coronary artery bypass graft* (3.4). Indigenous Australians had an SRR less than 1.0 for *Varicose veins stripping and ligation*.

For more information, see Table S9.1 accompanying this report online at www.aihw.gov.au/hospitals/>.

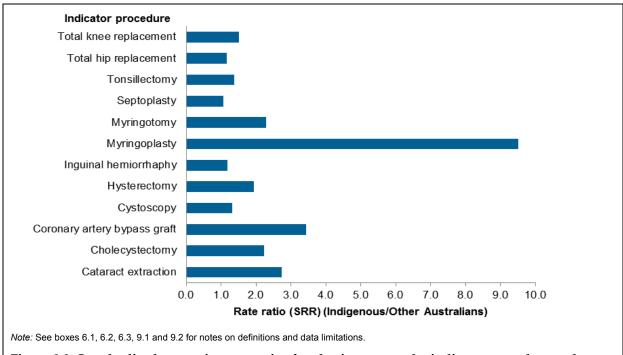


Figure 9.3: Standardised separation rate ratios for elective surgery by indicator procedure and Indigenous status, public hospitals, 2012-13

Remoteness area

In 2012–13, the overall rate of separations involving surgery was highest for those living in Inner regional areas (104 per 1,000 population, Table 9.5). The rate of elective admissions involving surgery was lowest for those living in Very remote areas (59 per 1,000) and highest for those living in *Inner regional* areas (91 per 1,000). The separation rate for emergency admissions involving surgery was highest for those living in *Very remote* areas (21 per 1,000) and decreased with decreasing remoteness.

For elective admissions involving surgery in public hospitals, the separation rate was lowest for those living in Major cities (25 per 1,000) and highest for those living in Remote areas (41 per 1,000). In contrast, for private hospitals the rate was highest for those living in *Major* cities (59 per 1,000) and fell with increasing remoteness to 25 per 1,000 for Very remote areas. This may reflect variations in the availability of private hospital services in the more remote areas of Australia.

Indicator procedures

Table 9.6 presents separation rates by indicator procedure and remoteness area for the 651,000 patients admitted from elective surgery waiting lists. For people living in Very remote areas, the rate for Myringoplasty for was 13 times the national rate and the rate for Cataract extraction was twice the national rate.

Socioeconomic status

There was little variation in the rate of emergency admissions involving surgery by SES of area of residence (Table 9.5). For elective admissions involving surgery, separation rates ranged from 79 per 1,000 population for those living in areas classified as being in the lowest SES group to 89 per 1,000 for those living in areas classified as being in the middle SES group.

In 2012–13, the separation rate for elective admissions involving surgery in public hospitals was highest for people living in areas classified as being in the lowest SES group (38 per 1,000) and tended to drop with increasing SES to 16 per 1,000 for people living in areas classified in the highest SES group. In contrast, the rate in private hospitals was highest for people living in areas classified as being in the highest SES group (72 per 1,000) and lowest for people living in areas classified in the lowest SES group (41 per 1,000).

Table 9.6: Separations per 1,000 population^(a) for admissions from public hospital elective surgery waiting lists, by indicator procedure and remoteness area of usual residence, public hospitals, 2012–13

		Remote	ness area of r	esidence		
Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total ^(b)
Cataract extraction	2.4	2.3	3.4	4.2	4.7	2.5
Cholecystectomy	0.7	0.9	1.0	1.0	0.9	0.8
Coronary artery bypass graft	0.1	0.2	0.2	n.p.	n.p.	0.2
Cystoscopy	1.9	1.6	1.6	2.0	1.7	1.8
Haemorrhoidectomy	0.2	0.1	0.3	n.p.	n.p.	0.2
Hysterectomy	0.4	0.5	0.6	n.p.	n.p.	0.4
Inguinal herniorrhaphy	0.6	0.7	0.7	1.0	0.7	0.7
Myringoplasty	0.1	0.1	0.1	0.4	1.3	0.1
Myringotomy	0.3	0.3	0.3	0.5	0.5	0.3
Prostatectomy	0.3	0.3	0.3	n.p.	n.p.	0.3
Septoplasty	0.2	0.2	0.2	n.p.	n.p.	0.2
Tonsillectomy	0.8	1.0	0.8	0.9	0.6	0.8
Total hip replacement	0.3	0.4	0.5	n.p.	n.p.	0.4
Total knee replacement	0.5	0.6	0.8	n.p.	n.p.	0.6
Varicose veins stripping and ligation	0.2	0.2	0.2	n.p.	n.p.	0.2
Not applicable/not stated	17.8	19.7	23.3	26.5	21.3	18.8
Total	26.8	29.1	34.2	39.4	34.2	28.1
Number of separations	419,956	137,143	74,162	12,456	5,614	651,372

⁽a) Separations per 1000 population are not published where there are fewer than 100 separations in a remoteness area for the indicator procedure.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

Indicator procedures

Table 9.7 presents separation rates by indicator procedure and socioeconomic status for the 651,000 patients admitted from elective surgery waiting lists. Across all indicator procedures, people living in areas classified as being in the highest SES group had the lowest separation rates for public elective surgery (Table 9.7).

The greatest variation in separation rates by SES were for *Myringoplasty*, with people living in areas classified as being in the lowest SES group having twice the overall rate. The rates for *Septoplasty* were more evenly distributed among SES groups, with people living in areas classified as being in the lowest SES group having separation rates about 30% higher than the

⁽b) The total includes records for which Remoteness area was not recorded or not known.

overall rate, and those in the highest SES group having separation rates about 60% lower than the overall rate.

Table 9.7: Separations per 1,000 population for admissions from public hospital elective surgery waiting lists, by indicator procedure and socioeconomic status(a) of area of residence, public hospitals, 2012-13

	Sc	ocioeconomi	status of are	ea of residen	ce	
Indicator procedure	1-Lowest	2	3	4	5-Highest	Total ^(b)
Cataract extraction	3.3	2.7	2.7	2.1	1.4	2.5
Cholecystectomy	1.2	0.9	8.0	0.6	0.4	0.8
Coronary artery bypass graft	0.2	0.2	0.2	0.1	0.1	0.1
Cystoscopy	2.3	1.9	2.0	1.7	1.1	1.8
Haemorrhoidectomy	0.3	0.2	0.2	0.1	0.1	0.2
Hysterectomy	0.6	0.5	0.5	0.3	0.2	0.4
Inguinal herniorrhaphy	0.8	0.7	0.7	0.6	0.4	0.7
Myringoplasty	0.2	0.1	0.1	0.1	<0.1	0.1
Myringotomy	0.3	0.3	0.3	0.3	0.1	0.3
Prostatectomy	0.4	0.3	0.3	0.3	0.2	0.3
Septoplasty	0.3	0.2	0.2	0.2	0.1	0.2
Tonsillectomy	1.1	1.0	0.9	0.7	0.4	0.8
Total hip replacement	0.5	0.4	0.4	0.3	0.2	0.4
Total knee replacement	0.8	0.7	0.6	0.4	0.3	0.6
Varicose veins stripping and ligation	0.2	0.2	0.2	0.2	0.1	0.2
Not applicable/not stated	25.0	20.9	20.2	16.0	11.3	18.9
Total	37.3	31.3	30.3	23.9	16.5	28.2
Number of separations	176,431	150,201	135,590	108,095	74,994	651,372

⁽a) Disaggregation by socioeconomic group is based on the usual residence of the patient, not the location of the hospital. The socioeconomic status of area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the national population.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

How did people access these services?

Most separations involving surgery had a mode of admission of Other (97%), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 9.8). However, for emergency admissions involving surgery, about 11% were transferred from another hospital.

Table 9.8: Separations involving surgery by urgency of admission and mode of admission, all hospitals, 2012-13

Mode of admission	Emergency admissions	Elective admissions	Total
Admitted patient transferred from another hospital	34,180	21,908	56,088
Other	265,543	2,010,418	2,275,961
Not reported	253	10,324	10,577
Total	299,976	2,042,650	2,342,626

⁽b) The total includes records for which records for which Socioeconomic status of area of usual residence was not recorded or not known.

Why did people receive the care?

The reason that a patient receives surgical care can be described in terms of the principal diagnosis.

In 2012–13, more than 14% of separations involving surgery had a principal diagnosis in the ICD-10-AM chapter *Diseases of the musculoskeletal system and connective tissue* and almost 14% had a principal diagnosis in both the *Neoplasms* and *Diseases of the eye and adnexa* chapters (Table 9.9).

The relative distributions of separations involving surgery by diagnosis chapter varied by urgency of admission. For example, more than 98% of separations involving surgery for Diseases of the eye and adnexa and Diseases of the ear and mastoid process and Factors influencing health status and contact with health services were elective admissions. More than half of separations involving surgery for Injury, poisoning and certain other consequences of external causes were emergency admissions.

Table 9.9: Separations involving surgery, by principal diagnosis in ICD-10-AM chapters and urgency of admission, all hospitals, 2012–13

Principal d	iagnosis	Emergency admissions	Elective admissions	Total
A00-B99	Certain infectious and parasitic diseases	2,376	3,405	5,781
C00-D48	Neoplasms	12,852	307,772	320,624
D50-D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	581	1,441	2,022
E00-E89	Endocrine, nutritional and metabolic diseases	3,683	31,910	35,593
F00-F99	Mental and behavioural disorders	104	31	135
G00-G99	Diseases of the nervous system	1,625	50,918	52,543
H00-H59	Diseases of the eye and adnexa	4,472	318,483	322,955
H60-H95	Diseases of the ear and mastoid process	444	41,174	41,618
100–199	Diseases of the circulatory system	34,808	101,802	136,610
J00-J99	Diseases of the respiratory system	5,504	83,809	89,313
K00-K93	Diseases of the digestive system	66,918	169,770	236,688
L00-L99	Diseases of the skin and subcutaneous tissue	6,925	41,274	48,199
M00-M99	Diseases of the musculoskeletal system and connective tissue	9,970	322,033	332,003
N00-N99	Diseases of the genitourinary system	13,777	215,256	229,033
O00-O99	Pregnancy, childbirth and the puerperium	12,739	63,296	76,035
P00-P96	Certain conditions originating in the perinatal period	202	241	443
Q00-Q99	Congenital malformations, deformations and chromosomal abnormalities	1,289	20,169	21,458
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	5,002	21,964	26,966
S00-T98	Injury, poisoning and certain other consequences of external causes	115,781	102,226	218,007
Z00–Z99	Factors influencing health status and contact with health services	924	145,676	146,600
Total		299,976	2,042,650	2,342,626

Most common principal diagnoses

The 20 most common principal diagnoses for emergency admissions involving surgery accounted for half of the principal diagnoses reported (Table 9.10). The most common principal diagnosis for emergency admissions was *Acute appendicitis*, with 89% of those separations in public hospitals. *Angina pectoris* was the principal diagnosis with the highest proportion of emergency admissions in private hospitals (32%).

For elective admissions involving surgery, the 20 most common principal diagnoses accounted for about 46% of the principal diagnoses reported (Table 9.11). The most common principal diagnosis for elective admissions was *Other cataract*, with 68% of those separations coming from private hospitals. About 94% of elective admissions involving surgery with a principal diagnosis of *Other retinal disorders* and about 92% with a principal diagnosis of *Procreative management* were from private hospitals.

Table 9.10: Separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings for emergency admissions involving surgery, public and private hospitals, 2012–13

		Public	Private	
Princi	pal diagnosis	hospitals	hospitals	Total
K35	Acute appendicitis	24,308	3,103	27,411
S72	Fracture of femur	16,899	2,437	19,336
121	Acute myocardial infarction	12,137	1,947	14,084
S82	Fracture of lower leg, including ankle	11,322	1,182	12,504
S52	Fracture of forearm	9,201	1,011	10,212
K80	Cholelithiasis	8,054	1,646	9,700
S62	Fracture at wrist and hand level	6,864	546	7,410
S61	Open wound of wrist and hand	6,308	574	6,882
T81	Complications of procedures, not elsewhere classified	4,710	840	5,550
K61	Abscess of anal and rectal regions	4,871	444	5,315
S42	Fracture of shoulder and upper arm	4,714	548	5,262
O03	Spontaneous abortion	4,263	242	4,505
S66	Injury of muscle and tendon at wrist and hand level	4,061	286	4,347
K56	Paralytic ileus and intestinal obstruction without hernia	3,652	607	4,259
O02	Other abnormal products of conception	3,196	135	3,331
S01	Open wound of head	2,976	235	3,211
O00	Ectopic pregnancy	2,983	149	3,132
120	Angina pectoris	2,109	983	3,092
S81	Open wound of lower leg	2,606	329	2,935
E11	Type 2 diabetes mellitus	2,689	205	2,894
	Other	122,880	21,724	144,604
Total		260,803	39,173	299,976

Table 9.11: Separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings for elective admissions involving surgery, public and private hospitals, 2012–13

Princi	pal diagnosis	Public hospitals	Private hospitals	Total
H26	Other cataract	58,213	122,869	181,082
C44	Other malignant neoplasms of skin	27,799	67,359	95,158
Z31	Procreative management	5,032	62,260	67,292
M23	Internal derangement of knee	12,738	48,877	61,615
M17	Gonarthrosis [arthrosis of knee]	17,672	41,469	59,141
H35	Other retinal disorders	3,055	48,751	51,806
O04	Medical abortion	7,766	36,964	44,730
K40	Inguinal hernia	17,502	25,026	42,528
J35	Chronic diseases of tonsils and adenoids	15,331	24,581	39,912
K80	Cholelithiasis	16,976	15,408	32,384
G56	Mononeuropathies of upper limb	11,994	20,234	32,228
H25	Senile cataract	7,582	23,296	30,878
M75	Shoulder lesions	4,913	24,996	29,909
N92	Excessive, frequent and irregular menstruation	13,998	14,657	28,655
M16	Coxarthrosis [arthrosis of hip]	7,964	17,584	25,548
J34	Other disorders of nose and nasal sinuses	6,804	17,514	24,318
Z47	Other orthopaedic follow-up care	8,506	14,703	23,209
184	Haemorrhoids	10,828	10,725	21,553
C50	Malignant neoplasm of breast	8,685	10,801	19,486
H65	Nonsuppurative otitis media	6,486	12,891	19,377
	Other	409,240	702,601	1,111,841
Total		679,084	1,363,566	2,042,650

What care was provided?

This section presents information on separations involving surgery describing care using:

- MDCs and AR-DRGs based on the AR-DRG classification of acute care separations
- type of surgical procedure undertaken.

Major Diagnostic Categories

Table 9.12 presents separations involving surgery by MDC and urgency of admission. About 27% of emergency admissions and 20% of elective admissions involving surgery were for *Diseases and disorders of the musculoskeletal system and connective tissue*, with 84% of these being elective admissions. Almost 60% of separations involving surgery for *Injuries*, *poisoning and toxic effects of drugs* were emergency admissions.

Table 9.12: Separations involving surgery, by Major Diagnostic Category(a), AR-DRG version 6.0x and urgency of admission, all hospitals, 2012-13

Major	Diagnostic Category	Emergency admissions	Elective admissions	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	8,682	6,789	15,471
01	Diseases and disorders of the nervous system	10,207	51,463	61,670
02	Diseases and disorders of the eye	5,787	326,374	332,161
03	Diseases and disorders of the ear, nose, mouth and throat	7,333	158,727	166,060
04	Diseases and disorders of the respiratory system	3,166	19,706	22,872
05	Diseases and disorders of the circulatory system	32,192	89,976	122,168
06	Diseases and disorders of the digestive system	58,380	161,693	220,073
07	Diseases and disorders of the hepatobiliary system and pancreas	13,987	43,768	57,755
80	Diseases and disorders of the musculoskeletal system and connective tissue	79,924	411,179	491,103
09	Diseases and disorders of the skin, subcutaneous tissue and breast	9,214	249,444	258,658
10	Endocrine, nutritional and metabolic diseases and disorders	2,809	33,250	36,059
11	Diseases and disorders of the kidney and urinary tract	6,742	65,841	72,583
12	Diseases and disorders of the male reproductive system	3,456	55,727	59,183
13	Diseases and disorders of the female reproductive system	6,743	254,180	260,923
14	Pregnancy, childbirth and puerperium	12,727	63,302	76,029
15	Newborns and other neonates	634	454	1,088
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	905	3,362	4,267
17	Neoplastic disorders (haematological and solid neoplasms)	1,560	8,664	10,224
18	Infectious and parasitic diseases	4,073	2,573	6,646
21	Injuries, poisoning and toxic effects of drugs	26,076	17,721	43,797
22	Burns	2,030	1,547	3,577
23	Factors influencing health status and other contacts with health services	201	11,782	11,983
ED	Error DRGs ^(b)	3,148	5,128	8,276
Total		299,976	2,042,650	2,342,626

DRG—Diagnosis Related Group; ECMO—extracorporeal membrane oxygenation; MDC—Major Diagnostic Category.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

Most common AR-DRGs

For emergency admissions involving surgery, the 20 most common AR-DRGs accounted for half of the AR-DRGs reported (Table 9.13). In 2012-13, about 7% of emergency admissions involving surgery had an AR-DRG of Appendicectomy without malignancy or peritonitis without catastrophic or severe complications or comorbidities. For Implantation or replacement of pacemaker, total system without catastrophic complications or comorbidities, about 31% of emergency admissions involving surgery were in private hospitals.

⁽a) The Major Diagnostic Categories Mental diseases and disorders and Alcohol/drug use and alcohol/drug induced organic mental disorders are not listed as there were no separations involving surgery for these MDCs.

⁽b) An Error DRG is assigned to hospital records that contain clinically atypical or invalid information.

Table 9.13: Separations involving surgery for the 20 most common AR-DRGs version 6.0x for emergency admissions, public and private hospitals, 2012–13

AR-DR	G	Public hospitals	Private hospitals	Total
G07B	Appendicectomy without malignancy or peritonitis without CSCC	18,835	2,541	21,376
130Z	Hand procedures	11,377	1,042	12,419
I13B	Humerus, tibia, fibula and ankle procedures without CC	10,715	1,177	11,892
F10B	Interventional coronary procedures with AMI without catastrophic CC	7,713	1,375	9,088
O05Z	Abortion with OR procedure	8,192	418	8,610
I19B	Other elbow or forearm procedures without CC	7,532	884	8,416
108B	Other hip and femur procedures without catastrophic CC	7,202	1,109	8,311
G07A	Appendicectomy with malignancy or peritonitis or with CSCC	6,888	700	7,588
X06B	Other procedures for other injuries without CSCC	6,768	636	7,404
H08B	Laparoscopic cholecystectomy without closed CDE without CSCC	5,879	1,448	7,327
G11Z	Anal and stomal procedures	5,878	835	6,713
X05B	Other procedures for injuries to hand without CC	5,330	482	5,812
A06B	Tracheostomy with ventilation >95 hours without catastrophic CC or tracheostomy with ventilation >95 hours with catastrophic CC	5,365	253	5,618
108A	Other hip and femur procedures with catastrophic CC	4,999	471	5,470
G02A	Major small and large bowel procedures with catastrophic CC	4,008	550	4,558
H08A	Laparoscopic cholecystectomy with closed CDE or with CSCC	3,235	538	3,773
F12B	Implantation or replacement of pacemaker, total system without catastrophic CC	2,470	1,131	3,601
127B	Soft tissue procedures without CC	3,124	320	3,444
103B	Hip replacement without catastrophic CC	2,684	735	3,419
X06A	Other procedures for other injuries with CSCC	2,899	280	3,179
	Other	129,710	22,248	151,958
Total		260,803	39,173	299,976

AMI—acute myocardial infarction; CC—complications or comorbidities; CDE—Common bile duct exploration; CSCC— catastrophic or severe complications or comorbidities; OR—operating room.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

For elective admissions involving surgery, the 20 most common AR-DRGs accounted for over half (56%) of the AR-DRGs reported (Table 9.14). The most common AR-DRG for elective admissions was for *Lens procedures*, of which 69% were carried out in private hospitals and which accounted for about 10% of elective admissions involving surgery.

Table 9.14: Separations involving surgery for the 20 most common AR-DRGs version 6.0x for elective admissions, public and private hospitals, 2012-13

AR-DR	G	Public hospitals	Private hospitals	Total
C16Z	Lens procedures	64,951	147,556	212,507
J11Z	Other skin, subcutaneous tissue and breast procedures	37,015	61,500	98,515
I18Z	Other knee procedures	16,736	66,793	83,529
N07Z	Other uterine and adnexa procedures for non-malignancy	18,985	60,676	79,661
C03Z	Retinal procedures	7,681	54,803	62,484
G10B	Hernia procedures without CC	25,647	35,814	61,461
O05Z	Abortion with OR procedure	14,992	46,371	61,363
G11Z	Anal and stomal procedures	20,248	34,351	54,599
D11Z	Tonsillectomy and/or adenoidectomy	18,462	28,916	47,378
J08B	Other skin graft and/or debridement procedures without CC	9,436	35,757	45,193
130Z	Hand procedures	15,723	29,393	45,116
I16Z	Other shoulder procedures	6,918	35,094	42,012
N10Z	Diagnostic Curettage or diagnostic Hysteroscopy	18,061	20,883	38,944
J10Z	Skin, subcutaneous tissue and breast plastic OR procedures	9,267	26,739	36,006
N11Z	Other female reproductive system OR procedures	10,129	23,270	33,399
104B	Knee replacement without CSCC	2,795	30,586	33,381
H08B	Laparoscopic cholecystectomy without closed CDE without CSCC	15,974	16,088	32,062
N09Z	Conisation, vagina, cervix and vulva procedures	15,606	13,906	29,512
B05Z	Carpal tunnel release	11,004	17,385	28,389
103B	Hip replacement without catastrophic CC	7,787	17,449	25,236
	Other	331,667	560,236	891,903
Total		679,084	1,363,566	2,042,650

CC—complications or comorbidities; CDE—common bile duct exploration; CSCC— catastrophic or severe complications or comorbidities; OR—operating room.

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

Procedures

In this chapter, counts of procedures are presented for surgical procedures only. See Box 6.1 and Appendix B for information on the classification of procedures.

Almost 23% of all surgical procedures reported for separations involving surgery were for Procedures on musculoskeletal system, with 81% of these being elective admissions (Table 9.15).

In 2012–13, more than 2.8 million surgical procedures were reported for separations involving surgery, with 2.4 million reported for elective admissions. Emergency admissions accounted for about 13% of the procedures reported for separations involving surgery.

Table 9.15: Procedures^{(a)(b)} reported for separations involving surgery by ACHI chapter and urgency of admission, all hospitals, 2012–13

Procedure		Emergency admissions	Elective admissions	Total
1–86	Procedures on nervous system	15,328	91,352	106,680
110–129	Procedures on endocrine system	278	15,853	16,131
160–256	Procedures on eye and adnexa	7,561	345,203	352,764
300–333	Procedures on ear and mastoid process	482	35,293	35,775
370-422	Procedures on nose, mouth and pharynx	4,292	143,547	147,839
450-490	Dental services	73	2,313	2,386
520-570	Procedures on respiratory system	13,543	16,765	30,308
600–777	Procedures on cardiovascular system	48,930	132,604	181,534
800–817	Procedures on blood and blood-forming organs	2,338	32,438	34,776
850-1011	Procedures on digestive system	84,283	262,533	346,816
1040–1129	Procedures on urinary system	8,083	87,680	95,763
1160–1203	Procedures on male genital organs	4,814	61,395	66,209
1240–1299	Gynaecological procedures	19,112	351,185	370,297
1330–1347	Obstetric procedures	678	782	1,460
1360–1579	Procedures on musculoskeletal system	120,019	522,785	642,804
1600–1718	Dermatological and plastic procedures	36,573	287,640	324,213
1740–1759	Procedures on breast	376	54,479	54,855
1786–1799	Radiation oncology procedures	28	2,019	2,047
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	3,729	1,834	5,563
1940–2016	Imaging services	2	5	7
Total surgical	al procedures	370,522	2,447,705	2,818,227

ACHI—Australian Classification of Health Interventions; n.e.c.—not elsewhere classified.

⁽a) A procedure was counted if it was an operating room procedure included in the definition of the AR-DRG as Surgical.

⁽b) A procedure is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.

Most common procedures

In 2012–13, *Appendicectomy* was the most common surgical procedure for emergency admissions involving surgery (Table 9.16). Around 89% of emergency admissions for *Appendicectomy* procedures were performed in public hospitals. *Insertion of cardiac pacemaker generator* was the surgical procedure with the highest proportion of emergency admissions in private hospitals (32%).

Table 9.16: Procedures^(a) reported for the 20 most common ACHI procedure blocks for emergency admissions involving surgery, public and private hospitals, 2012–13

Proce	dure	Public hospitals	Private hospitals	Total
926	Appendicectomy	26,462	3,283	29,745
671	Transluminal coronary angioplasty with stenting	11,416	2,697	14,113
1566	Excision procedures on other musculoskeletal sites	12,268	1,652	13,920
965	Cholecystectomy	9,806	2,062	11,868
1628	Other debridement of skin and subcutaneous tissue	11,131	530	11,661
1479	Fixation of fracture of pelvis or femur	9,719	1,301	11,020
1265	Curettage and evacuation of uterus	8,461	453	8,914
1539	Open reduction of fracture of ankle or toe	6,396	728	7,124
569	Ventilatory support	6,660	308	6,968
1489	Arthroplasty of hip	5,539	1,091	6,630
1429	Open reduction of fracture of radius	5,672	727	6,399
986	Division of abdominal adhesions	4,760	903	5,663
930	Incision procedures on rectum or anus	5,013	486	5,499
650	Insertion of cardiac pacemaker generator	3,333	1,319	4,652
1466	Repair of tendon of hand	4,059	270	4,329
1636	Repair of nail	3,924	214	4,138
1256	Procedures for management of ectopic pregnancy	2,995	149	3,144
913	Colectomy	2,451	454	2,905
83	Repair of nerve or nerve trunk	2,464	138	2,602
1414	Open reduction of fracture of humerus or elbow	2,236	317	2,553
	Other	116,038	20,091	136,129
Total		260,803	39,173	299,976

ACHI—Australian Classification of Health Interventions.

⁽a) A procedure was counted if it was an operating room procedure included in the definition of the AR-DRG as Surgical. For separations for which more than one operating room procedure was reported, the separation was counted against the first surgical procedure reported.

In 2012–13, *Extracapsular crystalline lens extraction by phacoemulsification* was the most common surgical procedure for elective admissions, accounting for 10% of elective admissions (Table 9.17). Around 93% of elective admissions for *Procedures for reproductive medicine* were reported for private hospitals.

Table 9.17: Procedures^(a) reported for the 20 most common ACHI procedure blocks for elective admissions involving surgery, public and private hospitals, 2012–13

Proce	dure	Public hospitals	Private hospitals	Total
197	Extracapsular crystalline lens extraction by phacoemulsification	62,697	140,851	203,548
1620	Excision of lesion(s) of skin and subcutaneous tissue	33,444	55,957	89,401
1265	Curettage and evacuation of uterus	26,035	56,600	82,635
1297	Procedures for reproductive medicine	4,926	63,113	68,039
412	Tonsillectomy or adenoidectomy	23,354	35,038	58,392
209	Application, insertion or removal procedures on retina, choroid or posterior chamber	2,914	46,836	49,750
1517	Arthroscopic meniscectomy of knee with repair	6,820	40,638	47,458
990	Repair of inguinal hernia	17,293	24,030	41,323
1518	Arthroplasty of knee	13,321	27,680	41,001
941	Procedures for haemorrhoids	13,709	24,839	38,548
965	Cholecystectomy	18,876	17,915	36,791
1651	Local skin flap, simple and small, single stage	6,910	25,105	32,015
76	Release of carpal and tarsal tunnel	11,117	17,671	28,788
1489	Arthroplasty of hip	8,851	18,675	27,526
1554	Other application, insertion or removal procedures on other musculoskeletal sites	12,432	10,970	23,402
309	Myringotomy	7,023	14,241	21,264
1266	Excision of lesion of uterus	7,401	13,260	20,661
1566	Excision procedures on other musculoskeletal sites	5,080	15,053	20,133
1503	Arthroscopic excision of knee	6,184	13,854	20,038
1649	Other full thickness skin graft	6,596	11,985	18,581
	Other	384,101	689,255	1,073,356
Total		679,084	1,363,566	2,042,650

ACHI—Australian Classification of Health Interventions.

⁽a) A procedure was counted if it was an operating room procedure included in the definition of the AR-DRG as *Surgical*. For separations for which more than one operating room procedure was reported, the separation was counted against the first surgical procedure reported.

How long did patients stay?

The length of stay for separations involving surgery varied by urgency of admission and, to a lesser extent, between public and private hospitals. For overnight separations, the length of stay for emergency admissions involving surgery was more than twice as long as for elective admissions involving surgery (Table 9.18).

Table 9.18: Patient days and average length of stay for separations involving surgery, by urgency of admission, public and private hospitals, 2012-13

	Public hos	pitals	Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Same-day						
Emergency admissions	21,733	1.0	4,932	1.0	26,665	1.0
Elective admissions	358,098	1.0	808,955	1.0	1,167,053	1.0
All same-day surgery	379,831	1.0	813,887	1.0	1,193,718	1.0
Overnight						
Emergency admissions	1,844,054	7.7	278,862	8.1	2,122,916	7.8
Elective admissions	1,197,450	3.7	1,776,484	3.2	2,973,934	3.4
All overnight surgery	3,041,504	4.7	2,055,346	3.3	5,096,850	4.0
Total						
Emergency admissions	1,865,787	7.2	283,794	7.2	2,149,581	7.2
Elective admissions	1,555,548	2.3	2,585,439	1.9	4,140,987	2.0
All surgery	3,421,335	3.3	2,869,233	2.0	6,290,568	2.7

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations.

Who paid for the care?

About 76% of emergency admissions involving surgery in public hospitals were for *Public* patients and Private health insurance funded about 16% (Table 9.19). For private hospitals, Private health insurance funded almost 86% of emergency admissions involving surgery and the Department of Veterans' Affairs funded about 7%.

For elective admissions involving surgery, 88% of separations in public hospitals were for Public patients and Private health insurance funded about 7% of separations. In private hospitals, Private health insurance funded about 81% of elective admissions involving surgery and 11% were Self-funded.

Table 9.19: Separations involving surgery, by principal source of funds and urgency of admission, public and private hospitals, 2012–13

	Public hospitals	Private hospitals	Total
Emergency admissions			
Public patients ^(a)	197,473	64	197,537
Private health insurance	42,409	33,759	76,168
Self-funded	2,360	758	3,118
Workers compensation	6,257	1,435	7,692
Motor vehicle third party personal claim	5,245	90	5,335
Department of Veterans' Affairs	4,140	2,841	6,981
Other ^(b)	2,919	226	3,145
Total	260,803	39,173	299,976
Elective admissions			
Public patients ^(a)	597,482	8,122	605,604
Private health insurance	49,510	1,100,424	1,149,934
Self-funded	22,271	153,647	175,918
Workers compensation	2,646	39,350	41,996
Motor vehicle third party personal claim	1,693	3,021	4,714
Department of Veterans' Affairs	3,232	48,324	51,556
Other ^(b)	2,250	10,678	12,928
Total	679,084	1,363,566	2,042,650

⁽a) Public patients includes separations with a funding source of Health service budget, Other hospital or public authority (with a Public patient election status), Health service budget (due to eligibility for Reciprocal health care agreements) and Health service budget—no charge raised due to hospital decision (in public hospitals).

How was the care completed?

The mode of separation records the status of the patient at the time of separation and, for some categories, the place to which the person was discharged or transferred.

About 94% of separations involving surgery had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 9.20). A higher proportion of separations involving surgery were *Discharged/transferred to an (other) acute hospital* for public hospitals (4%) compared with private hospitals (2%).

⁽b) Other includes separations with a funding source of Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority (without a Public patient election status), Other, Health service budget—no charge raised due to hospital decision (in private hospitals) and not reported.

Table 9.20: Separations involving surgery, by mode of separation, public and private hospitals, 2012–13

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	34,093	26,221	60,314
Discharge/transfer to residential aged care service ^(a)	3,946	1,001	4,947
Discharge/transfer to an (other) psychiatric hospital	103	19	122
Discharge/transfer to other health care accommodation ^(b)	1,786	25,106	26,892
Statistical discharge: type change	15,651	11,364	27,015
Left against medical advice/discharge at own risk	4,197	341	4,538
Statistical discharge from leave	258	64	322
Died	5,428	1,286	6,714
Other ^(c)	874,389	1,337,317	2,211,706
Not reported	36	20	56
Total	939,887	1,402,739	2,342,626

⁽a) Unless this is the usual place of residence.

Public hospital elective surgery

This section presents information on patients admitted from public hospital elective surgery waiting lists. Depending on data availability, some of the information presented here relate to the period 1 July 2012 to 30 June 2013 (2012–13), while other analyses present information for the 2012 and 2013 calendar years.

Information on waiting times for about 651,000 patients admitted from public hospital elective surgery waiting lists in 2012–13 includes analyses by:

- the Indigenous status of the patient
- remoteness of the area of residence of the patient
- the socioeconomic status of the area of residence of the patient
- and for patients with a principal diagnosis of cancer.

Information for about 682,000 patients admitted from public hospital elective surgery waiting lists in the 2013 calendar year includes information on:

- reason for removal
- clinical urgency category
- adverse events
- readmissions following elective surgery.

The waiting times data presented in this section are for patients who completed their wait and were admitted for their surgery on either an emergency or an elective basis.

⁽b) Includes mothercraft hospitals, except in jurisdictions where mothercraft facilities are considered acute.

⁽c) Includes Discharge to usual residence/own accommodation/welfare institution (including prisons, hostels and group homes providing primarily welfare services).

How did people access these services?

The section describes the reason that a patient was removed from an elective surgery waiting list. Most patients are admitted after waiting; however, some patients were removed from waiting lists for other reasons.

Number of patients removed (as an elective or emergency admission) from elective surgery waiting lists managed by public hospitals

In 2013, there were more than 682,000 admissions from public hospital elective surgery waiting lists, as either an elective or an emergency admission (Table 9.21). Emergency admissions accounted for around 0.6% of admissions across Australia, ranging from 0.4% in Victoria and the Australian Capital Territory to 0.7% in New South Wales and Western Australia.

Number of removals from waiting lists for reasons other than elective or emergency admission

In 2013, more than 110,000 patients were removed from public hospital elective surgery waiting lists for reasons other than admission (Table 9.21).

About 58% of patients removed from waiting lists for reasons other than admission for the awaited surgery had a reason of *Surgery not required or declined*. More than 19% were *Treated elsewhere* and a further 12% were *Transferred to another hospital's waiting list*.

Similar information on removals from waiting lists for each quarter is available in Table S9.2, accompanying this report online.

Table 9.21: Number of patients admitted from public hospital elective surgery waiting lists, by reason for removal, states and territories, 2013

Reason for removal	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Elective admissions	214,957	156,587	123,108	84,751	63,982	15,816	11,531	7,708	678,440
Emergency admissions	1,576	553	575	568	358	102	49	42	3,823
Total admissions	216,533	157,140	123,683	85,319	64,340	15,918	11,580	7,750	682,263
Other reasons									
Not contactable/died	2,049	1,979	1,057	960	613	412	150	132	7,352
Treated elsewhere	10,484	3,701	2,662	2,512	1,083	475	358	120	21,395
Surgery not required or declined	19,757	15,832	14,243	7,002	3,865	988	1,137	1,107	63,931
Transferred to another hospital's waiting list	0	2,252	4,794	4,663	777	57	275	0	12,818
Not reported	0	269	125	2,255	1,300	490	157	0	4,596
Total other reasons	32,290	24,033	22,881	17,392	7,638	2,422	2,077	1,359	110,092
Total removals	248,823	181,173	146,564	102,711	71,978	18,340	13,657	9,109	792,355

How long did people wait for care?

This section presents information about the length of time waited by patients on public hospital elective surgery waiting lists before being admitted for surgery. The waiting times data presented are for patients who complete their wait and are admitted for surgery as either an elective or emergency admission.

It includes the proportion seen within the clinically recommended time, the median waiting time, the average overdue waiting time and the numbers of longest wait patients remaining on waiting lists at the end of the year. This information is presented by the clinical urgency category of the patient.

Due to the apparent lack of comparability of clinical urgency categories between states and territories, these data are presented for each state and territory separately. See Box 9.3 for more information.

How did waiting times differ by clinical urgency category?

At the time of being placed on the public hospital waiting list, a clinical assessment is made of the urgency with which the patient requires elective surgery. The clinical urgency categories are:

- *Category 1*—admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
- Category 2 admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
- Category 3 admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency. A patient is generally regarded as overdue for Category 3 if they wait longer than 365 days.

Box 9.3: Comparability of clinical urgency categorisation

Analyses of clinical urgency category data have shown notable variation in the assignment of these categories, both among and within jurisdictions, and for individual surgical specialties and indicator procedures, as well as overall (AIHW 2013i). This apparent lack of comparability of clinical urgency categories among jurisdictions means that measures based on these categories are not comparable between jurisdictions.

In 2012, the AIHW, in collaboration with the Royal Australasian College of Surgeons, developed a package of integrated reforms for national definitions for elective surgery urgency categories (AIHW 2013i). Health ministers have agreed with these recommendations, which are being implemented. Once this has occurred, waiting times will be able to be presented in a comparable way for each state and territory for each urgency category, as will the proportions of patients who had their surgery within the clinically recommended time.

For the purpose of this report, a patient is regarded as being treated within the clinically recommended time (or 'seen on time') if they were admitted within:

- 30 days for Category 1
- 90 days for Category 2
- 365 days for *Category 3*.

Proportion of patients seen within the recommended time

This measure presents the percentage of patients removed from elective surgery waiting lists who received surgery within the clinically recommended time for each clinical urgency category.

Between 2012 and 2013, 6 states and territories increased the proportion of patients who received treatment within the recommended time for clinical urgency category 1 (tables 9.22a to 9.22h). For clinical urgency categories 2 and 3, the proportions seen on time in 2013 had either improved or were similar to the proportions seen on time in 2012 for 6 states and territories.

Average overdue wait time

The 'average overdue wait time' is calculated for patients remaining on the waiting list at 31 December, who were ready for care and had waited more than the recommended time for their clinical urgency category.

The 'overdue wait' is the amount of time spent waiting while overdue, that is, after 30, 90 or 365 days for clinical urgency categories 1, 2 and 3, respectively.

Between 2012 and 2013, the average overdue wait for people who were not admitted within the clinically recommended time decreased for most jurisdictions, or was fairly stable (tables 9.22a to 9.22h).

Number of longest wait patients at end of year

Tables 9.22a to 9.22h present the number of the 10% longest waiting patients in clinical urgency categories 1, 2 and 3 (as at 31 December 2012), who were still waiting for care (that is, they had not had their surgery or appropriate alternative treatment options identified) at 31 December 2013, for each clinical urgency category.

These data were provided by the Commonwealth Department of Health. They are based on anonymised lists of patients still waiting at 31 December 2012 agreed between the Department and states and territories, and anonymised information on patients removed from elective surgery waiting lists supplied to the Department by AIHW.

For New South Wales, Western Australia, South Australia and the Australian Capital Territory, there were no long wait patients remaining on elective surgery waiting lists at the end of 2013.

For the remaining states and territories, the number of long wait patients remaining on a list at the end of 2013 was generally lower than the number who remained waiting at the end of 2012.

Median waiting times

In 2013, the median waiting time for clinical urgency category 1 either improved or was similar to those for 2012 for most jurisdictions (tables 9.22a to 9.22h).

States and territories

For New South Wales, the proportion seen on time, average overdue waiting times and median waiting times improved between 2012 and 2013 for all clinical urgency categories (Table 9.22a). At 31 December 2013, there were no 'longest wait' patients remaining on elective surgery waiting lists.

Table 9.22a: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, New South Wales, 2012 and 2013

	2012			2013		
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)
Number of admissions	52,344	68,746	91,673	51,594	71,313	93,626
Number admitted within clinically recommended time	49,761	62,535	84,518	51,286	68,758	89,245
Proportion admitted within clinically recommended time (%)	95.1	91.0	92.2	99.4	96.4	95.3
Average overdue wait time (days)	11	23.6	63.4	0.0	20.5	51.5
Number of longest wait patients remaining on list at end of year	0	0	0	0	0	0
Days waited at 50th percentile	11	48	200	10	43	194

Note: See boxes 6.1, 6.2, 6.3, 9.1, 9.2 and 9.3 for notes on definitions and data limitations. Similar information for each quarter of 2013 is available in tables S9.3a to S9.3h, accompanying this report online.

For Victoria, the proportion seen on time, average overdue waiting times and median waiting times improved or were stable for clinical urgency category 1. For categories 2 and 3, they declined between 2012 and 2013 (Table 9.22b). At 31 December 2013, there were two 'longest wait' patients remaining on elective surgery waiting lists.

Table 9.22b: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Victoria, 2012 and 2013

	2012			2013		
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)
Number of admissions	47,223	72,328	34,423	47,777	73,857	35,506
Number admitted within clinically recommended time	47,223	49,392	31,073	47,777	48,150	31,397
Proportion admitted within clinically recommended time (%)	100.0	68.3	90.3	100.0	65.2	88.4
Average overdue wait time (days)	0.0	96.4	144.4	0.0	105	189.2
Number of longest wait patients remaining on list at end of year	0	0	0	0	0	2
Days waited at 50th percentile	11	60	105	11	64	104

For Queensland, the proportions seen on time were relatively stable and average overdue waiting times improved for all clinical urgency categories (Table 9.22c). There were 15 'longest wait' patients remaining on elective surgery waiting lists at 31 December 2013, an improvement compared with the 78 patients remaining on elective surgery waiting lists at 31 December 2012.

Table 9.22c: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Queensland, 2012 and 2013

	2012			2013		
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)
Number of admissions	49,160	53,446	19,876	49,061	53,136	21,486
Number admitted within clinically recommended time	43,769	41,215	17,627	45,977	40,985	18,711
Proportion admitted within clinically recommended time (%)	89	77.1	88.7	93.7	77.1	87.1
Average overdue wait time (days)	32	133	133.9	18.8	126.1	115.6
Number of longest wait patients remaining on list at end of year	1	65	12	0	11	4
Days waited at 50th percentile	12	52	109	11	55	127

Note: See boxes 6.1, 6.2, 6.3, 9.1, 9.2 and 9.3 for notes on definitions and data limitations. Similar information for each quarter of 2013 is available in tables S9.3a to S9.3h, accompanying this report online.

For Western Australia, the proportions seen on time improved and average overdue waiting times were relatively stable for all clinical urgency categories (Table 9.22d). At 31 December 2013, there were no 'longest wait' patients remaining on elective surgery waiting lists.

Table 9.22d: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Western Australia, 2012 and 2013

	2012			2013			
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	
Number of admissions	20,274	28,895	33,877	21,151	30,980	33,188	
Number admitted within clinically recommended time	17,502	23,708	32,661	20,291	27,690	32,411	
Proportion admitted within clinically recommended time (%)	86.3	82	96.4	95.9	89.4	97.7	
Average overdue wait time (days)	12.1	54.2	66.9	12.9	55.0	75.8	
Number of longest wait patients remaining on list at end of year	0	0	0	0	0	0	
Days waited at 50th percentile	12	40	53	10	40	63	

For South Australia, the proportions seen on time improved for all clinical urgency categories (Table 9.22e). There were no overdue patients who had waited more than the recommended time still on the waiting list as at 31 December 2013, and there were also no 'longest wait' patients remaining on elective surgery waiting lists.

Table 9.22e: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, South Australia, 2012 and 2013

	2012			2013			
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	
Number of admissions	17,476	22,274	24,692	16,731	22,962	24,647	
Number admitted within clinically recommended time	15,901	20,192	23,782	15,471	21,176	24,130	
Proportion admitted within clinically recommended time (%)	91	90.7	96.3	92.5	92.2	97.9	
Average overdue wait time (days)	22.7	38.2	65.8	0.0	0.0	0.0	
Number of longest wait patients remaining on list at end of year	0	0	0	0	0	0	
Days waited at 50th percentile	11	42	85	11	43	74	

Note: See boxes 6.1, 6.2, 6.3, 9.1, 9.2 and 9.3 for notes on definitions and data limitations. Similar information for each quarter of 2013 is available in tables S9.3a to S9.3h, accompanying this report online.

For Tasmania, the proportions seen on time declined for clinical urgency categories 1 and 2. However, the average overdue waiting time decreased for all clinical urgency categories between 2012 and 2013 (Table 9.22f). There were 57 'longest wait' patients remaining on elective surgery waiting lists at the end of 2013, an improvement compared with the 155 'longest wait' patients remaining on elective surgery waiting lists at the end of 2012.

Table 9.22f: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Tasmania, 2012 and 2013

	2012				2013			
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)		
Number of admissions	6,013	6,243	2,770	6,085	6,567	3,266		
Number admitted within clinically recommended time	4,575	3,770	2,017	4,499	3,476	2,376		
Proportion admitted within clinically recommended time (%)	76.1	60.4	72.8	73.9	52.9	72.7		
Average overdue wait time (days)	72.9	287.1	586.4	37.6	250.7	514.8		
Number of longest wait patients remaining on list at end of year	0	57	98	0	28	29		
Days waited at 50th percentile	15	66	183	17	83	152		

For the Australian Capital Territory, the proportions seen on time improved for clinical urgency categories 2 and 3. The average overdue waiting times decreased for all clinical urgency categories between 2012 and 2013 (Table 9.22g). There were no 'longest wait' patients remaining on elective surgery waiting lists at the end of 2013.

Table 9.22g: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Australian Capital Territory, 2012 and 2013

	2012				2013	
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)
Number of admissions	3,555	5,447	2,625	3,558	5,157	2,865
Number admitted within clinically recommended time	3,503	3,122	2,345	3,474	3,386	2,591
Proportion admitted within clinically recommended time (%)	98.5	57.3	89.3	97.6	65.7	90.4
Average overdue wait time (days)	20.3	127.1	109	0.0	100.5	73.4
Number of longest wait patients remaining on list at end of year	0	0	0	0	0	0
Days waited at 50th percentile	13	77	175	15	66	178

Note: See boxes 6.1, 6.2, 6.3, 9.1, 9.2 and 9.3 for notes on definitions and data limitations. Similar information for each quarter of 2013 is available in tables S9.3a to S9.3h, accompanying this report online.

For the Northern Territory, the proportions seen on time improved for all clinical urgency categories. Median waiting times improved for patients assigned to clinical urgency category 2 (decreasing from 57 days to 46 days) and clinical urgency category 3 (decreasing from 170 days to 140 days). (Table 9.22h). There were 6 'longest wait' patients remaining on elective surgery waiting lists at the end of 2013.

Table 9.22h: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category, Northern Territory, 2012 and 2013

	2012			2013			
	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	
Number of admissions	2,489	3,434	1,490	2,215	3,788	1,747	
Number admitted within clinically recommended time	2,178	2,450	1,282	2,005	2,867	1,499	
Proportion admitted within clinically recommended time (%)	87.5	71.3	86	90.5	75.7	85.8	
Average overdue wait time (days)	23.8	82.6	70.8	116.4	67.6	117.1	
Number of longest wait patients remaining on list at end of year	0	2	1	0	4	2	
Days waited at 50th percentile	12	57	170	12	46	140	

How did waiting times differ by indicator procedure?

Indicator procedures are those of high volume and are often associated with long waits. Table 9.23 presents median waiting times by indicator procedure for each state and territory for 2013.

Median waiting times were shortest for *Coronary artery bypass grafts* in six of the seven states and territories that performed this procedure. The median waiting times were longest for Total knee replacement in four states and territories.

Information on median waiting times for each quarter of 2013 is available in tables \$9.4a to S9.4h, accompanying this report online.

How did waiting times differ for Indigenous and other Australians?

In 2012–13, there were almost 20,000 admissions from public hospital waiting lists for elective surgery for patients identified as Aboriginal and/or Torres Strait Islander.

Overall, the median waiting time for Indigenous Australians was greater than the median waiting time for other Australians (41 days and 36 days respectively (Table 9.24).

Indicator procedures

Indigenous Australians had higher median waiting times for 9 of the 12 indicator procedures for which there were at least 100 separations for Indigenous Australians. The greatest difference in median waiting times was for Total knee replacement (320 days for Indigenous Australians and 205 days for other Australians). Cholecystectomy and Coronary artery bypass graft had the smallest differences in median waiting times by Indigenous status.

Table 9.23: Median waiting times (days) and admissions from public hospital elective surgery waiting lists, by indicator procedure, states and territories, 2013

Indicator procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Cataract extraction								
Admissions	22,082	13,105	7,918	10,232	6,863	1,435	1,283	838
Days waited at 50th percentile	230	47	42	42	70	147	167	120
Cholecystectomy								
Admissions	7,063	4,275	3,808	1,712	1,438	541	315	179
Days waited at 50th percentile	53	58	43	28	30	66	70	54
Coronary artery bypass graft								
Admissions	908	889	1327	233	424	154	71	0
Days waited at 50th percentile	23	22	9	16	16	23	19	0
Cystoscopy								
Admissions	12,735	15,648	4,627	7,111	2,945	817	1,322	377
Days waited at 50th percentile	27	21	25	20	31	34	30	45
Haemorrhoidectomy								
Admissions	1,304	1,338	462	563	423	131	56	188
Days waited at 50th percentile	64	79	55	36	21	76	74	70
Hysterectomy								
Admissions	2,560	2,476	2,216	1,140	863	310	163	62
Days waited at 50th percentile	55	63	54	33	42	69	55	60
Inguinal herniorrhaphy								
Admissions	6,172	3,682	2,286	1,747	1,295	408	252	149
Days waited at 50th percentile	70	70	62	36	29	88	71	47
Myringoplasty								
Admissions	370	355	436	351	86	22	10	246
Days waited at 50th percentile	319	141	85	84	83	80	392	158
Myringotomy								
Admissions	363	1536	1776	998	556	155	118	143
Days waited at 50th percentile	66	59	47	55	35	88	81	83

(continued)

Table 9.23 (continued): Median waiting times (days) and admissions from public hospital elective surgery waiting lists, by indicator procedure, states and territories, 2013

Indicator procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Prostatectomy								
Admissions	2,558	1,914	1,561	879	604	24	90	18
Days waited at 50th percentile	55	28	37	26	42	29	34	65
Septoplasty								
Admissions	1,792	1,317	562	390	469	92	108	39
Days waited at 50th percentile	323	143	84	140	98	301	357	133
Tonsillectomy								
Admissions	5,380	4,649	3,429	1,970	1,529	314	288	177
Days waited at 50th percentile	238	98	56	94	68	116	256	63
Total hip replacement								
Admissions	3,172	2,244	1,592	1,124	894	263	211	46
Days waited at 50th percentile	196	116	71	73	96	409	138	70
Total knee replacement								
Admissions	5,853	2,850	2,576	1,665	1,095	294	298	71
Days waited at 50th percentile	292	156	159	86	153	660	161	121
Varicose veins stripping and ligation								
Admissions	1,438	1,317	516	296	369	23	178	35
Days waited at 50th percentile	105	135	67	77	75	98	88	121
Other procedures								
Admissions	142,783	99,544	88,590	54,908	44,487	10,935	6,817	5,166
Days waited at 50th percentile	32	29	23	26	28	34	30	25
Total								
Admissions	216,533	157,140	123,683	85,319	64,340	15,918	11,580	7,750
Days waited at 50th percentile	48	36	27	29	34	44	49	37

Source: National Elective Surgery Target Database.

Table 9.24: Median waiting time (days) to admission for elective surgery by indicator procedure and Indigenous status, public hospitals, 2012–13

Indicator procedure	Indigenous Australians	Other Australians	All Australians
Cataract extraction	140	88	89
Cholecystectomy	47	50	50
Coronary artery bypass graft	16	16	16
Cystoscopy	29	24	24
Hysterectomy	59	53	53
Inguinal herniorrhaphy	42	60	59
Myringoplasty	121	123	123
Myringotomy	54	49	49
Septoplasty	253	191	193
Tonsillectomy	102	96	97
Total hip replacement	190	123	123
Total knee replacement	320	205	207
Not applicable/not stated	29	28	28
Total	41	36	36
Number of admissions	19,528	631,844	651,372

Note: See boxes 6.1, 6.2, 6.3, 9.1 and 9.2 for notes on definitions and data limitations. Some indicator procedures are not shown due to small numbers of admissions for Indigenous Australians.

Source: National Hospital Morbidity Database.

How did waiting times vary by remoteness area?

Overall, about 68% of admissions from waiting lists for elective surgery were for patients living in *Major cities*, 20% were for patients in *Inner regional* areas and 9% were for patients in *Outer regional* areas (Table 9.5).

The median waiting time varied somewhat by remoteness, ranging from 30 days for people living in *Remote* areas to 40 days for people living in *Inner regional* areas (Table 9.25).

Indicator procedures

There was some variation in the median waiting time for remoteness areas by indicator procedure. For indicator procedures with at least 100 admissions in each remoteness area, *Cataract extraction* had the greatest variation in waiting times by remoteness area. People from *Inner regional* areas had the highest median waiting time of 181 days, and people from *Major cities* had the lowest (70 days) (Table 9.25). *Cystoscopy* had the least variation by remoteness area, ranging from 24 days for people from *Inner regional*, *Major cities* and *Remote* areas to 38 days for people from *Very remote* areas.

For more information, see Table S9.5 accompanying this report online at www.aihw.gov.au/hospitals/>.

Table 9.25: Median waiting time (days) to admission for elective surgery by indicator procedure and remoteness area of usual residence, public hospitals, 2012–13

		Remotene	ess area of res	idence		
Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Cataract extraction	70	181	143	89	90	89
Cholecystectomy	51	53	46	35	49	50
Coronary artery bypass graft	16	12	24	n.p.	n.p.	16
Cystoscopy	24	24	26	24	38	24
Haemorrhoidectomy	65	67	42	38	n.p.	60
Hysterectomy	55	55	43	43	n.p.	53
Inguinal herniorrhaphy	62	64	51	33	31	59
Myringoplasty	125	130	105	84	145	123
Myringotomy	47	53	62	33	52	49
Prostatectomy	38	40	42	n.p.	n.p.	39
Septoplasty	194	192	253	n.p.	n.p.	193
Tonsillectomy	95	107	102	69	68	97
Total hip replacement	113	139	139	122	n.p.	123
Total knee replacement	180	259	248	227	n.p.	207
Varicose veins stripping and ligation	97	97	88	n.p.	n.p.	95
Not applicable/not stated	28	28	28	25	27	28
Total	36	40	37	30	35	36

How did waiting vary by socioeconomic status?

Overall, about 27% of admissions from waiting lists were for people living in areas classified as being in the lowest SES group, dropping to about 12% for people living in areas classified as being in the highest SES group (Table 9.7).

Median waiting times varied by SES, ranging from 31 days for people living in areas classified as the highest SES group to 40 days for people living in areas classified as the lowest SES group (Table 9.26).

Indicator procedures

Septoplasty was the indicator procedure with the greatest variation in waiting times by socioeconomic status, ranging from 251 days for people living in areas classified as being in the lowest SES group to 159 days for people in the highest SES group. *Cystoscopy* had the least variation by socioeconomic status group (Table 9.26).

For more information, see Table S9.6 accompanying this report online at www.aihw.gov.au/hospitals/>.

Table 9.26: Median waiting times (days) for elective surgery by indicator procedure and socioeconomic status of area of usual residence, public hospitals, 2012–13

	Soci	oeconomic s	status of are	a of reside	ence	
Indicator procedure	1-Lowest	2	3	4	5-Highest	Total
Cataract extraction	119	96	74	74	72	89
Cholecystectomy	54	50	49	51	43	50
Coronary artery bypass graft	18	18	14	16	14	16
Cystoscopy	25	24	23	23	24	24
Haemorrhoidectomy	58	56	63	64	56	60
Hysterectomy	56	51	52	54	47	53
Inguinal herniorrhaphy	61	58	60	63	53	59
Myringoplasty	147	123	103	99	113	123
Myringotomy	56	53	42	46	41	49
Prostatectomy	43	42	35	35	34	39
Septoplasty	251	197	161	167	159	193
Tonsillectomy	111	102	91	89	78	97
Total hip replacement	136	128	115	114	109	123
Total knee replacement	232	211	196	184	165	207
Varicose veins stripping and ligation	100	97	95	98	89	95
Not applicable/not stated	29	29	28	28	26	28
Total	40	39	35	35	31	36

How did waiting times vary by diagnosis?

The diagnosis information available in the data from the NHMD can be used to compare the waiting times for patients for whom elective surgery may be more urgent with the waiting times for other patients. In this way, the waiting times for patients awaiting surgery for cancer can be compared with the waiting times for patients awaiting the same surgery for other conditions.

Median waiting times varied according to the type of cancer. The selected 'cancer types' presented in Table 9.27 were defined as separations with a principal diagnosis of:

- Bladder cancer (C67, D09.0)
- Bowel cancer (C18–20, D01.0–D01.2)
- Breast cancer (C50, D05)
- Gynaecological cancer (C51–58, D06.9, D07.0–D07.3)
- Kidney cancer (C64)
- Lung cancer (C33–34, D02.1–D02.2)
- Melanoma (C43, D03)
- Prostate cancer (C61, D07.5).

In 2012–13, patients admitted with a principal diagnosis for lung cancer had a median waiting time of 12 days and 90% of patients had been admitted for surgery within 29 days (Table 9.27). Patients with a principal diagnosis of prostate cancer had a median waiting time of 28 days and 90% of patients had been admitted for surgery within 93 days.

Table 9.27: Waiting time statistics for admissions from public hospital waiting lists for elective surgery, for selected principal diagnoses for cancer, 2012–13

Cancer type	Separations	Days waited at 50th percentile	Days waited at 90th percentile
Bladder cancer	7,520	20	77
Bowel cancer	5,130	15	35
Breast cancer	10,140	13	28
Gynaecological cancer	7,417	22	78
Kidney cancer	1,275	23	72
Lung cancer	1,341	12	29
Melanoma	4,348	14	33
Prostate cancer	6,689	28	93
All other principal diagnoses	607,512	41	279
Total	651,372	36	266

Surgical specialties

There were shorter overall waiting times for admissions with a principal diagnosis of a cancer (median of 17 days) compared with other admissions (41 days), and for most surgical specialties (Table 9.28). Cancer principal diagnoses were defined by the ICD-10-AM diagnosis codes C00–C99, D00–D09, D45, D46, D47.1 and D47.3.

For surgical specialties for which there were at least 100 cancer-related separations, the largest variation in median waiting times by surgical specialty was for *General surgery* for which patients with a cancer-related principal diagnosis had a median waiting time of 14 days, compared with 38 days for other diagnoses and 31 days overall. The surgical specialties that had the least variation in median waiting times for separations with a cancer-related principal diagnosis compared with other diagnoses were *Urology* (23 days for cancer, compared with 26 days) and *Cardiothoracic surgery* (12 days for cancer, compared with 18 days).

Table 9.28: Median waiting time (days) for patients admitted from public hospital waiting lists for elective surgery with a cancer-related principal diagnoses (or other principal diagnosis), by surgical specialty, 2012–13

Surgical specialty	Cancer-related	Other diagnosis	Overall
Cardio-thoracic surgery	12	18	17
Ear, nose and throat surgery	n.p.	67	67
General surgery	14	38	31
Gynaecology	21	33	31
Neurosurgery	n.p.	32	32
Ophthalmology	n.p.	75	75
Orthopaedic surgery	n.p.	68	68
Plastic surgery	14	25	24
Urology	23	26	26
Vascular surgery	n.p.	21	21
Other	23	26	26
Total	17	41	36

What was the safety and quality of the care?

This section presents information on some aspects of safety and quality of surgical care. It includes information for:

- adverse events reported for public hospital elective surgery admissions
- unplanned readmissions following public hospital elective surgery.

Box 9.4: Limitations of the data for adverse events and unplanned readmissions following surgery

- Diagnosis information that can indicate that adverse events occurred are only available at the end of the episode of care. Therefore, information on adverse events may not be available for the quarter in which the surgery was undertaken.
- Data on readmissions within 28 days following elective surgery may not be available during the quarter that the surgery occurred, as the admission may occur during the following quarter. It should be noted that the numbers of readmissions following surgery for the most recent quarter may not be final.
- The Northern Territory Department of Health identified that, due to an error in their information system, the numbers reported for adverse events and readmissions during the July to September 2013 quarter were under reported. Therefore, these data have been suppressed in this report. The Northern Territory Department of Health have advised that the issue has been rectified. The data will be reported as soon as available.

Adverse events reported for elective surgery admissions

Adverse events are generally defined as incidents in which harm resulted to a person receiving health care. They include infections, falls resulting in injuries, and problems with medication and medical devices. Some of these adverse events may be preventable.

Table 9.29 presents information on the proportion of separations for patients admitted from elective surgery waiting lists where an adverse event was reported, for patients admitted to hospitals from elective surgery waiting lists between 1 October 2012 and 30 September 2013.

The data presented in Table 9.29 can be interpreted as representing selected adverse events in health care that have affected the hospital admissions, rather than all adverse events that occurred.

Information on adverse events was calculated by the states and territories, not the AIHW. Therefore, the comparability of the calculations is unknown. Data for the October to December quarter 2013 were not available at the time of publication of this report. Further information on the definition for this indicator is provided in Appendix B.

Between 1 October 2012 and 30 September 2013, adverse events were reported for approximately 6.5% of patients admitted from public hospital elective surgery waiting lists (Table 9.29). This was similar to the rate of adverse events reported for elective surgery for the period 1 January 2012 and 30 September 2012 (Australian hospital statistics: national emergency access and elective surgery targets 2012, AIHW 2013g).

Between 2012 and 2013, the rate of adverse events increased for most states and territories, it decreased for New South Wales.

More information on adverse events for each quarter, by states and territories is available in Table S9.7, accompanying this report online.

Table 9.29: Adverse events reported for admissions from public hospital elective surgery waiting lists, states and territories, October 2012 to September 2013

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Total admissions	205,248	147,173	107,497	81,606	63,649	15,279	10,774	6,843	641,418
Admissions with adverse events	10,898	12,538	7,896	4,328	4,033	1,237	820	n.a.	41,750
Proportion with an adverse event (%)	5.3	8.5	7.3	5.3	6.3	8.1	7.6	n.a.	6.5

Unplanned readmissions following elective surgery

Unplanned readmissions following selected surgical episodes of care are generally defined as the number of separations where the principal diagnosis indicates an unplanned or unexpected readmission following an episode of care, and where admission occurred within a specified period (in days).

Table 9.30 presents information on unplanned readmissions within 28 days to the same hospital, for patients admitted to hospitals from elective surgery waiting lists between 1 October 2012 and 30 September 2013. The indicator is an underestimate of all possible unplanned readmissions because:

- it could only be calculated for readmissions to the same hospital, whereas readmissions can take place to other hospitals and even across state and territory borders
- the unplanned and/or unexpected readmissions are limited to those having a principal diagnosis of a post-operative adverse event for which a specified ICD-10-AM (NCCH 2010) diagnosis code has been assigned. This does not include all possible unplanned/unexpected readmissions
- the indicator only includes unplanned readmissions where the urgency of admission was *Emergency*.

Information on unplanned readmissions was calculated by the states and territories, not the AIHW. Therefore, the comparability of the calculations is unknown. Data for the October to December 2013 quarter were not available at the time of publication of this report. Further information on the definition for this indicator is provided in Appendix B.

Between 1 October 2012 and 30 September 2013, approximately 1.2% of patients who were admitted from a public hospital elective surgery waiting list had an unplanned or unexpected readmission to hospital within 28 days of admission for the awaited surgery (Table 9.30). This was similar to the rate of unexpected readmissions reported for the period 1 January 2012 and 30 September 2012 (AIHW 2013g).

Between 2012 and 2013, the rate of unexpected readmission to hospital within 28 days decreased for Victoria and Tasmania.

More information on unplanned readmissions following elective surgery for each quarter, by states and territories is available in Table S9.8, accompanying this report online.

Table 9.30: Readmissions within 28 days of elective surgery for admissions from public hospital elective surgery waiting lists, states and territories, October 2012 to September 2013

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Total admissions	205,248	147,173	107,497	81,606	63,649	15,279	10,774	6,843	641,418
Readmissions within 28 days	2,332	1,693	1,665	922	743	3	148	n.a.	7,506
Proportion with a readmission (%)	1.1	1.2	1.5	1.1	1.2	0.0	1.4	n.a.	1.2

Additional information

Detailed information on waiting time statistics for patients admitted from waiting lists during 2012-13 were published in Australian hospital statistics: elective surgery waiting times 2012-13 (AIHW 2013d).

Additional information is available in tables accompanying this report online at <www.aihw.gov.au/hospitals/>.

Table S9.1: Selected separation statistics for elective surgery by indicator procedure and Indigenous status, public hospitals, 2012–13

Table S9.2: Number of patients admitted from public hospital elective surgery waiting lists, by reason for removal and quarter, states and territories, 2013

Table S9.3a: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, New South Wales, 2013

Table S9.3b: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Victoria, 2013

Table S9.3c: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Queensland 2013

Table S9.3d: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Western Australia, 2013

Table S9.3e: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, South Australia, 2013

Table S9.3f: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Tasmania, 2013

Table S9.3g: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Australian Capital Territory, 2013

Table S9.3h: Selected statistics for admissions from public hospital elective surgery waiting lists, by clinical urgency category and quarter, Northern Territory, 2013

Table S9.4a: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, New South Wales, 2013

Table S9.4b: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Victoria, 2013

Table S9.4c: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Queensland 2013

Table S9.4d: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Western Australia, 2013

Table S9.4e: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, South Australia, 2013

Table S9.4f: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Tasmania, 2013

Table S9.4g: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Australian Capital Territory, 2013

Table S9.4h: Median waiting times and admissions from public hospital elective surgery waiting lists, by indicator procedure and quarter, Northern Territory, 2013

Table S9.5: Waiting time statistics for admissions from public hospital elective surgery waiting lists by indicator procedure and remoteness area of usual residence, 2012–13

Table S9.6: Waiting time statistics for admissions from public hospital elective surgery waiting lists by indicator procedure and remoteness area of usual residence, 2012–13

Table S9.7: Adverse events reported for admissions from public hospital elective surgery waiting lists by quarter, states and territories, October 2012 to September 2013

Table S9.8: Readmissions within 28 days of elective surgery for admissions from public hospital elective surgery waiting lists by quarter, states and territories, October 2012 to September 2013