# 3 Hospital performance indicators

Performance indicators are defined as statistics or other units of information that reflect, directly or indirectly, the extent to which an anticipated outcome is achieved or the quality of the processes leading to that outcome (NHPC 2001).

This chapter presents hospital performance indicators within the context of the National Health Performance Framework (NHPF).

# The National Health Performance Framework

In 2001, the National Health Performance Committee (NHPC) developed a framework to report on the performance of the Australian health system, which was adopted by health ministers. In late 2006, the NHPC identified the need to review the framework and in 2008, AHMAC's National Health Information Standards and Statistics Committee (NHISSC) endorsed a revised framework, termed the National Health Performance Framework 2009.

The NHPC describes the framework as a structure to guide the understanding and evaluation of the health system, facilitating consideration of how well the health system or program is performing. The framework has three domains: 'Health Status', 'Determinants of Health' and 'Health System Performance'. Questions are posed for each domain and a number of dimensions have been identified within each domain. The dimensions guide the development and selection of performance indicators that can be used together to answer that domain's questions. Sometimes, single indicators can provide information relevant to several dimensions of the framework.

The Health System Performance domain is most directly relevant to assessment of the provision of hospital and other health-care services. The six dimensions are: Effectiveness, Safety, Responsiveness, Continuity of care, Accessibility and Efficiency & sustainability (Table 3.1).

The questions asked for the Health System Performance domain in the National Health Performance Framework 2009 are:

- How does the health system perform?
- What is the level of quality of care across the range of patient care needs?
- Does the system deliver value for money and is it sustainable?
- Is it the same for everyone?

# What data are reported?

Eleven hospital performance indicators have been presented in this chapter and are listed in Table 3.2 against the dimensions of the NHPF. Some indicators can be related to more than one dimension of the NHPF, even though they are presented here against only one dimension. For example, hospital accreditation could be related to *Safety* and *Responsiveness*, as well as *Effectiveness*.

Table 3.2 also indicates whether the indicator is included in a nationally agreed set of performance indicators, such as:

- the NHPF set as endorsed by health ministers for reporting in *Australia's health* 2010 (AIHW 2010b, forthcoming)
- the National Healthcare Agreement (NHA) (CRC 2010)
- the Australian Commission on Safety and Quality in Health Care's National core hospital-based outcome indicators of safety and quality (ACSQHC).

Most of the performance indicators presented in this report align with the NHA performance indicators for the outcome area of hospital and related care (CRC 2010). The NHA includes 70 performance indicators and nine performance benchmarks (including a number for hospital and related care) that are to be reported regularly under the Intergovernmental Agreement on Federal Financial Relations. The NHA performance indicators based on 2007–08 hospital data have been published by the COAG Reform Council (CRC 2010). The performance indicators presented here are based on data for the 2008–09 financial year.

Five indicators are also in the indicator set to be reported for the NHPF in *Australia's health* 2010. Seven indicators have been previously reported in *Australian hospital statistics*, including the Relative stay index, and the Average length of stay for selected AR-DRGs.

Indicators that are new or newly specified for this report are Unplanned/unexpected readmissions within 28 days of selected surgical admissions, Rates of services: overnight separations, Rates of services: hospital procedures and Rates of services: non-acute care separations.

Additional data for some hospital performance indicators are presented elsewhere in this report. For example, summary information on waiting times in public hospital emergency departments is presented in this chapter, with more detailed information in *Chapter 5*.

Table 3.1: The National Health Performance Framework – Health System Performance domain

Effectiveness	Safety	Responsiveness
Care/intervention/action provided is relevant to the client's needs and based on established standards. Care, intervention or action achieves desired outcome.	healthcare management or the	Service is client orientated. Clients are treated with dignity, confidentiality, and encouraged to participate in choices related to their care.
Continuity of care	Accessibility	Efficiency & sustainability
Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.	People can obtain health care at the right place and right time irrespective of income, physical location and cultural background.	Achieving desired results with most cost- effective use of resources. Capacity of system to sustain workforce and infrastructure, to innovate and respond to emerging needs.

#### Box 3.1 What are the limitations of the data?

The performance indicators presented should be interpreted taking into consideration the limitations of the data from which they are derived. Information on variation in data recording practices, data quality and database coverage, are presented in appendixes 1 and 2.

While the rates could be interpreted as reflecting hospital system performance, they may also reflect variation in underlying needs for hospitalisation, admission and data recording practices, and availability of non-hospital services.

Table 3.2: Hospital performance indicators in this chapter, by National Health Performance Framework dimension

		Related	l national i	ndicator set
Table(s)	Indicator	NHA	NHPF	ACSQHC
	Effectiveness			
Table 3.4	Accreditation of hospitals and beds		✓	
	Safety			
Table 3.5	Adverse events treated in hospitals		✓	
Table 3.6	Unplanned/unexpected readmissions within 28 days of selected surgical admissions	✓		✓
	Responsiveness			
No indicators availa	able			
	Continuity of care			
No indicators availa	able			
	Accessibility			
Table 3.7, and Figure 3.1	Waiting times for emergency department care	✓	✓	
Table 3.8	Waiting times for elective surgery	$\checkmark$	✓	
Table 3.9, and Figures 3.2 to 3.4	Rates of services: overnight separations	✓		
Tables 3.10, S3.9	Rates of services: hospital procedures	✓		
Table 3.11	Rates of services: non-acute care separations	$\checkmark$		
	Efficiency & sustainability			
Tables 3.12, 3.13, S3.1 to S3.7	Cost per case mix-adjusted separation for acute care episodes	✓	✓	
Tables 3.14, S3.3	Relative stay index			
Figure 3.5, Table S3.10	Average length of stay for selected AR-DRGs			

Abbreviations: NHA—National Healthcare Agreement; NHPF—National Health Performance Framework; ACSQHC—Australian Commission on Safety and Quality in Health Care; AR-DRG—Australian Refined-Diagnosis Related Group.

Table 3.3 lists three other NHA performance indicators, presented elsewhere in this report. These indicators are not presented in this chapter as they are not indicators of hospital performance.

Table 3.3: Other performance indicators in this report

Indicator	NHA	NHPF	ACSQHC	Chapter
Selected potentially preventable hospitalisations	✓	✓	✓	Chapter 7. Related to the NHA outcome area of primary and community health.
People aged 65 years or over receiving sub-acute services	✓			Chapter 11. Related to the NHA outcome area of aged care.
Hospitalisation for injury and poisoning	✓			Chapter 7. Related to the NHA outcome area of social inclusion and Indigenous health.

Abbreviations: NHA—National Healthcare Agreement; NHPF—National Health Performance Framework; ACSQHC—Australian Commission on Safety and Quality in Health Care.

#### Box 3.2 What methods were used?

Readers should note the following:

- Unless otherwise indicated in footnotes, separations with a care type of *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ* procurement have been excluded.
- separation rates are age-standardised
- public hospitals includes *Public acute* and *Public psychiatric hospitals*
- private hospitals includes *Private freestanding day facilities* and *Other private hospitals*.

Details of methods, including the selection of AR-DRGs, diagnoses and procedures used are presented in *Appendix 1* for:

- adverse events treated in hospitals
- rates of service: hospital procedures
- cost per casemix-adjusted separation
- relative stay index
- average length of stay for selected AR-DRGs

#### **Effectiveness**

Care/intervention/action provided is relevant to the client's needs and based on established standards. Care, intervention or action achieves desired outcome.

#### Performance indicator: Hospital accreditation

Accreditation is recognised through a variety of bodies including the Australian Council on Healthcare Standards EQuIP, Business Excellence Australia the Quality Improvement Council, and hospitals certified as compliant with the International Organization for Standardization's (ISO) 9000 quality family.

Accreditation at any point in time does not assume a fixed or continuing status as accredited.

For Australia as a whole, 654 public hospitals were accredited at 30 June 2009, with 54,953 public hospital beds (87% of public hospitals and 97% of public hospital beds) (Table 3.4). These hospitals delivered 99% of separations and 98% of patient days in public hospitals. The proportion of public hospitals that were accredited ranged from 11% in Tasmania to 100% in Victoria, Western Australia and the Australian Capital Territory.

A total of 371 private hospitals were accredited in 2006–07 with 23,917 private hospital beds (70% of hospitals, accounting for 90% of the beds).

The proportion of public hospital beds in accredited hospitals ranged from 80% in Tasmania to 100% in Victoria and the Australian Capital Territory. The proportion of separations in accredited public hospitals ranged from 94% in Tasmania to 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory.

The comparability of accreditation data among states and territories is limited because of the voluntary nature of participation in award schemes for hospitals in some jurisdictions. As accreditation for public hospitals was counted as at 30 June 2009, some hospitals that were accredited for the majority of the financial year, but had their accreditation status lapse shortly before this date were counted as non-accredited.

Table 3.4: Selected statistics by accreditation status and states and territories, public hospitals 2008–09, private hospitals, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Total hospitals	227	149	170	94	80	28	3	5	756
Accredited hospitals	182	149	146	92	74	3	3	5	654
Accredited (%)	80	100	86	98	93	11	100	100	87
Total average available beds <sup>(a)</sup>	19,805	12,869	10,805	5,369	4,874	1,275	875	606	56,478
Beds in accredited hospitals	18,878	12,869	10,582	5,355	4,761	1,026	875	606	54,953
Beds in accredited hospitals as % of total	95	100	98	100	98	80	100	100	97
Separations in accredited hospitals (%)	98	100	99	100	99	94	100	100	99
Patient days in accredited hospitals (%)	97	100	99	100	99	84	100	100	98
Private hospitals (2006–07) <sup>(a)</sup>									
Total hospitals <sup>(b)</sup>	175	155	109	40	54	n.p.	n.p.	n.p.	533
Accredited hospitals	107	95	83	28	41	n.p.	n.p.	n.p.	371
Accredited (%)	61	61	76	70	76	n.p.	n.p.	n.p.	70
Total average available beds <sup>(b)</sup>	7,118	7,184	6,240	2,988	2,008	n.p.	n.p.	n.p.	26,677
Beds in accredited hospitals	5,778	6,350	5,973	2,850	1,865	n.p.	n.p.	n.p.	23,917
Beds in accredited hospitals as % of total	81	88	96	95	93	n.p.	n.p.	n.p.	90

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

<sup>(</sup>a) The number of average available beds presented here may differ form the counts published elsewhere. For example, counts based on bed numbers at a specified date such as 30 June may differ from the average available beds over the reporting period.

<sup>(</sup>b) Accreditation statistics for private hospitals were sourced from the Australian Bureau of Statistics *Private hospitals Australia* (ABS 2008), and relate to accreditation by any body. As these data are for 2006–07, the numbers of private hospitals and private hospital beds presented here do not match the numbers presented in *Chapters 2* and *4*.

# Safety

The avoidance or reduction to acceptable limits of actual or potential harm from health-care management or the environment in which health care is delivered.

## Performance indicator: Adverse events treated in hospitals

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

Hospital separations data include information on diagnoses, places of occurrence and external causes of injury and poisoning that can indicate that an adverse event was treated and/or occurred during the hospitalisation. However, other diagnosis codes may also suggest that an adverse event has occurred, and some adverse events are not identifiable using these codes.

In 2008–09, 4.8% of separations reported an ICD-10-AM code for an adverse event. The proportion of separations with an adverse event was 5.6% in the public sector and 3.6% in the private sector (Table 3.5).

Table 3.5: Separations with an adverse event<sup>(a)</sup>, public and private hospitals, 2008–09

	Public ho	spitals	Private hos	spitals	Total	_
Adverse event	Separations	Per 100	Separations	Per 100	Separations	Per 100
External cause of injury and poisoning						
Adverse effects of drugs, medicaments and biological substances	92,630	1.9	21,361	0.7	113,991	1.4
Misadventures to patients during surgical and medical care	10,493	0.2	4,149	0.1	14,642	0.2
Procedures causing abnormal reactions/complications	150,644	3.1	84,369	2.6	235,013	2.9
Other external causes of adverse events	4,961	0.1	1,068	0.0	6,029	0.1
Place of occurrence of injury and poisoning						
Place of occurrence: Health service area	260,322	5.3	113,299	3.5	373,621	4.6
Diagnoses						
Selected post-procedural disorders	35,103	0.7	22,032	0.7	57,135	0.7
Haemorrhage and haematoma complicating a procedure	22,983	0.5	13,452	0.4	36,435	0.4
Infection following a procedure	21,764	0.4	10,421	0.3	32,185	0.4
Complications of internal prosthetic devices	53,618	1.1	30,080	0.9	83,698	1.0
Other diagnoses of complications of medical and surgical care	40,147	0.8	17,449	0.5	57,596	0.7
Total (any of the above) <sup>(b)</sup>	272,359	5.6	117,255	3.6	389,614	4.8

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

<sup>(</sup>a) Separations that included ICD-10-AM diagnosis and/or external cause codes that indicated an adverse event was treated and/or occurred during the hospitalisation.

<sup>(</sup>b) Categories do not sum to the totals because multiple diagnoses and external causes can be recorded for each separation and external cause codes and diagnosis codes can be used together to describe adverse events.

The data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may be different.

In the public sector, about 55% of separations with an adverse event reported *Procedures* causing abnormal reactions/complications, 34% reported *Adverse effects of drugs, medicaments and* biological substances and 20% reported *Complications of internal prosthetic devices, implants and* grafts. In the private sector, about 72% of separations with an adverse event reported *Procedures causing abnormal reactions/complications*, 18% reported *Adverse effects of drugs,* medicaments and biological substances and 26% reported *Complications of internal prosthetic devices, implants and grafts*.

The data presented in Table 3.5 can be interpreted as representing selected adverse events in health care that have resulted in, or have affected, hospital admissions, rather than all adverse events that occurred in hospitals. Some of the adverse events included in this table may represent events that occurred before admission. Condition onset flag information (see *Appendix 1*) could be used in the future to exclude conditions that arose before admission and to include conditions not currently used to indicate adverse events, to provide more accurate estimates of adverse events occurring and treated within single episodes of care.

# Performance indicator: Unplanned/unexpected readmissions within 28 days of selected surgical admissions

'Unplanned or unexpected readmissions after surgery' is defined as the number of separations involving selected procedures where readmission occurred within 28 days of the previous separation, and was considered to be 'unexpected or unplanned', because the principal diagnosis related to an adverse event (see above). The measure is regarded as an indicator of the safety of care. It could also be regarded as an indicator of effectiveness of care; however, the specifications identify adverse events of care as causes of readmission, rather than reasons that could indicate effectiveness.

Rates of unplanned or unexpected readmissions were about 3 per 100 separations for *Knee replacement*, *Tonsillectomy and adenoidectomy*, *Hysterectomy* and *Prostatectomy* (Table 3.6).

For Cataract extraction, fewer than 1 in 100 separations had a readmission within 28 days.

Table 3.6: Number and rate of unplanned/unexpected readmissions<sup>(a)(b)</sup> within 28 days, selected surgical procedures, public hospitals, 2008–09

	Separations	Readmissions	Per 100 separations
Knee replacement	9,856	232	2.4
Hip replacement	7,618	138	1.8
Tonsillectomy & adenoidectomy	22,129	560	2.5
Hysterectomy	7,234	206	2.8
Prostatectomy	8,339	238	2.9
Cataract extraction	51,513	248	0.5
Appendicectomy	22,427	499	2.2

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

<sup>(</sup>a) Includes readmissions to the same hospital only, for public hospitals.

<sup>(</sup>b) Excludes data for Western Australia.

This indicator was prepared using public hospital data only, where the readmission occurred in the same hospital. Data for Western Australia were not available.

# Responsiveness

Service is client orientated. Clients are treated with dignity, confidentiality, and encouraged to participate in choices related to their care.

There are no indicators of responsiveness available for hospitals.

# **Continuity of care**

Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.

There are no indicators of continuity of care available for hospitals.

# **Accessibility**

People can obtain health care at the right place and right time irrespective of income, physical location and cultural background.

#### Performance indicator: Waiting times for emergency department care

Emergency department waiting time to service delivery is 'The time elapsed for each patient from presentation in the emergency department to commencement of service by a treating medical officer or nurse'. The National Triage Scale has five categories that incorporate the time by which the patient should receive care.

Emergency department waiting times information is summarised as the proportions of presentations in which patients were treated within an appropriate time (for the urgency of their condition), and is presented for emergency departments in hospitals classified as *Principal referral and specialist women's and children's hospitals* and *Large hospitals*.

For 2008–09, for all triage categories overall, the proportion of presentations in which patients received emergency department care within the required time was 68%, ranging from 44% in the Northern Territory to 73% in Victoria.

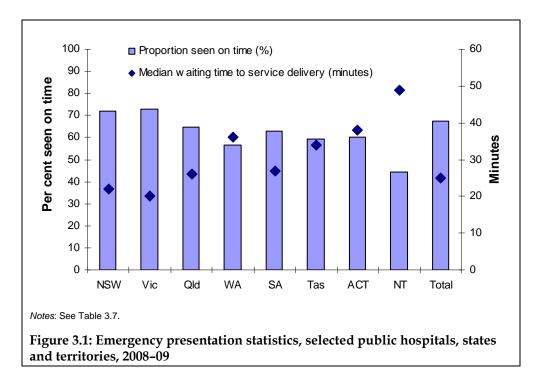
There was marked variation between states and territories in the median waiting times to service delivery for *Principal referral and specialist women's and children's hospitals* and *Large hospitals*. For Victoria, 50% of presentations were treated by a medical officer or nurse within 20 minutes and, for the Northern Territory, 50% of presentations were treated within 49 minutes (Table 3.8 and Figure 3.1).

Table 3.7: Proportion<sup>(a)</sup> of emergency presentations<sup>(b)</sup> seen on time, by triage category, selected public hospitals<sup>(c)</sup>, states and territories, 2008–09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	99	99	100	99	100	100	100
Emergency	80	82	72	66	74	75	85	61	76
Urgent	66	74	59	47	57	50	53	45	63
Semi-urgent	70	67	64	56	60	58	53	39	65
Non-urgent	87	85	88	85	83	86	78	76	86
Total	72	73	65	57	63	59	60	44	68

#### Notes:

- (a) The proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.
- (b) Records with a Type of visit of Emergency presentation.
- (c) For emergency department presentations reported for hospitals classified as Principal referral and specialist women's and children's hospitals and Large hospitals for which episode-level data were available. For more information, see the text of Chapter 5 and Appendix 1.



More information on triage categories and emergency department waiting times for all public hospitals for which data were available (including hospitals that are not *Principal referral and specialist women's and children's hospitals* and *Large hospitals*) is available in *Chapter 5*.

#### Performance indicator: Waiting times for elective surgery

Elective surgery waiting times data provide information on patients removed from public hospital elective surgery waiting lists.

Waiting times for elective surgery are an indicator of the provision of timely care. The median waiting time indicates the time within which 50% of patients were admitted for the

awaited procedure. The 90th percentile waiting time indicates the amount of time within which 90% of patients were admitted for the awaited procedure.

In 2008–09, the overall median waiting time for patients who were admitted from waiting lists was 34 days. It ranged from 27 days in Queensland to 75 days in the Australian Capital Territory. The 90th percentile for waiting time ranged from 133 days in Queensland to 448 days in Tasmania, with an overall value of 220 days (Table 3.8). In 2008–09, 2.9% of patients admitted from public hospital waiting lists waited over a year for their elective surgery.

Table 3.8: Waiting time statistics for patients admitted from public hospital waiting lists for elective surgery<sup>(a)</sup>, by state and territory, 2008–09

	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Number of admissions	199,384	147,690	109,940	60,398	44,152	16,931	10,104	6,410	595,009
Days waited at 50 <sup>th</sup> percentile	39	31	27	31	36	44	75	40	34
Days waited at 90 <sup>th</sup> percentile	283	194	133	174	207	448	378	256	220
% waited more than 365 days	2.5	2.9	1.8	2.0	2.7	13.1	10.6	5.6	2.9

Notes

For more information on elective surgery waiting times, see *Chapter 10*.

## Performance indicator: Rates of service—overnight separations

The number of overnight separations per 1,000 population is regarded as an indicator of the accessibility of hospital services. The number of overnight separations is considered to be more comparable among the states and territories and between the public and private sectors, than the total number of separations. This is due to variations in admission practices, which lead to variation, in particular, in the number of same-day admissions.

Rates of overnight separations in public hospitals ranged from 87 per 1,000 in Tasmania to 186 per 1,000 in the Northern Territory (Table 3.9).

Table 3.9: Overnight separations per 1,000 population, states and territories, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals	115.6	106.8	102.3	105.3	119.6	87.1	126.6	185.9	110.3
Private hospitals	37.8	48.7	60.9	54.7	51.8	n.p.	n.p.	n.p.	48.0
Total	153.4	155.5	163.3	160.0	171.4	n.p.	n.p.	n.p.	158.3

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

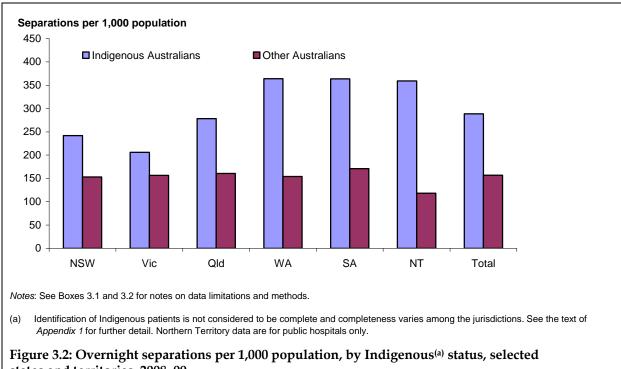
Separation rates presented by the state or territory of hospitalisation will include separations for patients not usually resident in that state or territory. For the Australian Capital Territory, about 77% of separations were for Australian Capital Territory residents, with most of the remainder being residents of New South Wales.

Overnight separation rates by Indigenous status are presented for the six jurisdictions with data of sufficient quality for analytical purposes (see *Appendix 1*). The rate of overnight separations for *Indigenous Australians* was almost twice the rate for *Other Australians* (289 per 1,000 and 157 per 1,000, respectively) (Figure 3.2).

<sup>(</sup>a) Records with a Reason for removal of Admitted as an elective/emergency patient for awaited procedure in this hospital or another hospital.

<sup>(</sup>b) Includes data for the Mersey Community Hospital.

More information on the number of separations, separations per 1,000 population, the standardised separation rate ratio (SRR) and the 95% confidence interval of the SRR by Indigenous status is available in *chapters 7*, 8, 9, 10 and 11.



states and territories, 2008–09

For public hospitals, rates of overnight separations increased with remoteness of the patient's area of usual residence, ranging from 97 per 1,000 population in *Major cities* to 239 per 1,000 in *Very remote* areas (Figure 3.3). For private hospitals, rates of overnight separations decreased with remoteness, ranging from 22 per 1,000 in *Very remote* areas to 50 per 1,000 in *Major cities*.

Rates of overnight separations in public hospitals increased with socioeconomic disadvantage, and for private hospitals decreased with socioeconomic disadvantage (Figure 3.4).

More information on overnight separations, including demographic and clinical data is available in *Chapter 9*. Similar information for same-day separations is available in *Chapter 8*.

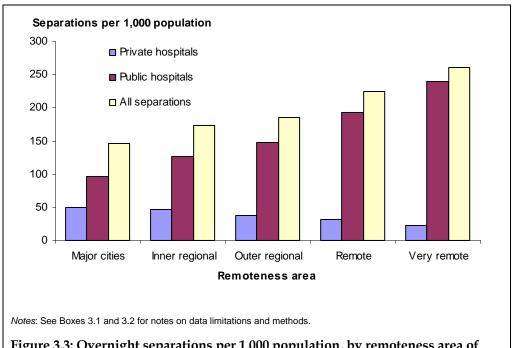


Figure 3.3: Overnight separations per 1,000 population, by remoteness area of usual residence, public and private hospitals, 2008–09

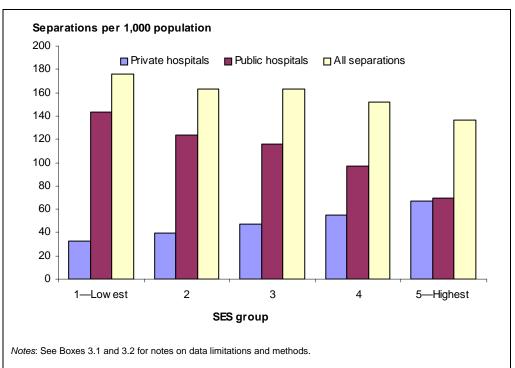


Figure 3.4: Overnight separations per 1,000 population, by socioeconomic status group, public and private hospitals, 2008–09

## Performance indicator: Rates of services—hospital procedures

This indicator relates to accessibility of hospitals services and may also relate to the appropriateness of hospital care. The procedures presented here are those used in the NHA performance indicator — Rates of services: hospital procedures. Most of these procedures were originally in a similar indicator for the Health Ministers' Benchmarking Working Group (NHMBWG). These procedures were selected because of the frequency with which they are undertaken, because they are often elective and discretionary, and because there are sometimes treatment alternatives available (NHMBWG 1998).

Table 3.10 presents separations per 1,000 population for the procedures, by state or territory of residence. There was some variation among states and territories for the selected procedures. For example, separations for *Cataract extraction* ranged from 6.8 per 1,000 population in the Australian Capital Territory to 9.8 per 1,000 population in Western Australia.

Table 3.10: Separations per 1,000 population for hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2008–09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Cataract extraction	8.5	8.1	9.8	9.8	7.8	8.1	6.8	9.1	8.7
Cholecystectomy	2.1	2.2	2.3	2.0	2.3	1.9	2.3	1.7	2.2
Coronary artery bypass graft	0.6	0.6	0.7	0.3	0.7	0.4	0.7		0.6
Coronary angioplasty	1.5	1.6	1.4	1.5	1.5	1.4	2.9		1.5
Cystoscopy	4.0	5.0	5.1	6.3	5.5	4.3	5.3	3.0	4.8
Haemorrhoidectomy	2.5	1.5	1.3	1.0	1.3	1.3	1.0	2.0	1.7
Hip replacement	1.3	1.4	1.2	1.5	1.5	1.5	2.4	8.0	1.4
Hysterectomy, females aged 15–69 <sup>(b)</sup>	2.2	2.2	2.7	2.4	2.8	2.6	2.8	1.7	2.4
Inguinal herniorrhaphy	2.2	2.2	2.4	2.3	2.1	1.9	2.3	1.9	2.2
Knee replacement	1.7	1.4	1.7	1.7	1.8	1.2	2.6	0.9	1.6
Myringotomy	1.5	1.8	1.7	2.3	3.2	1.2	2.7	1.1	1.8
Prostatectomy <sup>(c)</sup>	3.0	3.4	2.7	2.6	2.9	2.4	4.3	1.7	3.0
Septoplasty	1.0	1.3	0.9	0.9	1.5	0.5	1.4	0.5	1.1
Tonsillectomy	2.2	2.1	2.4	2.7	2.8	1.4	3.2	0.9	2.3
Varicose veins stripping and ligation	0.6	0.8	0.5	0.5	0.7	0.4	1.2	0.5	0.6

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

Additional information is available in Table S3.9 at the end of this chapter.

Similar information on these procedures by remoteness area of usual residence and socioeconomic status is available in additional tables accompanying this report on the CD and internet. The additional tables include the numbers of separations, the separation rates, separation rate ratios (SRRs) and confidence intervals (of the SRR).

<sup>(</sup>a) The procedures are defined using ACHI codes in Appendix 1.

<sup>(</sup>b) For Hysterectomy, the rate per 1,000 population was calculated for the estimated resident female population aged 15 to 69 years.

<sup>(</sup>c) For Prostatectomy, the rate per 1,000 population was calculated for the estimated resident male population.

## Performance indicator: Rates of service—non-acute care separations

Table 3.11 presents rates of separations for non-acute care by state and territory. Caution should be used in interpreting these data as there are variations in the assignment of care type categories between jurisdictions.

Table 3.11: Separations for non-acute care per 1,000 population, states and territories, 2008–09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Rehabilitation	13.9	4.7	9.9	4.8	10.0	3.3	16.7	2.3	9.4
Palliative care	1.3	1.0	1.7	1.6	0.8	0.5	2.0	3.3	1.3
Geriatric evaluation and management	0.3	2.0	0.3	0.3	0.2	0.1	4.2	n.a.	0.8
Psychogeriatric care	0.1	1.5	0.1	0.4	0.1	0.2	0.2	n.a.	0.5
Maintenance care	0.8	0.1	1.6	1.0	1.3	0.8	4.3	3.9	0.9
Total non-acute care	16.3	9.3	13.6	8.2	12.3	5.0	27.4	9.6	12.8

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

More information on sub- and non-acute admitted patient care, including demographic and clinical data is available in *Chapter 11*.

# **Efficiency & sustainability**

Achieving desired results with most cost-effective use of resources. Capacity of system to sustain workforce and infrastructure, to innovate and respond to emerging needs.

#### Performance indicator: Cost per casemix-adjusted separation

#### Box 3.3 Cost per casemix adjusted separation – method

Details of the methods used in this analysis are presented in *Appendix 1* of this report and in more detail in *Australian hospital statistics 1999–00* (AIHW 2001).

The scope of the analysis includes public hospitals that provide mainly acute care. These are the hospitals in the public hospital peer groups of *Principal referral and Specialist women's and children's hospitals, Large hospitals, Medium hospitals* and *Small acute hospitals* (see *Appendix 1*). Hospitals included in this analysis accounted for 95% of separations in public acute and psychiatric hospitals in 2008–09, and 92% of recurrent expenditure on public hospitals (excluding depreciation).

Casemix-adjusted separations is calculated as the product of Total separations and Average cost weight.

The Average cost weight is sourced from the National Hospital Morbidity Database, using the 2007–08 AR-DRG version 5.1 cost weights (DoHA 2009) for separations for which the care type was reported as *Acute*, *Newborn* with at least one qualified day or was *Not reported*.

The cost per casemix-adjusted separation is a measure of the average cost of providing care for each admitted patient separation, accounting for the relative complexity of the patients' conditions. It is calculated for selected public acute hospitals as the average recurrent expenditure for each separation, adjusted using AR-DRG cost weights for the resources expected to be used for the separation. As such it can be taken as a measure of the relative technical efficiency of hospitals.

Nationally, the average cost per casemix-adjusted separation was \$4,471 (excluding depreciation). There was some variation in the average cost per casemix-adjusted separation by state and territory (Table 3.12).

A large portion of the costs was attributed to *Non-medical labour* and *Medical labour* costs (Table 3.12). Nationally these costs were \$2,281 and \$974, respectively, per casemix-adjusted separation. Depreciation added an average of 3.5% (\$157) to the cost of each separation. More detailed information is available in Table S3.1, at the end of this chapter.

Table 3.12: Cost (\$) per casemix-adjusted separation (excluding depreciation), selected public hospitals, states and territories, 2008–09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Medical labour costs (\$)	1,035	807	966	1,190	1,030	972	1,118	964	974
Non-medical labour costs (\$)	2,253	2,310	2,318	2,440	1,920	2,328	2,322	2,854	2,281
Nursing (\$)	1,184	1,200	1,154	1,164	1,094	1,194	1,238	1,541	1,180
Other staff (includes superannuation) (\$)	1,068	1,110	1,164	1,276	826	1,134	1,084	1,313	1,101
Other recurrent costs (excludes depreciation) (\$)	1,166	1,263	1,222	1,212	1,124	1,516	1,184	1,544	1,215
Depreciation (\$)	159	170	183	118	124	124	129	44	157
Total (excludes depreciation) (\$)	4,454	4,380	4,507	4,842	4,074	4,817	4,624	5,361	4,471

Notes: See Boxes 3.1 and 3.2 for notes on data limitations and methods.

Additional information is available in tables S3.2 to S3.7 at the end of this chapter.

Interpretation of the cost per casemix-adjusted separation data should take into consideration factors such as costs incurred that are beyond the control of a jurisdiction. For example, the Northern Territory has high staffing and transport costs, and treats a greater proportion of Aboriginal and Torres Strait Islander patients than other jurisdictions. The cost disabilities associated with providing hospital services in the Northern Territory have been recognised by the Commonwealth Grants Commission.

Table 3.13 presents costs per casemix-adjusted separation data for selected public hospital peer groups. Public hospitals can be classified into peer groups that allow a more meaningful comparison of cost data. The peer group classification allocates hospitals into broadly similar groups in terms of their level of admitted patient activity and their geographical location (see *Appendix* 1).

Table 3.13: Cost (\$) per casemix-adjusted separation (excluding depreciation), by public hospital peer group, selected public hospitals(b), states and territories, 2008–09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
			Cost pe	er casemi	x adjuste	ed separa	ation (\$)		
Principal referral and specialist women's									
and children's hospitals	4,465	4,426	4,579	4,852	4,124	4,713	4,624	5,287	4,501
Large hospitals	4,283	3,946	3,693	4,248	3,903	5,640			4,156
Medium hospitals	4,434	4,098	4,003	5,138	3,696				4,315
Small acute hospitals	4,991	5,277	4,883	5,784	4,531	4,355		5,912	5,162
Total (selected hospitals)	4,454	4,380	4,507	4,842	4,074	4,817	4,624	5,361	4,471

Notes: See Boxes 3.1, 3.2 and 3.3 for notes on data limitations and methods.

Additional information is available in tables S3.1 to S3.7 at the end of this chapter.

For more information on the characteristics of public hospitals, see *Chapter 4*.

#### Performance indicator: Relative stay indexes

Relative stay indexes (RSIs) are calculated as the observed number of patient days for separations in selected AR-DRGs, divided by the expected number of patient days (based on national figures), standardised for casemix. The adjustment for casemix allows variation in types of services provided to be taken into account.

An RSI greater than 1 indicates that an average patient's length of stay is higher than would be expected given the casemix for the category of interest (for example, hospital sector or jurisdiction). An RSI of less than 1 indicates that the length of stay was less than would have been expected. More detail on these methods is included in *Appendix 1*.

The indirectly standardised relative stay index is not technically comparable between cells but is a comparison of the hospital group with the national average based on the casemix of that group. The directly standardised relative stay index is re-scaled so each group represents the national casemix and allows comparison of RSI values across groups of hospitals.

Table 3.14 presents both indirectly and directly standardised RSIs for all hospitals for 2008–09. For the hospitals included in the cost per casemix-adjusted separation analysis (see above), the RSI was 1.00 overall.

Overall, the RSI for private hospitals was 1.10 directly standardised compared to 1.00 for public hospitals, indicating relatively shorter lengths of stay in the public sector compared with the private sector.

Table 3.14 also presents RSI information for the *Medical, Surgical* and *Other* categories of AR-DRGs (DoHA 2006). These figures indicate relatively shorter lengths of stay for *Medical* separations in public hospitals, and for *Surgical* and *Other* separations in private hospitals.

RSIs for selected acute and non-acute public hospitals are presented in Tables S3.1 to S3.7 with a range of other information on these hospitals at the end of this chapter.

Table 3.14: Relative stay index by medical/surgical/other type of AR-DRG, public and private hospitals, states and territories, 2008–09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Indirectly standardise	ed relative sta	y index							
Public hospitals	1.04	0.92	0.95	1.01	1.01	1.01	0.89	1.18	0.99
Medical	1.03	0.89	0.92	0.99	0.99	1.01	0.90	1.11	0.96
Surgical	1.08	0.98	1.02	1.06	1.04	1.02	0.88	1.39	1.04
Other	1.15	0.96	1.05	0.98	1.06	1.00	0.89	1.16	1.05
Private hospitals	1.03	1.04	1.04	1.05	0.98	n.p.	n.p.	n.p.	1.03
Medical	1.21	1.12	1.15	1.10	1.05	n.p.	n.p.	n.p.	1.14
Surgical	0.93	0.98	0.94	1.03	0.94	n.p.	n.p.	n.p.	0.95
Other	0.90	0.94	0.98	0.96	0.92	n.p.	n.p.	n.p.	0.94
All hospitals	1.04	0.95	0.98	1.02	1.00	n.p.	n.p.	n.p.	1.00
Medical	1.05	0.94	0.99	1.01	1.00	n.p.	n.p.	n.p.	1.00
Surgical	1.02	0.98	0.98	1.05	1.00	n.p.	n.p.	n.p.	1.00
Other	1.05	0.95	1.01	0.97	1.00	n.p.	n.p.	n.p.	1.00
Directly standardised	relative stay	index							
Public hospitals	1.06	0.93	0.97	1.02	1.02	1.03	0.92	1.28	1.00
Medical	1.03	0.89	0.92	0.99	0.99	1.03	0.91	1.13	0.96
Surgical	1.10	1.00	1.04	1.09	1.06	1.04	0.93	1.55	1.05
Other	1.17	0.99	1.06	0.99	1.09	1.02	0.98	1.32	1.06
Private hospitals	1.11	1.09	1.11	1.14	1.04	n.p.	n.p.	n.p.	1.10
Medical	1.23	1.16	1.21	1.21	1.09	n.p.	n.p.	n.p.	1.19
Surgical	0.92	0.99	0.95	1.03	0.95	n.p.	n.p.	n.p.	0.95
Other	0.93	0.94	1.03	1.01	0.93	n.p.	n.p.	n.p.	0.96
All hospitals	1.04	0.96	0.99	1.03	1.00	n.p.	n.p.	n.p.	1.00
Medical	1.05	0.94	0.99	1.02	1.00	n.p.	n.p.	n.p.	1.00
Surgical	1.02	0.98	0.98	1.05	1.00	n.p.	n.p.	n.p.	1.00
Other	1.05	0.95	1.01	0.97	1.01	n.p.	n.p.	n.p.	1.00

 $\it Notes$ : See Boxes 3.1 and 3.2 for notes on data limitations and methods.

Additional information on RSI by funding source is available in Table S3.8.

n.p. Private hospital data not published for confidentiality.

## Performance indicator: Average lengths of stay for 20 selected AR-DRGs

The selected AR-DRGs (Figure 3.5 and Table S3.9) were chosen on the basis of:

- homogeneity, where variation is more likely to be attributable to the hospital's performance rather than variations in the patients themselves
- representativeness across clinical groups (major diagnostic categories, MDCs) and surgical and medical AR-DRGs
- differences between jurisdictions and/or sectors
- policy interest as evidenced by:
  - inclusion of similar groups in other tables in *Australian hospital statistics*, such as indicator procedures for elective surgery waiting times
  - high volume and/or cost
  - changes in volume over years.

More information on the basis of selection for the AR-DRGs is included in *Appendix* 1.

Figure 3.5 presents the average lengths of stay for selected AR-DRGs in public and private hospitals. There were notable differences (more than 1 day) in the average length of stay between public and private hospitals for 7 of the 20 selected AR-DRGs. The average length of stay for U63B *Major affective disorders age*<70 *W/O catastrophic or severe CC* was 13.6 days for public hospitals and 18.6 days for private hospitals.

Public hospitals accounted for more than 70% of separations for 8 of the 20 selected AR-DRGs and private hospitals accounted for more than 80% of separations for I16Z *Other shoulder procedures*.

Additional information on the average length of stay for selected AR-DRGs is available by state and territory on the CD and internet.

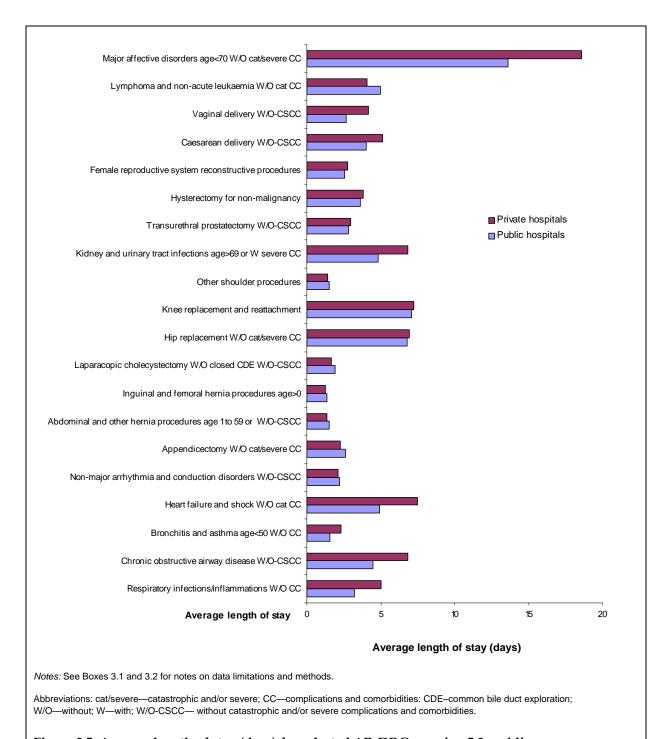


Figure 3.5: Average length of stay (days) for selected AR-DRGs version 5.2, public and private hospitals, 2008-09

# Supplementary tables

#### Box 3.4: Notes for Chapter 3 supplementary tables

#### **Table S3.1 to S3.7:**

- (a) Excludes separations for which the care type was reported as *Newborn with no qualified days*, and records for *Hospital boarders* and *Posthumous organ procurement*.
- (b) For Victoria, the cost per casemix-adjusted separation could be calculated for only 5 of the 16 teaching hospitals, and may not be representative of Victorian teaching hospitals as a whole. See *Appendix 1* for more information.
- (c) Queensland pathology services are purchased from the statewide pathology service rather than being provided by each hospital's employees, resulting in higher medical supplies costs and lower diagnostic staff costs.
- (d) Depreciation was reported for a subset of South Australian and Tasmanian hospitals.
- (e) Estimated private patient medical costs calculated as the sum of *Salary/sessional* and *Visiting medical officer* payments multiplied by the proportion of patient days that were for private patients. This is a notional estimate of the medical costs for all non-public patients, including those *Self-funded* and those funded by *Private health insurance*, *Compensation* and the *Department of Veterans' Affairs*.

#### Table S3.2 to S3.7:

- (a) See footnote (a) for Table S3.1.
- (b) Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included. See *Appendix 1* for further information.
- (c) Separations for which the care type was reported as *Acute*, *Newborn* with at least one qualified day, or was *Not reported*.
- (d) Casemix-adjusted separations is calculated as the product of Total separations and Average cost weight.
- (e) Average cost weight, using the 2007–08 AR-DRG version 5.1 cost weights (DoHA 2008) for acute separations (see footnote (c)).
- (f) The indirectly standardised relative stay index is not technically comparable between cells but is a comparison of the hospital group with the national average of public hospitals based on the casemix of that group. See *Appendix 1* for details on the methodology.
- (g) Average cost per casemix-adjusted separation excluding depreciation.
- (h) Average cost per casemix-adjusted separation including depreciation.
- (i) Definitions of the peer groups can be found in *Appendix* 1.
- (j) For the Australian Capital Territory, the information presented for RSI, average cost weight, and Cost per casemix-adjusted separation data are only presented for hospitals reporting admitted patient activity (excludes a mothercraft hospital).

Table S3.1: Cost per case mix-adjusted separation  $^{(a)}$  and average cost data for selected public acute hospitals, states and territories, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Non-medical labour costs per case	mix-adjus	sted sepa	ration (\$)	)					
Nursing	1,184	1,200	1,154	1,164	1,094	1,194	1,238	1,541	1,180
Diagnostic/allied health <sup>(b) (c)</sup>	317	370	294	338	222	308	299	334	321
Administrative	314	291	296	381	253	271	320	335	305
Other staff	206	218	304	312	135	275	139	398	233
Superannuation	232	232	270	244	215	280	327	245	242
Total non-medical labour costs	2,253	2,310	2,318	2,440	1,920	2,328	2,322	2,854	2,281
Other recurrent costs per casemix-	adjusted	separatio	on (\$)						
Domestic services	125	101	115	110	97	95	169	138	114
Repairs/maintenance	86	81	98	118	90	89	56	133	90
Medical supplies <sup>(b) (c)</sup>	409	387	478	336	308	571	395	363	403
Drug supplies	221	237	232	262	199	270	129	236	229
Food supplies	43	47	33	33	27	47	17	43	40
Administration	206	256	240	197	52	228	273	244	214
Other	77	154	26	156	351	215	145	386	126
Total other recurrent costs excluding									
depreciation	1,166	1,263	1,222	1,212	1,124	1,516	1,184	1,544	1,215
Depreciation <sup>(d)</sup>	159	170	183	118	124	124	129	44	157
Total excluding medical labour costs									
and depreciation	3,419	3,573	3,540	3,652	3,044	3,844	3,506	4,398	3,496
Medical labour costs per casemix-a	djusted	separatio	n (\$)						
Public patients									
Salaried/sessional staff	546	616	806	847	664	634	698	848	658
Visiting medical officer payments	228	66	79	161	196	146	247	62	146
Private patients (estimated) <sup>(e)</sup>	260	124	81	182	170	192	173	54	171
Total medical labour costs	1,035	807	966	1,190	1,030	972	1,118	964	974
Total cost per casemix-adjusted									
separation excluding depreciation	4,454	4,380	4,507	4,842	4,074	4,817	4,624	5,361	4,471
Total cost per casemix-adjusted									
separation including depreciation	4,613	4,550	4,689	4,960	4,197	4,940	4,753	5,406	4,628

Notes: See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.2: Cost per casemix-adjusted separation<sup>(a)</sup> and other statistics, acute, non-acute and total selected public hospitals<sup>(b)</sup>, states and territories, 2008–09

	Number of hospitals <sup>(b)</sup>	Separations per hospital <sup>(a)</sup>	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d) (e)</sup>	Relative stay index <sup>(f)</sup>	Cost/casemix- adjusted sep excl dep <sup>(g)</sup>	Cost/casemix- adjusted sep inc dep <sup>(h)</sup>
Total be	nchmarking hos	spitals in cost per	casemix-adju			<del>-</del>	-
NSW	127	11,430	226	1.07	1.08	4,454	4,613
Vic	67	19,658	173	0.98	0.92	4,380	4,550
Qld	73	11,702	209	1.01	0.96	4,507	4,689
WA	34	13,082	227	0.97	1.01	4,842	4,960
SA	35	10,042	241	1.11	1.03	4,074	4,197
Tas	9	10,236	256	1.04	1.04	4,817	4,940
ACT	2	44,935	447	1.00	0.86	4,624	4,753
NT	5	19,071	250	0.70	1.19	5,361	5,406
Total	352	13,342	209	1.02	1.00	4,471	4,628
Non-acu	te hospitals in o	cost per casemix-	adjusted sepa	ration analysis	s <sup>(b)</sup>		
NSW	59	630	20	0.90	0.98	9,898	10,198
Vic	15	892	16	0.83	1.34	5,039	5,358
Qld	28	871	36	0.79	0.95	4,751	5,017
WA	43	419	14	0.97	1.05	7,863	8,139
SA	25	588	23	0.81	1.06	8,756	9,095
Tas	5	244	12	0.97	1.56	7,689	7,908
ACT	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NT	0						
Total	176	618	21	0.86	1.04	7,763	8,061
Public h	ospitals (includ	ing Psychiatric ar	nd unpeered) ii	n cost per cas	emix-adjusted	I separation anal	ysis <sup>(b)</sup>
NSW	227	6,634	155	1.07	1.07	4,637	4,802
Vic	95	14,177	104	0.97	0.92	4,468	4,643
Qld	170	5,196	146	1.00	0.96	4,595	4,787
WA	94	4,973	155	0.98	1.02	5,155	5,283
SA	80	4,682	149	1.10	1.04	4,455	4,591
Tas	28	3,389	157	1.05	1.07	4,887	5,012
ACT <sup>(j)</sup>	2	n.a.	447	1.00	0.86	4,623	4,752
NT	5	19,071	250	0.70	1.19	5,361	5,406
Total	702	6,920	126	1.02	1.00	4,634	4,798

 $\it Notes$ : See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.3: Principal referral and specialist women's & children's hospitals—cost per casemix-adjusted separation  $^{(a)}$  and selected other statistics, 2008–09

	Number of hospitals <sup>(b)</sup>	Separations per hospital <sup>(a)</sup>	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d) (e)</sup>	Relative stay index <sup>(f)</sup>	Cost/casemix- adjusted sep excl dep <sup>(g)</sup>	Cost/casemix- adjusted sep inc dep <sup>(h)</sup>
Principa	l referral hospit	als: Major cities a	nd Regional <sup>(i)</sup>				
NSW	26	37,129	434	1.11	1.10	4,432	4,590
Vic	18	56,360	396	1.01	0.90	4,374	4,520
Qld	16	40,489	381	1.05	0.98	4,519	4,693
WA	4	54,613	443	1.08	1.06	4,836	4,944
SA	4	50,887	495	1.20	1.06	4,023	4,151
Tas	2	40,163	485	1.02	1.01	4,713	4,852
ACT	2	44,935	447	1.00	0.86	4,624	4,753
NT	2	40,051	396	0.74	1.22	5,287	5,329
Total	74	44,594	398	1.06	1.01	4,455	4,604
Specialis	st women's & cl	hildren's hospitals	S <sup>(i)</sup>				
NSW	3	17,779	235	1.27	1.14	5,082	5,313
Vic	2	28,624	238	1.30	0.97	5,166	5,654
Qld	3	15,211	203	1.24	0.97	5,339	5,564
WA	2	20,295	198	1.23	1.06	4,932	5,045
SA	1	30,164	313	1.15	n.p.	n.p.	n.p.
Tas	0						
ACT	0						
NT	0						
Total	11	20,634	227	1.25	1.05	5,087	5,331
Total Pri	ncipal referral a	and specialist wor	nen's & childre	en's hospitals	(i)		
NSW	29	35,127	423	1.12	1.10	4,465	4,627
Vic	20	53,586	314	1.02	0.91	4,426	4,594
Qld	19	36,498	386	1.07	0.98	4,579	4,758
WA	6	43,174	387	1.10	1.06	4,852	4,962
SA	5	46,742	459	1.19	1.07	4,124	4,241
Tas	2	40,163	485	1.02	1.01	4,713	4,852
ACT	2	44,935	447	1.00	0.86	4,624	4,753
NT	2	40,051	396	0.74	1.22	5,287	5,329
Total	85	41,493	380	1.07	1.01	4,501	4,657

Notes: See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.4: Large hospitals — cost per case mix-adjusted separation  $^{\rm (a)}$  and selected other statistics, 2008–09

	Number of hospitals <sup>(b)</sup>	Separations per hospital <sup>(a)</sup>	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d) (e)</sup>	Relative stay index <sup>(f)</sup>	Cost/casemix- adjusted sep excl dep <sup>(g)</sup>	Cost/casemix- adjusted sep inc dep <sup>(h)</sup>
Large ho	ospitals: Major o		-				
NSW	9	14,044	286	1.12	1.01	3,969	4,085
Vic	2	16,595	117	0.87	0.90	4,198	4,399
Qld	2	19,539	274	0.83	0.85	3,316	3,424
WA	2	20,196	284	0.76	0.93	4,396	4,483
SA	2	16,412	299	1.24	0.99	3,903	4,069
Tas	0						
ACT	0						
NT	0						
Total	17	15,993	253	1.00	0.97	3,968	4,100
Large ho	ospitals: Region	nal and Remote <sup>(i)</sup>					
NSW	5	12,754	279	0.90	0.98	5,046	5,221
Vic	7	14,576	228	0.84	0.95	3,909	4,027
Qld	2	12,068	252	0.81	0.90	4,324	4,478
WA	3	15,979	283	0.78	0.92	4,126	4,226
SA	0						
Tas	1	9,061	262	1.28	n.p.	n.p.	n.p.
ACT	0						
NT	0						
Total	18	13,719	243	0.86	0.95	4,383	4,510
Total La	rge hospitals <sup>(i)</sup>						
NSW	14	13,583	283	1.04	1.00	4,283	4,415
Vic	9	15,025	208	0.85	0.94	3,946	4,091
Qld	4	15,803	263	0.82	0.87	3,693	3,818
WA	5	17,665	283	0.77	0.93	4,248	4,342
SA	2	16,412	299	1.24	0.99	3,903	4,069
Tas	1	9,061	262	1.28	n.p.	n.p.	n.p.
ACT	0						
NT	0						
Total	35	14,823	259	0.93	0.97	4,156	4,286

Notes: See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.5: Medium hospitals — cost per casemix-adjusted separation  $^{(a)}$  and selected other statistics, states and territories, 2008-09

	Number of	Separations	AR-DRGs (5+) per	Average cost	Relative	Cost/casemix- adjusted sep	Cost/casemix- adjusted sep
Medium	hospitals: Maio	per hospital <sup>(a)</sup> r cities (<10,000) a	hospital <sup>(c)</sup>	weight <sup>(d) (e)</sup>	stay index <sup>(f)</sup>	excl dep <sup>(g)</sup>	inc dep <sup>(h)</sup>
NSW	13	8,149	166	0.95	0.98	4,150	4,301
Vic	4	9,000	206	0.72	0.93	3,979	4,166
Qld	3	8,875	201	0.69	0.66	3,455	3,586
WA	6	10,059	173	0.81	0.93	5,114	5,243
SA	4	8,958	199	0.83	0.92	3,951	4,056
Tas	0						
ACT	0						
NT	0						
Total	30	8,825	172	0.85	0.93	4,260	4,405
Medium	hospitals: Majo	r cities and Regio	nal (<5,000 ac	ute weighted	separations) <sup>(i)</sup>		
NSW	23	3,675	123	0.80	1.13	4,820	4,961
Vic	13	4,097	111	0.69	1.04	4,193	4,379
Qld	9	3,769	127	0.79	0.87	4,381	4,650
WA	2	3,365	121	0.80	0.91	5,354	5,544
SA	9	3,477	131	0.87	0.90	3,398	3,511
Tas	0						
ACT	0						
NT	0						
Total	56	3,745	122	0.78	1.02	4,362	4,530
Total Me	edium hospitals <sup>(</sup>	i)					
NSW	36	5,291	150	0.88	1.05	4,434	4,580
Vic	17	5,250	133	0.70	0.99	4,098	4,282
Qld	12	5,046	145	0.74	0.79	4,003	4,214
WA	8	8,386	160	0.81	0.93	5,138	5,273
SA	13	5,163	154	0.85	0.91	3,696	3,804
Tas	0						
ACT	0						
NT	0						
Total	86	5,517	148	0.82	0.97	4,315	4,471

 $\it Notes$ : See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.6: Small hospitals — cost per casemix-adjusted separation  $^{(a)}$  and selected other statistics, 2008–09

	Number of hospitals <sup>(b)</sup>	Separations per hospital <sup>(a)</sup>	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d) (e)</sup>	Relative stay index <sup>(f)</sup>	Cost/casemix- adjusted sep excl dep <sup>(g)</sup>	Cost/casemix- adjusted sep inc dep <sup>(h)</sup>
Small reg	ional acute ho						
NSW	43	1,120	48	0.79	1.07	4,787	5,015
Vic	21	993	37	0.77	1.25	5,277	5,678
Qld	21	1,167	53	0.74	0.88	3,850	4,082
WA	4	1,363	63	0.80	1.14	5,640	5,951
SA	12	1,037	50	0.84	1.01	5,067	5,254
Tas	5	468	20	0.89	1.67	4,481	4,624
ACT	0						
NT	0						
Total Remote a	106 cute hospitals	1,073	46	0.78	1.08	4,754	5,014
NSW	5	826	36	0.67	0.96	7,686	8,062
Vic	0						
Qld	17	736	43	0.77	1.05	6,815	7,339
WA	11	2,263	85	0.79	0.88	5,804	6,030
SA	3	1,786	67	0.85	0.92	3,309	3,483
Tas	1	397	22	0.78	n.p.	n.p.	n.p.
ACT	0						
NT	3	5,085	104	0.52	1.01	5,912	5,977
Total Sma	40 all acute hospi	1,564 tals <sup>(i)</sup>	54	0.72	0.95	5,897	6,172
NSW	48	1,089	47	0.78	1.07	4,991	5,228
Vic	21	993	37	0.77	1.25	5,277	5,678
Qld	38	974	44	0.75	0.94	4,883	5,218
WA	15	2,023	79	0.79	0.93	5,784	6,020
SA	15	1,187	53	0.84	0.98	4,531	4,716
Tas	6	456	21	0.88	1.59	4,355	4,517
ACT	0						
NT	3	5,085	104	0.52	1.01	5,912	5,977
Total	146	1,208	49	0.76	1.04	5,162	5,426

Notes: See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Table S3.7: Teaching hospitals—cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, states and territories, 2008–09

	Number of hospitals <sup>(b)</sup>	Separations per hospital <sup>(a)</sup>	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d) (e)</sup>	Relative stay index <sup>(f)</sup>	Cost/casemix- adjusted sep excl dep <sup>(g)</sup>	Cost/casemix- adjusted sep inc dep <sup>(h)</sup>
NSW	20	39,769	421	1.15	1.12	4,475	4,644
Vic	5	27,963	237	1.15	0.99	4,972	5,267
Qld	22	31,564	358	1.07	0.98	4,636	4,817
WA	6	38,739	335	1.15	1.07	5,107	5,223
SA	8	35,003	385	1.17	1.05	4,108	4,229
Tas	3	29,796	410	1.04	1.02	4,830	4,952
ACT	2	44,935	447	1.00	0.86	4,624	4,753
NT	2	40,051	396	0.74	1.22	5,287	5,329
Total	68	35,315	375	1.11	1.05	4,600	4,763

Notes: See Boxes 3.1 to 3.4 for notes on limitations of the data and methods.

# Box 3.5: Notes for Chapter 3 supplementary tables S3.8 to S3.10

#### Table S3.8:

- (a) 'Public patients' includes separations with a funding source of *Australian Health Care Agreements*, *Reciprocal health care agreements*, *Other hospital or public authority* (with a public patient election status) and *No charge raised* (in public hospitals).
- (b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.
- (c) '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, No charge raised* (in private hospitals) and *Not reported*.

#### Table S3.9

- (a) Separations for which the care type was reported as *Newborn with no qualified days*, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.
- (b) The procedures are defined using ACHI codes as detailed in *Appendix* 1.
- (c) Rate per 1,000 population was directly age-standardised as detailed in *Appendix* 1.

#### **Table S3.10:**

- (a) Separations for which the care type was reported as *Acute* or *Newborn with qualified days*, or was *Not reported*. Excludes separations where the length of stay was greater than 120 days.
- (b) Average length of stay has been suppressed for AR-DRGs for which less than 50 separations were reported.

Table S3.8: Relative stay index (directly standardised), by funding source, public and private hospitals, states and territories, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Public patients <sup>(a)</sup>	1.03	0.91	0.94	0.99	0.99	1.00	0.90	1.18	0.97
Private health insurance	1.08	0.96	1.02	1.12	1.08	1.06	0.93	0.96	1.05
Self-funded <sup>(b)</sup>	1.02	0.88	0.83	0.81	0.90	0.00	0.95	1.17	0.95
Workers compensation	1.14	1.03	1.17	1.20	1.09	1.01	0.88	1.64	1.12
Motor vehicle third party personal claim	1.27	0.90	1.22	1.19	1.15	1.13	0.84	1.53	1.09
Department of Veterans' Affairs	1.01	0.92	0.95	1.01	1.02	1.13	0.68	0.98	0.98
Other <sup>(c)</sup>	1.55	1.13	1.11	1.10	1.04	1.76	1.00	1.16	1.28
Total	1.04	0.92	0.95	1.01	1.01	1.01	0.89	1.18	0.99
Private hospitals									
Public patients <sup>(a)</sup>	0.78	0.79	0.00	1.11	1.08	n.p.	n.p.	n.p.	1.39
Private health insurance	1.03	1.05	1.04	1.04	0.98	n.p.	n.p.	n.p.	1.03
Self-funded <sup>(b)</sup>	0.94	0.87	0.83	0.84	0.77	n.p.	n.p.	n.p.	0.88
Workers compensation	0.95	1.04	0.93	0.88	0.95	n.p.	n.p.	n.p.	0.96
Motor vehicle third party personal claim	0.96	1.05	1.04	0.92	1.15	n.p.	n.p.	n.p.	1.04
Department of Veterans' Affairs	1.15	1.06	1.18	1.31	1.03	n.p.	n.p.	n.p.	1.15
Other <sup>(c)</sup>	0.72	0.88	0.87	1.04	1.47	n.p.	n.p.	n.p.	0.95
Total	1.03	1.04	1.04	1.05	0.98	n.p.	n.p.	n.p.	1.03
All hospitals									
Public patients <sup>(a)</sup>	1.03	0.91	0.94	0.99	0.99	n.p.	n.p.	n.p.	0.97
Private health insurance	1.05	1.03	1.03	1.05	1.00	n.p.	n.p.	n.p.	1.03
Self-funded <sup>(b)</sup>	0.97	0.87	0.83	0.84	0.79	n.p.	n.p.	n.p.	0.90
Workers compensation	1.02	1.03	1.02	0.98	0.99	n.p.	n.p.	n.p.	1.02
Motor vehicle third party personal claim	1.25	0.92	1.21	1.17	1.15	n.p.	n.p.	n.p.	1.08
Department of Veterans' Affairs	1.06	0.99	1.14	1.21	1.03	n.p.	n.p.	n.p.	1.07
Other <sup>(c)</sup>	1.47	1.10	0.93	1.09	1.19	n.p.	n.p.	n.p.	1.13
Total	1.04	0.95	0.98	1.02	1.00	n.p.	n.p.	n.p.	1.00

Notes: See Box 3.5.

Table S3.9: Separation statistics<sup>(a)</sup> for selected hospital procedures<sup>(b)</sup>, all hospitals, states and territories, 2008–09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Cataract extraction									
Separations <sup>(a)</sup>	65,701	47,067	41,562	20,465	15,412	4,810	1,928	917	197,862
Separations not within state of residence (%)	2	2	2	<1	2	40	19	1	3
Proportion of separations public patients (%)	28	28	16	42	30	23	55	52	27
Separation rate <sup>(c)</sup>	8.5	8.1	9.8	9.8	7.8	8.1	6.8	9.1	8.7
Standardised separation rate ratio (SRR)	0.98	0.94	1.13	1.13	0.90	0.93	0.79	1.04	
95% confidence interval of SRR	0.97-0.99	0.93-0.94	1.12-1.14	1.11-1.14	0.88-0.91	0.91-0.96	0.75-0.82	0.98-1.11	
Cholecystectomy									
Separations <sup>(a)</sup>	15,293	11,974	10,023	4,442	3,944	964	793	330	47,763
Separations not within state of residence (%)	2	1	2	<1	2	1	21	4	2
Proportion of separations public patients (%)	59	62	49	54	60	53	50	70	57
Separation rate <sup>(c)</sup>	2.1	2.2	2.3	2.0	2.3	1.9	2.3	1.7	2.2
Standardised separation rate ratio (SRR)	0.97	1.01	1.07	0.93	1.06	0.85	1.07	0.76	
95% confidence interval of SRR	0.96-0.99	0.99-1.03	1.04-1.09	0.91-0.96	1.03-1.10	0.80-0.91	0.99-1.14	0.68-0.84	
Coronary angioplasty									
Separations <sup>(a)</sup>	11,570	9,271	6,326	3,348	2,775	845	912		35,047
Separations not within state of residence (%)	2	3	9	1	9	2	48		5
Proportion of separations public patients (%)	48	46	47	43	53	59	55		48
Separation rate <sup>(c)</sup>	1.5	1.6	1.4	1.5	1.5	1.4	2.9		1.5
Standardised separation rate ratio (SRR)	0.99	1.06	0.94	1.00	0.97	0.94	1.89		
95% confidence interval of SRR	0.97-1.01	1.04-1.08	0.91-0.96	0.96-1.03	0.93-1.01	0.88-1.00	1.77-2.01		

Table S3.9 (continued): Separation statistics(a) for selected hospital procedures(b), all hospitals, states and territories, 2008-09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Coronary artery bypass graft									
Separations <sup>(a)</sup>	4,388	3,512	3,086	752	1,240	241	203		13,422
Separations not within state of residence (%)	5	4	7	1	12	<1	47		6
Proportion of separations public patients (%)	51	50	50	47	53	56	58		51
Separation rate <sup>(c)</sup>	0.6	0.6	0.7	0.3	0.7	0.4	0.7		0.6
Standardised separation rate ratio (SRR)	0.98	1.05	1.21	0.59	1.11	0.70	1.13		
95% confidence interval of SRR	0.95-1.01	1.01-1.08	1.16–1.25	0.54-0.63	1.05–1.17	0.61-0.78	0.98-1.29		
Cystoscopy									
Separations <sup>(a)</sup>	30,366	28,144	22,094	13,760	10,205	2,499	1,610	428	109,106
Separations not within state of residence (%)	2	2	4	<1	2	<1	29	5	3
Proportion of separations public patients (%)	36	48	31	42	44	41	37	50	40
Separation rate <sup>(c)</sup>	4.0	5.0	5.1	6.3	5.5	4.3	5.3	3.0	4.8
Standardised separation rate ratio (SRR)	0.83	1.03	1.05	1.32	1.14	0.89	1.09	0.63	
95% confidence interval of SRR	0.82-0.84	1.02-1.04	1.04-1.07	1.30-1.34	1.12–1.17	0.86-0.93	1.04–1.15	0.57-0.69	
Haemorrhoidectomy									
Separations <sup>(a)</sup>	18,072	7,999	5,739	2,319	2,181	692	333	385	37,720
Separations not within state of residence (%)	1	2	2	<1	1	<1	17	2	1
Proportion of separations public patients (%)	29	40	24	43	35	51	34	30	32
Separation rate <sup>(c)</sup>	2.5	1.5	1.3	1.0	1.3	1.3	1.0	2.0	1.7
Standardised separation rate ratio (SRR)	1.46	0.86	0.77	0.61	0.74	0.76	0.57	1.16	
95% confidence interval of SRR	1.44-1.48	0.84-0.87	0.75-0.79	0.59-0.64	0.71-0.77	0.70-0.82	0.51-0.63	1.04-1.28	

Table S3.9 (continued): Separation statistics(a) for selected hospital procedures(b), all hospitals, states and territories, 2008-09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Hip replacement									
Separations <sup>(a)</sup>	9,747	8,307	5,224	3,232	3,041	891	703	84	31,229
Separations not within state of residence (%)	2	2	5	1	3	1	35	6	3
Proportion of separations public patients (%)	39	40	36	37	39	46	44	68	39
Separation rate <sup>(c)</sup>	1.3	1.4	1.2	1.5	1.5	1.5	2.4	0.8	1.4
Standardised separation rate ratio (SRR)	0.93	1.06	0.89	1.11	1.14	1.10	1.75	0.57	
95% confidence interval of SRR	0.91-0.94	1.04-1.08	0.86-0.91	1.07-1.14	1.10-1.18	1.02-1.17	1.62-1.88	0.45-0.69	
Hysterectomy, females aged 15-69									
Separations <sup>(a)</sup>	8,025	6,018	5,821	2,627	2,371	667	510	184	26,223
Separations not within state of residence (%)	2	3	3	<1	2	<1	21	2	2
Proportion of separations public patients (%)	39	51	35	35	44	48	27	33	41
Separation rate <sup>(c)</sup>	2.2	2.2	2.7	2.4	2.8	2.6	2.8	1.7	2.4
Standardised separation rate ratio (SRR)	0.94	0.92	1.12	1.00	1.19	1.10	1.19	0.73	
95% confidence interval of SRR	0.92-0.96	0.90-0.94	1.09-1.14	0.96-1.04	1.14–1.24	1.01-1.18	1.09-1.29	0.62-0.83	
Inguinal herniorrhaphy									
Separations <sup>(a)</sup>	15,897	12,266	10,259	4,946	3,745	1,018	758	333	49,222
Separations not within state of residence (%)	2	1	2	<1	2	<1	20	3	2
Proportion of separations public patients (%)	39	45	35	39	45	52	35	40	40
Separation rate <sup>(c)</sup>	2.2	2.2	2.4	2.3	2.1	1.9	2.3	1.9	2.2
Standardised separation rate ratio (SRR)	0.98	1.00	1.06	1.02	0.96	0.85	1.04	0.86	
95% confidence interval of SRR	0.97-1.00	0.98-1.02	1.04-1.08	0.99-1.05	0.93-0.99	0.79-0.90	0.97-1.11	0.77-0.95	

Table S3.9 (continued): Separation statistics(a) for selected hospital procedures(b), all hospitals, states and territories, 2008-09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Knee replacement									
Separations <sup>(a)</sup>	12,795	7,853	7,509	3,802	3,534	706	806	112	37,117
Separations not within state of residence (%)	2	3	6	<1	5	<1	37	<1	4
Proportion of separations public patients (%)	34	34	26	32	30	43	29	50	32
Separation rate <sup>(c)</sup>	1.7	1.4	1.7	1.7	1.8	1.2	2.6	0.9	1.6
Standardised separation rate ratio (SRR)	1.03	0.85	1.06	1.08	1.14	0.73	1.61	0.56	
95% confidence interval of SRR	1.01-1.05	0.83-0.87	1.04-1.09	1.05-1.12	1.11–1.18	0.67-0.78	1.50-1.72	0.46-0.67	
Myringotomy (with insertion of tube)									
Separations <sup>(a)</sup>	9,964	9,218	7,405	4,802	4,570	559	867	279	37,664
Separations not within state of residence (%)	2	2	3	<1	1	17	25	<1	3
Proportion of separations public patients (%)	30	41	27	36	35	45	29	71	34
Separation rate <sup>(c)</sup>	1.5	1.8	1.7	2.3	3.2	1.2	2.7	1.1	1.8
Standardised separation rate ratio (SRR)	0.82	1.00	0.95	1.24	1.72	0.63	1.46	0.60	
95% confidence interval of SRR	0.80-0.83	0.98-1.02	0.93-0.97	1.20-1.27	1.67–1.77	0.58-0.68	1.36–1.55	0.53-0.67	
Prostatectomy									
Separations <sup>(a)</sup>	10,893	9,255	5,722	2,721	2,611	668	620	96	32,586
Separations not within state of residence (%)	3	2	5	<1	2	1	38	2	4
Proportion of separations public patients (%)	32	35	25	33	34	42	24	28	32
Separation rate <sup>(c)</sup>	3.0	3.4	2.7	2.6	2.9	2.4	4.3	1.7	3.0
Standardised separation rate ratio (SRR)	1.00	1.15	0.90	0.87	0.97	0.79	1.43	0.57	
95% confidence interval of SRR	0.98-1.02	1.12-1.17	0.88-0.92	0.83-0.90	0.93-1.01	0.73-0.85	1.32-1.54	0.46-0.68	

Table S3.9 (continued): Separation statistics(a) for selected hospital procedures(b), all hospitals, states and territories, 2008-09

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Septoplasty									
Separations <sup>(a)</sup>	7,014	7,167	3,755	1,924	2,364	235	490	107	23,056
Separations not within state of residence (%)	3	2	4	1	3	<1	30	1	3
Proportion of separations public patients (%)	22	34	18	29	33	29	43	22	27
Separation rate <sup>(c)</sup>	1.0	1.3	0.9	0.9	1.5	0.5	1.4	0.5	1.1
Standardised separation rate ratio (SRR)	0.94	1.25	0.81	0.82	1.37	0.44	1.28	0.43	
95% confidence interval of SRR	0.91-0.96	1.22-1.28	0.79-0.84	0.78-0.86	1.32-1.43	0.38-0.50	1.17–1.39	0.35-0.51	
Tonsillectomy									
Separations <sup>(a)</sup>	14,241	10,685	10,023	5,679	4,092	640	1,069	231	46,660
Separations not within state of residence (%)	2	2	2	<1	1	<1	26	1	2
Proportion of separations public patients (%)	35	50	26	42	39	52	32	44	38
Separation rate <sup>(c)</sup>	2.2	2.1	2.4	2.7	2.8	1.4	3.2	0.9	2.3
Standardised separation rate ratio (SRR)	0.95	0.94	1.04	1.18	1.24	0.60	1.41	0.41	
95% confidence interval of SRR	0.93-0.96	0.92-0.95	1.02-1.06	1.15–1.21	1.20-1.27	0.56-0.65	1.32-1.49	0.35-0.46	
Varicose veins stripping and ligation									
Separations <sup>(a)</sup>	3,985	4,618	2,380	1,170	1,168	245	409	86	14,061
Separations not within state of residence (%)	1	1	3	<1	1	<1	26	<1	2
Proportion of separations public patients (%)	32	42	22	21	41	21	45	37	34
Separation rate <sup>(c)</sup>	0.6	0.8	0.5	0.5	0.7	0.4	1.2	0.5	0.6
Standardised separation rate ratio (SRR)	0.87	1.32	0.85	0.83	1.08	0.70	1.87	0.75	
95% confidence interval of SRR	0.84-0.89	1.29-1.36	0.82-0.89	0.78-0.88	1.01-1.14	0.62-0.79	1.69-2.06	0.59-0.91	

Notes: See Box 3.5.

Table S3.10: Average length of stay (days)(a)(b) for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008-09

AR-DR	G	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
E62C	Respiratory in	nfections/inflammatio	ns W/O CC								
	ALOS (days)	Public	3.6	2.8	2.9	3.2	3.3	3.9	2.9	3.6	3.2
		Private	5.3	5.2	4.8	5.0	5.1	n.p.	n.p.	n.p.	5.0
		Total	3.7	3.2	3.4	3.4	3.6	n.p.	n.p.	n.p.	3.5
	Separations	Public	10,323	6,336	5,736	2,572	2,042	573	406	645	28,633
		Private	664	1,474	1,756	413	449	n.p.	n.p.	n.p.	4,963
		Total	10,987	7,810	7,492	2,985	2,491	n.p.	n.p.	n.p.	33,596
E65B	Chronic obst	ructive airway disease	e W/O catastroph	nic or severe Co	С						
	ALOS (days)	Public	4.8	3.9	4.3	4.5	4.4	5.3	3.8	4.3	4.5
		Private	7.6	6.9	6.9	7.2	5.4	n.p.	n.p.	n.p.	6.8
		Total	5.0	4.5	5.0	5.0	4.6	n.p.	n.p.	n.p.	4.8
	Separations	Public	10,112	5,531	5,358	2,214	2,633	786	300	522	27,456
		Private	702	1,284	1,889	566	534	n.p.	n.p.	n.p.	5,199
		Total	10,814	6,815	7,247	2,780	3,167	n.p.	n.p.	n.p.	32,655
E69C	Bronchitis an	d asthma age<50 W/C	CC								
	ALOS (days)	Public	1.6	1.4	1.5	1.6	1.6	1.6	1.5	1.8	1.5
		Private	2.0	2.7	2.1	2.5	2.9	n.p.	n.p.	n.p.	2.3
		Total	1.6	1.4	1.5	1.7	1.6	n.p.	n.p.	n.p.	1.6
	Separations	Public	10,174	6,818	4,669	2,304	2,826	392	296	341	27,820
		Private	111	207	541	85	81	n.p.	n.p.	n.p.	1,101
		Total	10,285	7,025	5,210	2,389	2,907	n.p.	n.p.	n.p.	28,921

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008–09

AR-DR	kG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
F62B	Heart failure a	and shock W/O catast	rophic CC								
	ALOS (days)	Public	5.5	4.2	4.5	4.7	5.5	5.0	5.0	4.3	4.9
		Private	8.7	7.4	7.1	8.2	7.0	n.p.	n.p.	n.p.	7.5
		Total	5.8	5.0	5.3	5.4	5.9	n.p.	n.p.	n.p.	5.4
	Separations	Public	9,039	5,834	4,020	2,180	1,970	559	341	230	24,173
		Private	914	1,910	1,810	507	676	n.p.	n.p.	n.p.	6,089
		Total	9,953	7,744	5,830	2,687	2,646	n.p.	n.p.	n.p.	30,262
F71B	Non-major ar	rhythmia and conduct	ion disorders V	I/O catastrophic	or severe CC						
	ALOS (days)	Public	2.5	2.0	2.1	1.8	2.3	2.0	2.1	2.3	2.2
		Private	2.0	2.2	2.3	1.7	2.1	n.p.	n.p.	n.p.	2.1
		Total	2.4	2.1	2.2	1.8	2.2	n.p.	n.p.	n.p.	2.2
	Separations	Public	11,384	7,817	5,843	2,538	2,763	763	644	252	32,004
		Private	2,022	2,970	3,287	1,422	1,493	n.p.	n.p.	n.p.	11,661
		Total	13,406	10,787	9,130	3,960	4,256	n.p.	n.p.	n.p.	43,665
G07B	Appendicecto	omy W/O Catastrophic	or Severe CC								
	ALOS (days)	Public	2.8	2.6	2.4	2.5	2.6	2.4	2.6	2.7	2.6
		Private	2.3	2.5	2.0	2.4	2.5	n.p.	n.p.	n.p.	2.3
		Total	2.7	2.6	2.3	2.4	2.6	n.p.	n.p.	n.p.	2.5
	Separations	Public	6,825	4,624	3,384	2,305	1,405	364	424	246	19,577
		Private	722	985	1,764	620	381	n.p.	n.p.	n.p.	4,721
		Total	7,547	5,609	5,1 <b>4</b> 8	2,925	1,786	n.p.	n.p.	n.p.	24,298

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008–09

AR-DR	G	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT NT	T	otal
G08B	Abdominal ar	nd other hernia proced	lures age 1 to 59	or W catastro	phic or severe	СС					
	ALOS (days)	Public	1.6	1.5	1.4	1.5	1.9	1.4	1.7	2.0	1.5
		Private	1.3	1.4	1.2	1.5	1.4	n.p.	n.p.	n.p.	1.4
		Total	1.5	1.4	1.3	1.5	1.6	n.p.	n.p.	n.p.	1.4
	Separations	Public	2,193	2,069	1,414	783	643	159	92	77	7,430
		Private	2,238	1,582	2,051	848	533	n.p.	n.p.	n.p.	7,614
		Total	4,431	3,651	3,465	1,631	1,176	n.p.	n.p.	n.p.	15,044
309Z	Inguinal and f	femoral hernia proced	ures age > 0								
	ALOS (days)	Public	1.3	1.4	1.2	1.3	1.4	1.4	1.3	1.5	1.3
		Private	1.3	1.3	1.2	1.3	1.3	n.p.	n.p.	n.p.	1.3
		Total	1.3	1.4	1.2	1.3	1.4	n.p.	n.p.	n.p.	1.3
	Separations	Public	5,357	4,809	3,049	1,710	1,453	348	177	134	17,037
		Private	7,244	5,163	5,233	2,352	1,600	n.p.	n.p.	n.p.	22,619
		Total	12,601	9,972	8,282	4,062	3,053	n.p.	n.p.	n.p.	39,656
108B	Laparacopic o	cholecystectomy W/O	closed CDE W/G	O catastrophic	or severe CC						
	ALOS (days)	Public	2.0	1.9	1.8	2.0	2.0	1.7	1.8	2.4	1.9
		Private	1.5	1.8	1.7	1.8	1.8	n.p.	n.p.	n.p.	1.7
		Total	1.8	1.9	1.7	1.9	1.9	n.p.	n.p.	n.p.	1.8
	Separations	Public	6,698	5,262	3,575	1,817	1,670	375	270	154	19,821
		Private	5,297	3,751	4,176	1,684	1,270	n.p.	n.p.	n.p.	16,968
		Total	11,995	9,013	7,751	3,501	2,940	n.p.	n.p.	n.p.	36,789

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008–09

AR-DF	RG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
103C	Hip replacem	ent W/O catastrophic	or severe CC								
	ALOS (days)	Public	6.8	6.8	6.9	7.0	6.4	6.4	6.0	n.p.	6.8
		Private	6.6	7.2	6.5	8.6	7.0	n.p.	n.p.	n.p.	7.0
		Total	6.7	7.0	6.6	8.0	6.8	n.p.	n.p.	n.p.	6.9
	Separations	Public	2,681	1,872	1,129	785	718	285	164	39	7,673
		Private	3,777	3,331	2,430	1,320	1,429	n.p.	n.p.	n.p.	12,937
		Total	6,458	5,203	3,559	2,105	2,147	n.p.	n.p.	n.p.	20,610
104Z	Knee replace	ment and reattachmer	nt								
	ALOS (days)	Public	6.9	7.3	7.1	8.2	6.2	6.8	6.0	13.1	7.1
		Private	6.9	7.6	6.6	9.7	6.8	n.p.	n.p.	n.p.	7.2
		Total	6.9	7.5	6.8	9.2	6.6	n.p.	n.p.	n.p.	7.2
	Separations	Public	4,424	2,817	2,007	1,239	1,126	298	211	56	12,178
		Private	7,440	4,871	5,107	2,379	2,326	n.p.	n.p.	n.p.	23,051
		Total	11,864	7,688	7,114	3,618	3,452	n.p.	n.p.	n.p.	35,229
I16Z	Other should	er procedures									
	ALOS (days)	Public	1.6	1.6	1.4	1.5	1.4	1.5	1.3	n.p.	1.5
		Private	1.4	1.4	1.3	1.4	1.4	n.p.	n.p.	n.p.	1.4
		Total	1.4	1.4	1.3	1.5	1.4	n.p.	n.p.	n.p.	1.4
	Separations	Public	1,732	1,497	1,049	967	541	82	88	42	5,998
		Private	8,069	6,706	6,487	4,748	2,802	n.p.	n.p.	n.p.	29,924
		Total	9,801	8,203	7,536	5,715	3,343	n.p.	n.p.	n.p.	35,922

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008–09

AR-DR	:G	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
L63B	Kidney and u	rinary tract infections	age>69 W/O cat	astrophic CC							
	ALOS (days)	Public	5.4	3.8	4.6	4.9	5.0	4.8	3.7	6.7	4.8
		Private	7.6	6.5	6.7	7.9	6.7	n.p.	n.p.	n.p.	6.8
		Total	5.6	4.4	5.2	5.4	5.4	n.p.	n.p.	n.p.	5.2
	Separations	Public	7,000	4,257	3,208	1,486	1,397	237	282	155	18,022
		Private	549	1,129	1,355	300	365	n.p.	n.p.	n.p.	3,824
		Total	7,549	5,386	4,563	1,786	1,762	n.p.	n.p.	n.p.	21,846
M02B	Transurethra	I prostatectomy W/O c	atastrophic or s	evere CC							
	ALOS (days)	Public	3.1	2.6	2.6	2.7	2.9	2.8	3.7	n.p.	2.8
		Private	2.9	2.9	2.9	2.9	3.3	n.p.	n.p.	n.p.	3.0
		Total	3.0	2.8	2.8	2.8	3.1	n.p.	n.p.	n.p.	2.9
	Separations	Public	2,155	2,177	934	598	616	175	62	21	6,738
		Private	3,874	3,248	2,401	950	918	n.p.	n.p.	n.p.	11,820
		Total	6,029	<i>5,4</i> 2 <i>5</i>	3,335	1,548	1,534	n.p.	n.p.	n.p.	18,558
N04Z	Hysterectomy	y for non-malignancy									
	ALOS (days)	Public	3.7	3.7	3.3	3.7	3.6	3.3	3.9	4.1	3.6
		Private	3.8	4.2	3.4	4.0	4.2	n.p.	n.p.	n.p.	3.8
		Total	3.7	4.0	3.3	3.9	3.9	n.p.	n.p.	n.p.	3.7
	Separations	Public	3,381	3,149	1,929	898	1,112	286	145	92	10,992
		Private	4,235	2,605	3,485	1,553	1,117	n.p.	n.p.	n.p.	13,773
		Total	7,616	5,754	5,414	2,451	2,229	n.p.	n.p.	n.p.	24,765

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008–09

AR-DR	.G	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
N06Z	Female repro	ductive system recon	structive proce	dures							
	ALOS (days)	Public	2.8	2.6	2.1	2.8	2.5	2.5	2.5	n.p.	2.6
		Private	3.0	2.8	2.2	3.0	3.0	n.p.	n.p.	n.p.	2.7
		Total	2.9	2.7	2.2	2.9	2.8	n.p.	n.p.	n.p.	2.7
	Separations	Public	2,062	1,666	1,090	535	636	193	71	29	6,282
		Private	3,528	2,053	2,531	1,052	984	n.p.	n.p.	n.p.	10,551
		Total	5,590	3,719	3,621	1,587	1,620	n.p.	n.p.	n.p.	16,833
O01C	Caesarean de	elivery W moderate co	mplicating diag	nosis							
	ALOS (days)	Public	4.1	4.1	3.7	4.1	4.4	3.8	3.9	5.2	4.0
		Private	5.1	5.2	4.6	5.8	5.2	n.p.	n.p.	n.p.	5.1
		Total	4.5	4.5	4.1	4.9	4.7	n.p.	n.p.	n.p.	4.5
	Separations	Public	14,807	10,591	9,093	4,030	3,182	803	652	547	43,705
		Private	7,796	6,413	7,436	3,798	1,798	n.p.	n.p.	n.p.	28,788
		Total	22,603	17,004	16,529	7,828	4,980	n.p.	n.p.	n.p.	72,493
O60B	Vaginal delive	ery W severe complic	ating diagnosis								
	ALOS (days)	Public	2.8	2.6	2.4	2.8	2.8	2.7	2.3	3.3	2.7
		Private	4.2	4.2	3.9	4.6	4.2	n.p.	n.p.	n.p.	4.2
		Total	3.1	3.0	2.8	3.3	3.1	n.p.	n.p.	n.p.	3.1
	Separations	Public	36,425	27,202	19,808	9,764	6,702	1,790	1,972	1,304	104,967
		Private	10,946	9,406	7,472	4,127	2,426	n.p.	n.p.	n.p.	36,835
		Total	47,371	36,608	27,280	13,891	9,128	n.p.	n.p.	n.p.	141,802

Table S3.10 (continued): Average length of stay (days)<sup>(a)(b)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2008-09

AR-DR	G	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT To	otal				
R61B	Lymphoma a	nd non-acute leukaem	nia W/O catastro	phic CC											
	ALOS (days)	Public	5.1	4.3	4.7	5.3	5.2	5.5	8.7	n.p.	5.0				
		Private	4.8	3.6	5.0	2.9	4.3	n.p.	n.p.	n.p.	4.1				
		Total	5.0	4.0	4.9	3.8	4.8	n.p.	n.p.	n.p.	4.5				
	Separations	Public	2,693	1,962	983	658	863	214	149	42	7,564				
		Private	609	2,201	1,672	1,071	635	n.p.	n.p.	n.p.	6,292				
		Total	3,302	4,163	2,655	1,729	1,498	n.p.	n.p.	n.p.	13,856				
U63B	Major affective	lajor affective disorders age<70 W/O catastrophic or severe CC													
	ALOS (days)	Public	14.1	13.1	13.9	14.7	11.6	14.3	17.2	13.1	13.6				
		Private	19.1	19.5	19.9	13.9	19.2	n.p.	n.p.	n.p.	18.6				
		Total	15.9	16.0	16.7	14.3	13.3	n.p.	n.p.	n.p.	15.6				
	Separations	Public	6,097	3,801	2,807	1,922	2,350	393	300	142	17,812				
		Private	3,504	3,252	2,421	1,684	655	n.p.	n.p.	n.p.	12,078				
		Total	9,601	7,053	5,228	3,606	3,005	n.p.	n.p.	n.p.	29,890				

Notes: See Box 3.5.

Abbreviations: ALOS—average length of stay, CC—complications and comorbidities, CDE—common duct exploration, W/O—without, W—with.