

4 Hospital performance indicators

Introduction

This chapter presents information on performance indicators that relate to the provision of hospital services. 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).

In 2001, the National Health Performance Committee (NHPC) developed a framework to report on the performance of the Australian health system, which has been adopted by Health Ministers. This report uses this National Health Performance Framework to present performance indicator information.

This chapter describes the performance indicators presented in this report within the context of the framework. A substantial proportion of the performance indicator information is included in this chapter, but some is included elsewhere, for example in Chapter 5 for emergency department waiting times and in Chapter 6 for elective surgery waiting times.

The performance indicators presented in this chapter include cost per casemix-adjusted separation, average salary expenditure, separation rates for selected potentially preventable hospitalisations, hospital accreditation, separation rates for selected procedures, average lengths of stay for a selection of AR-DRGs, relative stay indexes, and separations with adverse events. Additional information on potentially preventable hospitalisations is presented in Appendix 5.

The National Health Performance Framework

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. It has three tiers: 'Health status and outcomes', 'Determinants of health' and 'Health system performance'. Questions are posed for each tier and a number of dimensions have been identified within each. The dimensions can guide the development and selection of performance indicators such that the indicators can be used together to answer each tier's questions. Sometimes, single indicators can provide information in several dimensions of the framework.

The third tier is most directly relevant to assessment of the provision of hospital and other health care services. It is organised into nine dimensions: effective, appropriate, efficient, responsive, accessible, safe, continuous, capable and sustainable. The questions asked for this tier are: 'How well is the health system performing in delivering quality health actions to improve the health of all Australians?' and 'Is it the same for everyone?' The latter question underlines the focus throughout the framework on equity.

Table 4.A presents the third tier from the National Health Performance Framework (NHPC 2001). Further information on the framework is included in Chapter 4 of *Australian hospital statistics 2000-01* (AIHW 2002).

Table 4.A: The National Health Performance Framework, Tier 3

Health system performance		
<i>How well is the health system performing in delivering quality health actions to improve the health of all Australians?</i>		
<i>Is it the same for everyone?</i>		
<i>Effective</i>	<i>Appropriate</i>	<i>Efficient</i>
Care, intervention or action achieves desired outcome.	Care/intervention/action provided is relevant to the client's needs and based on established standards.	Achieving desired results with most cost-effective use of resources.
<i>Responsive</i>	<i>Accessible</i>	<i>Safe</i>
Service provides respect for persons and is client orientated and includes respect for dignity, confidentiality, participation in choices, promptness, quality of amenities, access to social support networks, and choice of provider.	Ability of people to obtain health care at the right place and right time irrespective of income, physical location and cultural background.	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.
<i>Continuous</i>	<i>Capable</i>	<i>Sustainable</i>
Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.	An individual's or service's capacity to provide a health service based on skills and knowledge.	System or organisation's capacity to provide infrastructure such as workforce, facilities and equipment, and be innovative and respond to emerging needs (research, monitoring).

Source: NHPC 2001.

Performance indicators in this report

Table 4.B presents performance indicator information in this report (both in this chapter and elsewhere) for the National Health Performance Framework Tier 3 dimensions. Information relevant to the interpretation of these performance indicator data is in the text and footnotes accompanying the tables. Further discussion of how these performance indicators fit into the National Health Performance Framework is presented in *Australian hospital statistics 2002–03* (AIHW 2004a).

Table 4.B: Performance indicator information in this report, by National Health Performance Framework dimension

Table(s)	Indicator	Level(s) of care to which it relates	Presentation that relates to equity
Effective			
4.5, 4.6, A5.1, A5.2, A5.3	Separation rates for selected potentially preventable hospitalisations	Primary care Population health	Presented in summary by state and territory of usual residence of the patient, Remoteness Area of usual residence and quintile of socioeconomic advantage/disadvantage (Table 4.5) and as a time-series (Table 4.6) Presented in detail by state or territory of usual residence of the patient (Table A5.1), Remoteness Area of usual residence (Table A5.2) and quintile of socioeconomic advantage/disadvantage (Table A5.3)
No indicators available for acute care			

(continued)

Table 4.B (continued): Performance indicator information in this report, by National Health Performance Framework dimension

Table(s)	Indicator	Level(s) of care to which it relates	Presentation that relates to equity
Appropriate			
2.4	Separation rates	Acute care	Presented by state and territory of hospitalisation, and for the public and private sectors
7.3	Separation rates	Acute care	Presented by state and territory of hospitalisation, by admitted patient election status and funding source, and for the public and private sectors
8.7, 8.8	Separation rates	Acute care	Presented by state and territory of hospital, hospital sector and Indigenous status
8.11, 8.12, 8.13	Separation rates	Acute care	Presented by state and territory of usual residence of the patient (Table 8.11), Remoteness Area of usual residence (Table 8.12) and quintile of socioeconomic advantage/disadvantage (Table 8.13) for the public and private sectors
4.7, 4.8, 4.9	Separation rates for selected procedures	Acute care	Presented by state and territory of usual residence of the patient (Table 4.7), Remoteness Area of usual residence (Table 4.8) and quintile of socioeconomic advantage/disadvantage (Table 4.9)
Efficient			
4.1c–d, 4.2a–f	Cost per casemix-adjusted separation	Acute care	Presented by state and territory of hospital (tables 4.1c and 4.1d), and by public hospital peer group (tables 4.2a–f)
4.1c–d, 4.2a–e, 4.3, 4.11, 4.12, 12.1, 12.2	Relative stay index	Acute care	Presented by state and territory of hospital (Table 4.1c), by public hospital peer group (tables 4.2a–e and 4.3) and, for the public and private sectors, by admitted patient election status and funding source (tables 4.11, 4.12), and by MDC (tables 12.1, 12.2)
3.5	Average salary by staffing category	Acute care	Presented by state and territory of hospital
4.10	Average length of stay for a selection of AR-DRGs	Acute care	Presented by state and territory of hospital, and for the public and private sectors
Responsive			
5.2, 5.3	Emergency department waiting times (proportions waiting longer than clinically desirable, and times waited at the 50th and the 90th percentiles)	Acute care	Presented as a time series (Table 5.2) and by state and territory of hospital and by public hospital peer group (Table 5.3)

(continued)

Table 4.B (continued): Performance indicator information in this report, by National Health Performance Framework dimension

Table(s)	Indicator	Level(s) of care to which it relates	Presentation that relates to equity
Accessible			
6.1, 6.2, 6.4, 6.5	Waiting times for elective surgery (times waited at the 50th and 90th percentiles)	Acute care	Presented as a time series (Table 6.1), by state and territory of hospital, and by public hospital peer group (Table 6.2), by surgical specialty (Table 6.4) and by indicator procedure (Table 6.5) Tables based on information on the patient's area of usual residence included in other dimensions also relate to accessibility. These include the selected procedures and selected potentially preventable hospitalisations tables (tables 4.4, 4.5, 4.7 to 4.9, 8.11 to 8.13 and A5.1 to A5.3)
Safe			
4.13	Separations with adverse events	Acute care	Presented for the public and private sectors
Continuous			
7.13, 7.14	Separations with non-acute care, by mode of separation, age group, sex and patient election status	Continuing care	Presented by patient election status (Table 7.13) and age group and sex (Table 7.14).
No indicators available for acute care			
Capable			
4.4	Accreditation of hospitals and beds	Acute care	Presented by state and territory of hospital, and for the public and private sectors
Sustainable			
No indicators available for acute care			

Cost per casemix-adjusted separation

The cost per casemix-adjusted separation is an indicator of the efficiency of the acute care sector. It has been published in *Australian hospital statistics* since the 1996–97 reference year (AIHW 1998), and included within frameworks of indicators by the National Health Ministers' Benchmarking Working Group (NHMBWG 1999), the Steering Committee for the Review of Government Service Provision (SCRGSP 2008) and the NHPC (NHPC 2004). It is a measure of the average recurrent expenditure for each admitted patient, adjusted using AR-DRG cost weights for the relative complexity of the patient's clinical condition and for the hospital services provided. 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 calculation of these figures is sensitive to a number of deficiencies in available data. In particular:

- The proportion of recurrent expenditure that relates to admitted patients (the numerator) is estimated in different ways in different hospitals, and so is not always comparable.

- Capital costs are not included in numerators. Cost per casemix-adjusted separation both including and excluding have been presented. (see also Appendix 1 for SCRGSP estimates of cost per casemix-adjusted separation including capital costs).
- Only cost weights applicable to acute care separations are available, so these have been applied to all separations, including the 2% that were not acute. Appendix 1 includes details of the separations in this analysis, by care type, and also separate data for acute care separations only for New South Wales, Victoria and Western Australia.
- The proportion of patients other than public patients can vary, and the estimation of medical costs for these patients (undertaken to adjust expenditure to resemble what it would be if all patients had been public patients) is subject to error.

The scope of the analysis is 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 2). Excluded are *Small non-acute hospitals*, *Multi-purpose services*, *Hospices*, *Rehabilitation hospitals*, *Mothercraft hospitals*, *Other non-acute hospitals*, *Psychiatric hospitals*, and hospitals in the *Unpeered and other hospitals* peer group. Also excluded are hospitals for which expenditure or separation data were incomplete, although most of these hospitals would have been excluded for other reasons (for example, they are small non-acute hospitals). The scope restrictions improve the comparability of data among the jurisdictions and increase the accuracy of the analysis. Hospitals included accounted for 96.3% of separations in public acute and psychiatric hospitals in 2006–07, and 91.9% of recurrent expenditure (excluding depreciation).

A small number of hospitals may be classified to peer groups included in the analysis in some years, but to other peer groups excluded from the analysis in other years; this applies mainly to the *Small acute hospitals* and *Non-acute* peer groups. This is because the peer grouping is largely based on hospital activity, which can change from year to year.

As noted in Chapter 3 the average costs reported here are based on expenditure by public hospitals in a state or territory. These average costs do not necessarily include state and territory government contracted services with private hospitals or allow for the source of funds.

Hospital activity in the 347 selected public acute hospitals is shown in Table 4.1a (see Box 4.1 for an explanation of the hospitals included/excluded from the analysis). There were 4.5 million separations from these selected public acute hospitals in 2006–07; nearly 98% of these were acute separations. Public patients accounted for 84% of the 15.4 million patient days reported and 88% of patient days were for acute separations. Over 173,000 *Newborns* with no qualified days were reported for these selected public acute hospitals in 2006–07.

In 2006–07, for the selected public acute hospitals, total recurrent expenditure was \$25.2 billion including depreciation and \$24.3 billion excluding depreciation (Table 4.1b). Almost 34% of the total recurrent expenditure was in New South Wales (\$8.2 billion), 27% in Victoria (\$6.5 billion) and 17% in Queensland (\$4.1 billion). Expenditure in these three states accounted for 77% of the total recurrent expenditure (excluding depreciation) for the selected public acute hospitals in 2006–07.

Table 4.1c shows the cost per casemix-adjusted separation for selected acute public hospitals by state and territory for 2006–07. Nationally, the average cost per casemix-adjusted separation was \$3,922 excluding depreciation and \$4,067 including depreciation. The average cost weight for the selected public acute hospitals was 1.00, and the Relative stay index was the same as the national average (see below for more information on Relative stay indexes).

A large portion of the costs was attributed to *Non-medical* and *Medical labour* costs. Nationally these costs were \$2,027 and \$803, respectively, per casemix-adjusted separation (Table 4.1d). *Depreciation* was supplied for all jurisdictions, though only for a subset of South Australian and Tasmanian hospitals. *Depreciation* added an average of 3.7% (\$145) to the cost of each separation, with Queensland being the highest with \$213 (5.6%).

Interpretation of the cost per casemix-adjusted separation data should take into consideration other 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.

Public hospital peer groups

Public hospital peer groups have been developed for presenting data on costs per casemix-adjusted separation (see Appendix 2). The peer group classification allocates hospitals into broadly similar groups in terms of their level of admitted patient activity and their geographical location. The classification allows more meaningful comparison of cost data than comparison at the jurisdiction level would allow.

Table 4.2a provides totals for all public hospitals in the analysis including acute, non-acute, psychiatric and un-peered. These data are not considered directly comparable across states and territories. Tables 4.2a–f also present a range of other statistics about the peer groups for each state and territory, such as the number of hospitals in each, average length of stay and Relative stay index (see below and in Appendix 1). The average number of AR-DRGs with five or more acute separations reported for each hospital is also presented; this provides information on the breadth of activity of each type of hospital, as measured using AR-DRGs.

For 2006–07, the dominant hospital peer group category was the *Principal referral and Specialist women's and children's hospitals* group. The 81 hospitals in this group had an average of 40,979 separations each at a cost (excluding depreciation) of \$3,959 per separation (Table 4.2b). The 70 *Principal referral hospitals* had an average of 44,210 separations each. New South Wales has 26 hospitals, Victoria and Queensland both have 15 hospitals in this peer group, accounting for 80% of Australia's *Principal referral hospitals*. Separations ranged from 30,488 separations per hospital from Tasmania's three hospitals to 65,860 separations per hospital from the 15 hospitals in Victoria. The cost per casemix-adjusted separation (excluding depreciation) for this peer group was highest in the Northern Territory (\$4,523 per separation).

The 35 *Large hospitals* averaged 14,754 separations each at a cost (excluding depreciation) of \$3,833 per separation (Table 4.2c). The 86 *Medium hospitals* averaged 5,415 separations each at a cost (excluding depreciation) of \$3,659 per separation (Table 4.2d). The 145 *Small acute hospitals* (41.8% of acute hospitals) averaged 1,252 separations each at a cost per casemix-adjusted separation of \$4,002 (excluding depreciation) (Table 4.2e).

Table 4.3 shows a range of statistics for *Teaching hospitals*. These hospitals can be in any peer group; however, 87% are in the *Principal referral and Specialist women's and children's hospitals* peer groups. Queensland had 22 *Teaching hospitals* and New South Wales had 17. The 63 *Teaching hospitals* in Australia in 2006–07 averaged 34,998 separations each at a cost (excluding depreciation) of \$4,067 per casemix-adjusted separation.

Hospital accreditation

Hospital accreditation has been identified as an indicator of capability within the National Health Performance Framework. Table 4.4 includes accreditation through any body including the Australian Council on Healthcare Standards EQuIP, Business Excellence Australia and the Quality Improvement Council, and hospitals certified as compliant with the International Organization for Standardization's (ISO) 9000 quality family. For private hospitals, the data have been sourced from the ABS Private Health Establishments Collection for 2005–06 and relate to accreditation by any body. Accreditation at any point in time does not assume a fixed or continuing status as accredited.

As accreditation status for public hospitals was counted as at the 30th June 2007, some New South Wales 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*.

The comparability of the accreditation data among the states and territories is limited because of the voluntary nature of participation in the award schemes for hospitals in some jurisdictions.

For Australia as a whole, 642 public hospitals with 51,730 public hospital beds (93% of all beds) were known to be accredited at 30 June 2007 (Table 4.4). These hospitals delivered 94% of separations and 93% of patient days. The proportion of public hospital patient days in accredited hospitals varied from 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory to 84% in New South Wales.

A total of 362 private hospitals and 22,934 private hospital beds (71% of hospitals but 91% of the beds) were accredited in 2005–06.

Separation rates for selected potentially preventable hospitalisations

The selected potentially preventable hospitalisations (PPHs) are those conditions where hospitalisation is thought to have been avoidable if timely and adequate non-hospital care had been provided. Separation rates for PPHs therefore have potential as indicators of the quality or effectiveness of non-hospital care. A high rate of potentially preventable hospitalisation may indicate an increased prevalence of the conditions in the community, poorer functioning of the non-hospital care system or an appropriate use of the hospital system to respond to greater need. It is important to note that the list of PPHs is not comprehensive – there are other hospital admissions which may be preventable. The ICD-10-AM code specifications and the categories included for PPHs may therefore be subject to change in future reports.

Three broad categories of PPHs have been used in this chapter. These have been sourced from *The Victorian Ambulatory Care Sensitive Conditions Study* (Department of Human Services Victoria 2002).

- **Vaccine-preventable.** These diseases can be prevented by proper vaccination and include influenza, bacterial pneumonia, tetanus, measles, mumps, rubella, pertussis and polio. The conditions are considered to be preventable, rather than the hospitalisation.
- **Acute.** These conditions may not be preventable, but theoretically would not result in hospitalisation if adequate and timely care (usually non-hospital) was received. These

include complicated appendicitis, dehydration/gastroenteritis, pyelonephritis, perforated ulcer, cellulitis, pelvic inflammatory disease, ear nose and throat infections and dental conditions.

- **Chronic.** The conditions may be preventable through behaviour modification and lifestyle change, but they can also be managed effectively through timely care (usually non-hospital care) to prevent deterioration and hospitalisation. These conditions include diabetes, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease.

A full description of all conditions presented in these tables, including ICD-10-AM codes, can be found in Appendix 1 (Table A1.9 accompanying this report on the Internet).

Table 4.5 presents the age-standardised separation rate for the three broad categories of PPHs for the state or territory of usual residence, the Remoteness Area of usual residence of the patient and the quintile of socioeconomic advantage/disadvantage. The quintile of socioeconomic advantage/disadvantage is determined using the ABS's Socio-Economic Indexes For Areas 2006 (termed SEIFA 2006; ABS 2008) (see Appendix 1).

There were 32.5 separations per 1,000 people in Australia for PPHs in 2006–07. The rate of PPH separations ranged from nearly 48 per 1,000 in the Northern Territory to 22 per 1,000 in the Australian Capital Territory. The rate was highest for residents of Very Remote areas (71 per 1,000 population) and lowest for residents of Major Cities (30 per 1,000 population). Residents of *Most disadvantaged* regions are more likely to be separated from hospital for a PPH than residents of other regions. The rate decreases with increased levels of advantage from 40 per 1,000 for residents of *Most disadvantaged* regions to 25 per 1,000 for residents of the *Most advantaged* regions.

Over the last five years the rate of PPH separations in most states and territories has been relatively stable (Table 4.6). The increase in the rate of PPH separations in Western Australia over this period is mainly due to the inclusion of diabetes as an additional diagnosis when a patient with diabetes is admitted for dialysis treatment. This is not done in other jurisdictions and because dialysis may be required several times per week, the number of separations which are included in *Complications of diabetes* is significantly higher than in other jurisdictions (Table A5.1).

Appendix 5 presents detailed statistics for each PPH condition. The appendix includes standardised separation rates, standardised separation rate ratio (SRR) for each PPH condition:

- for the states and territories (Table A5.1)
- for Remoteness Area of usual residence (Table A5.2)
- for quintile of socioeconomic advantage / disadvantage (Table A5.3).

Separation rates for selected procedures

Separation rates for selected procedures have been identified as indicators of appropriateness. However, several may also be indicators of accessibility or of the performance of non-hospital health services.

Most of the procedures were originally selected as indicators of appropriateness by the NHMBWG 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). ICD-10-AM codes used to define the procedures are listed in Appendix 1.

As for other separation rates, these data should be interpreted with caution. While the rates would reflect hospital system performance, they also reflect variation in underlying needs for hospitalisation, admission and data recording practices, and availability of non-hospital services. In addition, the National Hospital Morbidity Database does not include data for some private hospitals (as noted in Appendix 2). This may result in underestimation of separation rates for some of the procedures, particularly those more common for private hospitals. The separation rates are age-standardised to take into account the different age structures of the populations of the states and territories.

Information on public patients in tables 4.7, 4.8 and 4.9 relate to separations for which the patient election status was reported as *Public* (see Chapter 7). For example, the proportion of separations for public patients who had a *Hip replacement* was 39% nationally, ranging from 34% for Tasmania to 48% for the Northern Territory.

Table 4.7 presents age-standardised separation rates for each procedure for the state or territory of usual residence of the patient, accompanied by the standardised separation rate ratio (SRR) against the national total. If the SRR is greater than 1, then the rate for the state was higher than the national average and vice versa. The 95% confidence interval of the SRR is also included. If the confidence interval includes 1, then a difference between the jurisdictions rate and the national rate is considered less likely (see Appendix 1).

For example, the separation rate for *Knee replacement* for residents of Queensland was 1.51 separations per 1,000 population. The SRR was 0.98 with a 95% confidence interval of 0.96–1.00, indicating that the difference was not statistically significant. The separation rate for the Australian Capital Territory was 1.73 per 1,000 population, with an SRR of 1.13 and a 95% confidence interval of 1.03–1.23, indicating the difference was statistically significant.

Table 4.8 presents similar statistics by the Remoteness Area of usual residence of the patient. For example, the rate for *Coronary angioplasty* for residents of Major Cities was 1.68 separations per 1,000 population. The SRR was 1.06 and the 95% confidence interval was 1.05–1.07, indicating a statistically significant difference from the national rate.

Table 4.9 presents these data by the SEIFA 2006 categories (see Appendix 1). For all of the selected procedures, the *Most advantaged* quintiles had lower proportions of public patients than the *Most disadvantaged* quintiles.

The relationship between the quintile of socioeconomic advantage/disadvantage and the hospital separation rate varied among the procedures. For example, *Cholecystectomies* were more frequent in the *Most disadvantaged* and *Second most disadvantaged* quintiles, with an SRR of 1.14 and 1.07 respectively, and *Myringotomies* were most common in the *Most advantaged* quintile, with an SRR of 1.19. Although those in the *Most disadvantaged* quintile had more *Coronary artery bypass grafts* than those in the *Most advantaged* quintile, they had fewer *Coronary angioplasties*.

The number of Caesarean sections depends on the birth rate as well as the population size, so the population rate is less meaningful. The number of in-hospital births has therefore been included in the tables, and the number of Caesarean sections is reported for separations for which in-hospital birth was reported. Comparability is, however, still complicated by potential under-identification of in-hospital births in this analysis, variation in numbers of non-hospital births, and the age at which the mothers are giving birth. The *Most advantaged* quintile (36.0 Caesarean sections per 100 in-hospital births; Table 4.9), residents of *Major*

Cities (32.3 per 100; Table 4.8) and residents of Queensland (33.4 per 100; Table 4.7) had the highest rates.

Average lengths of stay for 20 selected AR-DRGs

The average length of stay for 20 selected version 5.1 AR-DRGs has been identified as an indicator of efficiency. The selected AR-DRGs (Table 4.10) 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.

In addition, only non-complication and/or comorbidity (non-CC) AR-DRGs were chosen from groups of adjacent AR-DRGs. AR-DRGs with CCs may be relatively less homogeneous, as they potentially include a range of complications and/or comorbidities.

These data are not equivalent to the data presented in the tables in Chapter 12, because separations with lengths of stay over 120 days are excluded.

The average length of stay of the chosen AR-DRGs ranged from 15.4 days for U63B *Major affective disorders age<70 W/O catastrophic or severe CC* to 1.4 days for G09Z *Inguinal and femoral hernia procedures age>0* (Table 4.10).

The average length of stay for F62B *Heart failure and shock without catastrophic complications* was 5.7 days for all hospitals in Australia, 5.1 days for public hospitals and 7.7 days for private hospitals. There was also some variation between states and territories, with Victorian public hospitals reporting an average length of stay of 4.2 days and New South Wales public hospitals 5.9 days.

Relative stay indexes

Relative stay indexes (RSIs) have been identified as indicators of efficiency. They are calculated as the actual number of patient days for separations in selected AR-DRGs, divided by the number of patient days expected (based on national figures), standardised for casemix. The adjustment for casemix (based on the AR-DRG version 5.1 and age of the patient for each separation) allows variation in types of services provided to be taken into account, but does not take into account other influences on length of stay.

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 group of separations of interest. An RSI of less than 1 indicates that the length of stay was less than would have been expected.

The RSIs presented in this report differ from those presented in *Australian hospital statistics 2003–04* and earlier reports in that they are based on AR-DRG version 5.1 rather than AR-DRG version 4.2. See Appendix 1 for details of the current methodology.

This report uses two methods of standardisation and three comparator sets. The method used in most tables (tables 4.1c, 4.2a–f, 4.3 and 4.11, and part of tables 2.3 and 4.12) is an indirect standardisation method. Indirectly standardised RSI compares the observed LOS of each group with the expected LOS for all hospitals. The indirectly standardised rates of different groups are not strictly comparable as the different groups have different casemixes. The RSIs in tables 4.1c, 4.2a–f and 4.3 are based on comparisons with the averages for public hospitals only for 2006–07. The RSIs in tables 4.11 and 4.12 are based on comparisons with the averages for all hospitals for 2006–07. The RSIs in Table 2.3 are based on comparisons with the combined average across all hospitals for all five years presented.

In addition to the indirect method, tables 2.3 and 4.12 present a directly standardised RSI. The direct method allows comparison of RSI values across groups of hospitals. More detail on these methods is included in Appendix 1.

Tables 4.1c, 4.2a–f and 4.3 present RSI information for public hospitals, using the indirect method and public hospital data to calculate expected lengths of stay. For the hospitals included in the cost per casemix-adjusted separation analysis, the RSI was 1.00 overall, and ranged from 1.20 in the Northern Territory to 0.91 in Victoria (Table 4.1c).

Tables 4.11 and 4.12 present RSI information using public and private sector data together to calculate expected lengths of stay. Overall, the RSI for private hospitals was 1.03 indirectly standardised and 1.06 directly standardised, and the RSI for public hospitals was 0.99 indirectly standardised and 0.97 directly standardised (Table 4.12). According to this measure, the lower directly standardised RSI in the public sector indicates relatively shorter lengths of stay compared with the private sector.

Table 4.12 also presents RSI information for the *Medical*, *Surgical* and *Other* categories of AR-DRGs (DoHA 2002). In the public sector, the RSI for *Medical* AR-DRGs was 0.96 indirectly standardised and 0.94 directly standardised, and the RSI for *Surgical* AR-DRGs was 1.04 indirectly standardised and 1.02 directly standardised. In the private sector, the RSI for *Medical* AR-DRGs was 1.14 indirectly standardised and 1.20 directly standardised, and the RSI for *Surgical* AR-DRGs was 0.95 indirectly standardised and 0.98 directly standardised.

Separations with adverse events

Adverse events are defined as incidents in which harm resulted to a person receiving health care. They include infections, falls and other injuries, and medication and medical device problems. Some of these adverse events may be preventable. Hospital separations can be used to indicate the occurrence of adverse events because they include information on ICD-10-AM diagnoses, places of occurrence, and external causes of injury and poisoning which indicate that an adverse event was treated and/or occurred during the hospitalisation. However, other ICD-10-AM codes may also indicate that an adverse event has occurred, and some adverse events are not identifiable using these codes. The data presented in Table 4.13 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.

In 2006-07, there were 370,147 separations with an ICD-10-AM code for an adverse event, that is 5.1 per 100 separations. There were 261,403 separations with adverse events in the public sector (5.9 per 100 separations) and 108,744 separations in the private sector (3.8 per 100 separations). However, the data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may be different.

Procedures causing abnormal reactions/complications (Y83-Y84) were reported for 233,414 separations, 101,003 separations were reported with Adverse effects of drugs, medicaments and biological substances (Y40-Y59) and 74,653 separations were reported with Complications of internal prosthetic devices, implants and grafts (T82-T85).

Table 4.1a: Hospital activity, selected public acute hospitals^(a), states and territories, 2006–07

	Total separations ('000) ^(b)	Proportion of separations acute (per cent) ^(c)	Casemix-adjusted separations ('000) ^(d)	Total admitted patient days ('000) ^(b)	Public patient day proportion ^(e)	Proportion of bed days acute (per cent)	Newborn episodes with no qualified days ('000)
NSW	1,401	98.4	1,491	5,123	78.1	92.4	63
Vic	1,288	97.6	1,224	4,209	84.2	82.9	41
Qld	754	96.9	771	2,577	92.1	86.2	32
WA	415	97.9	402	1,315	86.6	89.0	17
SA	368	97.8	376	1,278	84.5	91.8	10
Tas	95	98.1	99	364	81.4	84.8	3
ACT	76	95.0	77	260	85.0	79.2	3
NT ^(f)	86	98.7	62	258	95.5	93.7	2
Total	4,483	97.7	4,501	15,383	83.9	88.1	173

See table notes in Box 4.1.

Table 4.1b: Expenditure, selected public acute hospitals^(a), states and territories, 2006–07

	Total recurrent expenditure excluding depreciation (\$m)	Total recurrent expenditure including depreciation (\$m)	Admitted patient recurrent expenditure excluding depreciation (\$m)	Admitted patient recurrent expenditure including depreciation (\$m)
NSW	8,153	8,471	5,742	5,966
Vic	6,505	6,764	4,582	4,764
Qld	4,145	4,382	2,870	3,034
WA	2,290	2,366	1,605	1,659
SA	1,775	1,781	1,245	1,250
Tas	582	597	415	426
ACT	462	476	328	338
NT ^(f)	363	366	282	285
Total	24,274	25,203	17,070	17,723

See table notes in Box 4.1.

Table 4.1c: Cost per casemix-adjusted separation^(b) and selected other statistics, selected public acute hospitals^(a), states and territories, 2006–07

	Average cost weight ^(g)	Total cost per casemix-adjusted separation				Admitted patient cost proportion ^(h)		Relative stay index ^(f)
		Excluding depreciation		Including depreciation		All seps	Acute seps	
		All seps	Acute seps	All seps	Acute seps			
NSW	1.06	4,042	4,242	4,192	4,408	0.70	0.69	1.06
Vic	0.95	3,853	3,483	4,002	3,619	0.70	0.62	0.91
Qld	1.02	3,786	n.a.	3,999	n.a.	0.69	n.a.	0.97
WA	0.97	4,111	4,068	4,244	4,211	0.70	0.66	0.99
SA	1.02	3,436	n.a.	3,448	n.a.	0.70	n.a.	1.06
Tas	1.04	4,354	n.a.	4,462	n.a.	0.71	n.a.	1.05
ACT	1.01	4,430	n.a.	4,561	n.a.	0.71	n.a.	0.92
NT ^(f)	0.72	4,580	n.a.	4,617	n.a.	0.78	n.a.	1.20
Total	1.00	3,922	n.a.	4,067	n.a.	0.70	n.a.	1.00

See table notes in Box 4.1.

Table 4.1d: Average cost data for selected public acute hospitals^(a), states and territories, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT ^(f)	Total
Non-medical labour costs per casemix-adjusted separation (\$)									
Nursing	1,068	1,039	972	1,005	954	1,053	1,183	1,275	1,033
Diagnostic/allied health ^(j)	310	318	236	295	182	243	301	274	285
Administrative	305	257	222	324	226	247	303	345	272
Other staff	193	210	277	286	164	374	149	353	223
Superannuation	215	207	218	208	177	248	384	211	213
<i>Total non-medical labour costs</i>	<i>2,091</i>	<i>2,032</i>	<i>1,925</i>	<i>2,118</i>	<i>1,703</i>	<i>2,165</i>	<i>2,320</i>	<i>2,458</i>	<i>2,027</i>
Other recurrent costs per casemix-adjusted separation (\$)									
Domestic services	86	87	99	103	68	39	149	141	89
Repairs/maintenance	88	71	73	96	96	70	51	86	81
Medical supplies ⁽ⁱ⁾	416	337	422	326	237	374	374	310	370
Drug supplies	209	208	209	263	177	149	138	225	209
Food supplies	49	40	26	27	18	40	39	35	38
Administration	188	241	219	144	67	365	226	200	199
Other	50	138	23	126	277	396	154	331	108
<i>Total other recurrent costs excluding depreciation</i>	<i>1,086</i>	<i>1,122</i>	<i>1,071</i>	<i>1,086</i>	<i>940</i>	<i>1,434</i>	<i>1,131</i>	<i>1,327</i>	<i>1,093</i>
Depreciation ^(k)	150	149	213	133	12	108	131	37	145
<i>Total excluding medical labour costs and depreciation</i>	<i>3,177</i>	<i>3,154</i>	<i>2,996</i>	<i>3,204</i>	<i>2,642</i>	<i>3,599</i>	<i>3,451</i>	<i>3,785</i>	<i>3,119</i>
Medical labour costs per casemix-adjusted separation (\$)									
Public patients									
Salaried/sessional staff	473	530	646	638	498	487	558	721	540
Visiting medical officer payments	202	59	81	147	173	127	275	38	133
Private patients (estimated) ^(l)	190	110	63	122	123	140	147	36	130
<i>Total medical labour costs</i>	<i>866</i>	<i>699</i>	<i>790</i>	<i>907</i>	<i>794</i>	<i>755</i>	<i>979</i>	<i>795</i>	<i>803</i>
Total cost per casemix-adjusted separation excluding depreciation	4,042	3,853	3,786	4,111	3,436	4,354	4,430	4,580	3,922
Total cost per casemix-adjusted separation including depreciation	4,192	4,002	3,999	4,244	3,448	4,462	4,561	4,617	4,067

See table notes in Box 4.1.

Box 4.1: Table notes for tables 4.1a to 4.1d

- (a) *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.*
- (b) *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.*
- (c) *Separations for which the care type was reported as Acute and Unspecified and Newborn with qualified days.*
- (d) *Casemix-adjusted separations is the product of Total separations and Average cost weight.*
- (e) *Eligible public patient days as a proportion of total patient days, excluding Newborns with no qualified days. Public patients defined by patient election status equal to Public.*
- (f) *These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory (see text).*
- (g) *Average cost weight from the National Hospital Morbidity Database, using the 2005–06 AR-DRG version 5.0 cost weights (DoHA 2007) for separations for which the care type was reported as Acute, Newborn with at least one qualified day or was Not reported.*
- (h) *Of the selected hospitals, three small hospitals have had their Admitted patient cost proportion estimated by the HASAC ratio (see Appendix 1).*
- (i) *Relative stay index based on public hospitals using the indirect method. 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 (Appendix 1). Based on AR-DRG version 5.1.*
- (j) *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.*
- (k) *Depreciation reported for a subset of South Australian and Tasmanian hospitals.*
- (l) *Estimated private patient medical costs calculated as the sum of Salary/sessional and Visiting medical officer payments divided by the number of public patient days multiplied by the number of private patient days. 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 4.2a: Cost per casemix-adjusted separation^(a) and other statistics, acute, non-acute and total selected public hospitals^(b), states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix-adjusted sep excl dep ^(f)	Cost/casemix-adjusted sep inc dep ^(g)
Total benchmarking hospitals in cost per casemix-adjusted separation analysis^(b)							
NSW	124	11,300	196	1.06	1.06	4,042	4,192
Vic	65	19,822	202	0.95	0.91	3,853	4,002
Qld	71	10,619	163	1.02	0.97	3,786	3,999
WA	35	11,844	171	0.97	0.99	4,111	4,244
SA	35	10,525	165	1.02	1.06	3,436	3,448
Tas	10	9,488	146	1.04	1.05	4,354	4,462
ACT	2	37,884	438	1.01	0.92	4,430	4,561
NT	5	17,163	224	0.72	1.20	4,580	4,617
<i>Total</i>	<i>347</i>	<i>12,919</i>	<i>185</i>	<i>1.00</i>	<i>1.00</i>	<i>3,922</i>	<i>4,067</i>
Non-acute hospitals in cost per casemix-adjusted separation analysis^(b)							
NSW	65	691	20	0.90	1.02	7,910	8,170
Vic	13	947	26	0.93	1.25	4,001	4,227
Qld	31	827	34	0.78	0.88	3,863	4,235
WA	45	728	17	0.65	0.98	5,946	6,197
SA	26	640	26	0.79	1.10	7,256	7,302
Tas	4	170	6	1.01	1.55	7,675	7,845
ACT	1	n.a.	n.a.	1.00	n.a.	n.a.	n.a.
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>185</i>	<i>719</i>	<i>23</i>	<i>0.79</i>	<i>1.02</i>	<i>6,348</i>	<i>6,607</i>
Public hospitals (including Psychiatric and unpeered) in cost per casemix-adjusted separation analysis^(b)							
NSW	227	6,441	129	1.07	1.07	4,272	4,429
Vic	91	14,409	155	0.95	0.91	3,916	4,068
Qld	174	4,509	96	1.01	0.97	3,928	4,155
WA	95	4,746	79	0.95	0.99	4,377	4,519
SA	73	5,351	94	1.01	1.07	3,684	3,700
Tas	23	4,200	79	1.04	1.06	4,424	4,536
ACT	3	25,256	438	1.01	0.92	4,430	4,560
NT	5	17,163	224	0.72	1.20	4,580	4,617
Total	691	6,740	114	1.00	1.00	4,088	4,240

See table notes in Box 4.2.

Table 4.2b: Cost per casemix-adjusted separation^(a) and selected other statistics, *Principal referral and Specialist women's & children's hospitals*, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix-adjusted sep excl dep ^(f)	Cost/casemix-adjusted sep inc dep ^(g)
Principal referral hospitals: Major Cities and Regional^(h)							
NSW	26	35,120	443	1.12	1.09	4,108	4,259
Vic	15	65,860	480	0.97	0.89	3,842	3,979
Qld	15	36,681	415	1.07	1.00	3,825	4,033
WA	4	52,228	480	1.06	n.p.	n.p.	n.p.
SA	4	53,348	494	1.09	n.p.	n.p.	n.p.
Tas	3	30,488	440	1.05	1.03	4,323	4,429
ACT	1	58,168	547	1.00	n.p.	n.p.	n.p.
NT	2	35,773	399	0.76	1.22	4,523	4,557
<i>Total</i>	<i>70</i>	<i>44,210</i>	<i>450</i>	<i>1.05</i>	<i>1.00</i>	<i>3,940</i>	<i>4,081</i>
Specialist women's & children's hospitals^(h)							
NSW	3	17,800	236	1.23	1.12	4,684	4,899
Vic	2	30,801	239	1.21	0.98	3,826	4,033
Qld	3	13,322	202	1.19	0.93	4,401	4,593
WA	2	19,730	196	1.22	n.p.	n.p.	n.p.
SA	1	30,162	302	1.10	n.p.	n.p.	n.p.
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>11</i>	<i>20,417</i>	<i>226</i>	<i>1.20</i>	<i>1.05</i>	<i>4,208</i>	<i>4,375</i>
Total Principal referral and Specialist women's & children's hospitals							
NSW	29	33,328	422	1.13	1.09	4,139	4,294
Vic	17	61,735	452	0.99	0.89	3,839	3,981
Qld	18	32,788	380	1.08	1.00	3,866	4,073
WA	6	41,396	385	1.09	1.02	4,084	4,204
SA	5	48,710	456	1.09	1.09	3,478	3,484
Tas	3	30,488	440	1.05	1.03	4,323	4,429
ACT	1	58,168	547	1.00	n.p.	n.p.	n.p.
NT	2	35,773	399	0.76	1.22	4,523	4,557
Total	81	40,979	420	1.06	1.01	3,959	4,103

See table notes in Box 4.2.

Table 4.2c: Cost per casemix-adjusted separation^(a) and selected other statistics, *Large hospitals, states and territories, 2006–07*

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix-adjusted sep excl dep ^(f)	Cost/casemix-adjusted sep inc dep ^(g)
Large hospitals: Major Cities^(h)							
NSW	8	13,707	290	1.10	0.97	3,739	3,872
Vic	2	17,467	114	0.82	0.91	4,764	5,043
Qld	2	16,783	274	0.94	0.90	2,896	3,043
WA	2	18,015	276	0.76	0.96	3,778	3,875
SA	2	17,963	304	1.14	1.02	3,767	3,775
Tas	0	..	..	..	..	..	..
ACT	1	17,599	328	1.05	n.p.	n.p.	n.p.
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>17</i>	<i>15,748</i>	<i>269</i>	<i>1.00</i>	<i>0.96</i>	<i>3,794</i>	<i>3,925</i>
Large hospitals: Regional and Remote^(h)							
NSW	4	14,388	314	0.91	0.99	3,848	3,955
Vic	7	13,573	281	0.84	0.96	3,615	3,739
Qld	3	13,909	272	0.77	0.90	4,189	4,436
WA	4	13,600	264	0.76	0.92	4,142	4,282
SA	0	..	..	..	..	..	..
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>18</i>	<i>13,816</i>	<i>283</i>	<i>0.83</i>	<i>0.95</i>	<i>3,873</i>	<i>4,016</i>
Total Large hospitals							
NSW	12	13,934	298	1.03	0.98	3,773	3,898
Vic	9	14,438	244	0.83	0.95	3,876	4,044
Qld	5	15,058	273	0.84	0.90	3,554	3,751
WA	6	15,072	268	0.76	0.93	3,998	4,120
SA	2	17,963	304	1.14	1.02	3,767	3,775
Tas	0	..	..	..	..	..	..
ACT	1	17,599	328	1.05	n.p.	n.p.	n.p.
NT	0	..	..	..	..	..	..
Total	35	14,754	276	0.91	0.96	3,833	3,970

See table notes in Box 4.2.

Table 4.2d: Cost per casemix-adjusted separation^(a) and selected other statistics, *Medium hospitals*, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix-adjusted sep excl dep ^(f)	Cost/casemix-adjusted sep inc dep ^(g)
Medium hospitals: Major Cities (<10,000) and Regional (<8,000)^(h)							
NSW	16	8,048	202	0.91	0.98	3,634	3,767
Vic	4	8,327	212	0.75	0.95	3,648	3,841
Qld	2	7,028	193	0.83	0.67	3,136	3,380
WA	5	8,298	143	0.85	0.96	4,414	4,579
SA	4	9,560	211	0.75	0.99	2,948	2,991
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>31</i>	<i>8,253</i>	<i>194</i>	<i>0.85</i>	<i>0.95</i>	<i>3,648</i>	<i>3,787</i>
Medium hospitals: Major Cities and Regional (<5,000 acute weighted separations)^(h)							
NSW	23	3,731	121	0.79	1.03	3,980	4,110
Vic	13	3,841	113	0.72	1.06	3,786	3,945
Qld	10	3,996	146	0.78	0.85	3,213	3,491
WA	2	3,438	125	0.82	0.92	3,864	4,031
SA	7	3,887	139	0.85	0.91	3,180	3,221
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>55</i>	<i>3,814</i>	<i>126</i>	<i>0.78</i>	<i>0.98</i>	<i>3,670</i>	<i>3,826</i>
Total Medium hospitals							
NSW	39	5,502	154	0.87	1.00	3,760	3,892
Vic	17	4,896	136	0.73	1.02	3,724	3,893
Qld	12	4,502	154	0.79	0.80	3,195	3,464
WA	7	6,909	138	0.84	0.95	4,338	4,504
SA	11	5,950	165	0.79	0.95	3,053	3,095
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
Total	86	5,415	151	0.82	0.97	3,659	3,805

See table notes in Box 4.2.

Table 4.2e: Cost per casemix-adjusted separation^(a) and selected other statistics, *Small acute hospitals*, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix-adjusted sep excl dep ^(f)	Cost/casemix-adjusted sep inc dep ^(g)
Small regional acute hospitals^(h)							
NSW	40	1,222	57	0.81	1.04	3,843	4,042
Vic	22	1,171	42	0.73	1.22	4,740	5,029
Qld	20	1,124	49	0.76	0.89	2,921	3,135
WA	4	1,188	57	0.82	1.15	5,410	5,672
SA	13	1,342	63	0.79	0.97	3,019	3,045
Tas	6	514	21	0.88	1.51	5,379	5,505
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>105</i>	<i>1,166</i>	<i>51</i>	<i>0.78</i>	<i>1.06</i>	<i>3,845</i>	<i>4,046</i>
Remote acute hospitals^(h)							
NSW	4	1,005	43	0.67	1.11	6,493	6,850
Vic	0	..	..	..	..	..	..
Qld	16	748	35	0.77	0.98	4,044	4,414
WA	12	1,884	72	0.82	0.87	4,159	4,401
SA	4	1,499	62	0.85	0.88	3,119	3,129
Tas	1	332	13	0.72	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	3	4,756	108	0.54	1.09	4,969	5,027
<i>Total</i>	<i>40</i>	<i>1,480</i>	<i>55</i>	<i>0.73</i>	<i>0.95</i>	<i>4,311</i>	<i>4,549</i>
Total Small acute hospitals							
NSW	44	1,202	55	0.80	1.04	4,016	4,226
Vic	22	1,171	42	0.73	1.22	4,740	5,029
Qld	36	957	43	0.76	0.93	3,314	3,586
WA	16	1,710	68	0.82	0.93	4,384	4,632
SA	17	1,379	63	0.81	0.95	3,046	3,067
Tas	7	488	20	0.86	1.48	5,358	5,526
ACT	0	..	..	..	..	..	..
NT	3	4,756	108	0.54	1.09	4,969	5,027
Total	145	1,252	52	0.77	1.03	4,002	4,214

See table notes in Box 4.2.

Table 4.2f: Expenditure and other statistics, *Non-acute hospitals*, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	Total exp. excl dep (\$'000) ⁽ⁱ⁾	Total exp. incl dep (\$'000) ⁽ⁱ⁾	Cost/casemix-adjusted separation excl dep ^(f)	Cost/casemix-adjusted separation incl dep ^(g)
Small non-acute hospitals^(h)						
NSW	25	659	108,108	113,310	5,506	5,763
Vic	4	737	23,396	24,704	6,076	6,410
Qld	21	864	78,622	86,493	4,034	4,426
WA	7	1,051	43,269	45,014	5,795	6,025
SA	20	569	56,431	57,019	5,127	5,177
Tas	1	256	1,833	1,946	4,718	5,007
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	<i>78</i>	<i>725</i>	<i>311,661</i>	<i>328,486</i>	<i>5,075</i>	<i>5,339</i>
Multi-purpose service^(h)						
NSW	18	279	53,040	55,782	9,576	10,065
Vic	7	694	39,502	41,884	6,715	7,108
Qld	9	629	32,187	35,596	4,121	4,554
WA	37	246	63,447	67,026	5,480	5,773
SA	4	826	18,015	18,168	5,377	5,422
Tas	2	87	5,548	5,667	9,251	9,448
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	<i>77</i>	<i>365</i>	<i>211,739</i>	<i>224,123</i>	<i>6,185</i>	<i>6,536</i>
Hospice^(h)						
NSW	3	1,787	54,865	56,026	6,866	7,003
Vic	0	..	..	..	..	..
Qld	0	..	..	..	..	..
WA	0	..	..	..	..	..
SA	0	..	..	..	..	..
Tas	1	250	n.p.	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	<i>4</i>	<i>1,403</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>

See table notes in Box 4.2.

(continued)

Table 4.2f (continued): Expenditure and other statistics, *Non-acute hospitals*, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	Total exp. excl dep (\$'000) ⁽ⁱ⁾	Total exp. incl dep (\$'000) ⁽ⁱ⁾	Cost/casemix-adjusted separation excl dep ^(f)	Cost/casemix-adjusted separation incl dep ^(g)
Rehabilitation^(h)						
NSW	5	540	69,975	72,583	18,280	18,944
Vic	0	..	..	..	..	..
Qld	0	..	..	..	..	..
WA	1	16,314	n.p.	n.p.	n.p.	n.p.
SA	2	976	38,071	38,071	16,175	16,175
Tas	0	..	..	..	..	..
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	8	2,621	n.p.	n.p.	n.p.	n.p.
Mothercraft^(h)						
NSW	3	1,932	16,851	17,106	2,882	2,926
Vic	2	2,256	9,409	9,866	1,402	1,470
Qld	1	1,815	n.p.	n.p.	n.p.	n.p.
WA	0	..	..	..	..	..
SA	0	..	..	..	..	..
Tas	0	..	..	..	..	..
ACT	1	n.a.	n.p.	n.p.	n.p.	n.p.
NT	0	..	..	..	..	..
<i>Total</i>	7	1,732	32,592	33,398	2,089	2,140
Other non-acute hospitals^(h)						
NSW	11	867	137,817	140,753	7,973	8,138
Vic	0	..	..	..	..	..
Qld	0	..	..	..	..	..
WA	0	..	..	..	..	..
SA	0	..	..	..	..	..
Tas	0	..	..	..	..	..
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	11	867	137,817	140,753	7,973	8,138

See table notes in Box 4.2.

Table 4.2g: Expenditure and other statistics for selected psychiatric, un-peered, and other acute hospitals, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	Total exp. excl dep (\$'000) ^(h)	Total exp. incl dep (\$'000) ⁽ⁱ⁾	Cost per separation excl dep ^(f)	Cost per separation incl dep ^(g)
Psychiatric hospitals^{(h)(k)}						
NSW	9	1,195	355,754	369,101	13,102	13,594
Vic	1	125	n.p.	n.p.	n.p.	n.p.
Qld	4	101	98,923	105,166	n.p.	n.p.
WA	1	1,445	n.p.	n.p.	n.p.	n.p.
SA	1	1,759	n.p.	n.p.	n.p.	n.p.
Tas	0	..	..	..	..	..
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	<i>16</i>	<i>906</i>	<i>622,514</i>	<i>645,923</i>	<i>17,195</i>	<i>17,835</i>
Unpeered and other acute^(h) (includes hospitals with fewer than 200 separations)						
NSW	29	181	183,637	188,763	10,724	10,988
Vic	12	859	75,126	78,307	10,447	10,874
Qld	68	68	80,395	86,916	7,799	8,427
WA	14	153	56,401	57,995	19,365	19,905
SA	11	350	19,562	19,803	4,369	4,422
Tas	9	117	13,846	14,466	10,008	10,456
ACT	0	..	..	..	..	..
NT	0	..	..	..	..	..
<i>Total</i>	<i>143</i>	<i>191</i>	<i>428,966</i>	<i>446,250</i>	<i>10,404</i>	<i>10,807</i>

See table notes in Box 4.2.

Table 4.3: Teaching hospitals (excluding psychiatric) – cost per casemix-adjusted separation^(a) and selected other statistics, states and territories, 2006–07

	Number of hospitals ^(b)	Separations per hospital ^(a)	AR-DRGs (5+) per hospital ^(c)	Average cost weight ^(d)	Relative stay index ^(e)	Cost/casemix -adjusted sep excl dep ^(f)	Cost/casemix -adjusted sep incl dep ^(g)
NSW	17	41,500	441	1.15	1.11	4,225	4,390
Vic	5	29,743	238	1.07	0.98	4,152	4,352
Qld	22	27,924	351	1.08	1.00	3,924	4,134
WA	6	39,259	336	1.09	1.02	4,195	4,319
SA	6	43,660	424	1.10	1.09	3,573	3,579
Tas	3	30,488	440	1.05	1.03	4,323	4,429
ACT	2	37,884	438	1.01	0.92	4,430	4,561
NT	2	35,773	399	0.76	1.22	4,523	4,557
Total	63	34,998	381	1.09	1.05	4,067	4,217

See table notes in Box 4.2.

Box 4.2: Table notes for tables 4.2a to 4.2g and Table 4.3

- (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 data are based on public 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) *The number of different version 5.1 AR-DRGs provided by a hospital for which there were at least five acute separations.*
- (d) *Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations and Newborn episodes of care with qualified days, using the 2005–06 AR-DRG version 5.0 cost weights (DoHA 2007).*
- (e) *Relative stay index based on observed vs expected length of stay based on age and AR-DRG version 5.1, public hospitals using the indirect method. 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.*
- (f) *Average cost per casemix-adjusted separation excluding depreciation.*
- (g) *Average cost per casemix-adjusted separation including depreciation. Depreciation reported for a subset of South Australian and Tasmanian hospitals.*
- (h) *Definitions of the peer groups used in this publication can be found in Appendix 2.*
- (i) *Total expenditure excluding depreciation.*
- (j) *Total expenditure including depreciation. Depreciation reported for a subset of South Australian and Tasmanian hospitals.*
- (k) *Psychiatric hospitals consist of a mix of short-term acute, long-term, psychogeriatric and forensic psychiatric hospitals.*

Table 4.4: Selected statistics^{(a)(b)}, by accreditation status, states and territories, public hospitals 2006–07, private hospitals 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals (2006–07)									
Accredited hospitals	189	141	134	93	72	5	3	5	642
Non-accredited hospitals	39	3	43	2	7	22	0	0	116
Hospitals accredited (%)	83	98	76	98	91	19	100	100	85
<i>Total public hospitals</i>	228	144	177	95	79	27	3	5	758
Accredited beds	16,852	12,380	9,694	5,545	4,752	1,122	785	600	51,730
Non-accredited beds	3,072	55	660	14	143	231	0	0	4,175
Beds accredited (%)	85	100	94	100	97	83	100	100	93
<i>Total available beds for admitted patients</i>	19,924	12,434	10,354	5,558	4,895	1,353	785	600	55,903
Separations from accredited hospitals	1,234,333	1,314,242	743,603	450,388	388,008	91,538	75,767	85,813	4,383,692
Separations from non-accredited hospitals	227,796	..	41,027	508	2,602	5,467	..	..	277,400
Separations with unknown accreditation status	..	..	..	..	37	151	..	..	188
Proportion of separations in accredited hospitals	84	99	95	100	99	94	100	100	94
<i>Total separations</i>	1,462,129	1,314,242	784,630	450,896	390,647	97,156	75,767	85,813	4,661,280
Patient days from accredited hospitals	5,025,989	4,407,320	2,755,592	1,608,558	1,569,593	350,345	260,346	257,532	16,235,275
Patient days from non-accredited hospitals	989,436	11,797	116,486	1,504	26,481	54,747	0	0	1,200,451
Patient days with unknown accreditation status	..	..	..	..	2,089	1,273	..	..	3,362
Proportion of patient days in accredited hospitals	84	100	96	100	98	86	100	100	93
<i>Total patient days</i>	6,015,425	4,419,117	2,872,078	1,610,062	1,598,163	406,365	260,346	257,532	17,439,088
Private hospitals (2005–06)									
Accredited hospitals	112	100	n.a.	27	42	n.a.	n.a.	n.a.	362
Non-accredited hospitals	66	46	n.a.	10	14	n.a.	n.a.	n.a.	163
Hospitals accredited (%)	63	68	n.a.	73	75	n.a.	n.a.	n.a.	71
<i>Total private hospitals</i>	178	146	108	37	56	n.a.	n.a.	n.a.	525
Accredited beds	5,886	6,467	n.a.	2,522	1,906	n.a.	n.a.	n.a.	22,934
Non-accredited beds	1,286	467	n.a.	307	145	n.a.	n.a.	n.a.	2,497
Beds accredited (%)	82	93	n.a.	89	93	n.a.	n.a.	n.a.	91
<i>Total available beds for admitted patients</i>	7,172	6,934	6,098	2,829	2,051	n.a.	n.a.	n.a.	25,431
Total (estimated)									
Accredited hospitals	301	241	n.a.	120	114	n.a.	n.a.	n.a.	1,004
Non-accredited hospitals	105	49	n.a.	12	21	n.a.	n.a.	n.a.	279
Hospitals accredited (%)	74	83	n.a.	91	84	n.a.	n.a.	n.a.	78
<i>Total hospitals</i>	406	290	285	132	135	n.a.	n.a.	n.a.	1,283
Accredited beds	22,738	18,847	n.a.	8,067	6,658	n.a.	n.a.	n.a.	74,664
Non-accredited beds	4,358	522	n.a.	321	288	n.a.	n.a.	n.a.	6,672
Beds accredited (%)	84	97	n.a.	96	96	n.a.	n.a.	n.a.	92
<i>Total available beds for admitted patients</i>	27,096	19,369	16,452	8,388	6,946	n.a.	n.a.	n.a.	81,336

(a) Where average available beds for the year were not available, bed numbers at 30 June 2007 were used.

(b) Separations for which establishment-level data were not reported separately or the care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(c) Accreditation status shown is as listed on the 30th of June 2006–07 for Public hospitals and 30th of June 2005–06 for Private hospitals.

Note: Private hospital data are provided from the Australian Bureau of Statistics' Private Hospitals Establishments Collection.

Table 4.5: Separation rates^{(a)(b)} for potentially preventable hospitalisations^(c), by state or territory of usual residence, remoteness and socioeconomic advantage / disadvantage, 2006–07

	Vaccine-preventable conditions	Acute conditions	Chronic conditions	Potentially preventable hospitalisations ^(c)
Australia^(d)	0.59	13.01	19.05	32.49
95% CI ^(e)	0.0–1.6	8.1–17.9	13.2–24.9	24.8–40.1
State or territory of usual residence				
NSW	0.61	12.27	15.66	28.41
Vic	0.56	13.69	18.07	32.19
Qld	0.61	13.02	19.02	32.50
WA	0.52	13.13	34.25	47.70
SA	0.51	14.27	17.69	32.31
Tas	0.46	10.37	21.18	31.89
ACT	0.41	10.40	11.43	22.16
NT	1.96	19.47	27.25	47.94
Remoteness				
Major Cities	0.55	12.25	17.50	30.18
Inner Regional	0.56	13.93	20.07	34.42
Outer Regional	0.73	15.87	23.95	40.35
Remote	1.13	19.72	44.64	65.08
Very Remote	2.04	27.13	42.2	70.54
Socioeconomic advantage / disadvantage				
Most disadvantaged	0.73	14.86	24.28	39.68
Second most disadvantaged	0.59	13.83	20.27	34.54
Middle quintile	0.55	12.63	20.03	33.06
Second most advantaged	0.53	12.99	18.53	31.90
Most advantaged	0.56	11.40	12.93	24.78

(a) Rate per 1,000 population was directly age-standardised as detailed in Appendix 1.

(b) 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. Excludes multiple diagnoses for the same separation within the same group.

(c) The conditions included in the groups *Vaccine-preventable conditions*, *Acute conditions* and *Chronic conditions* are listed in Appendix 5.

(d) Includes unknown Remoteness Area and excludes overseas residents and unknown state of residence.

(e) 95% confidence intervals calculated based on weighted sums of Poisson parameters (Dobson et al. 1991).

Table 4.6: Separations^{(a)(b)} per 1,000 population (age-standardised^(c)) for potentially preventable hospitalisations, by state or territory of usual residence, 2002–03 to 2006–07

	2002–03	2003–04	2004–05	2005–06	2006–07
State or territory of usual residence					
NSW	26.87	27.59	27.45	28.14	28.41
Vic	30.77	31.74	32.96	31.78	32.19
Qld	30.69	31.75	32.08	31.85	32.50
WA	31.67	36.00	44.92	46.80	47.70
SA	30.29	31.43	30.94	32.59	32.31
Tas	31.89	29.57	27.39	31.23	31.89
ACT	17.14	20.22	19.45	21.91	22.16
NT	47.02	48.34	45.82	47.53	47.94
Australia	29.44	30.64	31.71	32.07	32.49

(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. Excludes multiple diagnoses for the same separation within the same group.

(b) Includes unknown Remoteness Area and excludes overseas residents and unknown state of residence.

(c) Rate per 1,000 population was directly age-standardised as detailed in Appendix 1.

Table 4.7: Separation statistics^(a) for selected procedures^(b), by state or territory of usual residence, all hospitals^(c), 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total ^(c)
Caesarean section									
Separations ^(d)	28,041	21,445	19,231	9,582	6,242	1,739	1,293	1,050	88,632
Separations not within state of residence (%)	3	0	1	0	0	1	2	2	
Proportion of separations public patients (%)	57	57	54	51	58	55	52	70	56
Separation rate ^(e)	4.26	4.25	4.86	4.79	4.43	4.20	3.63	4.36	4.43
Standardised separation rate ratio (SRR)	0.96	0.96	1.10	1.08	1.00	0.95	0.82	0.99	
95% confidence interval of SRR	0.95–0.97	0.95–0.97	1.08–1.12	1.06–1.10	0.98–1.02	0.91–0.99	0.78–0.86	0.93–1.05	
In-hospital birth separations	94,441	68,259	57,514	28,736	18,783	6,242	4,533	3,441	281,985
Proportion of births to public patients (%)	67	65	67	64	68	60	64	79	66
In-hospital birth separation rate ^(e)	14.3	13.5	14.4	14.3	13.3	15.0	12.5	14.2	14.0
Separations per 100 in-hospital birth separations ^(f)	29.7	31.4	33.4	33.3	33.2	27.9	28.5	30.5	31.4
Public hospitals	26.4	28.2	27.3	27.3	29.1	27.0	23.5	27.6	27.3
Public patients	25.1	27.7	26.9	27.0	28.5	25.2	23.1	27.2	26.5
Private patients	36.1	37.2	37.8	33.0	37.0	41.0	30.5	35.8	36.4
Private hospitals	40.0	38.7	47.5	45.8	44.5	29.8	38.6	44.2	42.0
Cholecystectomy									
Separations ^(d)	15,615	11,988	9,385	4,512	3,778	1,013	654	331	47,331
Separations not within state of residence (%)	2	1	1	0	0	1	7	8	
Proportion of separations public patients (%)	54	55	45	51	54	46	50	69	52
Separation rate ^(e)	2.21	2.25	2.26	2.15	2.26	1.95	1.98	1.80	2.22
Standardised separation rate ratio (SRR)	1.00	1.02	1.02	0.97	1.02	0.88	0.89	0.81	
95% confidence interval of SRR	0.98–1.02	1.00–1.04	1.00–1.04	0.94–1.00	0.99–1.05	0.83–0.93	0.82–0.96	0.72–0.90	
Coronary angioplasty									
Separations ^(d)	12,321	9,398	5,625	3,192	2,599	855	438	152	34,609
Separations not within state of residence (%)	9	1	2	1	1	3	5	100	
Proportion of separations public patients (%)	47	45	45	46	51	54	49	73	47
Separation rate ^(e)	1.67	1.71	1.33	1.53	1.42	1.49	1.44	1.03	1.57
Standardised separation rate ratio (SRR)	1.06	1.09	0.85	0.97	0.90	0.95	0.92	0.66	
95% confidence interval of SRR	1.04–1.08	1.07–1.11	0.83–0.87	0.94–1.00	0.87–0.93	0.89–1.01	0.83–1.01	0.56–0.76	
Coronary artery bypass graft									
Separations ^(d)	4,823	3,477	3,026	849	1,263	311	120	125	14,012
Separations not within state of residence (%)	8	1	1	0	1	6	10	100	
Proportion of separations public patients (%)	54	50	52	47	48	46	55	69	51
Separation rate ^(e)	0.66	0.63	0.73	0.41	0.68	0.54	0.42	0.93	0.64
Standardised separation rate ratio (SRR)	1.03	0.99	1.14	0.64	1.07	0.84	0.66	1.46	
95% confidence interval of SRR	1.00–1.06	0.96–1.02	1.10–1.18	0.60–0.68	1.01–1.13	0.75–0.93	0.54–0.78	1.20–1.72	

(continued)

Table 4.7 (continued): Separation statistics^(a) for selected procedures^(b), by state or territory of usual residence, all hospitals^(c), 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total ^(c)
Hip replacement									
Separations ^(d)	9,562	7,573	4,830	3,279	2,598	1,008	419	83	29,387
Separations not within state of residence (%)	6	1	2	0	0	3	7	36	
Proportion of separations public patients (%)	40	39	38	42	39	34	43	48	39
Separation rate ^(e)	1.28	1.35	1.17	1.60	1.35	1.73	1.48	0.75	1.32
Standardised separation rate ratio (SRR)	0.96	1.02	0.88	1.21	1.02	1.31	1.12	0.57	
95% confidence interval of SRR	0.94-0.98	1.00-1.04	0.86-0.90	1.17-1.25	0.98-1.06	1.23-1.39	1.01-1.23	0.45-0.69	
Revision of hip replacement									
Separations ^(d)	1,168	942	590	366	235	127	61	8	3,507
Separations not within state of residence (%)	8	2	1	0	0	6	13	75	
Proportion of separations public patients (%)	36	36	34	36	32	23	38	63	35
Separation rate ^(e)	0.16	0.17	0.14	0.18	0.12	0.22	0.22	0.06	0.16
Proportion of hip replacements	0.12	0.12	0.12	0.11	0.09	0.13	0.15	0.10	0.12
Standardised separation rate ratio (SRR)	0.98	1.06	0.90	1.12	0.78	1.39	1.36	0.38	
95% confidence interval of SRR	0.92-1.04	0.99-1.13	0.83-0.97	1.01-1.23	0.68-0.88	1.15-1.63	1.02-1.70	0.12-0.64	
Hysterectomy, females aged 15-69									
Separations ^(d)	8,717	6,207	5,471	2,861	2,487	753	457	233	27,203
Separations not within state of residence (%)	5	1	1	0	0	1	12	9	
Proportion of separations public patients (%)	41	48	36	40	42	42	28	55	42
Separation rate ^(e)	1.25	1.18	1.31	1.34	1.53	1.47	1.33	1.09	1.28
Standardised separation rate ratio (SRR)	0.98	0.92	1.02	1.04	1.19	1.15	1.04	0.85	
95% confidence interval of SRR	0.96-1.00	0.90-0.94	0.99-1.05	1.00-1.08	1.14-1.24	1.07-1.23	0.94-1.14	0.74-0.96	
Age and sex restricted adjusted separation rate ^(h)	3.6	3.4	3.7	3.8	4.3	4.2	3.8	3.1	3.6
Knee replacement									
Separations ^(d)	12,660	7,068	6,241	3,506	2,737	824	505	113	33,743
Separations not within state of residence (%)	6	2	1	0	0	3	5	58	
Proportion of separations public patients (%)	36	32	29	40	28	26	28	26	33
Separation rate ^(e)	1.71	1.28	1.51	1.72	1.47	1.42	1.73	0.79	1.54
Standardised separation rate ratio (SRR)	1.11	0.84	0.98	1.12	0.96	0.93	1.13	0.52	
95% confidence interval of SRR	1.09-1.13	0.82-0.86	0.96-1.00	1.08-1.16	0.92-1.00	0.87-0.99	1.03-1.23	0.31-0.47	
Lens insertion									
Separations ^(d)	62,135	42,088	37,608	16,318	13,499	3,558	1,663	813	177,999
Separations not within state of residence (%)	4	1	2	0	0	1	4	17	
Proportion of separations public patients (%)	31	26	11	38	30	9	52	62	26
Separation rate ^(e)	8.33	7.55	9.28	8.20	7.01	6.17	6.20	7.90	8.12
Standardised separation rate ratio (SRR)	1.03	0.93	1.14	1.01	0.86	0.76	0.76	0.97	
95% confidence interval of SRR	1.02-1.04	0.92-0.94	1.13-1.15	0.99-1.03	0.85-0.87	0.74-0.78	0.72-0.80	0.68-0.80	

(continued)

Table 4.7 (continued): Separation statistics^(a) for selected procedures^(b), by state or territory of usual residence, all hospitals^(c), 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total ^(c)
Myringotomy (with insertion of tube)									
Separations ^(d)	8,502	7,573	5,259	3,415	4,085	532	523	136	30,044
Separations not within state of residence (%)	6	2	1	0	0	1	3	13	
Proportion of separations public patients (%)	32	42	30	33	33	39	26	71	35
Separation rate ^(e)	1.29	1.56	1.30	1.69	2.89	1.13	1.68	0.55	1.50
Standardised separation rate ratio (SRR)	0.86	1.04	0.86	1.13	1.92	0.75	1.12	0.36	
95% confidence interval of SRR	0.84–0.88	1.02–1.06	0.84–0.88	1.09–1.17	1.86–1.98	0.69–0.81	1.02–1.22	0.30–0.42	
Prostatectomy									
Separations ^(d)	9,942	8,468	5,262	2,629	2,382	806	335	97	29,974
Separations not within state of residence (%)	6	1	2	0	0	2	8	31	
Proportion of separations public patients (%)	31	35	22	32	37	28	23	52	31
Separation rate ^(e)	1.33	1.52	1.25	1.27	1.25	1.37	1.14	0.91	1.35
Standardised separation rate ratio (SRR)	0.99	1.13	0.93	0.94	0.93	1.02	0.84	0.68	
95% confidence interval of SRR	0.97–1.01	1.11–1.15	0.90–0.96	0.90–0.98	0.89–0.97	0.95–1.09	0.75–0.93	0.54–0.82	
Tonsillectomy									
Separations ^(d)	11,807	8,627	7,312	3,858	3,514	598	633	252	36,638
Separations not within state of residence (%)	5	2	1	0	1	1	3	8	
Proportion of separations public patients (%)	36	49	24	39	41	36	35	59	38
Separation rate ^(e)	1.80	1.75	1.79	1.89	2.45	1.28	1.89	1.06	1.82
Standardised separation rate ratio (SRR)	0.98	0.96	0.98	1.04	1.34	0.70	1.03	0.58	
95% confidence interval of SRR	0.96–1.00	0.94–0.98	0.96–1.00	1.01–1.07	1.30–1.38	0.64–0.76	0.95–1.11	0.51–0.65	

(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 and diagnoses are defined using ICD-10-AM codes in Appendix 1.

(c) Includes other territories and excludes overseas residents and unknown state of residence.

(d) Excludes multiple procedures for the same separation within the same group.

(e) Rate per 1,000 population was directly age-standardised as detailed in Appendix 1.

(f) Caesarean section separations divided by separations for which in-hospital birth was reported. This is an approximate measure of the proportion of all births that are by caesarean section, as births out of hospital are not included.

(g) Females aged 15–69 years only.

Table 4.8: Separation statistics^(a) by Remoteness Area of usual residence, all hospitals, Australia, 2006-07

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia ^(c)
Caesarean section						
Separations ^(d)	63,293	15,109	8,058	1,355	806	88,632
Proportion of separations public patients (%)	51	68	67	71	84	56
Separation rate ^(e)	4.40	4.62	4.87	4.38	4.32	4.45
Standardised separation rate ratio (SRR)	0.99	1.04	1.09	0.98	0.97	
95% confidence interval of SRR	0.98-1.00	1.02-1.06	1.07-1.11	0.93-1.03	0.90-1.04	
In-hospital birth separations	195,879	51,599	26,823	4,714	2,922	281,985
Proportion of separations public patients (%)	61.9	76.0	74.0	78.2	88.2	66.2
Separation rate ^(e)	13.51	15.78	16.26	15.35	15.55	14.10
Separations per 100 in-hospital birth separations ^(f)	32.3	29.3	30.0	28.7	27.6	31.4
Public hospitals	27.3	26.9	27.7	26.7	26.4	27.3
Public patients	26.5	26.1	27.3	26.1	26.4	26.5
Private patients	38.1	35.7	31.7	31.3	27.1	36.4
Private hospitals	42.3	41.1	40.5	44.1	39.8	42.0
Cholecystectomy						
Separations ^(d)	31,599	10,313	4,590	569	256	47,331
Proportion of separations public patients (%)	49	56	61	62	77	52
Separation rate ^(e)	2.20	2.44	2.27	1.87	1.62	2.24
Standardised separation rate ratio (SRR)	0.98	1.09	1.01	0.83	0.73	
95% confidence interval of SRR	0.97-0.99	1.07-1.11	0.98-1.04	0.76-0.90	0.64-0.82	
Coronary angioplasty						
Separations ^(d)	24,187	7,010	2,909	377	121	34,609
Proportion of separations public patients (%)	45	49	52	60	74	47
Separation rate ^(e)	1.68	1.46	1.33	1.29	0.98	1.59
Standardised separation rate ratio (SRR)	1.06	0.92	0.84	0.81	0.62	
95% confidence interval of SRR	1.05-1.07	0.90-0.94	0.81-0.87	0.73-0.89	0.51-0.73	
Coronary artery bypass graft						
Separations ^(d)	9,202	3,092	1,481	161	73	14,012
Proportion of separations public patients (%)	49	53	62	71	73	51
Separation rate ^(e)	0.65	0.64	0.68	0.57	0.57	0.65
Standardised separation rate ratio (SRR)	1.00	0.99	1.05	0.88	0.88	
95% confidence interval of SRR	0.98-1.02	0.96-1.02	1.00-1.10	0.74-1.02	0.68-1.08	

(continued)

Table 4.8 (continued): Separation statistics^(a) for selected procedures^(b), by Remoteness Area of usual residence, all hospitals, Australia, 2006–07

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia ^(c)
Hip replacement						
Separations ^(e)	18,625	7,278	3,097	311	71	29,387
Proportion of separations public patients (%)	37	41	46	42	45	39
Separation rate ^(f)	1.28	1.51	1.44	1.19	0.74	1.34
Standardised separation rate ratio (SRR)	0.95	1.12	1.07	0.89	0.55	
95% confidence interval of SRR	0.94–0.96	1.09–1.15	1.03–1.11	0.79–0.99	0.42–0.68	
Revision of hip replacement						
Separations ^(d)	2,177	899	393	31	7	3,507
Proportion of separations public patients (%)	33	37	39	29	57	35
Separation rate ^(e)	0.15	0.19	0.18	0.12	0.09	0.16
Standardised separation rate ratio (SRR)	0.93	1.16	1.14	0.77	0.53	
95% confidence interval of SRR	0.89–0.97	1.08–1.24	1.03–1.25	0.50–1.04	0.14–0.92	
Hysterectomy, females aged 15–69						
Separations ^(d)	17,408	6,240	3,002	363	186	27,203
Proportion of separations public patients (%)	37	48	51	58	69	42
Separation rate ^(e)	1.22	1.50	1.48	1.11	1.16	1.29
Standardised separation rate ratio (SRR)	0.94	1.16	1.15	0.86	0.90	
95% confidence interval of SRR	0.93–0.95	1.13–1.19	1.11–1.19	0.77–0.95	0.77–1.03	
Age and sex restricted adjusted separation rate ^(g)	3.46	4.25	4.22	3.14	3.30	3.67
Knee replacement						
Separations ^(d)	20,888	8,676	3,702	359	112	33,743
Proportion of separations public patients (%)	32	34	38	33	45	33
Separation rate ^(e)	1.46	1.79	1.68	1.29	1.09	1.55
Standardised separation rate ratio (SRR)	0.94	1.15	1.08	0.83	0.70	
95% confidence interval of SRR	0.93–0.95	1.13–1.17	1.05–1.11	0.74–0.92	0.57–0.83	
Lens insertion						
Separations ^(d)	116,910	41,268	17,447	1,578	764	177,999
Proportion of separations public patients (%)	23	30	31	50	58	26
Separation rate ^(e)	8.13	8.53	8.23	6.37	7.88	8.21
Standardised separation rate ratio (SRR)	0.99	1.04	1.00	0.78	0.96	
95% confidence interval of SRR	0.98–1.00	1.03–1.05	0.99–1.01	0.74–0.82	0.89–1.03	

(continued)

Table 4.8 (continued): Separation statistics^(a) for selected procedures^(b), by Remoteness Area of usual residence, all hospitals, Australia, 2006–07

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia ^(c)
Myringotomy (with insertion of tube)						
Separations ^(d)	20,687	6,121	2,675	386	174	30,044
Proportion of separations public patients (%)	28	46	51	58	78	35
Separation rate ^(e)	1.55	1.53	1.34	1.06	0.82	1.51
Standardised separation rate ratio (SRR)	1.03	1.01	0.89	0.70	0.54	
95% confidence interval of SRR	1.02–1.04	0.98–1.04	0.86–0.92	0.63–0.77	0.46–0.62	
Prostatectomy						
Separations ^(d)	19,790	6,959	2,881	262	78	29,974
Proportion of separations public patients (%)	28	35	39	42	46	31
Separation rate ^(e)	1.37	1.42	1.31	1.00	0.77	1.37
Standardised separation rate ratio (SRR)	1.00	1.04	0.96	0.73	0.56	
95% confidence interval of SRR	0.99–1.01	1.02–1.06	0.92–1.00	0.64–0.82	0.44–0.68	
Tonsillectomy						
Separations ^(d)	23,892	8,523	3,523	533	163	36,638
Proportion of separations public patients (%)	33	45	49	56	61	38
Separation rate ^(e)	1.76	2.18	1.85	1.58	0.79	1.83
Standardised separation rate ratio (SRR)	0.96	1.19	1.01	0.86	0.43	
95% confidence interval of SRR	0.95–0.97	1.16–1.22	0.98–1.04	0.79–0.93	0.36–0.50	

(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 ICD-10-AM codes in Appendix 1.

(c) Includes unknown remoteness area and excludes overseas residents and unknown state of residence.

(d) Excludes multiple procedures in the same separation within the same group.

(e) Rate per 1,000 population was directly age-standardised as detailed in Appendix 1.

(f) Caesarean sections divided by separations for which in-hospital birth was reported. This is an approximate measure of the proportion of all births that are by caesarean section, as births out of hospital are not included.

(g) Females aged 15–69 years only.

Table 4.9: Separation statistics^(a) for selected procedures^(b), by quintile of socioeconomic advantage/disadvantage^(c), all hospitals, Australia, 2006–07

	Most disadvantaged	Second most disadvantaged	Middle quintile	Second most advantaged	Most advantaged	Total ^(d)
Caesarean section						
Separations ^(e)	17,029	16,425	17,947	18,447	18,776	88,632
Proportion of separations public patients (%)	76	68	58	50	30	56
Separation rate ^(f)	4.52	4.50	4.27	4.38	4.55	4.45
Standardised separation rate ratio (SRR)	1.02	1.01	0.96	0.99	1.02	
95% confidence interval of SRR	1.00–1.04	0.99–1.03	0.95–0.97	0.98–1.00	1.01–1.03	
In-hospital birth separations	61,662	54,859	57,658	55,609	52,176	281,985
Proportion of separations public patients (%)	82.4	76.2	67.9	60.4	40.9	66.2
Separation rate ^(f)	16.24	14.97	13.66	13.19	12.65	14.10
Separations per 100 in-hospital birth separations ^(g)	27.6	29.9	31.1	33.2	36.0	31.4
Public hospitals	26.0	27.3	27.2	28.5	28.3	27.3
Public patients	25.5	26.8	26.4	27.6	26.8	26.5
Private patients	34.8	33.7	36.0	38.9	39.5	36.4
Private hospitals	39.0	42.2	42.3	42.0	42.7	42.0
Cholecystectomy						
Separations ^(e)	10,682	10,173	9,422	8,932	8,121	47,331
Proportion of separations public patients (%)	66	59	54	45	30	52
Separation rate ^(f)	2.54	2.40	2.21	2.16	1.90	2.24
Standardised separation rate ratio (SRR)	1.14	1.07	0.99	0.97	0.85	
95% confidence interval of SRR	1.12–1.16	1.05–1.09	0.97–1.01	0.95–0.99	0.83–0.87	
Coronary angioplasty						
Separations ^(e)	6,962	7,534	6,658	6,439	7,016	34,609
Proportion of separations public patients (%)	61	51	49	43	29	47
Separation rate ^(f)	1.55	1.62	1.55	1.60	1.64	1.59
Standardised separation rate ratio (SRR)	0.97	1.02	0.98	1.01	1.03	
95% confidence interval of SRR	0.95–0.99	1.00–1.04	0.96–1.00	0.99–1.03	1.01–1.05	
Coronary artery bypass graft						
Separations ^(e)	3,237	3,116	2,760	2,424	2,473	14,012
Proportion of separations public patients (%)	64	56	53	45	32	51
Separation rate ^(f)	0.71	0.67	0.65	0.61	0.59	0.65
Standardised separation rate ratio (SRR)	1.10	1.03	1.00	0.95	0.91	
95% confidence interval of SRR	1.06–1.14	0.99–1.07	0.96–1.04	0.91–0.99	0.87–0.95	

(continued)

Table 4.9 (continued): Separation statistics^(a) for selected procedures^(b), by quintile of socioeconomic advantage/disadvantage^(c), all hospitals, Australia, 2006–07

	Most disadvantaged	Second most disadvantaged	Middle quintile	Second most advantaged	Most advantaged	Total ^(d)
Hip replacement						
Separations ^(e)	5,699	6,413	5,738	5,451	6,083	29,387
Proportion of separations public patients (%)	49	46	42	35	24	39
Separation rate ^(f)	1.24	1.36	1.34	1.37	1.41	1.34
Standardised separation rate ratio (SRR)	0.93	1.01	1.00	1.02	1.05	
95% confidence interval of SRR	0.91–0.95	0.99–1.03	0.97–1.03	0.99–1.05	1.02–1.08	
Revision of hip replacement						
Separations ^(e)	668	806	693	645	695	3,507
Proportion of separations public patients (%)	42	38	40	31	21	35
Separation rate ^(f)	0.15	0.17	0.16	0.16	0.16	0.16
Standardised separation rate ratio (SRR)	0.91	1.06	1.01	1.01	1.01	
95% confidence interval of SRR	0.84–0.98	0.99–1.13	0.93–1.09	0.93–1.09	0.93–1.09	
Hysterectomy, females aged 15–69						
Separations ^(e)	5,695	5,817	5,530	5,114	5,045	27,203
Proportion of separations public patients (%)	58	49	43	35	20	42
Separation rate ^(f)	1.40	1.42	1.30	1.21	1.15	1.29
Standardised separation rate ratio (SRR)	1.08	1.10	1.00	0.94	0.89	
95% confidence interval of SRR	1.05–1.11	1.07–1.13	0.97–1.03	0.91–0.97	0.87–0.91	
Age and sex restricted standardised separation rate ^(h)	4.0	4.0	3.7	3.4	3.3	3.7
Knee replacement						
Separations ^(e)	7,057	8,072	6,738	5,827	6,045	33,743
Proportion of separations public patients (%)	42	38	36	28	18	33
Separation rate ^(f)	1.54	1.71	1.58	1.48	1.45	1.55
Standardised separation rate ratio (SRR)	0.99	1.10	1.02	0.95	0.93	
95% confidence interval of SRR	0.97–1.01	1.08–1.12	1.00–1.04	0.93–0.97	0.91–0.95	
Lens insertion						
Separations ^(e)	38,331	38,361	35,077	31,247	34,962	177,999
Proportion of separations public patients (%)	32	34	27	21	14	26
Separation rate ^(f)	8.35	8.05	8.28	8.01	8.34	8.21
Standardised separation rate ratio (SRR)	1.02	0.98	1.01	0.98	1.02	
95% confidence interval of SRR	1.01–1.03	0.97–0.99	1.00–1.02	0.97–0.99	1.01–1.03	

(continued)

Table 4.9 (continued): Separation statistics^(a) for selected procedures^(b), by quintile of socioeconomic advantage/disadvantage^(c), all hospitals, Australia, 2006–07

	Most disadvantaged	Second most disadvantaged	Middle quintile	Second most advantaged	Most advantaged	Total ^(d)
Myringotomy (with insertion of tube)						
Separations ^(e)	5,237	5,944	5,771	6,324	6,768	30,044
Proportion of separations public patients (%)	53	47	38	28	13	35
Separation rate ^(f)	1.25	1.51	1.43	1.60	1.80	1.51
Standardised separation rate ratio (SRR)	0.83	1.00	0.94	1.06	1.19	
95% confidence interval of SRR	0.81–0.85	0.97–1.03	0.92–0.96	1.03–1.09	1.16–1.22	
Prostatectomy						
Separations ^(e)	6,042	6,332	5,577	5,587	6,433	29,974
Proportion of separations public patients (%)	42	38	35	26	15	31
Separation rate ^(f)	1.31	1.33	1.30	1.41	1.51	1.37
Standardised separation rate ratio (SRR)	0.96	0.97	0.95	1.03	1.11	
95% confidence interval of SRR	0.94–0.98	0.95–0.99	0.93–0.97	1.00–1.06	1.08–1.14	
Tonsillectomy						
Separations ^(e)	7,139	7,512	7,481	7,179	7,325	36,638
Proportion of separations public patients (%)	52	49	41	30	16	38
Separation rate ^(f)	1.74	1.93	1.83	1.78	1.88	1.83
Standardised separation rate ratio (SRR)	0.95	1.05	1.00	0.97	1.02	
95% confidence interval of SRR	0.93–0.97	1.03–1.07	0.98–1.02	0.95–0.99	1.00–1.04	

(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 ICD-10-AM codes in Appendix 1.

(c) Based on the ABS SEIFA 2006 Index of Advantage/Disadvantage score for the statistical local area of the patient's usual residence.

(d) Includes unknown area of usual residence and excludes overseas residents and unknown state of residence.

(e) Excludes multiple procedures in the same separation within the same group.

(f) Rate per 1,000 population was directly age-standardised as detailed in Appendix 1.

(g) Caesarean section separations divided by separations for which in-hospital birth was reported. This is an approximate measure of the proportion of all births that are by caesarean section, as births out of hospital are not included.

(h) Females aged 15–69 years only.

Table 4.10: Average length of stay (days)^(a) for selected AR-DRGs version 5.1, by hospital sector, states and territories, 2006–07

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
E62C Respiratory infections/inflamations W/O CC										
ALOS (days)	Public	3.6	2.9	3.2	3.3	3.5	3.7	3.0	4.1	3.3
	Private	5.2	5.4	4.7	4.9	5.2	n.p.	n.p.	n.p.	5.1
	Total	3.8	3.4	3.6	3.5	3.8	n.p.	n.p.	n.p.	3.6
Separations	Public	8,768	5,489	3,689	1,933	1,640	481	310	578	22,888
	Private	643	1,279	1,301	378	394	n.p.	n.p.	n.p.	4,146
	Total	9,411	6,768	4,990	2,311	2,034	n.p.	n.p.	n.p.	27,034
E65B Chronic obstructive airway disease W/O catastrophic or severe CC										
ALOS (days)	Public	5.1	4.0	4.7	4.9	4.6	5.7	5.3	5.1	4.7
	Private	9.0	7.0	6.9	7.0	5.3	n.p.	n.p.	n.p.	7.1
	Total	5.4	4.6	5.3	5.4	4.7	n.p.	n.p.	n.p.	5.1
Separations	Public	8,841	5,198	4,197	1,924	1,923	687	202	417	23,389
	Private	651	1,223	1,503	489	530	n.p.	n.p.	n.p.	4,550
	Total	9,492	6,421	5,700	2,413	2,453	n.p.	n.p.	n.p.	27,939
E69C Bronchitis and asthma age<50 W/O CC										
ALOS (days)	Public	1.6	1.5	1.5	1.7	1.7	1.6	1.7	1.8	1.6
	Private	1.9	2.5	2.2	2.0	2.6	n.p.	n.p.	n.p.	2.3
	Total	1.6	1.5	1.6	1.7	1.8	n.p.	n.p.	n.p.	1.6
Separations	Public	10,670	6,806	3,916	2,142	2,870	496	300	271	27,471
	Private	153	214	582	121	116	n.p.	n.p.	n.p.	1,208
	Total	10,823	7,020	4,498	2,263	2,986	n.p.	n.p.	n.p.	28,679
F62B Heart failure and shock W/O catastrophic CC										
ALOS (days)	Public	5.9	4.2	4.7	5.1	5.4	6.1	5.4	3.60	5.1
	Private	8.5	7.5	7.5	8.3	6.8	n.p.	n.p.	n.p.	7.7
	Total	6.1	5.0	5.7	5.7	5.8	n.p.	n.p.	n.p.	5.7
Separations	Public	8,702	6,021	3,692	2,033	1,949	571	259	231	23,458
	Private	909	1,941	1,843	512	646	n.p.	n.p.	n.p.	6,080
	Total	9,611	7,962	5,535	2,545	2,595	n.p.	n.p.	n.p.	29,538
F71B Non-major arrhythmia and conduction disorders W/O catastrophic or severe CC										
ALOS (days)	Public	2.5	2.1	2.2	1.8	2.4	2.2	2.0	2.21	2.3
	Private	2.0	2.2	2.5	1.8	2.3	n.p.	n.p.	n.p.	2.2
	Total	2.5	2.2	2.3	1.8	2.4	n.p.	n.p.	n.p.	2.3
Separations	Public	10,807	7,568	4,950	2,285	2,387	808	500	212	29,517
	Private	1,760	2,770	2,996	1,222	1,357	n.p.	n.p.	n.p.	10,507
	Total	12,567	10,338	7,946	3,507	3,744	n.p.	n.p.	n.p.	40,024

(continued)

Table 4.10 (continued): Average length of stay (days)^(a) for selected AR-DRGs version 5.1, by hospital sector, states and territories, 2006-07

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
G07B Appendicectomy W/O Catastrophic or Severe CC ALOS (days)	Public	3.0	2.7	2.5	2.6	2.9	2.7	2.7	2.9	2.8
	Private	2.5	2.7	2.3	2.5	2.7	n.p.	n.p.	n.p.	2.5
	<i>Total</i>	2.9	2.7	2.4	2.6	2.8	n.p.	n.p.	n.p.	2.7
Separations	Public	6,303	4,221	2,973	2,071	1,235	408	384	220	17,815
	Private	799	1,087	1,679	628	366	n.p.	n.p.	n.p.	4,774
	<i>Total</i>	7,102	5,308	4,652	2,699	1,601	n.p.	n.p.	n.p.	22,589
G08B Abdominal and other hernia procedures age 1 to 59 or W catastrophic or severe CC ALOS (days)	Public	1.6	1.5	1.4	1.7	1.8	1.5	1.5	1.7	1.6
	Private	1.5	1.5	1.3	1.7	1.5	n.p.	n.p.	n.p.	1.5
	<i>Total</i>	1.5	1.5	1.4	1.7	1.7	n.p.	n.p.	n.p.	1.5
Separations	Public	2,248	1,825	1,387	803	557	121	91	87	7,119
	Private	2,177	1,508	1,907	791	522	n.p.	n.p.	n.p.	7,239
	<i>Total</i>	4,425	3,333	3,294	1,594	1,079	n.p.	n.p.	n.p.	14,358
G09Z Inguinal and femoral hernia procedures age>0 ALOS (days)	Public	1.4	1.5	1.3	1.3	1.6	1.3	1.2	1.4	1.4
	Private	1.3	1.4	1.2	1.6	1.5	n.p.	n.p.	n.p.	1.3
	<i>Total</i>	1.4	1.4	1.2	1.5	1.5	n.p.	n.p.	n.p.	1.4
Separations	Public	5,622	4,519	2,952	1,803	1,325	345	209	151	16,926
	Private	7,313	5,268	5,013	2,277	1,806	n.p.	n.p.	n.p.	22,888
	<i>Total</i>	12,935	9,787	7,965	4,080	3,131	n.p.	n.p.	n.p.	39,814
H08B Laparoscopic cholecystectomy W/O closed CDE W/O catastrophic or severe CC ALOS (days)	Public	1.9	1.9	1.7	1.9	1.9	1.9	2.0	2.4	1.9
	Private	1.7	1.9	1.8	1.8	2.0	n.p.	n.p.	n.p.	1.8
	<i>Total</i>	1.8	1.9	1.8	1.9	2.0	n.p.	n.p.	n.p.	1.8
Separations	Public	6,820	4,959	3,339	1,802	1,591	328	248	140	19,227
	Private	5,067	3,761	3,873	1,581	1,211	n.p.	n.p.	n.p.	16,294
	<i>Total</i>	11,887	8,720	7,212	3,383	2,802	n.p.	n.p.	n.p.	35,521
I03C Hip replacement W/O catastrophic or severe CC ALOS (days)	Public	7.1	7.2	7.3	6.1	7.0	7.2	6.4	n.p.	7.0
	Private	7.0	7.4	7.0	8.7	7.2	n.p.	n.p.	n.p.	7.3
	<i>Total</i>	7.1	7.3	7.1	7.6	7.1	n.p.	n.p.	n.p.	7.2
Separations	Public	2,505	1,652	1,145	843	595	234	181	23	7,178
	Private	3,386	3,268	2,183	1,216	1,079	n.p.	n.p.	n.p.	11,856
	<i>Total</i>	5,891	4,920	3,328	2,059	1,674	n.p.	n.p.	n.p.	19,034

(continued)

Table 4.10 (continued): Average length of stay (days)^(a) for selected AR-DRGs version 5.1, by hospital sector, states and territories, 2006-07

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
I04Z Knee replacement and reattachment ALOS (days)	Public	7.2	8.0	7.2	7.7	6.5	7.6	6.7	n.p.	7.4
	Private	7.1	7.6	7.3	10.1	7.1	n.p.	n.p.	n.p.	7.6
	Total	7.2	7.8	7.3	9.1	7.0	n.p.	n.p.	n.p.	7.5
Separations	Public	4,584	2,393	1,934	1,421	848	220	200	27	11,627
	Private	6,728	4,554	4,209	1,946	1,905	n.p.	n.p.	n.p.	20,338
	Total	11,312	6,947	6,143	3,367	2,753	n.p.	n.p.	n.p.	31,965
I16Z Other shoulder procedures ALOS (days)	Public	1.7	1.7	1.5	1.4	1.7	1.7	1.6	n.p.	1.6
	Private	1.5	1.5	1.5	1.6	1.7	n.p.	n.p.	n.p.	1.5
	Total	1.5	1.5	1.5	1.5	1.7	n.p.	n.p.	n.p.	1.5
Separations	Public	1,692	1,331	1,021	968	494	137	111	38	5,792
	Private	6,622	6,741	5,365	4,257	2,722	n.p.	n.p.	n.p.	26,804
	Total	8,314	8,072	6,386	5,225	3,216	n.p.	n.p.	n.p.	32,596
L63B Kidney and urinary tract infections age>69 W/O catastrophic CC ALOS (days)	Public	5.7	4.2	4.8	5.3	5.5	4.9	4.4	5.3	5.1
	Private	7.5	6.8	6.4	7.0	6.2	n.p.	n.p.	n.p.	6.7
	Total	5.9	4.8	5.4	5.7	5.7	n.p.	n.p.	n.p.	5.4
Separations	Public	6,677	4,202	2,655	1,352	1,278	283	211	138	16,796
	Private	545	1,145	1,385	305	316	n.p.	n.p.	n.p.	3,847
	Total	7,222	5,347	4,040	1,657	1,594	n.p.	n.p.	n.p.	20,643
M02B Transurethral prostatectomy W/O catastrophic or severe CC ALOS (days)	Public	3.2	2.8	2.8	2.8	3.0	3.4	4.0	n.p.	3.0
	Private	3.0	3.0	3.0	3.0	3.4	n.p.	n.p.	n.p.	3.1
	Total	3.1	2.9	2.9	2.9	3.2	n.p.	n.p.	n.p.	3.0
Separations	Public	1,978	1,988	812	583	715	134	52	18	6,280
	Private	3,583	3,178	2,530	1,032	898	n.p.	n.p.	n.p.	11,714
	Total	5,561	5,166	3,342	1,615	1,613	n.p.	n.p.	n.p.	17,994
N04Z Hysterectomy for non-malignancy ALOS (days)	Public	3.9	3.9	3.5	3.8	3.7	3.5	4.2	4.4	3.8
	Private	4.1	4.6	3.8	4.3	4.3	n.p.	n.p.	n.p.	4.2
	Total	4.0	4.2	3.6	4.1	4.0	n.p.	n.p.	n.p.	4.0
Separations	Public	3,794	3,258	2,078	1,202	1,088	302	135	111	11,968
	Private	4,367	2,796	3,266	1,540	1,307	n.p.	n.p.	n.p.	14,152
	Total	8,161	6,054	5,344	2,742	2,395	n.p.	n.p.	n.p.	26,120

(continued)

Table 4.10 (continued): Average length of stay (days)^(a) for selected AR-DRGs version 5.1, by hospital sector, states and territories, 2006–07

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
N06Z Female reproductive system reconstructive procedures										
ALOS (days)	Public	3.0	2.6	2.3	2.7	2.8	2.7	2.6	n.p.	2.7
	Private	3.2	3.1	2.6	3.3	3.2	n.p.	n.p.	n.p.	3.0
	Total	3.1	2.9	2.5	3.0	3.1	n.p.	n.p.	n.p.	2.9
Separations	Public	2,082	1,737	1,250	740	651	158	68	23	6,709
	Private	3,270	1,939	2,525	1,053	1,090	n.p.	n.p.	n.p.	10,381
	Total	5,352	3,676	3,775	1,793	1,741	n.p.	n.p.	n.p.	17,090
O01C Caesarean delivery W moderate complicating diagnosis										
ALOS (days)	Public	4.3	4.3	3.7	4.4	4.6	4.2	4.0	4.9	4.2
	Private	5.4	5.2	4.7	6.0	5.7	n.p.	n.p.	n.p.	5.3
	Total	4.7	4.6	4.2	5.2	5.0	n.p.	n.p.	n.p.	4.6
Separations	Public	14,354	10,222	8,268	3,759	2,856	876	635	531	41,501
	Private	7,371	6,514	7,002	3,662	1,844	n.p.	n.p.	n.p.	27,653
	Total	21,725	16,736	15,270	7,421	4,700	n.p.	n.p.	n.p.	69,154
O60B Vaginal delivery W severe complicating diagnosis										
ALOS (days)	Public	3.0	2.7	2.5	3.0	2.9	3.0	2.6	3.2	2.8
	Private	4.3	4.2	3.9	4.9	4.5	n.p.	n.p.	n.p.	4.3
	Total	3.3	3.2	2.9	3.5	3.3	n.p.	n.p.	n.p.	3.2
Separations	Public	35,808	26,529	18,039	9,547	6,710	2,049	1,700	1,250	101,632
	Private	10,689	10,282	7,155	3,932	2,265	n.p.	n.p.	n.p.	36,428
	Total	46,497	36,811	25,194	13,479	8,975	n.p.	n.p.	n.p.	138,060
R61B Lymphoma and non-acute leukaemia W/O catastrophic CC										
ALOS (days)	Public	5.2	4.0	5.1	4.8	4.9	5.6	7.7	n.p.	4.8
	Private	5.2	3.8	4.9	3.2	3.9	n.p.	n.p.	n.p.	4.2
	Total	5.2	3.9	5.0	3.9	4.5	n.p.	n.p.	n.p.	4.6
Separations	Public	3,028	2,341	1,041	638	735	266	161	32	8,242
	Private	738	2,247	1,784	896	521	n.p.	n.p.	n.p.	6,344
	Total	3,766	4,588	2,825	1,534	1,256	n.p.	n.p.	n.p.	14,586
U60B Major affective disorders age<70 W/O catastrophic or severe CC										
ALOS (days)	Public	13.8	13.0	14.1	15.4	12.6	11.7	15.1	11.9	13.6
	Private	21.8	17.4	19.0	13.1	16.0	n.p.	n.p.	n.p.	18.0
	Total	16.2	15.2	16.3	14.4	13.4	n.p.	n.p.	n.p.	15.3
Separations	Public	5,828	3,802	2,726	1,882	2,313	364	260	159	17,334
	Private	2,530	3,709	2,267	1,570	766	n.p.	n.p.	n.p.	11,351
	Total	8,358	7,511	4,993	3,452	3,079	n.p.	n.p.	n.p.	28,685

(a) Separations for which the care type was reported as *Acute*, *Unknown* and *Newborn* with qualified days. Excludes separations where the length of stay was greater than 120 days. Abbreviations: ALOS—average length of stay, CC—complications and comorbidities, CDE—common duct exploration, W/O—without, W—with.

Table 4.11: Relative stay index^{(a)(b)}, by hospital sector, patient election status and funding source, states and territories, 2006–07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Public patients ^(c)	1.03	0.91	0.95	0.98	1.02	1.01	0.93	1.18	0.98
Public ^(d)	1.03	0.91	0.95	0.98	1.02	1.01	0.93	1.18	0.98
Private patients	1.08	0.94	0.99	1.02	1.06	1.05	0.96	1.32	1.03
Private health insurance	1.09	0.96	0.99	1.03	1.06	1.01	1.03	1.00	1.04
Self-funded	1.02	0.89	0.80	0.79	0.99	..	0.84	1.59	0.94
Workers compensation	1.15	1.05	1.15	1.07	1.11	1.22	0.92	1.44	1.12
Motor vehicle third party personal claim	1.21	0.88	1.25	1.12	1.31	1.34	0.89	1.79	1.09
Department of Veterans' Affairs	1.00	0.92	0.94	0.96	1.03	1.04	0.84	1.03	0.98
Other ^(e)	2.14	1.10	1.07	1.10	0.90	0.94	0.89	1.21	1.41
Patient election status not reported	0.82	1.15	..	..	..	1.04	..	..	1.13
<i>Total</i>	<i>1.04</i>	<i>0.92</i>	<i>0.95</i>	<i>0.98</i>	<i>1.02</i>	<i>1.02</i>	<i>0.93</i>	<i>1.18</i>	<i>0.99</i>
Private hospitals									
Public patients ^(c)	0.57	0.98	0.94	0.85	1.03	n.p.	n.p.	n.p.	0.89
Public ^(d)	0.57	0.98	0.94	0.85	1.03	n.p.	n.p.	n.p.	0.89
Private patients	1.04	1.02	1.03	1.06	0.99	n.p.	n.p.	n.p.	1.03
Private health insurance	1.05	1.03	1.02	1.04	0.99	n.p.	n.p.	n.p.	1.03
Self-funded	0.88	0.86	0.81	0.82	0.80	n.p.	n.p.	n.p.	0.85
Workers compensation	0.98	1.01	0.89	0.89	0.90	n.p.	n.p.	n.p.	0.95
Motor vehicle third party personal claim	0.99	1.02	1.13	1.05	1.05	n.p.	n.p.	n.p.	1.05
Department of Veterans' Affairs	1.15	1.04	1.14	1.34	1.01	n.p.	n.p.	n.p.	1.13
Other ^(e)	1.04	0.75	0.90	1.12	0.99	n.p.	n.p.	n.p.	0.96
Patient election status not reported	0.72	0.96	..	..	..	n.p.	n.p.	n.p.	0.86
<i>Total</i>	<i>1.04</i>	<i>1.02</i>	<i>1.03</i>	<i>1.06</i>	<i>0.99</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.03</i>
All hospitals									
Public patients ^(c)	1.03	0.91	0.95	0.98	1.02	n.p.	n.p.	n.p.	0.98
Public ^(d)	1.03	0.91	0.95	0.98	1.02	n.p.	n.p.	n.p.	0.98
Private patients	1.06	1.00	1.02	1.05	1.01	n.p.	n.p.	n.p.	1.03
Private health insurance	1.06	1.01	1.02	1.04	1.01	n.p.	n.p.	n.p.	1.03
Self-funded	0.93	0.87	0.81	0.82	0.83	n.p.	n.p.	n.p.	0.87
Workers compensation	1.05	1.03	1.00	0.95	0.96	n.p.	n.p.	n.p.	1.02
Motor vehicle third party personal claim	1.21	0.90	1.25	1.11	1.28	n.p.	n.p.	n.p.	1.08
Department of Veterans' Affairs	1.06	0.98	1.11	1.22	1.02	n.p.	n.p.	n.p.	1.06
Other ^(e)	2.02	1.03	1.01	1.10	0.95	n.p.	n.p.	n.p.	1.28
Patient election status not reported	0.77	1.14	..	..	..	n.p.	n.p.	n.p.	1.06
<i>Total</i>	<i>1.04</i>	<i>0.95</i>	<i>0.98</i>	<i>1.01</i>	<i>1.01</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.00</i>

(a) Separations for which the care type was reported as *Acute* or *Newborn* with qualified days, or was *Not reported*.

(b) Relative stay index based on all hospitals using the indirect method using AR-DRG version 5.1. 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.

(c) Includes separations whose patient election status was *Public* and whose funding source was reported as *Australian Health Care agreements*, *Reciprocal Health Care agreements*, *Other hospital or public authority*, *Other* or *Not reported*, and most patients in *Public psychiatric hospitals*.

(d) Includes patients whose funding source was reported as *Australian Health Care Agreements*, *Other hospital or public authority* and most patients in *Public psychiatric hospitals*.

(e) Includes patients whose funding source was reported as *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority*, *Other* and *Unknown*.

Table 4.12: Relative stay index^(a), directly and indirectly standardised by hospital sector, and medical/surgical/other type of AR-DRG, states and territories, 2006–07

Type of hospital	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Indirectly standardised relative stay index^(b)									
Public hospitals	1.04	0.92	0.95	0.98	1.02	1.02	0.93	1.18	0.99
Medical	1.02	0.88	0.93	0.97	1.00	1.01	0.92	1.14	0.96
Surgical	1.08	0.99	1.01	1.02	1.07	1.03	0.95	1.31	1.04
Other	1.18	0.96	1.07	0.98	1.04	1.04	0.89	1.25	1.06
Private hospitals	1.04	1.02	1.03	1.06	0.99	n.p.	n.p.	n.p.	1.03
Medical	1.26	1.10	1.12	1.11	1.05	n.p.	n.p.	n.p.	1.14
Surgical	0.93	0.96	0.94	1.04	0.95	n.p.	n.p.	n.p.	0.95
Other	0.89	0.94	0.95	0.95	0.93	n.p.	n.p.	n.p.	0.93
All hospitals	1.04	0.95	0.98	1.01	1.01	n.p.	n.p.	n.p.	1.00
Medical	1.05	0.93	0.99	1.00	1.01	n.p.	n.p.	n.p.	1.00
Surgical	1.02	0.98	0.98	1.03	1.01	n.p.	n.p.	n.p.	1.00
Other	1.06	0.95	1.00	0.97	0.99	n.p.	n.p.	n.p.	1.00
Directly standardised relative stay index^(c)									
Public hospitals	1.02	0.91	0.92	0.98	1.00	0.99	0.91	1.15	0.97
Medical	1.00	0.87	0.90	0.96	0.98	0.98	0.89	1.09	0.94
Surgical	1.05	1.01	0.97	1.03	1.04	1.02	0.98	1.33	1.02
Other	1.21	1.01	1.09	0.98	1.02	1.07	0.87	1.39	1.08
Private hospitals	1.07	1.06	1.04	1.12	1.04	n.p.	n.p.	n.p.	1.06
Medical	1.28	1.17	1.16	1.21	1.15	n.p.	n.p.	n.p.	1.20
Surgical	0.96	0.99	0.95	1.09	0.98	n.p.	n.p.	n.p.	0.98
Other	0.95	0.97	0.98	0.97	0.97	n.p.	n.p.	n.p.	0.96
All hospitals	1.03	0.96	0.97	1.03	1.01	n.p.	n.p.	n.p.	1.00
Medical	1.05	0.94	0.98	1.03	1.02	n.p.	n.p.	n.p.	1.00
Surgical	1.00	1.00	0.96	1.06	1.01	n.p.	n.p.	n.p.	1.00
Other	1.03	0.98	1.01	0.97	0.99	n.p.	n.p.	n.p.	1.00

(a) Separations for which the care type was reported as *Acute* or *Newborn* with qualified days, or was *Not reported*. Relative stay index based on all hospitals using AR DRG version 5.1.

(b) 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.

(c) The directly standardised relative stay index is rescaled so each group represents the national casemix and is therefore directly comparable between cells.

Table 4.13: Separations^(a) with an adverse event^(b), by hospital sector^(c), Australia, 2006–07

Adverse event	Public		Private		Total	
	Separations with adverse events	Adverse event separations per 100 separations	Separations with adverse events	Adverse event separations per 100 separations	Separations with adverse events	Adverse event separations per 100 separations
External cause codes						
Y40–Y59 Adverse effects of drugs, medicaments and biological substances	81,862	1.8	19,141	0.7	101,003	1.4
Y60–Y82 Misadventures to patients during surgical and medical care	10,015	0.2	3,713	0.1	13,728	0.2
Y83–Y84 Procedures causing abnormal reactions/complications	153,487	3.4	79,927	2.8	233,414	3.2
Y88 & Y95 Other external causes of adverse events	5,444	0.1	846	0.0	6,290	0.1
Place of occurrence codes						
Y92.22 Health service area	239,960	5.4	102,303	3.6	342,263	4.7
Diagnosis codes						
E89, G97, H59, H95, I97, J95, K91, M96, N99 Selected post-procedural disorders	42,556	1.0	22,912	0.8	65,468	0.9
T81.0 Haemorrhage and haematoma complicating a procedure, n.e.c.	22,707	0.5	13,183	0.5	35,890	0.5
T81.4 Infection following a procedure, n.e.c.	22,714	0.5	10,171	0.4	32,885	0.4
T82–T85 Complications of internal prosthetic devices, implants and grafts	48,094	1.1	26,559	0.9	74,653	1.0
Other diagnoses of complications of medical and surgical care (T80 to T88 and T98.3, not including above)	38,544	0.9	15,033	0.5	53,577	0.7
<i>Total^(d)</i>	<i>261,403</i>	<i>5.9</i>	<i>108,744</i>	<i>3.8</i>	<i>370,147</i>	<i>5.1</i>

(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) 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. Other ICD-10-AM codes may also indicate that an adverse event has occurred, and some adverse events are not identifiable using ICD-10-AM codes. Hence these data will underestimate the total number of adverse events.

(c) The data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may also differ.

(d) 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 an adverse event.