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**Please note that there is the potential for minor revisions of data in this report.  
Please check the online version at <[www.aihw.gov.au](http://www.aihw.gov.au)> for any amendments.**

# Foreword

I am pleased to present *Australian hospital statistics 2010–11*, an authoritative annual report that provides a comprehensive range of performance information and other statistics about public and private hospitals. A shorter companion report—*Australia's hospitals 2010–11 at a glance*—accompanies this report. The companion report provides a summary of the detailed information presented here, in a form accessible to a general readership.

The reports are based on the AIHW's comprehensive national hospitals databases, also the source of data for the *MyHospitals* website, and for hospital performance indicators that the Council of Australian Governments' (COAG) Reform Council reports. The Steering Committee for the Review of Government Service Provision also uses this data to prepare the Report on Government Services (ROGS). The use of the Institute's databases and robust processes with the jurisdictions to validate the data supplied for these and other purposes ensures that the performance indicators and statistics in this report are consistent with the national hospitals information reported elsewhere.

Important improvements in the report this year include enhanced information on surgery in Australian hospitals, with detail provided for both emergency and elective admissions.

Summary information is included for the first time on cases of *Staphylococcus aureus* bacteraemia (SAB) in public hospitals, an important indicator of the safety of hospital care. As for a number of other indicators, the SAB information reported here complement the hospital-level information on SAB reported on *MyHospitals*.

The report also includes time series information on hospitals, available beds, expenditure, outpatient activity and admitted patient activity for individual states and territories. Previously this information was reported only at a national level.

The AIHW will continue to shape its suite of *Australian hospital statistics* products to suit the needs of users and to improve its quality, comprehensiveness and timeliness.

David Kalisch  
Director  
April 2012

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# Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ACHI	Australian Classification of Health Interventions
ACSQHC	Australian Commission on Safety and Quality in Health Care
AIHW	Australian Institute of Health and Welfare
ALOS	average length of stay
AR-DRG	Australian Refined Diagnosis Related Groups
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographical Classification
CC	complications and/or comorbidities
COAG	Council of Australian Governments
DoHA	Department of Health and Ageing
DRG	Diagnosis Related Group
DVA	Department of Veterans' Affairs
GP	General Practitioner
HASAC	Health and Allied Services Advisory Council
HDSC	Health Data Standards Committee
HITH	hospital in the home
ICD-9-CM	International classification of diseases, 9th revision, clinical modification
ICD-10-AM	International statistical classification of diseases and related health problems, 10th revision, Australian modification
IFRAC	admitted patient cost proportion (or inpatient fraction)
IRSD	Index of Relative Socioeconomic Disadvantage
ISO	International Organization for Standardization
MDC	Major Diagnostic Category
NAPEDC	non-admitted patient emergency department care
NCCC	National Casemix and Classification Centre
NCCH	National Centre for Classification in Health
NESWTDC	National Elective Surgery Waiting Times Data Collection
NHA	National Healthcare Agreement
NHCDC	National Hospital Cost Data Collection
NHDC	National Health Data Committee
NHDD	National Health Data Dictionary
NHISSC	National Health Information Standards and Statistics Committee

NHMBWG	National Health Ministers' Benchmarking Working Group
NHMD	National Hospital Morbidity Database
NHPC	National Health Performance Committee
NHPF	National Health Performance Framework
NMDS	National Minimum Data Set
NNAPEDCD	National Non-admitted Patient Emergency Department Care Database
NOCD	National Outpatient Care Database
NPHED	National Public Hospital Establishments Database
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
PHEC	Private Health Establishments Collection
PICQ	Performance Indicators for Coding Quality
PPH	potentially preventable hospitalisation
Qld	Queensland
RRMA	Rural, Remote and Metropolitan Area
RSI	relative stay index
SA	South Australia
SCRGSP	Steering Committee for the Review of Government Service Provision
SEIFA	Socio-Economic Indexes for Areas
SES	socioeconomic status
SLA	statistical local area
SRG	Service Related Group
SRR	standardised separation rate ratio
Tas	Tasmania
Vic	Victoria
VMO	visiting medical officer
WA	Western Australia

## Symbols

..	not applicable
n.a.	not available
n.e.c.	not elsewhere classified
n.p.	not published

# **Summary**

There were 1,340 hospitals in Australia in 2010–11. The 752 public hospitals accounted for 68% of hospital beds (57,772) and the 588 private hospitals accounted for about 32% of beds (28,000 private hospital beds based on 2009–10 data).

## **Expenditure and funding**

Public hospitals spent about \$37 billion in 2010–11. Adjusted for inflation, expenditure increased by an average of 5.9% each year between 2006–07 and 2010–11, and by 8.2% between 2009–10 and 2010–11.

## **Emergency department services**

Between 2006–07 and 2010–11, the number of emergency occasions of service provided by public hospitals increased from 6.7 million to 7.7 million (3.2% increase each year). Over this period, the proportion of presentations treated within an appropriate time, the median waiting time and the proportion ending in admission remained relatively stable. The time by which 90% of presentations were seen decreased from 120 minutes to 114 minutes.

## **Outpatient services**

Public hospitals provided about 16.7 million specialist outpatient clinic service in 2010–11, increasing by 2% on average each year between 2006–07 and 2010–11. They also provided 17.2 million services for pharmacy, pathology, radiology and organ imaging.

## **Admitted patient care**

In 2010–11 there were 8.9 million separations for admitted patients—5.3 million in public hospitals and 3.6 million in private hospitals. This was an increase of 3.2% on average each year between 2006–07 and 2010–11 for public hospitals, and 5.0% for private hospitals.

Between 2009–10 and 2010–11 (after adjusting for some coverage changes), separations increased in public hospitals by 4.1% and in private hospitals by 3.9%.

The proportion of admissions that were ‘same-day’ continued to increase, by 4% on average each year between 2006–07 and 2010–11. They accounted for 58% of the total in 2010–11 (51% in public hospitals and 68% in private hospitals).

In 2010–11, persons aged 65 and over accounted for 38% of separations and 48% of patient days. For persons aged 85 and over, there was an overall increase of 41% in separations between 2006–07 and 2010–11, an average increase of 9% each year.

## **Surgery**

In 2010–11 there were 2.2 million admissions that involved a surgical procedure. Of these, about 280,000 were emergency admissions. About two-thirds of elective admissions involving surgery occurred in private hospitals. In contrast, about 87% of emergency admissions involving surgery were in public hospitals.

Indigenous Australians had about twice the rate of emergency admissions involving surgery compared with other Australians.

Between 2006–07 and 2010–11, elective admissions involving surgery increased by about 4% on average each year and emergency admissions increased by about 3% each year.

# 1 Introduction

*Australian hospital statistics 2010–11* continues the Australian Institute of Health and Welfare's (AIHW) series of summary reports describing the characteristics and activity of Australia's hospitals. The AIHW has previously published comprehensive reports for the financial years 1993–94 to 2009–10 (AIHW 2011a, 2010 and earlier), summary reports including *Australia's hospitals 2009–10 at a glance* (AIHW 2011b) and more detailed reports on some aspects of Australia's hospitals including *Australian hospital statistics 2010–11: emergency department care and elective surgery waiting times* (AIHW 2011c) and *Australian hospital statistics 2010–11: Staphylococcus aureus bacteraemia in Australian public hospitals* (AIHW 2011d).

*Australia's hospitals 2010–11 at a glance* (AIHW 2012) accompanies this report and presents a summary of the information contained in this report.

## Data sources for this report

The AIHW has undertaken the collection and reporting of the data in this report under the auspices of the Australian Health Ministers' Advisory Council, through the National Health Information Agreement. Most of the data collected were as specified in the National Minimum Data Sets relating to hospitals.

The AIHW uses the data supplied by state and territory health authorities to assemble six databases which form the foundation for the Institute's statistical reporting on hospitals:

- the National Public Hospital Establishments Database, covering resources, expenditure and revenue for public hospitals
- the National Hospital Morbidity Database, covering the diagnoses and other characteristics of admitted patients, and the care they received in public and private hospitals
- the National Non-admitted Patient Emergency Department Care Database, covering emergency department care and waiting times for selected public hospitals
- the National Elective Surgery Waiting Times Data Collection, covering waiting times and other characteristics of elective surgery in public hospitals
- the National Outpatient Care Database, covering services provided to non-admitted, non-emergency department patients in outpatient clinics of selected public hospitals.
- the National *Staphylococcus aureus* bacteraemia (SAB) Data Collection, covering counts of cases of SAB for each public hospital covered by SAB surveillance arrangements, and for private hospitals that chose to provide data.

Detailed information about the AIHW's hospital databases is provided in Appendix 1, and in the Data Quality Statements accompanying this report online.

### **Box 1.1: Data limitations**

- States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data, checking for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked with data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these edit queries. Except as noted, the AIHW does not adjust data to account for possible data errors or missing or incorrect values.
- Statistics may be affected by variations in reporting practices across states and territories and over time. Where possible, these variations have been noted in the text. Comparisons between states and territories and reporting years should be made with reference to the accompanying notes in the chapters and in the appendixes. The AIHW takes active steps to improve the consistency of these data over time.

## **Structure of this report**

The broad topics addressed in the report are:

- hospital resources (including the number of hospitals, hospital beds, expenditure, resources and staffing)
- emergency department services
- outpatient services (outpatient clinics and other non-admitted services that hospitals provide)
- admitted patient care, with separate chapters for same-day acute care, overnight acute care, surgery and sub- and non-acute care.

**Chapter 2** presents an overview of hospitals and hospital activity in Australia. This includes time series information on hospital resources, emergency services, outpatient services and admitted patient care.

**Chapter 3** presents hospital performance indicator data. These indicators are presented according to the National Health Performance Framework. The chapter includes performance indicators reported under the National Healthcare Agreement (NHA).

**Chapter 4** presents data on the characteristics and resources of Australian hospitals. Most of this information is for public hospitals, derived from the National Public Hospital Establishments Database (NPHED).

**Chapter 5** presents information on non-admitted patient care provided in public hospital emergency departments and other emergency services.

**Chapter 6** presents information on non-admitted patient care provided in outpatient clinics and other non-admitted patient services.

**Chapter 7** presents an overview of admitted patient care. The chapter presents administrative, demographic and clinical information on all admitted patient care services.

**Chapter 8** presents information on same-day acute admitted patient care.

**Chapter 9** presents information on overnight acute admitted patient care.

**Chapter 10** presents information on surgery performed in Australian hospitals. In previous reports, this chapter focused on elective surgery. The chapter now includes analyses of surgery performed for patients whose admission was considered to be an emergency.

**Chapter 11** presents information on sub- and non-acute admitted patient care.

**Appendix 1** provides summary information on the AIHW's hospitals databases, the hospitals included in each of the databases, the categorisation of hospitals as public or private and the quality and comparability of the data.

**Appendix 2** includes notes on the presentation of data, the population estimates used to calculate population rates and analysis methods.

**Appendix 3** provides summary information on the Department of Health and Ageing's 2008–09 National Hospital Cost Data Collection (NHCDC). The NHCDC is the source of Australian Refined Diagnosis Related Groups (AR-DRG) cost weight and average cost information.

**Appendix 4** presents information on episodes of admitted patient care using the Service Related Group (SRG) classification.

**Appendix 5** presents information on potentially preventable hospitalisations not included in Chapter 7.

**Appendix 6** presents information on national performance indicators not presented elsewhere in this report.

## Improvements to the report this year

The overall changes to this year's report, as compared with *Australian hospital statistics 2009–10*, were introduced to:

- facilitate time trend analysis for states and territories:
  - the report now includes 5-year time series data by state and territory for:
    - numbers of public hospitals, available beds, recurrent expenditure and revenue (Chapter 4)
    - emergency department care (Chapter 5)
    - outpatient care (Chapter 6)
    - admitted patient care (Chapter 7), including analyses for same-day acute separations (Chapter 8), overnight acute separations (Chapter 9), surgical separations for elective and emergency admissions (Chapter 10) and sub- and non-acute care (Chapter 11)
- improve reporting of National Healthcare Agreement (NHA) hospital performance indicators (Chapter 3), including the NHA performance indicator – *Staphylococcus aureus* bacteraemia (SAB) in public hospitals.

## Chapter structure

In this report, chapters are structured to address a common set of questions concerning the source data for each chapter, with section titles that include:

- *What data are reported?* – which discusses the data sets used to inform the chapter
- *What are the limitations of the data?* – which provides caveats that should be considered when interpreting the data presented
- *What methods were used?* – which outlines issues such as inclusions and exclusions of records and calculation methods, with references to more detailed information in the technical appendix.

The data presentations that follow these sections address, where possible, the following questions:

- How has activity changed over time?
- How much activity was there in 2010–11?
- Who used these services?
- How did people access these services?
- How urgent was the care?
- How long did people wait for care?
- Why did people receive the care?
- What care was provided?
- What was the safety and quality of the care?
- How long did patients stay?
- What was the cost of the care?
- Who paid for the care?
- How was the care completed?

Generally, summary tables and figures are placed immediately below the discussion in related text. Where appropriate, tables and figures within the chapter are accompanied by footnotes referring readers to more detailed statistical tables at the end of the chapter, or accompanying the report online.

## **Additional online data**

This report is available on the AIHW website at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>. The report and the companion *Australia's hospitals 2010–11 at a glance* are presented in PDF format and all tables are available as downloadable Excel spread sheets. *Australia's hospitals 2010–11 at a glance* is also available in HTML format on the website, and this is updated whenever new data are available.

The website also includes additional data in Excel spread sheets on diagnoses, procedures and AR-DRGs for admitted patients. Some of the report's tables are presented with more detail online. For example, some online tables present separations in 5-year age groups rather than 10-year age groups.

To maintain time series information, selected tables that accompanied *Australian hospital statistics 2007–08* and earlier reports are also provided using 2010–11 data.

## **Interactive data cubes**

The website also has interactive cubes of data from the National Hospital Morbidity Database, which allow users to specify tables and graphs as required. These include:

- Principal diagnoses:
  - 1993–94 to 1997–98 (using ICD-9-CM to classify diagnoses)
  - 1998–99 to 2010–11 (using ICD-10-AM to classify diagnoses)
  - mental health-related separations for 2001–02 to 2009–10 (using ICD-10-AM to classify diagnoses)
- AR-DRGs:

- version 4.0/4.1/4.2 for 1997–98 to 2004–05
- version 5.0/5.1/5.2 for 1998–99 to 2009–10
- version 6.0 for 2010–11
- Procedures:
  - 2000–01 and 2001–02 (using ACHI 2nd edition to classify procedures)
  - 2002–03 and 2003–04 (using ACHI 3rd edition to classify procedures)
  - 2004–05 and 2005–06 (using ACHI 4th edition to classify procedures)
  - 2006–07 and 2007–08 (using ACHI 5th edition to classify procedures)
  - 2008–09 and 2009–10 (using ACHI 6th edition to classify procedures)
  - 2010–11 (using ACHI 7th edition to classify procedures).

Each principal diagnosis and AR-DRG cube includes information on the number of separations (same-day and overnight), patient days and average length of stay, by age group, sex and year of separation for each principal diagnosis or AR-DRG. The cube on mental health-related care also includes data on the mental health legal status of the patient and hospital sector (public or private) for each separation. The procedures cubes include information on numbers of procedures by age group, sex, year of separation and whether the procedure was undertaken on a same-day basis.

Online interactive data are also available for:

- public hospital establishments with beds, financial and staffing measures for 2003–04 to 2010–11
- elective surgery waiting times summary statistics for:
  - reason for removal from waiting lists (2002–03 to 2010–11)
  - surgical specialty (2001–02 to 2010–11)
  - indicator procedure (2001–02 to 2010–11).

## **Updates**

After this report is published, the website will include updates for the tables that use AR-DRG cost weight and/or average cost information when cost weights become available for AR-DRG version 6.0.

At the time of writing, 2010–11 cost weights and average costs were not available for AR-DRG version 6.0, which was used for the majority of tables in this report that present data for Diagnosis Related Groups and Major Diagnostic Categories. Therefore, 2008–09 public and private sector cost weights based on AR-DRG version 5.2 were used for the public and private sectors in analyses that required the application of cost weights (such as the ‘Cost per casemix-adjusted separation’ analysis presented in Chapter 3).

Online tables and interactive data cubes are also updated in the event of errors being found in the report after publication, or if data are resupplied by states and territories after release of the publication.

## **2 Overview: 2006–07 to 2010–11**

This chapter presents an overview of hospital resources and hospital activity between 2006–07 and 2010–11.

### **What data were reported?**

#### **Data on hospital resources**

Data on hospital resources include the number of public and private hospitals, the number of public and private hospital beds, public hospital expenditure, public hospital revenue and public hospital staffing.

Information on public hospital resources was sourced from the National Public Hospital Establishments Database (NPHED) (see Appendix 1). Some information on private hospital resources was sourced from the Australian Bureau of Statistics' (ABS) Private Health Establishments Collection (PHEC) for 2009–10 (ABS 2011). Private hospital available beds, staff, occasions of service, expenditure and revenue information for 2010–11 was not available at the time of publication.

#### **Data on hospital activity**

Data on hospital activity include summary information on non-admitted and admitted patient activity in public and private hospitals.

Information on non-admitted patient services in public hospitals was sourced from the NPHED. Information on non-admitted patient services in private hospitals was sourced from the *Private hospitals Australia* reports published by the ABS.

Information on admitted patient services was derived from the National Hospital Morbidity Database (NHMD) for both public and private hospitals.

### **Box 2.1: What are the limitations of the data?**

#### **Data coverage, administrative and reporting arrangements**

- Data on hospital resources and activity are affected by changes in coverage and administrative and reporting arrangements (see Appendix 1). Readers should note:
- Reporting arrangements may vary between jurisdictions for hospitals that are privately or publicly owned and/or operated and predominantly provide public hospital services. Most of these are reported as public hospitals, but some are reported as private hospitals (see Appendix 1).
- Coverage for the NHMD is essentially complete. For 2010–11, all public hospitals were included except for a small mothercraft hospital in the Australian Capital Territory. Private hospital data were not available for private free-standing day facilities in the Australian Capital Territory and the Northern Territory.
- From 2009–10, the data for the Albury Base Hospital (in New South Wales) has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. The Albury Wodonga Health Service was formed by the integration of Wodonga Regional Health Service in Victoria and acute services at the Albury Base Hospital. Data for Albury Base Hospital are therefore now included in statistics for Victoria whereas they were formerly reported by, and included in statistics for, New South Wales.
- In 2008–09, Western Australia did not provide data for approximately 3,000 admitted patient separations. Approximately 2,700 of those separations were from public hospitals. In 2009–10, Western Australia did not provide data for approximately 13,000 admitted patient separations. Approximately 2,400 of those separations were from public hospitals, and 10,600 separations were for one private hospital.
- There have been changes in reporting arrangements for the Mersey Community Hospital in Tasmania, which was reported as a Tasmanian public hospital before being taken over by the Australian Government in November 2007 (see Appendix 1).
- From 2009–10, Tasmania's Statewide Mental Health Services, which was previously reported as three separate public psychiatric hospitals, was reported as one entity. Therefore, the number of reporting units changed, but the number of public psychiatric hospital campuses remained the same. In 2010–11, a detoxification unit in Tasmania was re-classified as a mental health service and data for this establishment were not reported to the NPHE, resulting in a further decrease in the number of hospitals reported for Tasmania.

#### **Other data considerations**

##### *Hospitals*

- The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses (see Appendix 1).

*(continued)*

**Box 2.1 (continued)***Hospital beds*

Comparability of bed numbers can be affected by the range and types of patients treated by a hospital (casemix), with, for example, different proportions of beds being available for special and more general purposes. Public and private hospital bed numbers presented in this chapter are based on different definitions (see Appendix 2).

- Bed numbers may differ from those reported in previous editions of *Australian hospital statistics* due to revision of historic bed counts.
- Before July 2009, the number of available beds for admitted patients that were reported to NPHED included beds used for same-day admitted patients and overnight admitted patients. This meant that the count of available beds did not distinguish between the number of beds available in overnight wards and the number of same day beds and chairs used for day procedures. The collection of *Average available beds for overnight-stay patients* and *Average available beds for same-day patients* was mandated for national reporting, commencing 1 July 2009. Beds may be categorised as either same day or overnight, depending on the predominant use. See Chapter 4 and Appendix 1 for more information.
- There was a decrease in the number of available beds between 2009–10 and 2010–11 in Tasmania due to a reclassification of 76 beds from 'acute mental health beds' to 'residential care beds'.

*Financial data*

- Changes in accounting practices can affect the comparability of financial data over time. For example, in 2007–08 South Australia changed from cash accounting to accrual accounting and Tasmania changed their accrual accounting policy. Tasmania includes corporate overheads in expenditure, which may or may not be fully included by other states or territories.
- Capital expenditure is not reported in this publication. Not all jurisdictions were able to report using the *National health data dictionary version 14* (HDSC 2008) categories and the comparability of the data may not be adequate for reporting.

*Variation in reporting non-admitted patient activity*

- Reporting arrangements for non-admitted patient activity varied significantly across years. States and territories may also differ in the extent to which outpatient and other non-admitted services are provided in non-hospital settings (such as community health centres), which are beyond the scope of the AIHW hospital databases.
- For 2010–11, some states re-categorised some outpatient clinics to align with the Activity Based Funding Tier 2 clinics structure (ABF Price Model Reference Classifications for 2012–13, Independent Hospital Pricing Authority (IHPA 2011)). In addition, some outpatient services that were provided by private practices in public hospitals in Tasmania have been excluded to align reporting with ABF rules.
- For 2009–10, Tasmania was not able to provide data for one hospital that reported about 280,000 occasions of service to the NPHED and 140,000 to the National Outpatient Care Database.

*(continued)*

**Box 2.1 (continued)***Variation in admission practices*

- Admission practices vary between public and private sectors, states and territories, and over time (see Appendix 2). This applies, for example, to services such as chemotherapy and endoscopy. As a result, people receiving the same type of service may be counted as same-day admitted patients in some hospitals and as non-admitted patients in other hospitals.
- Before 1 July 2007, chemotherapy and selected endoscopies were treated as same-day admissions in South Australian public hospitals. From 1 July 2007, these services have been treated as outpatient occasions of service in South Australia.
- The decrease in private hospital separations between 2009–10 and 2010–11 for Victoria was due to inconsistent reporting practices at some private hospitals in previous years. For 2010–11, Victoria excluded some types of mental health activity (mainly same day care) that had previously been reported as separations by some hospitals.
- In 2008–09, Western Australia did not provide data for approximately 3,000 admitted patient separations. Approximately 2,700 of those separations were from public hospitals. In 2009–10, Western Australia did not provide data for approximately 13,000 admitted patient separations. Approximately 2,400 of those separations were from public hospitals, and 10,600 separations were for one private hospital.
- For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals that had accounted for about 200 same-day separations with specialised mental health care in 2008–09. For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.
- Statistics on separations for admitted patients may be affected by variations in statistical admission and statistical separation practices across states and territories, and the way in which hospital stays for *Newborns* were reported (see Appendix 1).

**Box 2.2: What methods were used?**

- The hospital types reported in this chapter are *Public acute hospitals*, *Public psychiatric hospitals*, *Private free-standing day hospital facilities* and *Other private hospitals*.
- Time series data are presented in this chapter showing average annual changes from 2006–07 to 2010–11 (or the latest available year of data), and annual change between 2009–10 and 2010–11 (or the change between the two latest available years of data if the 2010–11 data are unavailable). Annual change rates are not adjusted for any changes in data coverage and/or re-categorisation of the hospital as public or private, except where noted in the text.

*(continued)*

**Box 2.2 (continued)**

- Expenditure and revenue are presented in both current price and constant price terms. Current prices refer to amounts as reported, unadjusted for inflation. Current price amounts are less comparable between years than constant price amounts. Constant price values are adjusted for inflation and are expressed in terms of prices in the reference year. The ABS Government Final Consumption Expenditure, State and Local—Hospitals & Nursing Homes deflator was used for public hospitals. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.
- Separations for which the care type was reported as *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded from statistics on separations. Patient days for *Newborns* that were not qualified are excluded from the counts of patient days.
- Separations per 1,000 population and patient days per 1,000 population are reported as directly age-standardised rates based on the Australian population as at 30 June of the year of interest. The Australian population as at 30 June 2001 was used as the reference population. Age-standardisation of rates enables valid comparison across years and/or jurisdictions without being affected by the differences in age distributions (see Appendix 2).
- Average cost weight comparisons are based on the latest available public and private cost weights and the relevant AR-DRG versions applying to each year. In one analysis in this chapter, public sector cost weights have been used for private hospitals to enable comparison with public hospitals (see Appendix 2).
- The relative stay index (RSI) is calculated as the actual number of patient days for separations in selected AR-DRGs (version 6.0) divided by the expected number of patient days (based on national figures for the years 2006–07 to 2010–11 combined) and standardised for casemix (see Appendix 2).
- For reasons of confidentiality, data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory have not been published.

## Hospital resources 2006–07 to 2010–11

### How many hospitals?

In 2010–11, there were 752 public hospitals and 581 private hospitals (2009–10), compared with 758 public hospitals and 557 private hospitals in 2006–07 (Table 2.1).

More information on the types of hospitals, and their distribution by state and territory in 2010–11 is provided in Chapter 4.

**Table 2.1: Public and private hospitals<sup>(a)</sup>, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10 <sup>(b)</sup>	2010–11 <sup>(b)</sup>	<b>Change (per cent)</b>	
						<b>Average since 2006–07</b>	<b>Since 2009–10</b>
<b>Public hospitals</b>							
Public acute hospitals	739	742	737	736	735	-0.1	-0.1
Public psychiatric hospitals <sup>(b)</sup>	19	20	19	17	17	-2.7	0.0
<i>Total</i>	<i>758</i>	<i>762</i>	<i>756</i>	<i>753</i>	<i>752</i>	<i>-0.2</i>	<i>-0.1</i>
<b>Private hospitals<sup>(c)</sup></b>							
Private free-standing day hospital facilities	268	272	285	302	n.a.	4.1	6.0
Other private hospitals	289	280	276	279	n.a.	-1.2	1.1
<i>Total</i>	<i>557</i>	<i>552</i>	<i>561</i>	<i>581</i>	n.a.	n.a.	n.a.
<b>All hospitals</b>	<b>1,315</b>	<b>1,314</b>	<b>1,317</b>	<b>1,334</b>	n.a.	n.a.	n.a.

(a) The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses (see Appendix 1).

(b) In 2009–10, Tasmania's Statewide Mental Health Services, which was previously reported as three separate public psychiatric hospitals, was reported as one entity in 2009–10. Therefore the number of reporting units changed, but the number of public psychiatric hospital campuses remained the same. In 2010–11, a detoxification unit in Tasmania was re-classified as a mental health service and data for this establishment were not reported to NPHED, resulting in a further decrease in the number of hospitals reported for Tasmania.

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2008, 2010, 2011).

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

## How many beds?

Between 2006–07 and 2010–11, public hospital bed numbers rose overall (an average of 1.0% per year), and beds per 1,000 population decreased (an average of 1.0% per year). From 2009–10, the number of available beds was reported separately as the number of same-day and overnight admitted patient beds (see Chapter 4).

Data on the number of private hospital beds is not available for 2007–08 and was not available at the time of this report for 2010–11. Between 2006–07 and 2009–10, private hospital bed numbers rose by an average of 1.3% per year.

**Table 2.2: Public and private hospital beds and beds per 1,000 population<sup>(a)</sup>, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public acute hospitals	53,563	54,137	54,382	54,812	55,789	1.0	1.8
Public psychiatric hospitals <sup>(b)</sup>	2,341	2,330	2,140	2,088	1,983	-4.1	-5.0
<i>Total</i>	<i>55,904</i>	<i>56,467</i>	<i>56,522</i>	<i>56,900</i>	<i>57,772</i>	<i>0.8</i>	<i>1.5</i>
<i>Beds per 1,000 population</i>	<i>2.68</i>	<i>2.66</i>	<i>2.61</i>	<i>2.57</i>	<i>2.57</i>	<i>-1.0</i>	<i>-0.1</i>
<b>Private hospitals<sup>(c)</sup></b>							
Private free-standing day hospital facilities	2,251	n.a.	2,495	2,822	n.a.	7.8	13.1
Other private hospitals	24,427	n.a.	24,685	24,926	n.a.	0.7	1.0
<i>Total</i>	<i>26,678</i>	<i>n.a.</i>	<i>27,180</i>	<i>27,748</i>	<i>n.a.</i>	<i>1.3</i>	<i>2.1</i>
<i>Beds per 1,000 population</i>	<i>1.30</i>	<i>n.a.</i>	<i>1.28</i>	<i>1.28</i>	<i>n.a.</i>	<i>-0.4</i>	<i>0.2</i>
<b>All hospitals</b>	<b>82,582</b>	<b>n.a.</b>	<b>83,702</b>	<b>84,648</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Beds per 1,000 population</b>	<b>3.96</b>	<b>n.a.</b>	<b>3.88</b>	<b>3.83</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>

(a) Beds per 1,000 population is a crude rate based on Australian population as at the 31 December of the year in question.

(b) In 2010–11, Tasmania reclassified 76 beds from 'acute mental health beds' to 'residential care beds', decreasing both the number of beds and the number of separations reported for public psychiatric hospitals in Tasmania.

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2008, 2010, 2011).

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

Abbreviation: n.a.—not available.

## Did hospital expenditure and revenue change?

A summary measure of the significance of Australia's hospitals is the amount that is spent on them—an estimated \$46.3 billion in 2009–10, about 3.7% of Australia's gross domestic product, or about \$2,181 per person (AIHW 2011e). Hospital spending has been increasing faster than inflation—adjusted for inflation, it increased by 5.0% each year, on average, between 2004–05 and 2009–10.

Recurrent expenditure for public hospitals in 2010–11 was \$37 billion in current price terms (unadjusted for inflation), an increase of 9.7% from 2009–10 (Table 2.3). In constant price terms (adjusted for inflation) the average annual increase in recurrent expenditure for public hospitals was 5.9% between 2006–07 and 2010–11 (Table 2.3).

Total revenue for public hospitals increased in constant price terms by an average of 9.8% per year between 2006–07 and 2010–11 (Table 2.3).

For private hospitals, recurrent expenditure increased by 7.5% between 2008–09 and 2009–10 (adjusted for inflation). Total revenue for private hospitals increased in constant price terms by 6.6% in the same period.

**Table 2.3: Recurrent expenditure<sup>(a)</sup> and revenue (\$ million), public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Total recurrent expenditure<sup>(a)</sup>, constant prices<sup>(b)</sup></b>							
Public hospitals	29,391	31,385	32,947	34,178	36,985	5.9	8.2
Private hospitals <sup>(c)</sup>	7,411	n.a.	8,320	8,946	n.a.	6.5	7.5
<b>All hospitals</b>	<b>36,803</b>	<b>n.a.</b>	<b>41,267</b>	<b>43,125</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total recurrent expenditure<sup>(a)</sup>, current prices</b>							
Public hospitals	26,290	28,908	31,322	33,706	36,985	8.9	9.7
Private hospitals <sup>(c)</sup>	6,967	n.a.	8,137	8,946	n.a.	8.7	9.9
<b>All hospitals</b>	<b>33,256</b>	<b>n.a.</b>	<b>39,460</b>	<b>42,653</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total revenue, constant prices<sup>(b)</sup></b>							
Public hospitals	2,700	2,922	3,129	3,468	3,925	9.8	13.2
Private hospitals <sup>(c)</sup>	8,021	n.a.	9,184	9,790	n.a.	6.9	6.6
<b>All hospitals</b>	<b>10,721</b>	<b>n.a.</b>	<b>12,313</b>	<b>13,258</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total revenue, current prices</b>							
Public hospitals	2,415	2,691	2,975	3,420	3,925	12.9	14.8
Private hospitals <sup>(c)</sup>	7,539	n.a.	8,982	9,790	n.a.	9.1	9.0
<b>All hospitals</b>	<b>9,955</b>	<b>n.a.</b>	<b>11,957</b>	<b>13,210</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>

(a) Excludes depreciation.

(b) Expressed in terms of prices in the reference year 2008–09. The ABS Government Final Consumption Expenditure, State and Local – Hospitals & Nursing Homes deflator was used for public hospitals. Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2008, 2010, 2011). For private hospitals, comparison of most recent year increase is for the period between 2008–09 and 2009–10. Average yearly increase is calculated for the period 2006–07 to 2009–10.

Abbreviations:n.a.—not available.

## How many people were employed in public hospitals?

Between 2006–07 and 2010–11, the numbers of full-time equivalent staff employed in public hospitals in Australia increased by an average of 3.0% each year. There was variation in the relative size and direction of change across staff categories during this period (Table 2.4), with the greatest increase occurring in the *Salaried medical officers* category (7.4%).

**Table 2.4: Full-time equivalent staff, public hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Salaried medical officers</b>							
Salaried medical officers	24,439	26,996	29,166	30,497	32,514	7.4	6.6
<b>Total nurses</b>	<b>103,967</b>	<b>107,089</b>	<b>111,870</b>	<b>113,734</b>	<b>119,126</b>	<b>3.5</b>	<b>4.7</b>
Diagnostic and allied health professionals	34,240	36,013	35,506	35,441	36,993	2.0	4.4
Administrative and clerical staff	36,844	36,909	37,640	38,089	41,073	2.8	7.8
Other personal care staff, domestic and other staff	35,139	33,341	32,714	33,218	33,921	-0.9	2.1
<b>Total staff</b>	<b>234,630</b>	<b>240,344</b>	<b>246,895</b>	<b>250,978</b>	<b>263,623</b>	<b>3.0</b>	<b>5.0</b>

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

# Hospital activity 2006–07 to 2010–11

## How much non-admitted patient activity?

Hospitals provide services to non-admitted patients through emergency departments, outpatient clinics and a range of other services. Overall, the number of non-admitted patient occasions of service provided by *Public acute hospitals* increased by 2.1% per year between 2006–07 and 2010–11 (Table 2.5).

**Table 2.5: Non-admitted patient occasions of service<sup>(a)</sup> ('000), public<sup>(b)</sup> and private hospitals<sup>(b)(c)</sup>, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
Public acute hospitals <sup>(b)</sup>	46,141	48,355	49,161	49,471	50,177	2.1	1.4
Other private hospitals <sup>(c)</sup>	1,743	n.a.	1,520	2,077	n.a.	n.a.	n.a.
<b>Total<sup>(d)</sup></b>	<b>47,884</b>	<b>n.a.</b>	<b>50,681</b>	<b>51,548</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>

(a) Excludes group occasions of service.

(b) Excludes *Public psychiatric hospitals* and *Private free-standing day hospital facilities*.

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2008, 2010, 2011).

(d) The total for 2009–10 is underestimated by about 280,000 occasions of service that were not able to be reported for one hospital in Tasmania. For 2010–11, Tasmania excluded counts of outpatient services that were provided by private practices in public hospitals

*Note:* See boxes 2.1 and 2.2 for notes on data limitations and methods.

*Abbreviations:* n.a.—not available.

## How much admitted patient activity?

Admission to hospital is a formal process, and follows a decision made by a medical officer that a patient needs to be admitted for appropriate management or treatment of their condition, or for appropriate care or assessment of needs.

**Separation** is the term used to refer to the episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care by being discharged, dying, being transferred to another hospital or by a change of care type.

Between 2006–07 and 2010–11, the overall number of hospital separations rose from 7.6 million to 8.9 million separations. Over this period, the rate of growth in separations was higher for private hospitals than for public hospitals. In particular, the numbers of separations reported for *Private free-standing day hospital facilities* increased by an average of 9.1% each year.

Between 2009–10 and 2010–11, the rate of growth was higher in public hospitals (4.1%) than in private hospitals (3.2%). However, this was partly due to the reclassification in Victoria of some private hospital same-day mental health care as non-admitted patient activity (which was previously classified as admitted patient activity). After adjusting for the inclusion of

this activity in previous years, it is estimated that the national increase in separations between 2009–10 and 2010–11 was about 4.0% per year, 4.1% for public hospitals and 3.9% for private hospitals.

In 2010–11, private hospitals accounted for 40% of separations, compared with 39% in 2006–07 (Table 2.6). Over the same period, there was a fall in separations from *Public psychiatric hospitals*. In part, this reflects a change of service delivery arrangements including shifts from *Public psychiatric hospitals* to *Public acute hospitals* or to residential care.

**Table 2.6: Separations ('000), public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public acute hospitals	4,646	4,729	4,880	5,269	5,269	3.2	4.2
Public psychiatric hospitals <sup>(a)</sup>	15	15	11	10	10	-9.7	-9.7
<i>Total public hospitals</i>	<i>4,661</i>	<i>4,744</i>	<i>4,891</i>	<i>5,279</i>	<i>5,279</i>	<i>3.2</i>	<i>4.1</i>
<b>Private hospitals</b>							
Private free-standing day hospital facilities	570	668	729	783	809	9.1	3.3
Other private hospitals	2,371	2,462	2,528	2,678	2,764	3.9	3.2
<i>Total private hospitals</i>	<i>2,942</i>	<i>3,130</i>	<i>3,257</i>	<i>3,462</i>	<i>3,573</i>	<i>5.0</i>	<i>3.2</i>
<b>All hospitals</b>	<b>7,603</b>	<b>7,874</b>	<b>8,148</b>	<b>8,531</b>	<b>8,853</b>	<b>3.9</b>	<b>3.8</b>

(a) For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.

*Note:* See boxes 2.1 and 2.2 for notes on data limitations and methods.

Between 2006–07 and 2010–11, the number of separations per 1,000 population rose by an average of 1.5% per year, with growth observed in all types of hospitals apart from *Public psychiatric hospitals* (Table 2.7). For *Public psychiatric hospitals*, the separation rate decreased by 38.4% between 2006–07 and 2010–11 with an average decrease of 11% per year. The highest growth in separation rate was observed in *Private free-standing day hospital facilities* (6.6% on average per year) (Table 2.7). Over the same period, private hospital overnight separation rates increased less (0.1% per year) than the overall separation rate.

## How many same-day and overnight separations?

A **same-day separation** occurs when a patient is admitted and separated from hospital on the same date.

An **overnight separation** occurs when a patient is admitted and separated from hospital on different dates.

Between 2006–07 and 2010–11, the number of same-day separations rose at a greater rate than overnight separations (4.8% and 2.7% average per year, respectively) (Table 2.8), with the rate of increase being higher in the private sector. In 2010–11, same-day separations accounted for 57.8% of separations, compared with 55.8% of separations in 2006–07. For more information on same-day acute admitted patient care, see Chapter 8.

There was an increase in overnight separations between 2006–07 and 2010–11, with the rate of increase being higher for public hospitals (2.7%) than for private hospitals (2.5%). In 2010–11, overnight separations made up 49% of separations in public hospitals and 32% of separations in private hospitals. For more information on overnight acute admitted patient care, see Chapter 9.

**Table 2.7: Separations per 1,000 population<sup>(a)</sup>, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public acute hospitals	217.8	216.9	218.8	220.9	225.5	0.9	2.0
Public psychiatric hospitals	0.7	0.7	0.5	0.5	0.5	-11.4	-10.6
<i>Total public hospitals</i>	<i>218.5</i>	<i>217.6</i>	<i>219.3</i>	<i>221.5</i>	<i>225.9</i>	<i>0.8</i>	<i>2.0</i>
Overnight separations	110.5	110.4	110.0	110.2	112.2	0.4	1.7
<b>Private hospitals</b>							
Private free-standing day hospital facilities	26.5	30.3	32.4	33.9	34.3	6.6	1.0
Other private hospitals	109.6	111.4	111.9	115.6	116.6	1.6	0.9
<i>Total private hospitals</i>	<i>136.2</i>	<i>141.7</i>	<i>144.3</i>	<i>149.5</i>	<i>150.9</i>	<i>2.6</i>	<i>0.9</i>
Overnight separations	48.3	48.6	47.9	48.7	48.5	0.1	-0.6
<b>All hospitals</b>	<b>354.7</b>	<b>359.3</b>	<b>363.6</b>	<b>370.9</b>	<b>376.8</b>	<b>1.5</b>	<b>1.6</b>
<b>Overnight separations</b>	<b>158.8</b>	<b>159.0</b>	<b>158.0</b>	<b>159.0</b>	<b>160.6</b>	<b>0.3</b>	<b>1.0</b>

(a) Rates are directly age-standardised to the Australian population as at 30 June of each year. The Australian population as at 30 June 2001 is used as the reference population.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

Time series data for separations for the years 2006–07 to 2010–11 are also presented in:

- Chapter 7 for public patients, private patients and other categories of patients in public and private hospitals
- Chapter 8 for same-day acute care in public and private hospitals
- Chapter 9 for overnight acute care in public and private hospitals
- Chapter 10 for admissions involving surgery in public and private hospitals, and for public hospital elective surgery waiting times
- Chapter 11 for sub- and non-acute care in public and private hospitals.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours) or *Elective* (required at some stage beyond 24 hours). Emergency/elective status is not assigned for some admissions (for example, obstetric care and planned care, such as dialysis). This section classifies separations as *Emergency* or *Non-emergency* (which includes elective and other planned care).

Tables 2.9 and 2.10 present information on the *Urgency of admission* by same-day/overnight status and the broad category of admitted patient service (*Childbirth*, *Specialist mental health*,

*Surgical, Medical and Other*). See ‘What care was provided?’ for more information on these broad categories of service.

**Table 2.8: Same-day and overnight separations ('000), public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)						
						Average since 2006–07	Since 2009–10					
<b>Same-day separations</b>												
Public hospitals												
Public acute hospitals	2,331	2,362	2,460	2,573	2,685	3.6	4.3					
Public psychiatric hospitals	2	2	1	1	1	-26.0	-8.0					
<i>Total</i>	2,333	2,364	2,461	2,574	2,685	3.6	4.3					
<i>Proportion of total public separations (%)</i>	50.0	49.8	50.3	50.8	50.9	0.4	0.2					
Private hospitals												
Private free-standing day hospital facilities	568	666	728	782	808	9.2	3.3					
Other private hospitals	1,341	1,399	1,456	1,562	1,627	5.0	4.2					
<i>Total</i>	1,909	2,065	2,184	2,344	2,435	6.3	3.9					
<i>Proportion of total private separations (%)</i>	64.9	66.0	67.0	67.7	68.1	1.2	0.7					
<b>All hospitals</b>	<b>4,242</b>	<b>4,429</b>	<b>4,645</b>	<b>4,918</b>	<b>5,120</b>	<b>4.8</b>	<b>4.1</b>					
<b>Proportion of total separations (%)</b>	<b>55.8</b>	<b>56.2</b>	<b>57.0</b>	<b>57.6</b>	<b>57.8</b>	<b>0.9</b>	<b>0.3</b>					
<b>Overnight separations</b>												
Public hospitals												
Public acute hospitals	2,315	2,368	2,420	2,485	2,585	2.8	4.0					
Public psychiatric hospitals <sup>(a)</sup>	13	13	10	11	9	-7.7	-9.8					
<i>Total</i>	2,328	2,380	2,430	2,495	2,594	2.9	4.0					
Private hospitals												
Private free-standing day hospital facilities	2	2	1	1	1	-13.4	8.3					
Other private hospitals	1,031	1,062	1,073	1,117	1,137	2.5	1.8					
<i>Total</i>	1,033	1,065	1,074	1,118	1,138	2.5	1.8					
<b>All hospitals</b>	<b>3,361</b>	<b>3,445</b>	<b>3,504</b>	<b>3,613</b>	<b>3,732</b>	<b>2.7</b>	<b>3.3</b>					

(a) For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.

*Note:* See boxes 2.1 and 2.2 for notes on data limitations and methods.

Between 2006–07 and 2010–11, same-day separations with an urgency of admission of *Emergency* increased by 3.6% per year for public hospitals (Table 2.9). For *Non-emergency* admissions, same-day separations increased for both public and private hospitals (3.6% and 6.7% per year, respectively).

**Table 2.9: Same-day separations by broad category of service, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Childbirth	5,455	5,919	6,436	6,939	7,287	7.5	5.0
Specialist mental health <sup>(a)</sup>	12,821	10,644	16,268	11,153	10,642	-4.6	-4.6
<i>Emergency</i>	<b>471,784</b>	<b>474,074</b>	<b>490,598</b>	<b>498,996</b>	<b>542,853</b>	<b>3.6</b>	<b>8.8</b>
Surgical	20,002	19,933	20,361	19,879	20,686	0.8	4.1
Medical	447,202	449,855	465,923	474,705	518,281	3.8	9.2
Other	4,580	4,286	4,314	4,412	3,886	-4.0	-11.9
<i>Non-emergency</i>	<b>1,842,748</b>	<b>1,872,963</b>	<b>1,947,577</b>	<b>2,056,971</b>	<b>2,126,475</b>	<b>3.6</b>	<b>3.3</b>
Surgical	326,170	329,666	339,840	345,631	352,606	2.0	2.0
Medical	1,295,292	1,329,912	1,385,183	1,475,332	1,513,234	4.0	2.6
Other	221,286	213,385	222,554	236,008	258,527	4.0	9.5
<i>Total</i>	<b>2,332,808</b>	<b>2,363,600</b>	<b>2,460,879</b>	<b>2,574,059</b>	<b>2,685,148</b>	<b>3.6</b>	<b>4.3</b>
<b>Private hospitals</b>							
Childbirth	155	162	148	151	145	-1.7	-4.0
Specialist mental health <sup>(b)</sup>	89,740	88,905	103,897	114,838	99,742	2.7	-13.1
<i>Emergency</i>	<b>27,313</b>	<b>17,709</b>	<b>12,404</b>	<b>13,178</b>	<b>16,752</b>	<b>-11.5</b>	<b>27.1</b>
Surgical	8,363	5,850	2,621	2,749	3,893	-17.4	41.6
Medical	12,971	8,833	8,263	8,576	10,120	-6.0	18.0
Other	5,979	3,026	1,520	1,853	2,739	-17.7	47.8
<i>Non-emergency</i>	<b>1,791,493</b>	<b>1,958,325</b>	<b>2,067,217</b>	<b>2,215,398</b>	<b>2,318,630</b>	<b>6.7</b>	<b>4.7</b>
Surgical	619,305	670,816	702,309	740,835	757,940	5.2	2.3
Medical	628,806	707,317	771,272	846,955	870,319	8.5	2.8
Other	543,382	580,192	593,636	627,608	690,371	6.2	10.0
<i>Total</i>	<b>1,908,701</b>	<b>2,065,101</b>	<b>2,183,666</b>	<b>2,343,565</b>	<b>2,435,269</b>	<b>6.3</b>	<b>3.9</b>
<b>Total same-day separations</b>	<b>4,241,509</b>	<b>4,428,701</b>	<b>4,644,545</b>	<b>4,917,624</b>	<b>5,120,417</b>	<b>4.8</b>	<b>4.1</b>

- (a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute. Tasmanian public acute hospitals accounted for about 200 same-day separations with specialised mental health care in 2008–09. For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.
- (b) The decrease in private hospital separations between 2009–10 and 2010–11 for Victoria was due to inconsistent reporting practices at some private hospitals in previous years. For 2010–11, Victoria excluded some types of mental health activity (mainly same day care) that had previously been reported as separations by some hospitals.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

For overnight separations (between 2006–07 and 2010–11), the number of separations with an urgency of admission of *Emergency* increased by 3.4% per year for public hospitals (Table 2.10). For *Non-emergency* admissions, overnight separations increased for both public and private hospitals (2.1% per year and 2.9% per year, respectively).

**Table 2.10: Overnight separations by broad category of service, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Childbirth	197,506	200,476	201,727	204,160	206,133	1.1	1.0
Specialist mental health	86,172	86,125	86,950	85,675	90,566	1.3	5.7
<i>Emergency</i>	1,376,590	1,418,342	1,449,896	1,479,756	1,570,668	3.4	6.1
Surgical	190,379	197,785	205,662	209,499	223,155	4.1	6.5
Medical	1,141,381	1,175,086	1,194,220	1,219,161	1,293,948	3.2	6.1
Other	44,830	45,471	50,014	51,096	53,565	4.6	4.8
<i>Non-emergency</i>	668,204	675,517	691,571	725,638	726,617	2.1	0.1
Surgical	311,314	311,767	320,068	329,369	334,509	1.8	1.6
Medical	333,427	340,135	349,600	373,664	369,262	2.6	-1.2
Other	23,463	23,615	21,903	22,605	22,846	-0.7	1.1
<i>Total</i>	2,328,472	2,380,460	2,430,144	2,495,229	2,593,984	2.7	4.0
<b>Private hospitals</b>							
Childbirth	79,479	80,925	81,242	84,169	79,859	0.1	-5.1
Specialist mental health	25,703	26,921	27,481	30,805	30,350	4.2	-1.5
<i>Emergency</i>	170,886	159,252	153,314	165,540	178,381	1.1	7.8
Surgical	31,931	27,798	27,683	30,062	32,724	0.6	8.9
Medical	129,021	122,245	116,374	125,349	134,429	1.0	7.2
Other	9,934	9,209	9,257	10,129	11,228	3.1	10.9
<i>Non-emergency</i>	756,868	797,686	811,722	837,636	849,559	2.9	1.4
Surgical	468,885	492,575	504,314	522,542	533,149	3.3	2.0
Medical	249,692	267,187	269,033	276,143	277,021	2.6	0.3
Other	38,291	37,924	38,375	38,951	39,389	0.7	1.1
<i>Total</i>	1,032,936	1,064,784	1,073,759	1,118,150	1,138,149	2.5	1.8
<b>Total overnight separations</b>	<b>3,361,408</b>	<b>3,445,244</b>	<b>3,503,903</b>	<b>3,613,379</b>	<b>3,732,133</b>	<b>2.7</b>	<b>3.3</b>

- (a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals that had accounted for about 1,900 overnight separations with specialised mental health care in 2008–09. For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

## **What care was provided?**

The care that the patient received can be described in a variety of ways. This section presents information describing care by the following broad categories of service:

- *Childbirth*: separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health*: separations for which specialised psychiatric care days were reported.
- *Surgical*: separations for which the AR-DRG belonged to the *Surgical* partition (involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Medical*: separations for which the AR-DRG belonged to the *Medical* partition (not involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Other*: separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions (involving a non-operating room procedure, such as endoscopy), excluding separations for *Childbirth* and *Specialist mental health*.

Between 2006–07 and 2010–11, private hospitals accounted for the majority of *Specialist mental health* same-day separations, (90% in 2010–11) (Table 2.9) and for about one-quarter of overnight separations for *Specialist mental health* care (25% in 2010–11) (Table 2.10).

Public hospitals consistently accounted for about 71% of overnight *Childbirth* separations between 2006–07 and 2010–11.

## **Average cost weight**

Average cost weight information provides a guide to the expected resource use for separations, with a value of 1.00 representing the theoretical average for all separations. The validity of comparisons of average cost weights across jurisdictions is limited by differences in the extent to which each jurisdiction's acute care psychiatric services are integrated into its public hospital system. Cost weights are of less use as a measure of resource requirements for acute psychiatric services because the relevant AR-DRGs are less homogenous than for other acute services.

In the first part of Table 2.11, public sector cost weights were used for both public and private hospitals to enable comparison between sectors, because public and private sector cost weights are not comparable.

Using public cost weights for both public and private hospitals, average cost weights were lower for private hospitals than for public hospitals and average costs declined slightly overall between 2006–07 and 2010–11 (Table 2.11). Over that period there was an increase in the average cost weight for *Public psychiatric hospitals*.

Applying private hospital cost weights to separations for private hospitals shows that the overall average cost weight for private hospitals declined slightly between 2006–07 and 2010–11, while cost weights for *Other private hospitals* increased slightly between 2006–07 and 2007–08.

**Table 2.11: Average cost weight of separations, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Average public cost weight of separations<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.02	1.02	1.01	1.01	1.00	-0.5	-0.9
Public psychiatric hospitals	2.63	2.69	2.97	2.98	2.75	1.1	-7.7
<i>Total</i>	<b>1.02</b>	<b>1.02</b>	<b>1.01</b>	<b>1.01</b>	<b>1.00</b>	<b>-0.5</b>	<b>-0.9</b>
Private hospitals							
Private free-standing day hospital facilities	0.49	0.47	0.47	0.48	0.47	-0.9	-0.6
Other private hospitals	1.04	1.05	1.04	1.04	1.04	0.0	-0.2
<i>Total</i>	<b>0.93</b>	<b>0.92</b>	<b>0.91</b>	<b>0.91</b>	<b>0.90</b>	<b>-0.7</b>	<b>-0.4</b>
<b>All hospitals</b>	<b>0.99</b>	<b>0.98</b>	<b>0.97</b>	<b>0.97</b>	<b>0.96</b>	<b>-0.6</b>	<b>-0.7</b>
<b>Average private cost weight of separations<sup>(b)</sup></b>							
Private hospitals							
Private free-standing day hospital facilities	0.35	0.34	0.34	0.34	0.35	-0.3	0.6
Other private hospitals	0.96	0.98	0.97	0.97	0.97	0.2	0.3
<i>Total</i>	<b>0.84</b>	<b>0.84</b>	<b>0.82</b>	<b>0.82</b>	<b>0.82</b>	<b>-0.6</b>	<b>0.2</b>

(a) AR-DRG version 5.2 public cost weights 2008–09 were used for all rows in *Average public cost weight of separations*.

(b) AR-DRG version 5.2 private cost weights 2008–09 were used for all rows in *Average private cost weight of separations*.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

## How long did people stay in hospital?

In 2010–11, 69% of patient days were in public hospitals (Table 2.12). Patient days for *Public psychiatric hospitals* declined between 2006–07 and 2010–11. In part, this reflects a change in service delivery arrangements, such as the shifts from *Public psychiatric hospitals* to *Public acute hospitals* and residential care.

Between 2006–07 and 2010–11, the average length of stay for public acute and private hospitals fell slightly, but rose for *Public psychiatric hospitals*.

The length of stay for overnight separations is comparable with the length of stays reported by the Organization for Economic Co-operation and Development (OECD 2009) for other OECD countries (which do not include same-day activity). With same-day separations excluded, average lengths of stay in all hospitals combined decreased by 1.3% per year on average between 2006–07 and 2010–11 (Table 2.12).

Between 2006–07 and 2010–11, overall patient days per 1,000 population declined slightly for *Public acute hospitals* and for *Other private hospitals* (Table 2.13). Over the same period, patient days per 1,000 population increased by about 6.6% per year for *Private free-standing day hospital facilities*.

**Table 2.12: Patient days and average length of stay, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Patient days ('000)</b>							
Public hospitals							
Public acute hospitals	16,781	17,122	17,302	17,440	17,894	1.6	2.6
Public psychiatric hospitals <sup>(a)</sup>	658	714	587	663	593	-2.6	-10.6
<i>Total</i>	<b>17,439</b>	<b>17,836</b>	<b>17,889</b>	<b>18,103</b>	<b>18,487</b>	<b>1.5</b>	<b>2.1</b>
Private hospitals							
Private free-standing day hospital facilities	570	668	729	783	809	9.1	3.3
Other private hospitals	6,915	7,139	7,164	7,479	7,598	2.4	1.6
<i>Total</i>	<b>7,485</b>	<b>7,807</b>	<b>7,893</b>	<b>8,262</b>	<b>8,408</b>	<b>2.9</b>	<b>1.8</b>
<b>All hospitals</b>	<b>24,925</b>	<b>25,643</b>	<b>25,782</b>	<b>26,365</b>	<b>26,895</b>	<b>1.9</b>	<b>2.0</b>
<b>Average length of stay (days)</b>							
Public hospitals							
Public acute hospitals	3.6	3.6	3.5	3.4	3.4	-1.5	-1.5
Public psychiatric hospitals <sup>(a)</sup>	43.3	48.4	52.8	59.1	58.6	7.9	-1.0
<i>Total</i>	<b>3.7</b>	<b>3.8</b>	<b>3.7</b>	<b>3.6</b>	<b>3.5</b>	<b>-1.6</b>	<b>-1.9</b>
Private hospitals							
Private free-standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Other private hospitals	2.9	2.9	2.8	2.8	2.7	-1.5	-1.6
<i>Total</i>	<b>2.5</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>-1.9</b>	<b>-1.4</b>
<b>All hospitals</b>	<b>3.3</b>	<b>3.3</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>-1.9</b>	<b>-1.7</b>
<b>Average length of stay, excluding same-day separations (days)</b>							
Public hospitals							
Public acute hospitals	6.2	6.2	6.1	6.0	5.9	-1.5	-1.6
Public psychiatric hospitals <sup>(a)</sup>	50.3	55.0	56.0	63.0	62.5	5.6	-0.8
<i>Total</i>	<b>6.5</b>	<b>6.5</b>	<b>6.3</b>	<b>6.2</b>	<b>6.1</b>	<b>-1.6</b>	<b>-2.1</b>
Private hospitals <sup>(b)</sup>							
Other private hospitals	5.4	5.4	5.3	5.3	5.3	-0.7	-0.9
<b>All hospitals</b>	<b>6.2</b>	<b>6.2</b>	<b>6.0</b>	<b>5.9</b>	<b>5.8</b>	<b>-1.3</b>	<b>-1.7</b>

(a) For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.

(b) Average overnight length of stay for *Private free-standing day hospital facilities* is not shown as it is based on a small number of records and is not meaningful.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

**Table 2.13: Patient days per 1,000 population<sup>(a)</sup>, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
Public hospitals							
Public acute hospitals	775.7	772.6	762.4	749.0	751.7	-0.8	0.4
Public psychiatric hospitals <sup>(b)</sup>	31.5	33.2	27.0	29.7	26.2	-4.5	-11.8
Total	807.2	805.8	789.3	778.7	777.9	-0.9	-0.1
Private hospitals							
Private free-standing day hospital facilities	26.5	30.3	32.4	33.9	34.3	6.6	1.1
Other private hospitals	315.9	318.3	311.9	317.5	314.6	-0.1	-0.9
Total	342.5	348.6	344.3	351.4	348.9	0.5	-0.7
<b>All hospitals</b>	<b>1,149.7</b>	<b>1,154.4</b>	<b>1,133.7</b>	<b>1,130.1</b>	<b>1,126.8</b>	<b>-0.5</b>	<b>-0.3</b>

(a) Rates are directly age-standardised to the Australian population as at 30 June of the year of interest. The Australian population as at 30 June 2001 is used as the reference population.

(b) For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods.

## Relative stay index

A relative stay index (RSI) greater than 1 indicates that the average episode's length of stay is higher than would be expected given the casemix for the category of interest (for example, by hospital sector or jurisdiction). An RSI of less than 1 indicates that the length of stay was less than would have been expected. More information on RSIs by *Medical*, *Surgical* and *Other* categories of AR-DRGs and by funding source is provided in Chapter 3. Details of the methods used are included in Appendix 2.

Table 2.14 presents RSI information for 2006–07 to 2010–11. The directly standardised RSI for public hospitals was consistently lower than that for private hospitals between 2006–07 and 2010–11.

When interpreting RSI information, it should be noted that separation records from public psychiatric hospitals include some with very long individual lengths of stay, some as long as several years. The pattern of these separations from public psychiatric hospitals can vary over time and patient day counts can also fluctuate markedly for these hospitals.

**Table 2.14: Relative stay index, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Indirectly standardised relative stay index<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.00	1.00	0.99	0.97	0.96	..	..
Public psychiatric hospitals	1.20	1.19	1.24	1.24	1.31	..	..
<i>Total</i>	<b>1.01</b>	<b>1.00</b>	<b>0.99</b>	<b>0.97</b>	<b>0.96</b>	..	..
Private hospitals							
Private free-standing day hospital facilities	0.76	0.74	0.76	0.75	0.75	..	..
Other private hospitals	1.07	1.06	1.05	1.04	1.03	..	..
<i>Total</i>	<b>1.06</b>	<b>1.04</b>	<b>1.04</b>	<b>1.02</b>	<b>1.01</b>	..	..
<b>All hospitals</b>	<b>1.02</b>	<b>1.01</b>	<b>1.00</b>	<b>0.99</b>	<b>0.97</b>	..	..
<b>Directly standardised relative stay index<sup>(b)</sup></b>							
Public hospitals							
Public acute hospitals	1.02	1.01	1.00	0.98	0.97	-1.1	-0.9
Public psychiatric hospitals	2.38	2.98	2.48	3.60	1.69	-8.2	-53.2
<i>Total</i>	<b>1.02</b>	<b>1.01</b>	<b>1.00</b>	<b>0.99</b>	<b>0.98</b>	-1.1	-0.9
Private hospitals							
Private free-standing day hospital facilities	0.40	0.40	0.44	0.41	0.48	4.4	15.8
Other private hospitals	1.12	1.11	1.12	1.10	1.09	-0.7	-0.6
<i>Total</i>	<b>1.11</b>	<b>1.10</b>	<b>1.11</b>	<b>1.08</b>	<b>1.08</b>	-0.8	-0.5
<b>All hospitals</b>	<b>1.02</b>	<b>1.01</b>	<b>1.00</b>	<b>0.99</b>	<b>0.98</b>	<b>-1.1</b>	<b>-0.9</b>

(a) Relative stay index based on all hospitals combined for the 5-year period 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 5-year average based on the casemix of that group. See Appendix 2 for details on the methodology.

(b) Relative stay index based on all hospitals combined for the 5-year period using the direct method. The directly standardised relative stay index is comparable between cells. See Appendix 2 for details on the methodology.

*Note:* See boxes 2.1 and 2.2 for notes on data limitations and methods.

*Abbreviation:* ..—not applicable.

# **3 Hospital performance indicators**

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

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

## **The National Health Performance Framework**

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

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

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

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

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

## **What data are reported?**

Eleven hospital performance indicators are presented in this chapter, and 7 others are included elsewhere in this report. The indicators are listed in Table 3.2 against the dimensions of the NHPF. Some indicators can be related to more than one dimension of the NHPF, even though they are presented here against only one dimension. For example, hospital accreditation could be related to *Safety* and *Responsiveness*, as well as *Effectiveness*.

Table 3.2 also shows whether the indicator is included in a nationally agreed set of performance indicators:

- the NHPF set as endorsed by health ministers for reporting in *Australia's health*
- the National Healthcare Agreement (NHA) (CRC 2011).

Most of the performance indicators presented in this report align with the NHA performance indicators for the outcome area of 'hospital and related care' (CRC 2011). The NHA includes 70 performance indicators and nine performance benchmarks (including a number for 'hospital and related care') that are to be reported regularly under the Intergovernmental Agreement on Federal Financial Relations. The NHA performance indicators based on 2007–08 to 2009–10 hospital data have been published by the COAG Reform Council (CRC 2010 and 2011). The performance indicators presented here are based on data for the 2010–11 financial year and on specifications anticipated to be used for the Council's 2013 report.

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

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

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

**Box 3.1: What are the limitations of the data?**

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

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

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

<b>Table(s)</b>	<b>Indicator</b>	<b>Related national indicator set</b>	
		<b>NHA</b>	<b>NHPPF</b>
<b>Effectiveness</b>			
Table 3.4	Accreditation of hospitals and beds		✓
<b>Safety</b>			
Table 3.5	Adverse events treated in hospitals		✓
Table 3.6	<i>Staphylococcus aureus</i> bacteraemia in public hospitals	✓	
To be included at a later date.	Unplanned/unexpected readmissions following selected surgical episodes of care (same public hospital)	✓	
Table A6.3, Appendix 6	Falls resulting in patient harm in hospitals	✓ Interim	✓
Table A6.4, Appendix 6	Intentional self-harm in hospitals	✓ Interim	
<b>Responsiveness</b>			
No indicators available			
<b>Continuity of care</b>			
No indicators available			
<b>Accessibility</b>			
Tables 3.7 and 3.8	Waiting times for emergency department care	✓	✓
Tables 3.9 and 3.10	Waiting times for elective surgery	✓	✓
Table 3.11, and Figures 3.1 to 3.3	Rates of services: overnight separations	✓	
Tables 3.12, S3.9	Rates of services: hospital procedures	✓	✓
Tables 3.13 and 3.14	Rates of services: non-acute care separations	✓	
Table A6.2, Appendix 6	Rates of services: outpatient occasions of service	✓ Interim	
<b>Efficiency &amp; sustainability</b>			
Tables 3.15, 3.16, S3.1 to S3.7	Cost per casemix-adjusted separation for acute care episodes	✓	✓
Tables 3.17, S3.8	Relative stay index		✓
Figure 3.4, Table S3.10	Average length of stay for selected AR-DRGs		✓

*Abbreviations:* AR-DRG—Australian Refined Diagnosis Related Group; NHA—National Healthcare Agreement; NHPPF—National Health Performance Framework.

'Interim' or 'proxy' indicators include those measures that are of poor quality due to variation in reporting, or because the available data does not completely match the intent of the indicator. For more information on the interim indicators, see Appendix 6.

Table 3.3 lists four other NHA performance indicators that are presented elsewhere in this report. These indicators are not presented in this chapter as they are not indicators of hospital performance. They include one proxy measure for which the available data does not completely match the intent of the indicator.

**Table 3.3: Other performance indicators in this report**

Indicator	Related national indicator set		Section
	NHA	NHPF	
Selected potentially preventable hospitalisations	✓	✓	<b>Chapter 7.</b> Related to the NHA outcome area of primary and community health.
People aged 65 years or over receiving sub-acute services	✓		<b>Chapter 11.</b> Related to the NHA outcome area of aged care.
Hospitalisation for injury and poisoning	✓		<b>Chapter 7.</b> Related to the NHA outcome area of social inclusion and Indigenous health.
Hospital patient days used by those eligible and waiting for residential aged care	✓ Proxy		<b>Appendix 6, Table A6.4.</b> Related to the NHA outcome area of aged care.

Abbreviations: NHA—National Healthcare Agreement; NHPF—National Health Performance Framework.

**Box 3.2: What methods were used?**

Readers should note the following:

- unless otherwise indicated in footnotes, separations with a care type of *Newborn* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded
- separation rates are age-standardised (see Appendix 2)
- public hospitals include *Public acute* and *Public psychiatric* hospitals
- private hospitals include *Private free-standing day hospital facilities* and *Other private* hospitals.
- The abbreviation n.p.—not published may appear in a table to protect confidentiality of private hospital data, or for very small cell sizes (see Appendix 2).

Details of methods, including the selection of AR-DRGs, diagnoses and procedures used are presented in Appendix 2 for:

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

## **Effectiveness**

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

### **Performance indicator: Hospital accreditation**

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

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

For Australia as a whole, 681 public hospitals were accredited by one or more providers at 30 June 2011, with 56,545 public hospital beds (91% of public hospitals and 98% of public hospital beds) (Table 3.4). These hospitals delivered 99% of separations and 98% of patient days in public hospitals. The proportion of public hospitals that were accredited ranged from 17% in Tasmania to 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory.

The proportion of public hospital beds in accredited hospitals ranged from 87% in Tasmania to 100% in the 4 states and territories with complete accreditation (see above). The proportion of separations in accredited public hospitals ranged from 95% in Tasmania to 100% in the 4 states and territories with complete accreditation.

A total of 543 private hospitals were accredited in 2009–10, with 27,045 private hospital beds (93% of hospitals, accounting for 97% of the beds).

The comparability of accreditation data among states and territories is limited because of the voluntary nature of participation in award schemes for hospitals in some jurisdictions. As accreditation for public hospitals was counted as at 30 June 2011, hospitals that were accredited for the majority of the financial year, but had their accreditation status lapse shortly before this date, would have been counted as non-accredited.

**Table 3.4: Selected accreditation statistics by state and territory, public hospitals 2010–11, private hospitals, 2009–10**

	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
<i>Total hospitals</i>	226	151	170	94	80	23	3	5	752
Accredited hospitals	192	151	159	94	73	4	3	5	681
Accredited (%)	85	100	94	100	91	17	100	100	91
<i>Total beds<sup>(b)</sup></i>	19,931	13,408	11,117	5,492	5,040	1,196	926	662	57,772
Accredited beds	18,982	13,408	11,108	5,492	4,927	1,039	926	662	56,545
Accredited (%)	95	100	100	100	98	87	100	100	98
Separations in accredited hospitals (%)	98	100	100	100	99	95	100	100	99
Patient days in accredited hospitals (%)	96	100	100	100	99	91	100	100	98
<b>Private hospitals<sup>(c)</sup></b>									
<i>Total hospitals</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	581
Accredited hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	543
Accredited (%)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	93
<i>Total beds<sup>(b)</sup></i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	27,748
Accredited beds	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	27,045
Accredited (%)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	97

(a) For Victoria, 2 hospitals were enrolled in the accreditation process as at 30 June 2011. These hospitals are shown as accredited.

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

(c) Accreditation statistics for private hospitals were sourced from the Australian Bureau of Statistics *Private hospitals Australia 2009–10* (ABS 2011).

*Note:* See boxes 3.1 and 3.2 for notes on data limitations and methods.

*Abbreviation:* n.p.—not published.

## Safety

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

### Performance indicator: Adverse events treated in hospitals

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

Hospital separations data include information on diagnoses, places of occurrence and external causes of injury and poisoning that can indicate that an adverse event was treated and/or occurred during the hospitalisation. However, other diagnosis codes may also suggest that an adverse event has occurred, and some adverse events are not identifiable using these codes. A separation may be recorded against more than one category in Table 3.5 as some adverse events are reported as diagnoses and others as external causes or places of occurrence (of the injury or poisoning).

In 2010–11, 5.1% of separations reported an ICD-10-AM code indicating an adverse event. The proportion of separations with an adverse event was 5.9% in the public sector and 3.9% in the private sector (Table 3.5). The data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may be different.

**Table 3.5: Separations with an adverse event<sup>(a)</sup>, public and private hospitals, 2010–11**

Adverse event	Public hospitals		Private hospitals		Total	
	Separations	Per 100	Separations	Per 100	Separations	Per 100
<b>External cause of injury and poisoning</b>						
Adverse effects of drugs, medicaments and biological substances	111,939	2.1	26,674	0.7	138,613	1.6
Misadventures to patients during surgical and medical care	14,521	0.3	5,890	0.2	20,411	0.2
Procedures causing abnormal reactions/complications	168,022	3.2	98,387	2.8	266,409	3.0
Other external causes of adverse events	6,285	0.1	1,064	0.0	7,349	0.1
<b>Place of occurrence of injury and poisoning</b>						
Place of occurrence: Health service area	302,903	5.7	134,684	3.8	437,587	4.9
<b>Diagnoses</b>						
Selected post-procedural disorders	43,118	0.8	25,862	0.7	68,980	0.8
Haemorrhage and haematoma complicating a procedure	24,378	0.5	14,315	0.4	38,693	0.4
Infection following a procedure	22,652	0.4	11,305	0.3	33,957	0.4
Complications of internal prosthetic devices	63,298	1.2	39,024	1.1	102,322	1.2
Other diagnoses of complications of medical and surgical care	42,729	0.8	19,109	0.5	61,838	0.7
<b>Total (any of the above)<sup>(b)</sup></b>	<b>313,864</b>	<b>5.9</b>	<b>138,347</b>	<b>3.9</b>	<b>452,211</b>	<b>5.1</b>

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

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

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods.

In the public sector, about 54% of separations with an adverse event reported *Procedures causing abnormal reactions/complications* and 36% reported *Adverse effects of drugs, medicaments and biological substances*.

In the private sector, about 71% of separations with an adverse event reported *Procedures causing abnormal reactions/complications* and 19% reported *Adverse effects of drugs, medicaments and biological substances*.

The data presented in Table 3.5 can be interpreted as representing selected adverse events in health care that have resulted in, or have affected, hospital admissions, rather than all adverse events that occurred in hospitals. Some of the adverse events included in these tables may represent events that occurred before admission. Condition onset flag information (see Appendix 2) could be used in the future to exclude conditions that arose before admission and to include conditions not currently used to indicate adverse events, in order to provide

more accurate estimates of adverse events occurring and treated within single episodes of care.

### **Performance indicator: *Staphylococcus aureus* bacteraemia (SAB) in Australian public hospitals**

'*Staphylococcus aureus* bacteraemia (SAB) in Australian public hospitals' is regarded as an indicator of the safety of care. Patients who develop bloodstream infections such as SAB are more likely to suffer complications that result in a longer hospital stay and an increased cost of hospitalisation. Serious infections may also result in death.

Hospital-associated SAB infections are monitored by surveillance arrangements in public hospitals. The SAB cases reported include those associated with both admitted and non-admitted hospital care.

The aim is to have as few cases of SAB as possible. A national benchmark is specified in the National Healthcare Agreement for public hospitals that no more than 2.0 cases of SAB occur for every 10,000 days of patient care.

In 2010–11, there were 1,873 cases of SAB reported for Australian public hospitals overall. These cases occurred during approximately 17 million days of patient care under SAB surveillance. More than two-thirds (73%) were methicillin sensitive, and would therefore have been treatable with commonly used antibiotics (Table 3.6).

All states and territories had rates of SAB below the national benchmark of 2.0 cases per 10,000 patient days, ranging from 0.9 cases per 10,000 patient days in Victoria, South Australia and the Australian Capital Territory to 1.4 in the Northern Territory (Table 3.6).

**Table 3.6: Cases of *Staphylococcus aureus* (including MRSA) bacteraemia (SAB) in public hospitals, MRSA and MSSA, by state/territory, 2010–11<sup>(a)</sup>**

	NSW	Vic	Qld <sup>(b)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Rate per 10,000 patient days</b>									
Methicillin-resistant <i>Staphylococcus aureus</i>	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.6	0.3
Methicillin-sensitive <i>Staphylococcus aureus</i>	0.9	0.7	0.9	0.9	0.7	1.1	0.7	0.8	0.8
<b>Total<sup>(c)</sup></b>	<b>1.2</b>	<b>0.9</b>	<b>1.2</b>	<b>1.0</b>	<b>0.9</b>	<b>1.3</b>	<b>0.9</b>	<b>1.4</b>	<b>1.1</b>
<b>Number of cases</b>									
Methicillin resistant <i>Staphylococcus aureus</i>	232	118	72	23	30	6	6	18	505
Methicillin sensitive <i>Staphylococcus aureus</i>	535	322	218	117	93	35	23	25	1,368
<b>Total</b>	<b>767</b>	<b>440</b>	<b>290</b>	<b>140</b>	<b>123</b>	<b>41</b>	<b>29</b>	<b>43</b>	<b>1,873</b>
Patient days under SAB surveillance ('000)	6,279	4,791	2,440	1,335	1,300	305	313	301	17,064
Coverage <sup>(d)</sup> (per cent)	97	99	77	83	81	81	98	100	91

(a) The SAB cases were associated with both admitted patient care and with non-admitted patient care (including emergency departments and outpatient clinics). The comparability of the SAB rates among jurisdictions is limited because of coverage differences and because the count of patient days reflects the amount of admitted patient activity, but does not necessarily reflect the amount of non-admitted patient activity.

(b) Only includes patients aged 14 and over.

(c) Total may not equal sum of components due to rounding.

(d) Coverage and patient day estimates may be preliminary. Coverage is the number of patient days for hospitals included in the SAB surveillance arrangements as a proportion of total patient days for all public hospitals.

## **Performance indicator: Unplanned /unexpected readmissions following selected surgical episodes of care (same public hospital)**

'Unplanned /unexpected readmissions following selected surgical episodes of care (same public hospital)' are defined as the number of separations where the principal diagnosis indicates an unplanned or unexpected readmission following a surgical episode of care, and where admission occurred within a specified period (in days) of an initial episode of care involving one of the selected procedures.

The measure is regarded as an indicator of the safety of care. It could also be regarded as an indicator of effectiveness of care.

The specification for this indicator is currently under development and will differ from the readmission indicator presented in previous *Australian hospital statistics* reports. The revised specification will include specific values for each of the procedures for the:

- reference periods (for the initial episode of care in which the procedure was performed),
- readmission intervals (days between the initial episode of care and the readmission)
- principal diagnoses used to define unplanned/unexpected readmissions for each of the selected procedures.

Information on unplanned/unexpected readmissions will be reported on the AIHW website after the specification has been finalised.

## **Responsiveness**

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

There are no indicators of responsiveness available for hospitals.

## **Continuity of care**

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

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

## **Accessibility**

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

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

Emergency department waiting time to service delivery is 'the time elapsed for each patient from presentation in the emergency department to commencement of service by a treating medical officer or nurse'.

Emergency department waiting times information is summarised as the proportion of presentations in which patients were treated within the recommended time (for the urgency of their condition), and is presented for emergency departments in hospitals classified as *Principal referral and specialist women's and children's hospitals* and *Large hospitals*. The urgency of treatment is categorised using the National Triage Scale that has five categories that incorporate the time by which the patient should receive care (HDSC 2008). For more information on triage categories see Chapter 5.

For 2010–11, for all triage categories overall, the proportion of presentations in which patients received emergency department care within the required time was 69%, ranging from 52% in the Northern Territory to 74% in New South Wales (Table 3.7).

**Table 3.7: Proportion<sup>(a)</sup> of emergency presentations<sup>(b)</sup> seen on time, by triage category, peer group A and B hospitals<sup>(c)</sup>, states and territories, 2010–11**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	100	99	100	100	100	100	100
Emergency	83	81	78	71	77	70	82	65	79
Urgent	70	69	59	49	65	51	54	50	64
Semi-urgent	71	64	67	64	70	59	49	48	66
Non-urgent	85	85	90	92	88	81	76	83	86
<b>Total</b>	<b>74</b>	<b>70</b>	<b>66</b>	<b>62</b>	<b>71</b>	<b>59</b>	<b>58</b>	<b>52</b>	<b>69</b>

(a) The proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.

(b) Records with a type of visit of *Emergency presentation*.

(c) For emergency department presentations reported for hospitals classified as *Principal referral and specialist women's and children's hospitals* and *Large hospitals* for which episode-level data were available. For more information, see the text of Chapter 5 and Appendix 2.

There were variations between states and territories in the proportion of emergency presentations seen on time, by hospital peer group, Indigenous status, remoteness area of residence and socioeconomic status of area of residence. Overall, 67% of emergency presentations were seen on time for *Principal referral and specialist women's and children's hospitals* and 73% were seen on time for *Large hospitals* (Table 3.8).

There were relatively slight differences in the proportion of presentations seen on time for Indigenous Australians compared to other Australians (67% and 69% respectively). Patients from *Very remote* areas were the group with the lowest proportion of presentations seen on time (62%).

Additional information on the proportion seen on time by triage category and by state and territory is included in tables that accompany this report online. More information on triage categories and emergency department waiting times for all public hospitals for which data were available (including hospitals that were not *Principal referral and specialist women's and children's hospitals* and *Large hospitals*) is available in Chapter 5.

**Table 3.8: Proportion<sup>(a)</sup> of emergency presentations<sup>(b)</sup> seen on time by triage category, peer group A and B hospitals<sup>(c)</sup>, 2010–11**

	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	Total
<b>Hospital peer group</b>						
Principal referral and specialist women's and children's	100	79	62	65	85	67
Large hospitals	99	81	70	70	88	73
<b>Indigenous status<sup>(d)</sup></b>						
Indigenous	100	77	63	64	86	67
Other Australians	100	79	64	66	86	69
<b>Remoteness of residence<sup>(e)</sup></b>						
Major cities	100	79	63	65	85	68
Inner regional	99	77	64	67	87	69
Outer regional	100	79	68	70	90	72
Remote	100	79	70	69	91	72
Very remote	100	73	61	57	88	62
<b>Socioeconomic status of area of residence<sup>(f)</sup></b>						
1—Lowest	100	80	65	66	86	69
2	100	78	65	67	85	70
3	100	78	63	66	87	68
4	100	78	60	64	85	66
5—Highest	100	82	65	68	88	71
<b>Total</b>	<b>100</b>	<b>79</b>	<b>64</b>	<b>66</b>	<b>86</b>	<b>69</b>

- (a) The proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.
- (b) Records with a type of visit of *Emergency presentation*.
- (c) For emergency department presentations reported for hospitals classified as *Principal referral and specialist women's and children's* hospitals and *Large* hospitals for which episode-level data were available. For more information, see the text of Chapter 5 and Appendix 2.
- (d) Other Australians includes presentations for which the Indigenous status was not reported. Excludes data for Tasmania and the Australian Capital Territory.
- (e) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.
- (f) Disaggregation by socioeconomic group is based on the usual residence of the patient, not the location of the hospital. The socioeconomic status of area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory.

## Performance indicator: Waiting times for elective surgery

Elective surgery waiting times data provide information on patients removed from public hospital elective surgery waiting lists for their surgery. Waiting times for elective surgery are an indicator of the provision of timely care. The median waiting time indicates the time within which 50% of patients were admitted for the awaited procedure. The 90th percentile waiting time indicates the amount of time within which 90% of patients were admitted for the awaited procedure.

The NHA indicator is prepared using linked elective surgery waiting times and admitted patient care data (for which demographic data were available), allowing analyses by remoteness areas and socioeconomic status groups. The linked data accounted for about 97% of the records provided with waiting times. There was some variation in the linked data coverage between states and territories, ranging from 90% for the Northern Territory to 99% for Queensland and South Australia.

Table 3.10 presents waiting time statistics for all patients admitted from public hospital waiting lists for elective surgery and for those records with demographic data available.

In 2010–11, the median waiting time for patients who were admitted from waiting lists was 36 days. It ranged from 29 days in Queensland and Western Australia to 76 days in the Australian Capital Territory. The 90th percentile for waiting time ranged from 148 days in Queensland to 378 days in the Australian Capital Territory, with an overall value of 250 days (Table 3.9). In 2010–11, 2.9% of patients admitted from public hospital waiting lists waited over a year for their elective surgery.

**Table 3.9: Waiting time statistics for patients admitted from public hospital waiting lists for elective surgery<sup>(a)(b)</sup>, states and territories, 2010–11**

	NSW	Vic	Qld	WA <sup>(c)</sup>	SA	Tas	ACT	NT	Total
<b>Elective surgery waiting times data<sup>(a)</sup></b>									
Number of admissions	204,820	157,073	113,876	64,785	46,081	16,497	11,338	6,429	620,899
Days waited at 50th percentile	47	36	29	29	38	38	76	33	36
Days waited at 90th percentile	333	182	148	159	208	359	378	223	252
Per cent waited more than 365 days	3.6	2.5	1.3	1.6	2.0	9.6	10.8	3.9	2.9

(a) Includes records with a reason for removal of *Admitted as an elective patient for awaited procedure in this hospital*.

(b) Records from the National Elective Surgery Waiting Times Collection for which demographic information was obtained from the National Hospital Morbidity Database. The linked records represent about 97% of records in the National Elective Surgery Waiting Times Data Collection for 2010–11.

(c) The data for Western Australia do not include non-metropolitan hospitals.

Table 3.10 presents waiting time statistics by Indigenous status, remoteness area and socioeconomic status, using the linked elective surgery waiting times and admitted patient care data.

There was a difference in the overall median waiting time for Indigenous Australians compared to other Australians (39 days and 36 days respectively) (Table 3.10). There were also variations by socioeconomic area of residence, with persons living in areas classified as being in the higher socioeconomic groups having shorter overall median waiting times than those living in areas classified as being in the lower socioeconomic groups. Persons residing in *Outer regional* areas had longer overall median waiting times than persons from other areas. However, these overall data do not take into account variations in the types of surgery awaited by patients from different socioeconomic groups or different remoteness areas.

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

**Table 3.10: Median waiting time (in days) for patients admitted from public hospital waiting lists for elective surgery<sup>(a)</sup>, by Indigenous status, remoteness area of residence and socioeconomic status of area of residence, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Number of admissions	200,745	150,310	113,208	62,965	45,661	15,569	11,025	5,800	605,283
Proportion of all elective surgery records (%)	98	96	99	97	99	94	97	90	97
<b>Indigenous status<sup>(b)</sup></b>									
Indigenous	50	35	34	31	33	40	67	43	39
Other Australians	47	36	29	30	38	36	75	30	36
<b>Remoteness of residence<sup>(c)</sup></b>									
Major cities	42	37	28	31	41	..	77	..	36
Inner regional	56	32	29	27	33	35	63	..	38
Outer regional	61	28	34	29	29	38	..	29	39
Remote	43	36	28	33	28	38	..	33	32
Very remote	27	..	35	27	26	55	..	50	35
<b>Socioeconomic status of area of residence<sup>(d)</sup></b>									
1—Lowest	52	41	30	29	40	37	n.p.	42	41
2	56	35	28	30	40	37	n.p.	39	41
3	42	38	29	29	37	34	72	29	35
4	43	35	29	31	35	32	78	30	35
5—Highest	28	30	25	29	35	..	73	34	30
<b>Total</b>	<b>47</b>	<b>36</b>	<b>29</b>	<b>30</b>	<b>38</b>	<b>36</b>	<b>75</b>	<b>34</b>	<b>36</b>

(a) For the 97% of elective surgery records for which demographic data were available (see Table 3.10). (c) The linked data for New South Wales does not include the data for Hawkesbury Hospital, which was included in the National Elective Surgery Waiting Times Data Collection.

(b) Excludes data for Tasmania and the Australian Capital Territory. Other Australians includes records for which the Indigenous status was not reported.

(c) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.

(d) Disaggregation by socioeconomic group is based on the usual residence of the patient, not the location of the hospital. The socioeconomic status of area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory.

Abbreviations: ..—not applicable; n.p.—not published.

## Performance indicator: Rates of service—overnight separations

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

Rates of overnight separations in public hospitals ranged from 92 per 1,000 in Tasmania to 189 per 1,000 in the Northern Territory (Table 3.11). For private hospitals, rates of overnight separations ranged from 38 per 1,000 in New South Wales to 61 per 1,000 in Queensland.

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

**Table 3.11: Overnight separations per 1,000 population, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
<b>Hospital sector</b>									
Public	114.5	111.3	103.8	111.4	118.7	92.2	128.2	189.4	112.0
Private	37.9	50.3	60.5	56.3	50.0	n.p.	n.p.	n.p.	48.4
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	252.4	259.8	279.2	395.8	366.6	104.4	315.6	380.4	303.8
Other Australians	152.0	162.6	161.0	161.1	168.1	92.0	126.0	118.0	158.6
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	147.3	154.0	155.3	156.1	158.9	..	142.8	..	152.3
Inner regional	158.0	180.2	173.2	174.0	165.3	133.6	n.p.	..	167.9
Outer regional	170.9	192.9	168.0	194.0	220.3	138.8	..	160.1	177.1
Remote	231.6	263.8	219.5	219.0	208.9	143.7	..	239.7	221.6
Very remote	231.2	..	253.9	270.1	241.7	175.8	..	300.0	271.6
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	163.2	165.3	190.0	267.0	196.4	134.0	n.p.	258.0	176.9
2	152.7	182.2	179.5	176.5	167.5	177.6	n.p.	236.8	167.8
3	157.8	167.1	159.3	161.9	174.2	135.1	333.3	262.9	162.8
4	141.2	155.2	151.9	162.5	143.1	127.6	195.4	138.0	150.7
5—Highest	137.6	141.4	135.9	145.0	135.5	..	132.4	163.4	139.0
<b>Total</b>	<b>152.4</b>	<b>161.5</b>	<b>164.3</b>	<b>167.7</b>	<b>168.7</b>	n.p.	n.p.	n.p.	<b>160.4</b>

(a) For Tasmania, the Australian Capital Territory and the Northern Territory, separation rates by Indigenous status are calculated for public hospitals only. *Other Australians* includes records for which the Indigenous status was not reported. The total excludes data for Tasmania, the Australian Capital Territory and private hospitals in the Northern Territory.

(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.

(c) Disaggregation by socioeconomic group is based on the patient's usual residence, not the location of the hospital. The socioeconomic status of area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory.

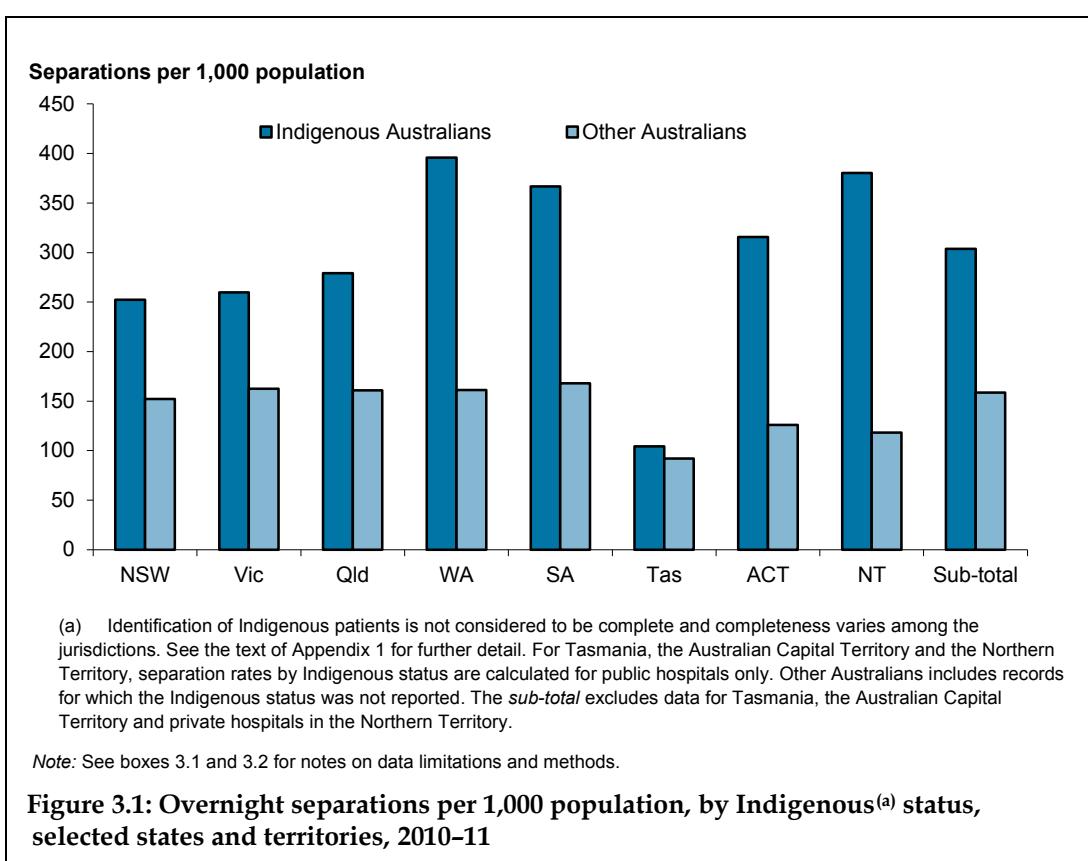
Note: See boxes 3.1 and 3.2 for notes on data limitations and methods.

Abbreviations: ..—not applicable; n.p.—not published.

There were variations in rates of overnight separations by Indigenous status, remoteness area of residence and socioeconomic status of area of residence.

There were 304 overnight separations for patients reported as Indigenous per 1,000 Indigenous persons. This was almost twice the rate for other Australians (159 per 1,000) (see Figure 3.1). The overall overnight separation rates by Indigenous status are presented in the 'sub-total' for the six jurisdictions with data of sufficient quality for analytical purposes (see Appendix 1).

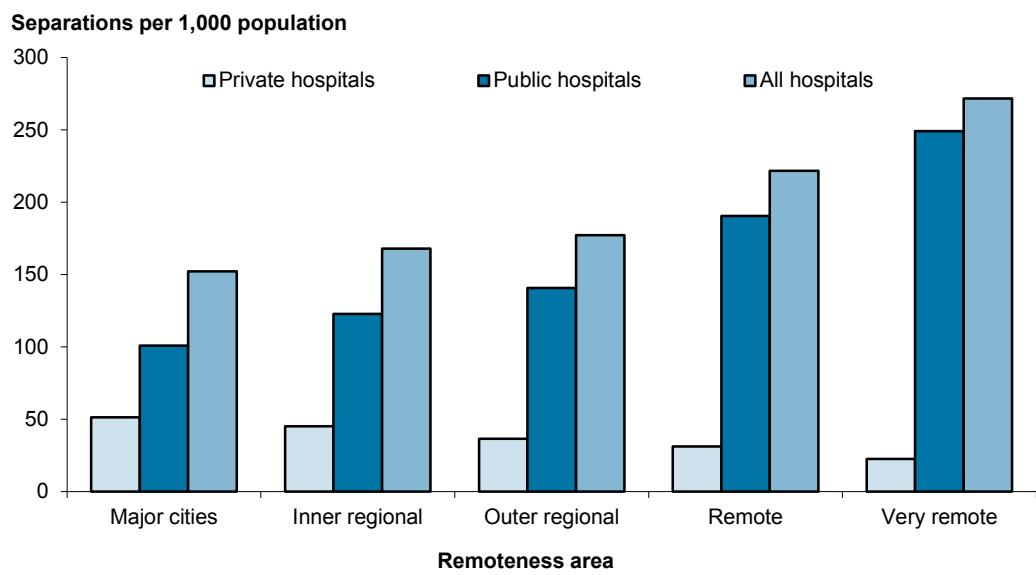
More information on the number of separations, separations per 1,000 population and the standardised separation rate ratio (SRR) by Indigenous status is available in chapters 7, 8, 9, 10 and 11.



There were also large variations in overnight separation rates by area of residence. Persons usually resident in *Very remote* areas had 272 overnight separations per 1,000 population compared with 152 per 1,000 for persons usually resident in *Major cities*. For public hospitals, rates of overnight separations increased with remoteness of the patient's area of usual residence, ranging from 101 per 1,000 population in *Major cities* to 249 per 1,000 in *Very remote* areas (Figure 3.2). For private hospitals, rates of overnight separations decreased with remoteness, ranging from 51 per 1,000 in *Major cities* to 23 per 1,000 in *Very remote* areas.

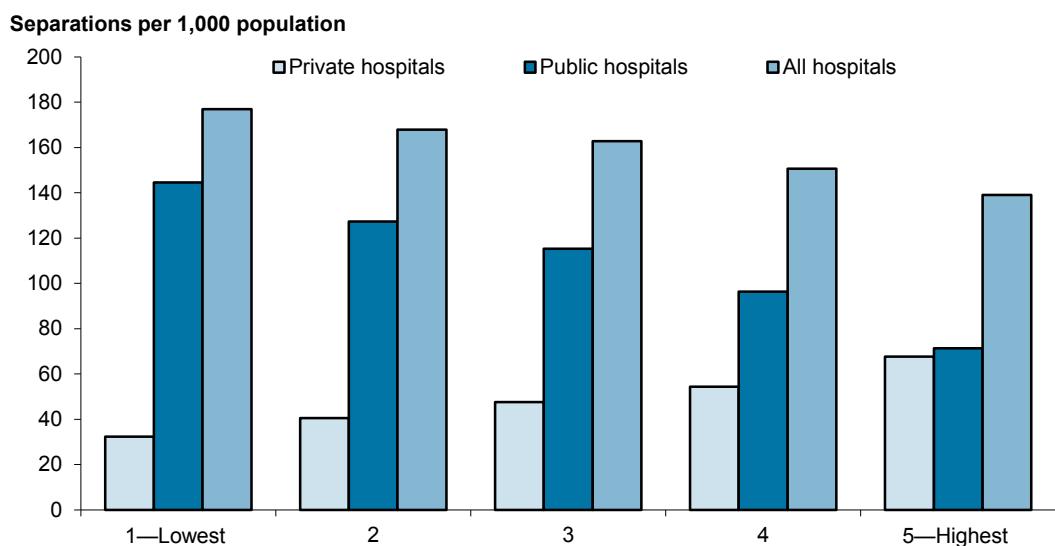
There was less variation by socioeconomic group, with persons living in areas classified as being in the lowest socioeconomic group having an overnight separation rate about 1.3 times as high as the rate for persons living in areas classified as being in the highest socioeconomic group. Rates of overnight separations in public hospitals increased with socioeconomic disadvantage, and for private hospitals decreased with socioeconomic disadvantage (Figure 3.3).

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



Note: See boxes 3.1 and 3.2 for notes on data limitations and methods.

**Figure 3.2: Overnight separations per 1,000 population, by remoteness area of usual residence, public and private hospitals, 2010–11**



Note: See boxes 3.1 and 3.2 for notes on data limitations and methods.

**Figure 3.3: Overnight separations per 1,000 population, by socioeconomic status group, public and private hospitals, 2010–11**

### Performance indicator: Rates of services—hospital procedures

This indicator relates to accessibility of hospital services and may also relate to the appropriateness of hospital care. Generally, the procedures were selected because of the frequency with which they are undertaken, because they are often elective and discretionary and because alternative treatments are sometimes available.

There was some variation in the numbers of separations per 1,000 population for the selected procedures among states and territories. For example, separations for *Cataract extraction* ranged from 6.7 per 1,000 population in the Australian Capital Territory to 10.3 per 1,000 population in Western Australia (Table 3.12). However, as data are not available for private free-standing day hospitals in the Australian Capital Territory, this is likely to underestimate the separation rate for cataract extractions in the Australian Capital Territory.

**Table 3.12: Separations per 1,000 population for hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2010–11**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Cataract extraction	8.5	8.1	8.5	10.3	8.0	9.6	6.7	8.5	8.6
Cholecystectomy	2.2	2.3	2.4	2.1	2.4	2.4	2.5	1.8	2.2
Coronary angioplasty	1.5	1.6	1.5	1.7	1.5	1.2	3.0	..	1.6
Coronary artery bypass graft	0.5	0.6	0.6	0.4	0.6	0.4	0.6	..	0.5
Cystoscopy	4.0	5.4	5.2	7.0	5.8	5.7	5.6	3.3	5.1
Haemorrhoidectomy	2.7	1.6	1.5	1.1	1.3	2.0	1.3	2.1	1.9
Hip replacement	1.4	1.5	1.3	1.7	1.7	1.9	2.5	0.7	1.5
Hysterectomy, females aged 15–69 <sup>(b)</sup>	2.1	2.1	2.5	2.4	2.6	2.5	2.6	2.0	2.3
Inguinal herniorrhaphy	2.2	2.1	2.2	2.3	2.0	2.2	2.7	1.8	2.2
Knee replacement	1.8	1.5	1.8	2.0	2.0	1.7	2.9	0.8	1.8
Myringotomy	1.6	2.0	1.6	2.2	3.2	1.4	2.5	0.8	1.9
Prostatectomy <sup>(c)</sup>	2.8	3.2	2.6	2.6	2.6	3.0	3.7	1.7	2.9
Septoplasty	1.0	1.4	0.8	0.9	1.3	0.5	1.1	0.5	1.1
Tonsillectomy	2.2	2.3	2.2	2.7	2.7	1.7	3.9	1.0	2.3
Varicose veins stripping and ligation	0.5	0.8	0.5	0.6	0.6	0.5	1.1	0.4	0.6

(a) The procedures are defined using Australian Classification of Health Interventions (ACHI) codes in Appendix 2.

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

(c) For *Prostatectomy*, the rate per 1,000 population was calculated for the estimated resident male population.

*Note:* See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information is available in Table S3.9 at the end of this chapter.

*Abbreviation:* ..—not applicable.

Additional information for these procedures for public and private hospitals, and by Indigenous status, remoteness area of usual residence and socioeconomic status is available in tables that accompany this report online.

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

Table 3.13 presents rates of overnight separations for non-acute care by state and territory. Caution should be used in interpreting these data as there are apparent variations in the practices of recording statistical discharges and in the assignment of care types between jurisdictions.

There was a large difference in the overall rate of overnight non-acute care between public and private hospitals (5.7 per 1,000 population and 2.5 per 1,000, respectively) (Table 3.14). The overnight non-acute separation rate for Indigenous Australians was about 30% higher than the rate for other Australians (10.7 per 1,000 and 8.4 per 1,000 respectively).

There were also variations by remoteness of area of residence, with persons residing in *Remote* areas having the lowest rate of non-acute overnight separations and persons residing in *Major cities* having the highest rate.

**Table 3.13: Overnight separations for non-acute care per 1,000 population, states and territories, all hospitals, 2010–11**

Care type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Rehabilitation	5.2	5.2	4.1	5.1	4.0	n.p.	n.p.	n.p.	4.8
Palliative care	1.2	1.1	1.7	1.3	0.9	n.p.	n.p.	n.p.	1.3
Geriatric evaluation and management	0.6	2.3	0.5	0.3	0.7	n.p.	n.p.	n.p.	1.0
Psychogeriatric care	0.1	0.2	0.1	0.7	0.1	n.p.	n.p.	n.p.	0.2
Maintenance care	0.9	0.1	1.5	0.6	1.2	n.p.	n.p.	n.p.	0.9
<b>Total</b>	<b>8.0</b>	<b>9.0</b>	<b>7.9</b>	<b>8.1</b>	<b>7.0</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8.2</b>

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table 3.14: Overnight separations for non-acute care per 1,000 population by hospital sector, Indigenous status, remoteness area and socioeconomic status, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total
<b>Hospital sector</b>									
Public	5.5	5.9	5.5	5.8	4.8	3.1	15.7	7.3	5.7
Private	2.5	3.1	2.3	2.3	2.2	n.p.	n.p.	n.p.	2.5
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	8.7	12.9	11.1	13.0	9.5	3.5	37.5	11.1	10.7
Other Australians	8.3	9.3	7.8	8.1	7.4	4.5	18.2	7.1	8.4
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	8.4	9.5	8.5	8.4	7.6	..	14.9	..	8.8
Inner regional	7.3	8.0	7.1	7.1	4.7	5.2	n.p.	..	7.3
Outer regional	6.8	6.5	6.4	7.2	5.6	2.8	..	9.7	6.5
Remote	7.6	7.5	6.3	7.3	5.5	2.1	..	6.6	6.4
Very remote	11.3	..	6.7	8.2	4.3	1.5	..	8.4	7.3
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	7.3	8.7	8.2	9.1	7.3	3.7	n.p.	8.2	7.6
2	7.2	8.1	8.6	8.9	6.7	4.3	n.p.	7.2	7.8
3	8.4	9.1	7.6	7.7	7.3	5.2	39.7	12.9	8.3
4	7.6	9.0	7.7	8.5	6.7	6.2	19.3	8.7	8.2
5—Highest	9.6	9.7	7.3	7.5	6.8	..	13.8	8.7	9.1
<b>Total</b>	<b>8.0</b>	<b>9.0</b>	<b>7.9</b>	<b>8.1</b>	<b>7.0</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8.2</b>

(a) For Indigenous status, the separations rates for Tasmania, the Australian Capital Territory and the Northern Territory are calculated for public hospitals only. The total excludes data for Tasmania, the Australian Capital Territory and private hospitals in the Northern Territory. Other Australians includes records for which the Indigenous status was not reported. The populations used for calculating age standardised separations rates by Indigenous status use different age groups compared with the populations used to calculate all other rates presented in this table. Therefore, the separation rates by Indigenous status are not directly comparable with the rates by hospital sector, remoteness of residence or socioeconomic status.

(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.

(c) Disaggregation by socioeconomic group is based on the patient's usual residence, not the location of the hospital. The socioeconomic status of the area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory.

Abbreviations: ..—not applicable; n.p.—not published.

More information on sub-and non-acute admitted patient care, for both same-day and overnight separations is available in Chapter 11.

## Efficiency & sustainability

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

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

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

#### Box 3.3: Cost per casemix-adjusted separation

Details of the methods used in this analysis are presented in Appendix 2.

The scope of the analysis includes public hospitals that provide mainly acute care. These are the hospitals in the public hospital peer groups of *Principal referral and specialist women's and children's hospitals*, *Large hospitals*, *Medium hospitals* and *Small acute hospitals*.

Hospitals included in this analysis accounted for 97% of separations in public acute and psychiatric hospitals in 2010–11, and 94% of recurrent expenditure on public hospitals (excluding depreciation).

*Casemix-adjusted separations* is calculated as the product of *Total separations* and *Average cost weight*. Separations data are sourced from the National Hospital Morbidity Database, and the cost weights used are the 2008–09 AR-DRG version 5.2 cost weights (DoHA 2010).

Included are separations for which the care type was reported as *Acute*, *Newborn* (with qualified days) or was not reported.

Nationally, the average cost per casemix-adjusted separation was \$4,918 (excluding depreciation). There was some variation in the cost per casemix-adjusted separation by state and territory (Table 3.15).

A large portion of the total cost was attributed to *Non-medical labour* and *Medical labour* costs. Nationally these costs were \$2,448 and \$1,066, respectively, per casemix-adjusted separation. Depreciation added an average of 4.1% (\$201) to the cost of each separation. More detailed information is available in Table S3.1, at the end of this chapter.

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

**Table 3.15: Cost (\$) per casemix-adjusted separation (excluding depreciation), selected public hospitals<sup>(a)</sup>, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Medical labour costs	1,124	834	1,152	1,202	1,156	1,238	1,271	1,154	1,066
<i>Non-medical labour costs</i>	<b>2,338</b>	<b>2,383</b>	<b>2,783</b>	<b>2,371</b>	<b>2,186</b>	<b>2,893</b>	<b>2,690</b>	<b>2,851</b>	<b>2,448</b>
Nursing	1,243	1,158	1,389	1,143	1,249	1,461	1,409	1,728	1,250
Other staff (includes superannuation)	1,096	1,225	1,394	1,228	937	1,433	1,281	1,123	1,198
Other recurrent costs (excludes depreciation)	1,442	1,291	1,388	1,423	1,511	1,782	1,440	1,641	1,404
Depreciation	169	294	185	140	156	149	169	51	201
<b>Total (excludes depreciation)</b>	<b>4,904</b>	<b>4,508</b>	<b>5,323</b>	<b>4,996</b>	<b>4,854</b>	<b>5,913</b>	<b>5,401</b>	<b>5,645</b>	<b>4,918</b>

(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 2 for further information.

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information is available in tables S3.1 to S3.7 at the end of this chapter.

Table 3.16 presents cost per casemix-adjusted separation data for selected public hospital peer groups. Public hospitals can be classified into peer groups that allow a more meaningful comparison of cost data. The peer group classification allocates hospitals into broadly similar groups in terms of their level of admitted patient activity and their geographical location (see Appendix 2). For more information on the characteristics of public hospitals, see Chapter 4.

**Table 3.16: Cost (\$) per casemix-adjusted separation (excluding depreciation), by public hospital peer group, selected public hospitals<sup>(a)</sup>, states and territories, 2010–11**

Hospital peer group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Principal referral and specialist women's and children's hospitals	4,897	4,477	5,420	4,720	4,929	5,779	5,401	5,595	4,904
Large hospitals	4,576	4,667	4,230	5,180	4,945	n.p.	..	..	4,754
Medium hospitals	5,115	4,403	5,138	5,336	4,530	n.p.	..	..	4,942
Small acute hospitals	6,112	5,556	5,183	7,516	4,159	5,773	..	6,027	5,920
<b>Total (selected hospitals)</b>	<b>4,904</b>	<b>4,508</b>	<b>5,323</b>	<b>4,996</b>	<b>4,854</b>	<b>5,913</b>	<b>5,401</b>	<b>5,645</b>	<b>4,918</b>

(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 2 for further information.

Note: See boxes 3.1, 3.2 and 3.3 for notes on data limitations and methods. Additional information is available in tables S3.1 to S3.7 at the end of this chapter.

Abbreviation: ..—not applicable.

## Performance indicator: Relative stay indexes

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

A RSI greater than 1 indicates that an average patient's length of stay is longer than would be expected given the casemix for the category of interest (for example, hospital sector or

jurisdiction). A RSI of less than 1 indicates that the length of stay was shorter than would have been expected. More detail on these methods is included in Appendix 2.

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

Table 3.17 presents both indirectly and directly standardised RSIs for all hospitals for 2010–11. For the hospitals included in the cost per casemix-adjusted separation analysis (see above), the RSI was 1.00 overall.

Overall, the directly standardised RSI for private hospitals was 1.11 compared to 1.00 for public hospitals, indicating relatively shorter lengths of stay in the public sector compared with the private sector.

Table 3.17 also presents RSI information for the *Medical*, *Surgical* and *Other* categories of AR-DRGs (DoHA 2010). These figures indicate relatively shorter lengths of stay for *Medical* separations in public hospitals, and for *Surgical* and *Other* separations in private hospitals.

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

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

The selected AR-DRGs (Figure 3.4 and Table S3.10) 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) and surgical and medical AR-DRGs
- differences between jurisdictions and/or sectors
- policy interest as evidenced by:
  - inclusion of similar groups in other tables in *Australian hospital statistics*, such as indicator procedures for elective surgery waiting times
  - high volume and/or cost
  - changes in volume over years.

More information on the basis of selection for the AR-DRGs is included in Appendix 2. Due to changes in the classification between AR-DRG version 5.2 and AR-DRG version 6.0, the data presented here are not comparable to that presented in previous reports.

Figure 3.4 presents the average length of stay for selected AR-DRGs in public and private hospitals. There were notable differences (more than 1 day) in the average length of stay between public and private hospitals for 7 of the 18 selected AR-DRGs. For example, the average length of stay for E65B *Chronic obstructive airways disease without catastrophic complications or comorbidities* was 4.7 days for public hospitals and 7.7 days for private hospitals.

Public hospitals accounted for more than 70% of separations for 8 of the 18 selected AR-DRGs and private hospitals accounted for more than 80% of separations for I16Z *Other shoulder procedures*.

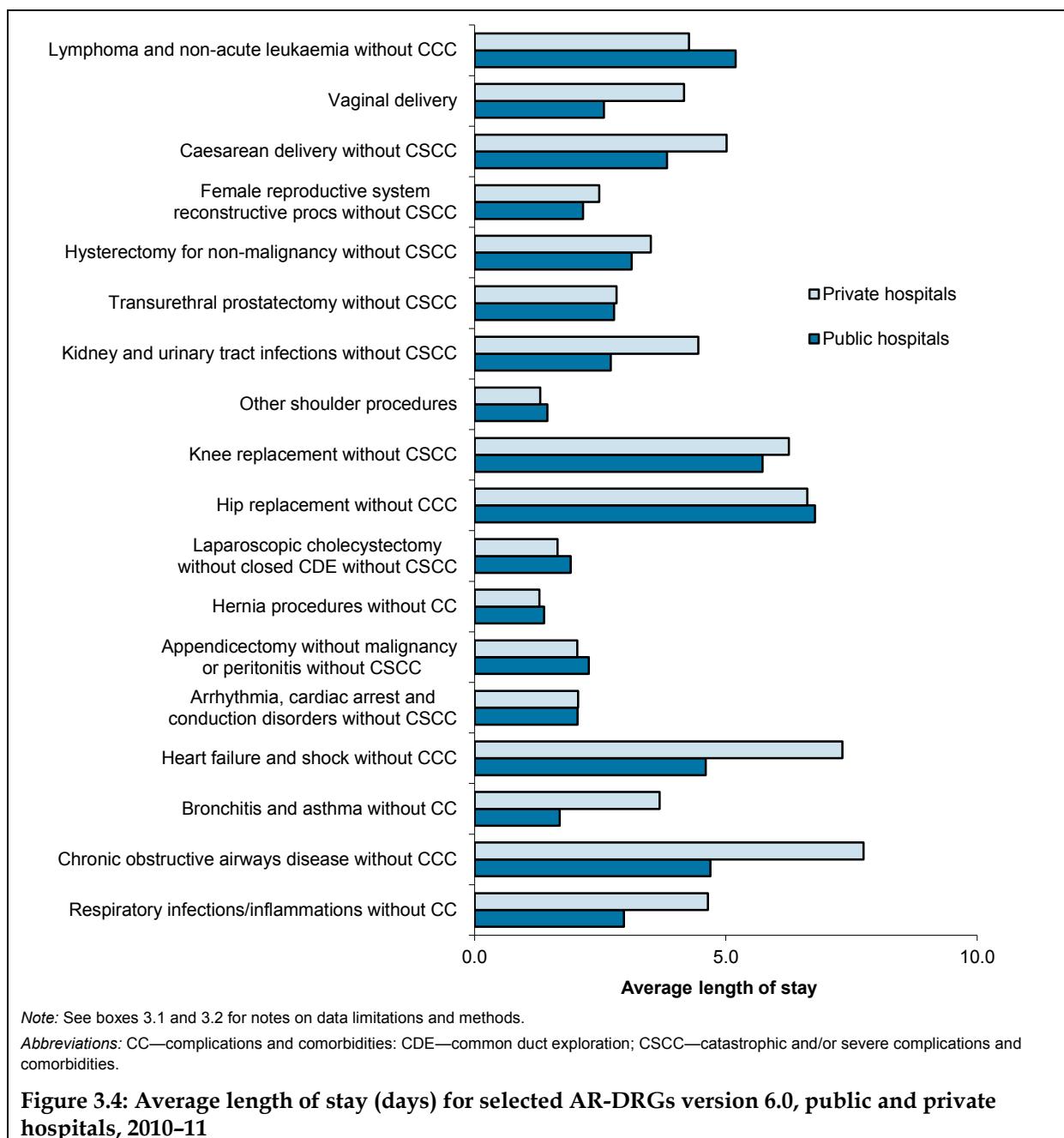
Additional information on the average length of stay for selected AR-DRGs is available by state and territory in the accompanying online material.

**Table 3.17: Relative stay index by medical/surgical/other type of AR-DRG<sup>(a)</sup>, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Indirectly standardised relative stay index<sup>(b)</sup></b>									
<i>Public hospitals</i>	<b>1.04</b>	<b>0.91</b>	<b>0.93</b>	<b>0.99</b>	<b>1.02</b>	<b>1.09</b>	<b>0.97</b>	<b>1.16</b>	<b>0.98</b>
Medical	1.02	0.89	0.90	0.96	1.01	1.12	0.99	1.09	0.96
Surgical	1.09	0.96	1.00	1.06	1.05	1.03	0.94	1.36	1.03
Other	1.14	0.95	1.02	1.02	1.06	1.02	1.02	1.22	1.05
<i>Private hospitals</i>	<b>1.04</b>	<b>1.05</b>	<b>1.06</b>	<b>1.03</b>	<b>0.98</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.04</b>
Medical	1.20	1.15	1.16	1.09	1.03	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.15
Surgical	0.95	0.98	0.97	0.99	0.96	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.97
Other	0.90	0.93	0.98	0.99	0.95	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.94
<b>All hospitals</b>	<b>1.04</b>	<b>0.95</b>	<b>0.98</b>	<b>1.00</b>	<b>1.01</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Medical</b>	<b>1.05</b>	<b>0.95</b>	<b>0.97</b>	<b>0.99</b>	<b>1.01</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Surgical</b>	<b>1.03</b>	<b>0.97</b>	<b>0.98</b>	<b>1.03</b>	<b>1.01</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Other</b>	<b>1.05</b>	<b>0.94</b>	<b>1.00</b>	<b>1.01</b>	<b>1.01</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Directly standardised relative stay index<sup>(c)</sup></b>									
<i>Public hospitals</i>	<b>1.06</b>	<b>0.93</b>	<b>0.95</b>	<b>1.01</b>	<b>1.03</b>	<b>1.10</b>	<b>1.02</b>	<b>1.24</b>	<b>1.00</b>
Medical	1.03	0.90	0.90	0.96	1.01	1.13	1.02	1.10	0.96
Surgical	1.10	0.98	1.02	1.09	1.06	1.06	1.00	1.49	1.04
Other	1.15	0.99	1.05	1.02	1.06	1.04	1.06	1.22	1.06
<i>Private hospitals</i>	<b>1.14</b>	<b>1.12</b>	<b>1.14</b>	<b>1.11</b>	<b>1.06</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.11</b>
Medical	1.26	1.20	1.23	1.18	1.12	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.20
Surgical	0.96	0.98	0.99	0.99	0.97	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.98
Other	0.94	0.96	1.01	1.02	0.98	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.97
<b>All hospitals</b>	<b>1.05</b>	<b>0.96</b>	<b>0.98</b>	<b>1.01</b>	<b>1.02</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Medical</b>	<b>1.05</b>	<b>0.95</b>	<b>0.97</b>	<b>1.00</b>	<b>1.02</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Surgical</b>	<b>1.03</b>	<b>0.97</b>	<b>0.99</b>	<b>1.03</b>	<b>1.02</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>
<b>Other</b>	<b>1.05</b>	<b>0.94</b>	<b>1.00</b>	<b>1.01</b>	<b>1.01</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1.00</b>

- (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 6.0.
- (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 re-scaled so each group represents the national casemix and is therefore directly comparable between cells.

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information on RSI by funding source is available in Table S3.8.



# Supplementary tables

## Box 3.4: Notes – Chapter 3 supplementary tables

### Tables S3.1 to S3.7:

- (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 2 for further information.
- (b) These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory (see text). Superannuation figures were not available for the Northern Territory.
- (c) *Casemix-adjusted separations* are the product of total separations and average cost weight. The average cost weight is calculated using the 2008–09 AR-DRG version 5.2 cost weights (DoHA 2010) for separations for which the care type was reported as *Acute, Newborn* (with qualified days) or was not reported.
- (d) Services purchased from the private sector rather than being provided by public hospitals will result in higher medical supplies costs, lower total full-time equivalent staff and lower total recurrent expenditure.
- (e) Depreciation was not reported for a small number of South Australian and Tasmanian hospitals.
- (f) Estimated private patient medical costs were calculated as the sum of *Salary/sessional* and *Visiting medical officer* payments multiplied by the proportion of patient days that were for private patients. This is a notional estimate of the medical costs for all non-public patients, including those *Self-funded* and those funded by *Private health insurance, Compensation* and the *Department of Veterans' Affairs*.
- (g) The number of different AR-DRGs version 6.0 provided by a hospital for which there were at least five acute separations.
- (h) *Average cost weight* from the National Hospital Morbidity Database, based on separations for which the care type was *Acute, Newborn* (with qualified days) or was not reported, using the 2008–09 AR-DRG version 5.2 cost weights (DoHA 2010).
- (i) Indirectly standardised relative stay index calculated as observed divided by expected length of stay modelled on age and AR-DRG version 6.0, for 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 2 for details on the methodology.
- (j) For the Australian Capital Territory, the information presented for RSI, average cost weight and cost per casemix-adjusted separation data are only presented for hospitals reporting admitted patient activity (excludes a mothercraft hospital).

**Table S3.1: Cost (\$) per casemix-adjusted separation and average cost data for selected public acute hospitals<sup>(a)</sup>, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(b)</sup>	Total
<b>Non-medical labour costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Nursing	1,243	1,158	1,389	1,143	1,249	1,461	1,409	1,728	1,250
Diagnostic/allied health	332	453	367	302	256	311	363	364	364
Administrative	321	272	370	380	241	422	368	341	320
Other staff	201	263	359	292	196	317	157	418	260
Superannuation	241	238	297	254	244	383	392	n.a.	255
<i>Total non-medical labour costs</i>	<i>2,338</i>	<i>2,383</i>	<i>2,783</i>	<i>2,371</i>	<i>2,186</i>	<i>2,893</i>	<i>2,690</i>	<i>2,851</i>	<i>2,448</i>
<b>Other recurrent costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Domestic services	149	101	114	121	87	109	193	136	122
Repairs/maintenance	104	80	97	179	99	72	65	141	102
Medical supplies <sup>(d)</sup>	540	390	582	332	335	780	467	414	471
Drug supplies	254	239	257	267	238	317	144	243	250
Food supplies	35	44	36	32	30	48	38	48	48
Administration	268	271	282	219	150	261	388	181	258
Other	92	166	19	274	572	195	147	477	163
<i>Total other recurrent costs excluding depreciation</i>	<i>1,442</i>	<i>1,291</i>	<i>1,388</i>	<i>1,423</i>	<i>1,511</i>	<i>1,782</i>	<i>1,440</i>	<i>1,641</i>	<i>1,404</i>
Depreciation <sup>(e)</sup>	169	294	185	140	156	149	169	51	201
<i>Total excluding medical labour costs and depreciation</i>	<i>3,781</i>	<i>3,673</i>	<i>4,171</i>	<i>3,794</i>	<i>3,697</i>	<i>4,676</i>	<i>4,130</i>	<i>4,492</i>	<i>3,852</i>
<b>Medical labour costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Public patients									
Salaried/sessional staff	591	626	964	889	788	978	792	967	730
Visiting medical officer payments	242	67	70	158	189	3	286	131	144
Private patients (estimated) <sup>(f)</sup>	291	142	118	155	180	257	193	56	192
<i>Total medical labour costs</i>	<i>1,124</i>	<i>834</i>	<i>1,152</i>	<i>1,202</i>	<i>1,156</i>	<i>1,238</i>	<i>1,271</i>	<i>1,154</i>	<i>1,066</i>
<b>Total cost per casemix-adjusted separation<sup>(c)</sup> excluding depreciation</b>	<b>4,904</b>	<b>4,508</b>	<b>5,323</b>	<b>4,996</b>	<b>4,854</b>	<b>5,913</b>	<b>5,401</b>	<b>5,645</b>	<b>4,918</b>
<b>Total cost per casemix-adjusted separation<sup>(c)</sup> including depreciation</b>	<b>5,074</b>	<b>4,802</b>	<b>5,508</b>	<b>5,137</b>	<b>5,010</b>	<b>6,062</b>	<b>5,571</b>	<b>5,696</b>	<b>5,120</b>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviation:* n.a.—not available.

**Table S3.2: Cost (\$) per casemix-adjusted separation<sup>(c)</sup> and other statistics, acute, non-acute and total selected public hospitals<sup>(a)</sup>, states and territories, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix - adjusted sep excl dep(\$)	Cost/casemix -adjusted sep incl dep(\$)
<b>Total benchmarking hospitals in cost per casemix-adjusted separation analysis<sup>(a)</sup></b>							
NSW	125	12,185	189	1.06	1.08	4,904	5,074
Vic	66	22,197	248	0.97	0.91	4,508	4,802
Qld	75	12,464	162	1.01	0.94	5,323	5,508
WA	35	15,050	187	0.93	1.00	4,996	5,137
SA <sup>(e)</sup>	36	10,247	159	1.09	1.04	4,854	5,010
Tas <sup>(e)</sup>	11	8,877	143	1.06	1.11	5,913	6,062
ACT	2	46,873	453	1.00	0.98	5,401	5,571
NT	5	20,887	230	0.69	1.17	5,645	5,696
<b>Total</b>	<b>355</b>	<b>4,407</b>	<b>191</b>	<b>1.00</b>	<b>1.00</b>	<b>4,918</b>	<b>5,120</b>
<b>Non-acute hospitals excluded from cost per casemix-adjusted separation analysis<sup>(a)</sup></b>							
NSW	53	751	15	0.84	0.83	n.p.	n.p.
Vic	22	684	16	0.86	1.41	n.p.	n.p.
Qld	30	878	35	0.79	0.95	n.p.	n.p.
WA	44	397	13	1.01	1.12	n.p.	n.p.
SA <sup>(e)</sup>	23	618	22	0.76	1.06	n.p.	n.p.
Tas <sup>(e)</sup>	1	543	23	0.92	n.p.	n.p.	n.p.
ACT	1	n.a.	n.a.	n.a.	n.a.	n.p.	n.p.
NT	0	..	..	..	..	n.p.	n.p.
<b>Total</b>	<b>174</b>	<b>652</b>	<b>19</b>	<b>0.85</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>
<b>All public hospitals (including Psychiatric and unpeered)<sup>(a)</sup></b>							
NSW	227	6,973	108	1.06	1.07	n.p.	n.p.
Vic	105	14,248	160	0.96	0.92	n.p.	n.p.
Qld	170	5,673	78	1.00	0.94	n.p.	n.p.
WA	94	5,833	76	0.94	1.01	n.p.	n.p.
SA <sup>(e)</sup>	80	4,877	79	1.08	1.05	n.p.	n.p.
Tas <sup>(e)</sup>	24	4,139	68	1.05	1.14	n.p.	n.p.
ACT <sup>(l)</sup>	3	31,248	302	1.00	0.98	n.p.	n.p.
NT	5	20,887	230	0.69	1.17	n.p.	n.p.
<b>Total</b>	<b>708</b>	<b>7,456</b>	<b>101</b>	<b>1.00</b>	<b>1.00</b>	<b>n.p.</b>	<b>n.p.</b>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviations:* ..—not applicable; dep—depreciation; excl—excluding; incl—including; n.a.—not available; n.p.—not published; sep—separation.

**Table S3.3: Principal referral and specialist women's and children's hospitals – cost (\$) per casemix-adjusted separation<sup>(c)</sup> and selected other statistics, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix - adjusted sep excl dep(\$)	Cost/casemix - adjusted sep incl dep(\$)
<b>Principal referral hospitals: Major cities and Regional</b>							
NSW	27	38,759	447	1.10	1.10	4,855	5,019
Vic	19	59,972	532	0.99	0.89	4,395	4,670
Qld	16	44,334	431	1.05	0.96	5,373	5,550
WA	5	57,800	464	1.00	1.03	4,696	4,808
SA	4	52,727	501	1.21	1.06	4,820	4,986
Tas	2	38,563	492	1.06	1.08	5,779	5,940
ACT	2	46,873	453	1.00	0.98	5,401	5,571
NT	2	44,269	410	0.72	1.21	5,595	5,643
<i>Total</i>	<i>77</i>	<i>47,463</i>	<i>469</i>	<i>1.04</i>	<i>1.00</i>	<i>4,851</i>	<i>5,046</i>
<b>Specialist women's and children's hospitals</b>							
NSW	3	19,553	243	1.21	1.10	5,682	5,903
Vic	2	29,588	239	1.27	1.00	5,803	6,212
Qld	3	15,446	205	1.21	0.98	6,071	6,303
WA	2	20,837	206	1.24	1.08	4,856	4,971
SA	1	29,872	312	1.09	n.p.	n.p.	n.p.
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>11</i>	<i>21,429</i>	<i>231</i>	<i>1.22</i>	<i>1.07</i>	<i>5,635</i>	<i>5,868</i>
<b>Total Principal referral and specialist women's and children's hospitals</b>							
NSW	30	36,839	426	1.11	1.10	4,897	5,064
Vic	21	57,079	504	1.00	0.89	4,477	4,760
Qld	19	39,772	395	1.06	0.96	5,420	5,601
WA	7	47,239	390	1.03	1.04	4,720	4,832
SA	5	48,156	463	1.20	1.08	4,929	5,089
Tas	2	38,563	492	1.06	1.08	5,779	5,940
ACT	2	46,873	453	1.00	0.98	5,401	5,571
NT	2	44,269	410	0.72	1.21	5,595	5,643
<b>Total</b>	<b>88</b>	<b>44,209</b>	<b>439</b>	<b>1.05</b>	<b>1.01</b>	<b>4,904</b>	<b>5,101</b>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviations:* ..—not applicable; dep—depreciation; excl—excluding; incl—including; n.p.—not published; sep—separation.

**Table S3.4: Large hospitals – cost (\$) per casemix-adjusted separation<sup>(c)</sup> and selected other statistics, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix - adjusted sep excl dep(\$)	Cost/casemix -adjusted sep incl dep(\$)
<b>Large hospitals: Major cities</b>							
NSW	11	14,451	286	1.09	1.04	4,474	4,612
Vic	2	17,034	119	0.90	0.95	5,244	5,674
Qld	2	22,931	293	0.84	0.85	3,767	3,911
WA	3	20,768	290	0.76	0.92	5,012	5,170
SA	2	17,447	287	1.16	0.95	4,944	5,083
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>20</i>	<i>16,805</i>	<i>270</i>	<i>0.98</i>	<i>0.98</i>	<i>4,608</i>	<i>4,784</i>
<b>Large hospitals: Regional and Remote</b>							
NSW	3	11,394	242	0.80	0.99	5,207	5,381
Vic	7	17,041	349	0.86	0.97	4,548	4,770
Qld	2	13,406	260	0.78	0.91	5,095	5,216
WA	4	15,049	258	0.67	0.94	5,371	5,560
SA	0	..	..	..	..	..	..
Tas	1	8,375	260	1.36	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>17</i>	<i>14,638</i>	<i>293</i>	<i>0.82</i>	<i>0.97</i>	<i>4,978</i>	<i>5,166</i>
<b>Total Large hospitals</b>							
NSW	14	13,796	276	1.04	1.03	4,576	4,718
Vic	9	17,039	298	0.87	0.97	4,667	4,948
Qld	4	18,168	277	0.82	0.87	4,230	4,366
WA	7	17,500	272	0.72	0.93	5,180	5,352
SA	2	17,447	287	1.16	0.95	4,944	5,083
Tas	1	8,375	260	1.36	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<b>Total</b>	<b>37</b>	<b>15,809</b>	<b>281</b>	<b>0.91</b>	<b>0.98</b>	<b>4,754</b>	<b>4,936</b>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviations:* ..—not applicable; dep—depreciation; excl—excluding; incl—including; n.p.—not published; sep—separation.

**Table S3.5: Medium hospitals – cost (\$) per casemix-adjusted separation<sup>(c)</sup> and selected other statistics, states and territories, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix - adjusted sep excl dep(\$)	Cost/casemix - adjusted sep incl dep(\$)
<b>Medium hospitals: Major cities (&lt;10,000 acute weighted separations) and Regional (&lt;8,000)</b>							
NSW	11	8,726	203	0.85	0.92	4,597	4,756
Vic	4	9,227	209	0.69	0.99	4,444	4,844
Qld	3	10,556	213	0.66	0.57	4,099	4,237
WA	3	10,556	122	0.90	0.98	5,279	5,424
SA	4	9,666	206	0.77	0.92	4,661	4,799
Tas	1	9,328	208	0.79	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>26</i>	<i>9,393</i>	<i>196</i>	<i>0.79</i>	<i>0.90</i>	<i>4,707</i>	<i>4,890</i>
<b>Medium hospitals: Major cities and Regional (&lt;5,000 acute weighted separations)</b>							
NSW	23	3,536	114	0.84	1.06	5,708	5,912
Vic	12	4,171	115	0.72	1.06	4,386	4,723
Qld	8	4,231	135	0.78	0.85	5,959	6,189
WA	2	3,709	131	0.77	0.88	5,605	5,806
SA	9	3,899	130	0.81	0.89	4,384	4,538
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>54</i>	<i>3,847</i>	<i>121</i>	<i>0.80</i>	<i>0.99</i>	<i>5,205</i>	<i>5,447</i>
<b>Total Medium hospitals</b>							
NSW	34	5,215	143	0.85	0.99	5,115	5,295
Vic	16	5,435	138	0.71	1.03	4,403	4,759
Qld	11	5,956	157	0.72	0.73	5,138	5,328
WA	5	7,817	126	0.87	0.96	5,336	5,492
SA	13	5,674	153	0.79	0.90	4,530	4,675
Tas	1	9,328	208	0.79	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>80</i>	<i>5,649</i>	<i>145</i>	<i>0.79</i>	<i>0.94</i>	<i>4,942</i>	<i>5,154</i>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviations:* ..—not applicable; dep—depreciation; excl—excluding; incl—including; n.p.—not published; sep—separation.

**Table S3.6: Small acute hospitals – cost (\$) per casemix-adjusted separation<sup>(c)</sup> and selected other statistics, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix - adjusted sep excl dep(\$)	Cost/casemix -adjusted sep incl dep(\$)
<b>Small regional acute hospitals</b>							
NSW	42	1,032	45	0.79	1.04	5,989	6,293
Vic	20	1,300	44	0.69	1.27	5,556	6,438
Qld	25	1,160	52	0.76	0.91	4,951	5,272
WA	4	1,166	55	0.80	1.12	5,756	6,135
SA	13	1,008	48	0.81	1.03	4,285	4,467
Tas	6	426	19	0.87	1.83	5,887	6,144
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>110</i>	<i>1,079</i>	<i>45</i>	<i>0.76</i>	<i>1.07</i>	<i>5,453</i>	<i>5,862</i>
<b>Remote acute hospitals</b>							
NSW	5	822	36	0.67	0.88	7,580	8,064
Vic	0	..	..	..	..	..	..
Qld	16	746	35	0.77	1.00	5,746	6,115
WA	12	2,486	88	0.77	0.86	7,775	8,163
SA	3	2,120	74	0.77	0.98	3,882	4,049
Tas	1	268	9	0.76	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	3	5,299	110	0.53	0.92	6,027	6,099
<i>Total</i>	<i>40</i>	<i>1,710</i>	<i>59</i>	<i>0.71</i>	<i>0.91</i>	<i>6,687</i>	<i>7,017</i>
<b>Total Small acute hospitals</b>							
NSW	47	1,010	44	0.78	1.03	6,112	6,431
Vic	20	1,300	44	0.69	1.27	5,556	6,438
Qld	41	998	45	0.76	0.93	5,183	5,517
WA	16	2,156	79	0.77	0.90	7,516	7,900
SA	16	1,217	53	0.79	1.02	4,158	4,336
Tas	7	403	17	0.86	1.77	5,773	6,052
ACT	0	..	..	..	..	..	..
NT	3	5,299	110	0.53	0.92	6,027	6,099
<i>Total</i>	<i>150</i>	<i>1,247</i>	<i>49</i>	<i>0.74</i>	<i>1.02</i>	<i>5,920</i>	<i>6,295</i>

Note: See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

Abbreviations: ..—not applicable; dep—depreciation; excl—excluding; incl—including; n.p.—not published; sep—separation.

**Table S3.7: Teaching hospitals – cost (\$) per casemix-adjusted separation<sup>(c)</sup> and selected other statistics, states and territories, 2010–11**

	Number of hospitals	Separations per hospital	AR-DRGs (5+) per hospital <sup>(g)</sup>	Average cost weight <sup>(h)</sup>	Relative stay index <sup>(i)</sup>	Cost/casemix -adjusted sep excl dep(\$)	Cost/casemix -adjusted sep incl dep(\$)
NSW	20	42,086	426	1.15	1.12	4,927	5,103
Vic	16	48,592	397	1.15	0.92	5,686	6,045
Qld	22	34,350	350	1.07	0.96	5,445	5,628
WA	6	47,280	346	1.06	1.06	4,806	4,917
SA	9	31,977	360	1.18	1.06	4,943	5,100
Tas	3	28,500	414	1.09	1.08	5,876	6,028
ACT	2	46,873	453	1.00	0.98	5,401	5,571
NT	2	44,269	410	0.72	1.21	5,595	5,643
<b>Total</b>	<b>80</b>	<b>40,177</b>	<b>386</b>	<b>1.11</b>	<b>1.02</b>	<b>5,276</b>	<b>5,489</b>

*Note:* See boxes 3.1 to 3.3 for notes on limitations of the data and methods. See Box 3.4 for footnotes specific to this table.

*Abbreviations:* dep—depreciation; excl—excluding; incl—including; sep—separation.

**Box 3.5: Notes - Chapter 3 supplementary tables**

**Table S3.8:**

- (a) *Public patients:* separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals).
- (b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.
- (c) *Other:* separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a *Public patient* election status), *Other, No charge raised* (in private hospitals) and not reported.

**Table S3.8: Relative stay index (indirectly standardised), by funding source, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.03	0.91	0.92	0.97	1.01	1.07	0.98	1.15	0.97
Private health insurance	1.07	0.97	1.02	1.11	1.11	1.17	0.96	0.96	1.04
Self-funded <sup>(b)</sup>	1.10	0.91	0.92	1.03	0.92	1.00	1.05	1.20	1.04
Workers compensation	1.15	0.98	1.11	1.13	1.21	1.14	0.91	1.46	1.10
Motor vehicle third party personal claim	1.22	0.91	1.13	1.21	1.28	1.12	1.23	1.39	1.10
Department of Veterans' Affairs	0.99	0.91	0.89	0.93	1.01	1.30	0.77	0.99	0.96
Other <sup>(c)</sup>	1.70	1.10	1.02	1.18	1.15	1.03	1.08	1.43	1.29
<b>Total</b>	<b>1.04</b>	<b>0.91</b>	<b>0.93</b>	<b>0.99</b>	<b>1.02</b>	<b>1.09</b>	<b>0.97</b>	<b>1.16</b>	<b>0.98</b>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	0.84	1.06	0.89	1.08	0.86	n.p.	n.p.	n.p.	0.90
Private health insurance	1.04	1.05	1.05	1.02	0.99	n.p.	n.p.	n.p.	1.04
Self-funded <sup>(b)</sup>	0.94	0.97	0.86	0.86	0.83	n.p.	n.p.	n.p.	0.92
Workers compensation	0.99	1.06	0.96	0.91	0.89	n.p.	n.p.	n.p.	0.98
Motor vehicle third party personal claim	0.82	1.03	1.05	0.93	0.86	n.p.	n.p.	n.p.	0.99
Department of Veterans' Affairs	1.18	1.08	1.21	1.25	1.04	n.p.	n.p.	n.p.	1.16
Other <sup>(c)</sup>	1.28	1.02	1.01	1.06	1.18	n.p.	n.p.	n.p.	1.03
<b>Total</b>	<b>1.04</b>	<b>1.05</b>	<b>1.06</b>	<b>1.03</b>	<b>0.98</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.04</b>
<b>All hospitals</b>									
Public patients <sup>(a)</sup>	1.03	0.91	0.92	0.97	1.01	n.p.	n.p.	n.p.	0.97
Private health insurance	1.05	1.03	1.05	1.04	1.01	n.p.	n.p.	n.p.	1.04
Self-funded <sup>(b)</sup>	1.00	0.96	0.87	0.87	0.85	n.p.	n.p.	n.p.	0.96
Workers compensation	1.04	1.03	1.02	0.96	0.97	n.p.	n.p.	n.p.	1.02
Motor vehicle third party personal claim	1.20	0.93	1.12	1.18	1.25	n.p.	n.p.	n.p.	1.09
Department of Veterans' Affairs	1.05	1.00	1.14	1.13	1.02	n.p.	n.p.	n.p.	1.07
Other <sup>(c)</sup>	1.63	1.10	1.01	1.15	1.16	n.p.	n.p.	n.p.	1.18
<b>Total</b>	<b>1.04</b>	<b>0.95</b>	<b>0.98</b>	<b>1.00</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>

Note: See Box 3.5.

Abbreviation: n.p.—not published.

**Table S3.9: Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2010–11**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Cataract extraction<sup>(b)</sup></b>									
Separations	68,558	49,384	38,580	22,805	16,437	5,976	2,008	1,012	204,760
Separations not within state of residence (%)	1	2	2	<1	2	31	23	<1	3
Proportion of separations public patients <sup>(b)</sup> (%)	29	29	14	43	34	11	56	52	28
Separation rate <sup>(c)</sup>	8.5	8.1	8.5	10.3	8.0	9.6	6.7	8.5	8.6
Standardised separation rate ratio	1.0	1.0	1.0	1.2	0.9	1.1	0.8	1.0	
<b>Cholecystectomy</b>									
Separations	16,245	12,941	10,772	4,757	4,104	1,311	896	381	51,407
Separations not within state of residence (%)	2	2	2	1	2	3	20	8	2
Proportion of separations public patients (%)	61	62	50	55	60	57	54	72	58
Separation rate <sup>(c)</sup>	2.2	2.3	2.4	2.1	2.4	2.4	2.5	1.8	2.2
Standardised separation rate ratio	1.0	1.0	1.1	0.9	1.1	1.1	1.1	0.8	
<b>Coronary angioplasty</b>									
Separations	11,961	9,881	6,975	3,888	2,966	760	1,004	4	37,439
Separations not within state of residence (%)	2	4	10	2	10	4	45	n.p.	6
Proportion of separations public patients (%)	48	46	46	43	53	57	50	n.p.	47
Separation rate <sup>(c)</sup>	1.5	1.6	1.5	1.7	1.5	1.2	3.0	n.p.	1.6
Standardised separation rate ratio	1.0	1.1	1.0	1.1	1.0	0.8	1.9	n.p.	
<b>Coronary artery bypass graft</b>									
Separations	3,810	3,403	2,667	820	1,179	256	184	0	12,319
Separations not within state of residence (%)	4	4	8	1	12	2	49	..	6
Proportion of separations public patients (%)	51	51	51	51	52	59	52	..	51
Separation rate <sup>(c)</sup>	0.5	0.6	0.6	0.4	0.6	0.4	0.6	..	0.5
Standardised separation rate ratio	0.9	1.1	1.1	0.7	1.2	0.8	1.2	..	

(continued)

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2010–11**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Cystoscopy</b>									
Separations	31,855	32,318	24,096	16,002	11,106	3,430	1,820	470	121,097
Separations not within state of residence (%)	2	2	3	<1	1	4	28	4	2
Proportion of separations public patients (%)	36	46	33	38	39	27	47	55	39
Separation rate <sup>(c)</sup>	4.0	5.4	5.2	7.0	5.8	5.7	5.6	3.3	5.1
Standardised separation rate ratio	0.8	1.1	1.0	1.4	1.1	1.1	1.1	0.7	
<b>Haemorrhoidectomy</b>									
Separations	20,485	8,984	6,836	2,682	2,381	1,139	457	441	43,405
Separations not within state of residence (%)	1	2	1	<1	1	4	17	1	2
Proportion of separations public patients (%)	29	40	23	40	30	31	33	22	31
Separation rate <sup>(c)</sup>	2.7	1.6	1.5	1.1	1.3	2.0	1.3	2.1	1.9
Standardised separation rate ratio	1.4	0.8	0.8	0.6	0.7	1.1	0.7	1.1	
<b>Hip replacement</b>									
Separations	11,086	9,503	5,939	3,906	3,421	1,174	820	81	35,930
Separations not within state of residence (%)	2	2	5	<1	4	3	36	6	3
Proportion of separations public patients (%)	38	38	35	39	35	34	41	69	37
Separation rate <sup>(c)</sup>	1.4	1.5	1.3	1.7	1.7	1.9	2.5	0.7	1.5
Standardised separation rate ratio	0.9	1.1	0.9	1.2	1.1	1.3	1.7	0.5	
<b>Hysterectomy, females aged 15–69</b>									
Separations	7,810	6,109	5,711	2,800	2,194	666	472	214	25,976
Separations not within state of residence (%)	2	2	3	<1	2	3	24	1	3
Proportion of separations public patients (%)	41	49	37	34	45	45	32	47	42
Separation rate <sup>(c)</sup>	2.1	2.1	2.5	2.4	2.6	2.5	2.6	2.0	2.3
Standardised separation rate ratio	0.9	0.9	1.1	1.1	1.1	1.1	1.1	0.9	

*(continued)*

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2010–11**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Inguinal herniorrhaphy</b>									
Separations	16,437	12,387	10,263	5,257	3,585	1,279	941	337	50,486
Separations not within state of residence (%)	2	2	2	<1	2	6	21	4	2
Proportion of separations public patients (%)	40	44	35	39	42	40	39	39	40
Separation rate <sup>(c)</sup>	2.2	2.1	2.2	2.3	2.0	2.2	2.7	1.8	2.2
Standardised separation rate ratio	1.0	1.0	1.0	1.0	0.9	1.0	1.3	0.8	
<b>Knee replacement</b>									
Separations	14,456	9,344	8,606	4,622	4,002	1,061	945	94	43,130
Separations not within state of residence (%)	1	3	5	<1	5	3	35	2	3
Proportion of separations public patients (%)	35	34	26	29	30	28	31	61	31
Separation rate <sup>(c)</sup>	1.8	1.5	1.8	2.0	2.0	1.7	2.9	0.8	1.8
Standardised separation rate ratio	1.0	0.9	1.0	1.1	1.1	0.9	1.6	0.4	
<b>Myringotomy (with insertion of tube)</b>									
Separations	11,286	10,532	7,445	4,982	4,762	711	861	202	40,781
Separations not within state of residence (%)	2	2	4	<1	1	14	21	0	3
Proportion of separations public patients (%)	26	36	28	33	34	36	29	60	31
Separation rate <sup>(c)</sup>	1.6	2.0	1.6	2.2	3.2	1.4	2.5	0.8	1.9
Standardised separation rate ratio	0.9	1.1	0.9	1.2	1.7	0.8	1.3	0.4	
<b>Prostatectomy</b>									
Separations	10,750	9,174	5,957	2,861	2,475	898	561	108	32,784
Separations not within state of residence (%)	2	3	5	<1	2	4	31	1	3
Proportion of separations public patients (%)	33	34	26	29	32	30	26	58	31
Separation rate <sup>(c)</sup>	2.8	3.2	2.6	2.6	2.6	3.0	3.7	1.7	2.9
Standardised separation rate ratio	1.0	1.1	0.9	0.9	0.9	1.1	1.3	0.6	

*(continued)*

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2010–11**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Septoplasty</b>									
Separations	7,529	7,701	3,678	2,193	2,208	277	408	113	24,107
Separations not within state of residence (%)	3	2	4	<1	3	1	26	1	3
Proportion of separations public patients (%)	24	33	16	23	32	25	39	35	27
Separation rate <sup>(c)</sup>	1.0	1.4	0.8	0.9	1.3	0.5	1.1	0.5	1.1
Standardised separation rate ratio	1.0	1.3	0.8	0.9	1.2	0.5	1.0	0.4	
<b>Tonsillectomy</b>									
Separations	15,196	11,912	9,755	5,945	4,030	821	1,326	259	49,244
Separations not within state of residence (%)	2	3	3	<1	1	1	28	2	3
Proportion of separations public patients (%)	33	47	29	40	39	45	38	61	38
Separation rate <sup>(c)</sup>	2.2	2.3	2.2	2.7	2.7	1.7	3.9	1.0	2.3
Standardised separation rate ratio	1.0	1.0	0.9	1.1	1.2	0.7	1.7	0.4	
<b>Varicose veins, stripping and ligation</b>									
Separations	3,842	4,473	2,373	1,364	1,092	283	411	76	13,914
Separations not within state of residence (%)	1	1	2	<1	2	6	29	0	2
Proportion of separations public patients (%)	31	39	29	22	44	19	33	38	33
Separation rate <sup>(c)</sup>	0.5	0.8	0.5	0.6	0.6	0.5	1.1	0.4	0.6
Standardised separation rate ratio	0.8	1.3	0.9	1.0	1.0	0.8	1.9	0.6	

(a) The procedures are defined using ACHI codes as detailed in Appendix 2.

(b) Ophthalmological services purchased from the private sector rather than being provided by public hospitals will result in an understating of *Cataract extraction* separation rates in the public sector.

(c) Separations per 1,000 population was directly age-standardised as detailed in Appendix 2.

*Abbreviation:* . .—not applicable; n.p.—not published.

Table S3.10: Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0, public and private hospitals, states and territories, 2010–11

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>E62C Respiratory infections/inflammations without complications or comorbidities</b>										
	ALOS (days)	Public	3.4	2.6	2.7	2.9	3.2	4.0	3.1	3.2
		Private	5.0	4.9	4.5	4.9	3.8	n.p.	n.p.	n.p.
		<i>Total</i>	3.4	3.0	3.0	3.1	3.3	n.p.	n.p.	3.2
	Separations	Public	11,148	7,702	6,843	3,233	2,517	552	626	810
		Private	618	1,744	1,874	430	620	n.p.	n.p.	5,457
		<i>Total</i>	11,766	9,446	8,717	3,663	3,137	n.p.	n.p.	38,888
<b>E65B Chronic obstructive airways disease without catastrophic complications or comorbidities</b>										
	ALOS (days)	Public	5.1	4.2	4.4	4.5	4.7	5.7	5.2	4.4
		Private	8.6	7.6	7.7	8.0	6.9	n.p.	n.p.	n.p.
		<i>Total</i>	5.3	4.8	5.2	5.0	5.0	n.p.	n.p.	5.1
	Separations	Public	14,705	9,419	8,581	3,628	3,572	1,157	457	957
		Private	838	1,959	2,506	597	581	n.p.	n.p.	6,715
		<i>Total</i>	15,543	11,378	11,087	4,225	4,153	n.p.	n.p.	49,191
<b>E69B Bronchitis and asthma without complications or comorbidities</b>										
	ALOS (days)	Public	1.8	1.5	1.6	1.8	1.8	1.8	1.8	1.7
		Private	3.3	4.1	3.4	3.7	3.9	n.p.	n.p.	n.p.
		<i>Total</i>	1.9	1.7	1.9	1.9	1.9	n.p.	n.p.	1.8
	Separations	Public	11,309	9,329	5,975	2,721	2,923	456	413	379
		Private	233	607	963	160	195	n.p.	n.p.	2,183
		<i>Total</i>	11,542	9,936	6,938	2,881	3,118	n.p.	n.p.	35,688
<b>F62B Heart failure and shock without catastrophic complications or comorbidities</b>										
	ALOS (days)	Public	5.2	3.9	4.3	4.3	4.9	5.9	5.2	4.2
		Private	8.3	7.2	7.3	7.0	6.6	n.p.	n.p.	n.p.
		<i>Total</i>	5.4	4.7	5.2	4.8	5.3	n.p.	n.p.	5.1
	Separations	Public	9,250	6,503	4,497	2,480	2,184	573	334	384
		Private	865	2,117	1,922	539	687	n.p.	n.p.	6,356
		<i>Total</i>	10,115	8,620	6,419	3,019	2,871	n.p.	n.p.	32,561

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0, public and private hospitals, states and territories, 2010–11**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>F76B Arrhythmia, cardiac arrest and conduction disorders without catastrophic or severe complications or comorbidities</b>										
ALOS (days)	Public	2.4	1.8	1.9	1.7	2.2	2.5	2.2	1.9	2.0
	Private	1.9	2.2	2.3	1.7	1.8	n.p.	n.p.	n.p.	2.1
	<i>Total</i>	2.3	1.9	2.1	1.7	2.1	n.p.	n.p.	n.p.	2.1
Separations	Public	13,686	10,735	7,428	3,481	3,333	630	650	336	40,279
	Private	2,592	3,576	4,083	1,812	1,727	n.p.	n.p.	n.p.	14,280
	<i>Total</i>	16,278	14,311	11,511	5,293	5,060	n.p.	n.p.	n.p.	54,559
<b>G07B Appendicectomy without malignancy or peritonitis without catastrophic or severe complications or comorbidities</b>										
ALOS (days)	Public	2.5	2.2	2.0	2.2	2.3	2.0	2.5	2.6	2.3
	Private	2.1	2.2	1.9	2.1	2.1	n.p.	n.p.	n.p.	2.0
	<i>Total</i>	2.4	2.2	2.0	2.2	2.2	n.p.	n.p.	n.p.	2.2
Separations	Public	5,936	4,497	3,601	2,202	1,193	493	444	239	18,605
	Private	601	1,021	1,615	577	274	n.p.	n.p.	n.p.	4,275
	<i>Total</i>	6,537	5,518	5,216	2,779	1,467	n.p.	n.p.	n.p.	22,880
<b>G10B Hernia Procedures without complications or comorbidities</b>										
ALOS (days)	Public	1.4	1.4	1.3	1.3	1.6	1.4	1.5	1.6	1.4
	Private	1.3	1.3	1.2	1.4	1.3	n.p.	n.p.	n.p.	1.3
	<i>Total</i>	1.4	1.4	1.2	1.3	1.5	n.p.	n.p.	n.p.	1.3
Separations	Public	9,372	7,637	5,233	2,915	2,259	680	462	219	28,777
	Private	11,119	7,846	8,186	3,893	2,428	n.p.	n.p.	n.p.	35,292
	<i>Total</i>	20,491	15,483	13,419	6,808	4,687	n.p.	n.p.	n.p.	64,069
<b>H08B Laparoscopic cholecystectomy without closed CDE without catastrophic or severe complications or comorbidities</b>										
ALOS (days)	Public	2.0	1.9	1.7	1.9	2.0	1.7	2.1	2.6	1.9
	Private	1.5	1.8	1.7	1.7	1.8	n.p.	n.p.	n.p.	1.6
	<i>Total</i>	1.8	1.9	1.7	1.8	1.9	n.p.	n.p.	n.p.	1.8
Separations	Public	7,374	5,619	4,129	2,010	1,767	567	333	186	21,985
	Private	5,449	4,022	4,354	1,771	1,336	n.p.	n.p.	n.p.	17,847
	<i>Total</i>	12,823	9,641	8,483	3,781	3,103	n.p.	n.p.	n.p.	39,832

*(continued)*

Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0, public and private hospitals, states and territories, 2010–11

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>I03B Hip replacement without catastrophic complications or comorbidities</b>										
ALOS (days)	Public	7.2	6.1	7.1	6.7	7.0	6.8	5.7	n.p.	6.8
	Private	6.2	6.9	6.4	7.2	7.1	n.p.	n.p.	n.p.	6.6
	<i>Total</i>	6.6	6.6	6.6	7.0	7.1	n.p.	n.p.	n.p.	6.7
Separations	Public	3,726	2,680	1,534	1,274	916	340	256	39	10,765
	Private	4,834	4,467	2,955	1,796	1,658	n.p.	n.p.	n.p.	16,719
	<i>Total</i>	8,560	7,147	4,489	3,070	2,574	n.p.	n.p.	n.p.	27,484
<b>I04B Knee replacement without catastrophic or severe complications or comorbidities</b>										
ALOS (days)	Public	5.7	5.4	5.9	6.6	5.6	5.6	4.1	n.p.	5.7
	Private	6.1	6.5	5.8	7.3	6.2	n.p.	n.p.	n.p.	6.3
	<i>Total</i>	6.0	6.1	5.8	7.1	6.0	n.p.	n.p.	n.p.	6.1
Separations	Public	3,961	2,238	1,678	1,022	993	235	225	38	10,390
	Private	6,462	4,678	4,945	2,479	2,070	n.p.	n.p.	n.p.	21,689
	<i>Total</i>	10,423	6,916	6,623	3,501	3,063	n.p.	n.p.	n.p.	32,079
<b>I16Z Other shoulder procedures</b>										
ALOS (days)	Public	1.4	1.4	1.4	1.4	1.5	1.3	1.4	2.7	1.4
	Private	1.3	1.3	1.3	1.3	1.3	n.p.	n.p.	n.p.	1.3
	<i>Total</i>	1.3	1.3	1.3	1.3	1.4	n.p.	n.p.	n.p.	1.3
Separations	Public	1,930	1,702	1,153	1,197	672	110	114	87	6,965
	Private	8,684	7,817	6,984	5,568	3,047	n.p.	n.p.	n.p.	33,526
	<i>Total</i>	10,614	9,519	8,137	6,765	3,719	n.p.	n.p.	n.p.	40,491
<b>L63B Kidney and urinary tract infections without catastrophic or severe complications or comorbidities</b>										
ALOS (days)	Public	3.2	2.2	2.5	2.6	3.0	3.8	2.8	2.9	2.7
	Private	5.0	4.5	4.1	4.2	5.2	n.p.	n.p.	n.p.	4.5
	<i>Total</i>	3.3	2.5	2.8	2.8	3.3	n.p.	n.p.	n.p.	2.9
Separations	Public	12,431	9,918	7,912	4,177	2,637	527	575	483	38,660
	Private	813	1,637	2,354	555	487	n.p.	n.p.	n.p.	6,061
	<i>Total</i>	13,244	11,555	10,266	4,732	3,124	n.p.	n.p.	n.p.	44,721

(continued)

Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0, public and private hospitals, states and territories, 2010–11

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>M02B Transurethral prostatectomy without catastrophic or severe complications or comorbidities</b>										
	ALOS (days)	Public	2.9	2.6	2.7	2.6	3.1	2.5	3.1	n.p.
		Private	2.8	2.8	2.8	2.5	3.0	n.p.	n.p.	2.8
		<i>Total</i>	2.8	2.8	2.8	2.6	3.1	n.p.	n.p.	2.8
	Separations	Public	2,126	1,803	997	582	487	141	67	41
		Private	3,664	3,223	2,357	1,090	940	n.p.	n.p.	11,788
		<i>Total</i>	5,790	5,026	3,354	1,672	1,427	n.p.	n.p.	18,032
<b>N04B Hysterectomy for non-malignancy without catastrophic or severe complications or comorbidities</b>										
	ALOS (days)	Public	3.2	3.2	2.9	3.3	3.1	3.0	3.3	3.1
		Private	3.5	3.9	3.1	3.4	3.9	n.p.	n.p.	3.5
		<i>Total</i>	3.4	3.5	3.0	3.4	3.5	n.p.	n.p.	3.3
	Separations	Public	2,846	2,616	1,733	820	888	246	111	87
		Private	3,693	2,487	2,984	1,575	924	n.p.	n.p.	12,342
		<i>Total</i>	6,539	5,103	4,717	2,395	1,812	n.p.	n.p.	21,689
<b>N06B Female reproductive system reconstructive procedures without catastrophic or severe complications or comorbidities</b>										
	ALOS (days)	Public	2.3	2.2	1.8	2.3	2.1	2.0	2.5	n.p.
		Private	2.6	2.6	2.1	2.5	2.8	n.p.	n.p.	2.5
		<i>Total</i>	2.5	2.4	2.0	2.4	2.5	n.p.	n.p.	2.4
	Separations	Public	1,908	1,410	1,039	469	558	175	60	30
		Private	3,273	2,127	2,407	1,032	916	n.p.	n.p.	10,234
		<i>Total</i>	5,181	3,537	3,446	1,501	1,474	n.p.	n.p.	15,883
<b>O01B Caesarean delivery without catastrophic or severe complications or comorbidities</b>										
	ALOS (days)	Public	3.9	3.8	3.5	3.9	4.2	4.0	3.7	4.8
		Private	5.2	5.0	4.6	5.4	5.2	n.p.	n.p.	5.0
		<i>Total</i>	4.3	4.3	4.0	4.6	4.5	n.p.	n.p.	4.3
	Separations	Public	14,886	11,031	8,956	4,399	3,227	861	809	617
		Private	7,917	6,473	7,050	3,856	1,657	n.p.	n.p.	28,376
		<i>Total</i>	22,803	17,504	16,006	8,255	4,884	n.p.	n.p.	73,162

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0, public and private hospitals, states and territories, 2010–11**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	
<b>O60Z</b>	<b>Vaginal delivery</b>										
	ALOS (days)	Public	2.7	2.5	2.3	2.7	2.8	2.7	2.3	3.1	2.6
		Private	4.3	4.2	3.9	4.4	4.2	n.p.	n.p.	n.p.	4.2
		<i>Total</i>	3.0	2.9	2.6	3.2	3.1	n.p.	n.p.	n.p.	2.9
	Separations	Public	50,538	35,658	29,563	14,220	9,728	2,794	2,844	2,050	147,395
		Private	12,846	11,580	9,138	5,274	2,773	n.p.	n.p.	n.p.	44,307
		<i>Total</i>	63,384	47,238	38,701	19,494	12,501	n.p.	n.p.	n.p.	191,702
<b>R61B</b>	<b>Lymphoma and non-acute leukaemia without catastrophic complications or comorbidities</b>										
	ALOS (days)	Public	5.3	4.8	5.3	5.1	5.6	5.4	7.0	3.8	5.2
		Private	4.3	3.7	5.6	3.0	4.9	n.p.	n.p.	n.p.	4.3
		<i>Total</i>	5.1	4.2	5.5	3.9	5.3	n.p.	n.p.	n.p.	4.8
	Separations	Public	2,678	1,975	985	766	742	270	123	63	7,602
		Private	492	2,075	1,579	1,093	576	n.p.	n.p.	n.p.	5,950
		<i>Total</i>	3,170	4,050	2,564	1,859	1,318	n.p.	n.p.	n.p.	13,552

(a) Separations for which the care type was reported as *Acute*, *Newborn* (with qualified days) or was not reported. Excludes separations where the length of stay was greater than 120 days. Average length of stay suppressed for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory, or if fewer than 50 separations were reported.

(b) For more information on the selected AR-DRGs, see Appendix 2 and Table A2.5 accompanying this report online.

Abbreviations: ALOS—average length of stay; CDE—common duct exploration; n.p.—not published.

# 4 Australia's hospital resources

This chapter presents an overview of public and private hospitals in 2010–11, covering the number and types of hospitals and availability of beds. This chapter also describes public hospitals in terms of public hospital expenditure and revenue, the number of full-time equivalent staff employed and specialised services provided.

## What data are reported?

The hospital types reported in this chapter are:

- public hospitals (acute and psychiatric hospitals)
- private free-standing day hospital facilities and other private hospitals (acute and psychiatric hospitals).

Information on public hospital resources was derived from the National Public Hospital Establishments Database (NPHED). Financial data reported from the NPHED are not directly comparable with data reported in the annual AIHW publication *Health expenditure Australia 2009–10* (AIHW 2011e). In the latter, trust fund expenditure is included (whereas it is not included in the data here) and hospital expenditure may be defined to cover activity not covered by this data collection.

Private hospital information on the numbers of hospitals, beds, expenditure and revenue was sourced from the Australian Bureau of Statistics' Private Hospital Establishments Collection (PHEC). Caution should be used in comparing the data for private hospitals and public hospitals as there are variations in the data definitions used between the NPHED and the PHEC.

### Box 4.1: What are the limitations of the data?

#### Hospitals

- The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses (see Chapter 2 and Appendix 2).

#### Hospital beds

- Comparability of bed numbers can be affected by the range and types of patients treated by a hospital (casemix). For example, hospitals may have different proportions of beds available for special and more general purposes, or for use as same-day care only or as overnight beds. Public and private hospital bed numbers presented in this chapter are based on different definitions.
- The number of average available beds presented in this report may differ from the counts published elsewhere. For example, counts based on a specified date, such as 30 June, may differ from the average available beds for the reporting period.
- The collection of *Average available beds for overnight-stay patients* and *Average available beds for same-day patients* was mandated for national reporting in the Public Hospital Establishments National Minimum Data Set (NMDS) commencing 1 July 2009. Due to changes in the definitions, the numbers of beds reported before 1 July 2009 may not be comparable to the numbers of beds reported after 1 July 2009.

(continued)

#### **Box 4.1 (continued)**

- Before 1 July 2009, **average available beds** were the average number of beds which were immediately available for use by an admitted patient within the establishment. Surgical tables, recovery trolleys, delivery beds, cots for normal neonates, emergency stretchers/beds not normally authorised or funded and beds designated for same-day non-admitted patient care were excluded. Beds in wards which were closed for any reason were also excluded.
- **Average available beds for same-day patients** are the number of beds, chairs or trolleys available to provide accommodation for same-day patients, averaged over the counting period.
- **Average available beds for overnight-stay patients** are the number of beds available to provide overnight accommodation for patients (other than neonatal cots (non-special-care) and beds occupied by hospital-in-the-home patients), averaged over the counting period.

#### **Public hospital financial data**

- A small number of establishments in 2010–11 did not report any financial data, or reported incomplete financial data.

#### **Public hospital expenditure**

- Capital expenditure is not reported in this publication. Not all jurisdictions were able to report using the *National health data dictionary* (HDSC 2008) categories and the comparability of the data may not be adequate for reporting.
- Recurrent expenditure reported in this chapter was largely expenditure by hospitals and may not necessarily include all expenditure spent on hospital services by each state or territory government. For example, recurrent expenditure on purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals may not be included.
- Expenditure on public patients hospitalised in other jurisdictions may not be included.

#### **Public hospital revenue**

- Revenue reported in this chapter was largely revenue received by individual hospitals, and may not necessarily include all revenue received by each state or territory government for the provision of public hospital services.
- There was some variation among the states and territories in the treatment of revenue data, for example, in the treatment of Australian Government grants and asset sales.

#### **Public hospital staffing**

- The collection of data by staffing category was not consistent among states and territories—for some jurisdictions, best estimates were reported for some staffing categories. There was variation in the reporting of *Other personal care staff* and *Domestic and other staff*. Queensland noted that there was little difference between these categories and that an employee may perform different functions within these two categories on different days (see Appendix 1).

*(continued)*

**Box 4.1 (continued)**

- The outsourcing of services with a large labour-related component (such as food services and domestic services) can have a substantial impact on staffing figures. Differences in outsourcing may explain some of the differences in full-time equivalent staff in some staffing categories and also some of the differences between the states and territories.
- Different reporting practices and use of outsourced services may also explain some of the variation in average salaries reported for *Diagnostic and allied health professionals*, *Other personal care staff* and *Domestic and other staff*. The degree of outsourcing of higher paid versus lower paid staffing functions affect the comparison of averages. For example, outsourcing the provision of domestic services but retaining domestic service managers to oversee the activities of the contractors tends to result in higher average salaries for the domestic service staff.
- Information on numbers of visiting medical officers (VMOs), who were contracted by hospitals to provide services to public patients and paid on sessional or fee-for-service basis in public hospitals, was not available.

**Box 4.2: What methods were used?**

- The *remoteness area* of hospital presented in this chapter was based on the ABS 2006 Australian Standard Geographical Classification (see Appendix 2). Beds per 1,000 population by remoteness areas are reported as crude rates based on the 30 June 2010 population in the remoteness area in question.
- Expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions.

## How do hospitals vary across states and territories?

In 2010–11, there were 752 public hospitals reported, compared with 758 public hospitals in 2006–07.

From 2009–10, the data for the Albury Base Hospital (located in New South Wales) was reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. The Albury Wodonga Health Service was formed by the integration of Wodonga Regional Health Service in Victoria and acute services at the Albury Base Hospital in New South Wales. Data for Albury Base Hospital are therefore included in statistics for Victoria from 2009–10 whereas they were formerly reported by and included in statistics for New South Wales.

For Tasmania, the Statewide Mental Health Services (SMHS), which was previously reported as three separate public psychiatric hospitals, was reported as one entity in 2009–10. Therefore the number of reporting units changed between 2008–09 and 2009–10, but the number of public psychiatric hospital campuses remained the same. In 2010–11, an alcohol and drug service (previously reported separately) was also included under SMHS. In addition, a decrease in the number of available beds for Tasmania between 2009–10 and 2010–11 was mainly due to a classification change of 76 beds from ‘acute mental health beds’ to ‘residential care beds’, and the result of an audit of beds in acute care facilities.

**Table 4.1: Number of hospitals and average available beds, public hospitals, states and territories, 2006–07 to 2010–11<sup>(a)</sup>**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(b)</sup></b>							
Public hospitals	228	228	227	226	226	-0.2	0.0
Average available beds	19,924	20,006	19,805	19,608	19,931	0.0	1.6
Available beds per 1,000 population	2.9	2.9	2.8	2.8	2.8	-1.4	0.3
<b>Victoria<sup>(b)</sup></b>							
Public hospitals	144	148	149	150	151	1.2	0.7
Average available beds	12,434	12,682	12,869	13,186	13,408	1.9	1.7
Available beds per 1,000 population	2.4	2.4	2.4	2.4	2.4	-0.1	0.0
<b>Queensland</b>							
Public hospitals	177	177	170	170	170	-1.0	0.0
Average available beds	10,354	10,651	10,805	10,911	11,117	1.8	1.9
Available beds per 1,000 population	2.5	2.5	2.5	2.5	2.5	-0.6	0.1
<b>Western Australia</b>							
Public hospitals	95	94	94	95	94	-0.3	-1.1
Average available beds	5,558	5,405	5,369	5,376	5,492	-0.3	2.2
Available beds per 1,000 population	2.7	2.6	2.5	2.4	2.4	-2.9	0.1
<b>South Australia</b>							
Public hospitals	79	80	80	80	80	0.3	0.0
Average available beds	4,895	4,981	4,874	4,859	5,040	0.7	3.7
Available beds per 1,000 population	3.1	3.1	3.0	3.0	3.1	-0.5	2.5
<b>Tasmania</b>							
Public hospitals <sup>(c)(d)</sup>	27	27	29	24	23	-3.9	-4.2
Average available beds <sup>(d)</sup>	1,353	1,275	1,449	1,359	1,196	-3.0	-12.0
Available beds per 1,000 population	2.8	2.6	2.9	2.7	2.4	-3.9	-12.7
<b>Australian Capital Territory</b>							
Public hospitals	3	3	3	3	3	0.0	0.0
Average available beds	785	851	875	907	926	4.2	2.1
Available beds per 1,000 population	2.3	2.5	2.5	2.6	2.6	2.4	0.3
<b>Northern Territory</b>							
Public hospitals	5	5	5	5	5	0.0	0.0
Average available beds	600	616	650	694	662	2.5	-4.6
Available beds per 1,000 population	2.8	2.9	2.9	3.1	2.9	0.3	-5.9
<b>Total</b>							
<b>Public hospitals</b>	<b>758</b>	<b>762</b>	<b>757</b>	<b>753</b>	<b>752</b>	<b>-0.2</b>	<b>-0.1</b>
<b>Average available beds</b>	<b>55,904</b>	<b>56,467</b>	<b>56,696</b>	<b>56,900</b>	<b>57,772</b>	<b>0.8</b>	<b>1.5</b>
<b>Available beds per 1,000</b>	<b>2.7</b>	<b>2.7</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>-1.0</b>	<b>-0.1</b>

- (a) Due to changes in the definitions of available beds, the numbers of beds reported before 1 July 2009 may not be comparable to the numbers of beds reported after 1 July 2009.
- (b) From 2009–10, the data for the Albury Base Hospital are included in statistics for Victoria whereas they were formerly reported by, and included in statistics for New South Wales. See Box 2.1 for more information.
- (c) From 2009–10, Tasmania's Statewide Mental Health Services, which was previously reported as three separate public psychiatric hospitals, was reported as one entity. Therefore, the number of reporting units changed, but the number of public psychiatric hospital campuses remained the same.
- (d) In 2010–11, a detoxification unit in Tasmania was re-classified as a mental health service and data for this establishment was not reported to NPHED. In addition, Tasmania reclassified 76 beds from 'acute mental health beds' to 'residential care beds', decreasing both the number of beds reported for public psychiatric hospitals in Tasmania.

While average available bed numbers rose overall between 2006–07 and 2010–11, the number of available beds per 1,000 population generally fell (from 2.7 per 1,000 to 2.6 per 1,000).

For the Australian Capital Territory and the Northern Territory, both the average available beds and the number of available beds per 1,000 population increased over the period 2006–07 to 2010–11 (Table 4.1).

In 2009–10 there were 581 private hospitals, compared with 547 private hospitals in 2005–06. South Australia and Victoria accounted for most of the increase in private hospital numbers. Between 2005–06 and 2009–10, the number of average available beds increased (0.6%). Available beds per 1,000 population fell by 1.2% over the same period (Table 4.2).

**Table 4.2: Number of hospitals and average available beds, private hospitals, states and territories, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08 <sup>(a)</sup>	2008–09	2009–10	Change (per cent)	
						Average since 2005–06	Since 2008–09
New South Wales	178	175	n.a.	176	179	0.1	1.7
Victoria	146	155	n.a.	152	161	2.5	5.9
Queensland	108	109	n.a.	106	106	-0.5	0.0
Western Australia	56	54	n.a.	54	55	-0.4	1.9
South Australia	37	40	n.a.	50	57	11.4	14.0
Australian Capital Territory, Northern Territory and Tasmania <sup>(b)</sup>	22	24	n.a.	26	23	1.1	-11.5
<b>Total private hospitals</b>	<b>547</b>	<b>557</b>	<b>n.a.</b>	<b>564</b>	<b>581</b>	<b>1.5</b>	<b>3.0</b>
<b>Average available beds<sup>(c)</sup></b>	<b>27,040</b>	<b>26,678</b>	<b>n.a.</b>	<b>27,180</b>	<b>27,748</b>	<b>0.6</b>	<b>2.1</b>
<b>Available beds per 1,000 population<sup>(d)</sup></b>	<b>1.3</b>	<b>1.3</b>	<b>n.a.</b>	<b>1.2</b>	<b>1.2</b>	<b>-1.2</b>	<b>0.6</b>

(a) Data for the 2007–08 reference year are not available.

(b) Australian Capital Territory, Northern Territory and Tasmania have been aggregated to protect the confidentiality of the small number of hospitals in these states/territories.

(c) Available beds/chairs (average for the year).

(d) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 31 December 2010.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods.

Source: Australian Bureau of Statistics, *Private hospitals Australia 2009–10* (ABS 2011).

Abbreviation: n.a.—not available.

## How many hospitals?

Table 4.3 presents the number of public and private hospitals by state and territory for 2010–11.

The data presented for private hospitals in Table 4.3 are counts of private hospitals provided by the states and territories for 2010–11. The three largest states together accounted for about three-quarters of all reported hospitals.

**Table 4.3: Public and private hospitals<sup>(a)</sup>, states and territories, 2010–11**

	NSW	Vic <sup>(b)</sup>	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute hospitals	218	150	166	93	78	22	3	5	735
Public psychiatric hospitals	8	1	4	1	2	1	0	0	17
<b>Private hospitals</b>									
Private free-standing day hospital facilities	91	85	53	34	28	2	9	1	303
Other private hospitals	86	81	53	24	31	6	3	1	285
<b>Total</b>	<b>403</b>	<b>317</b>	<b>276</b>	<b>156</b>	<b>139</b>	<b>31</b>	<b>15</b>	<b>7</b>	<b>1,340</b>

(a) The numbers of private hospitals for 2010–11, data provided by the jurisdiction.

(b) The number of public hospitals in Victoria is reported as a count of the campuses that reported data separately to the National Hospital Morbidity Database in 2010–11.

(c) The count of private hospitals in Queensland was based on data as at 30 June 2011.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods.

## How many hospital beds?

In 2010–11, the number of available beds in public acute hospitals ranged from 2.3 per 1,000 population in Western Australia, Tasmania and Queensland, to 2.9 per 1,000 in South Australia and the Northern Territory (Table 4.4).

In 2010–11 the total number of available beds per 1,000 population, in public and private hospitals, was 3.8 per 1,000.

The collection of *Average available beds for overnight-stay patients* and *Average available beds for same-day patients* was mandated for national reporting in the Public Hospital Establishments NMDS commencing 1 July 2009.

Nationally, about 88% of beds in public acute hospitals were available for overnight-stay patients (Table 4.4). The proportion of beds in public acute hospitals that were for same-day patients ranged from 5% in the Northern Territory to 16% in Queensland and the Australian Capital Territory. For public psychiatric hospitals, the majority of states and territories did not report any *Average available beds for same-day patients*.

The comparability of bed numbers can be affected by the casemix of hospitals including the extent to which hospitals provide same-day admitted patient services and other specialised services.

**Table 4.4: Public and private hospital average available beds<sup>(a)(b)</sup> and number of average available beds per 1,000 population<sup>(c)</sup>, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average available beds<sup>(a)</sup></b>									
Public hospitals									
Public acute hospitals	19,007	13,254	10,660	5,278	4,816	1,186	926	662	55,789
Same-day beds/chairs	1,447	2,037	1,733	672	330	177	152	34	6,582
Overnight beds	17,560	11,217	8,927	4,607	4,486	1,009	774	628	49,207
Public psychiatric hospitals	925	154	457	214	224	10	..	..	1,983
Private hospitals (2009–10) <sup>(b)</sup>	n.a.	27,748							
Private free-standing day hospital facilities	n.a.	2,822							
Other private hospitals	6,584	6,880	5,945	n.a.	2,158	n.a.	n.a.	n.a.	24,926
<b>Total beds<sup>(a)</sup></b>	<b>n.a.</b>	<b>85,520</b>							
Available or licensed beds per 1,000 population <sup>(c)</sup>									
Public hospitals	2.7	2.4	2.4	2.4	3.1	2.3	2.6	2.9	2.6
Public acute hospitals	2.6	2.4	2.3	2.3	2.9	2.3	2.6	2.9	2.5
Public psychiatric hospitals	0.1	0.0	0.1	0.1	0.1	0.0	..	..	0.1
Private hospitals <sup>(b)</sup>	n.a.	1.2							
Private free-standing day hospital facilities	n.a.	0.1							
Other private hospitals	0.9	1.2	1.3	n.a.	1.1	n.a.	n.a.	n.a.	1.1
<b>Total beds per 1,000 population<sup>(c)</sup></b>	<b>n.a.</b>	<b>3.8</b>							

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

(b) Source: Australian Bureau of Statistics' *Private hospitals Australia 2009–10* (ABS 2011).

(c) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 31 December 2010.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods.

Abbreviation: ..—not applicable, n.a.—not available.

## Public hospitals

### How diverse are public hospitals?

**Public hospital peer groups** were designed to explain variability in hospital costs by grouping hospitals according to the type and volume of their admitted patient activity and their geographical location. A range of other statistics are presented about public hospital peer groups in chapters 3, 5 and 10. Detailed information on the public hospital peer group classification is included in Appendix 2.

The 752 public hospitals are very diverse in size and type of services they provide for admitted and non-admitted patients (Table 4.5). The diversity of admitted patient services provided by each type can be gauged by the average number of Australian Refined Diagnosis Related Groups (AR-DRGs) reported.

In 2010–11, there were:

- 78 *Principal referral* hospitals—located mainly in major cities, with at least one in each state and territory. They provided a wide range of services, including emergency department, outpatient and admitted patient services (including 5 or more separations for 431 AR-DRGs on average). These hospitals accounted for a total of 3.6 million separations or 66% of the total for public hospitals (Figure 4.1), and for 11.5 million days or 62% of the total for public hospitals (Figure 4.2).
- 11 *Specialist women's and children's* hospitals—located in Sydney, Melbourne, Brisbane, Perth and Adelaide. They delivered an average of over 21,429 separations per hospital, specialising in maternity and other specialist services for women, and/or specialist paediatric services.
- 41 *Large* hospitals—24 in major cities and 17 in regional and remote areas. They provided emergency department, outpatient and admitted patient services, generally with a range of activities less than for the *Principal referral* hospitals (5 or more separations for 249 AR-DRGs), with an average of 16,094 separations per hospital.
- 88 *Medium* hospitals—22 in major cities and 66 in regional areas. They delivered an average of 6,154 separations per hospital (with a narrower range of services than the *Large* hospitals), most provided emergency services (rather than formal emergency departments) and some had outpatient clinics.
- 155 *Small acute* hospitals—115 in regional areas and 41 in remote areas. They delivered mainly acute care for admitted patients, with an average of 1,294 separations per hospital in the year, with a relatively narrow range of services (5 or more separations for an average of 49 AR-DRGs). They generally did not have emergency departments although most provided emergency services.
- 17 *Psychiatric* hospitals—specialising in the treatment and care of people with mental health problems. They were located in Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart, with 3 in regional Queensland centres.
- 8 specialist *Rehabilitation* hospitals—located in Sydney, Perth, Adelaide, Wollongong and 2 in regional areas.
- 8 specialist *Mothercraft* hospitals—located in Sydney, Melbourne, Brisbane and Canberra.
- 82 *Small non-acute* hospitals—mainly in rural and remote areas. The services they provided were mainly non-acute, so the average length of stay was longer than in the hospitals that provided mainly acute care.
- 77 *Multi-purpose services*—in regional and remote areas. These hospitals were generally combined with services for residential aged care and mainly provide sun and non-acute admitted patient care.
- 187 other hospitals, mainly small or specialist hospitals.

More information on hospital peer groups by state and territory is presented in the supplementary tables at the end of Chapter 3.

**Table 4.5: The diversity of public hospitals, 2010-11**

Hospital type	Number of hospitals												
	Location			Services provided									
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Other emergency services <sup>(b)</sup>	Outpatient clinics <sup>(c)</sup>	Elective surgery <sup>(d)</sup>	Average beds	Separations (average)	Average length of stay (days)	Non-acute care (patient days %)	AR-DRGs (5+) <sup>(e)</sup>
Principal referral	52	25	1	78	78	78	77	76	415	44,444	3.3	8.9	431
Specialist women's and children's	11	0	0	11	9	9	11	11	207	21,429	3.1	0.5	224
Large	24	16	1	41	39	39	40	33	140	16,094	2.9	14.0	249
Medium	22	66	0	88	30	73	8	50	66	6,154	3.1	25.4	134
Small acute	0	115	40	155	21	149	3	18	21	1,294	2.9	8.9	49
Psychiatric	12	5	0	17	0	0	0	0	117	608	59.5	50.1	7
Rehabilitation	6	2	0	8	0	1	1	1	63	1,095	19.5	89.4	15
Mothercraft	8	0	0	8	0	0	0	0	27	1,755	3.7	0.0	11
Small non-acute	14	55	13	82	4	64	1	5	32	872	10.0	71.5	33
Multi-purpose services	0	45	32	77	0	69	0	0	12	350	4.2	34.0	14
Other	32	87	68	187	6	120	0	0	11	273	9.6	79.8	5
<b>Total</b>	<b>181</b>	<b>418</b>	<b>155</b>	<b>752</b>	<b>187</b>	<b>602</b>	<b>141</b>	<b>194</b>	<b>77</b>	<b>7,031</b>	<b>3.5</b>	<b>17.1</b>	<b>94</b>

(a) This is the number of hospitals reporting episode-level non-admitted patient emergency department care data to the National Non-admitted Patient Emergency Department Care Database.

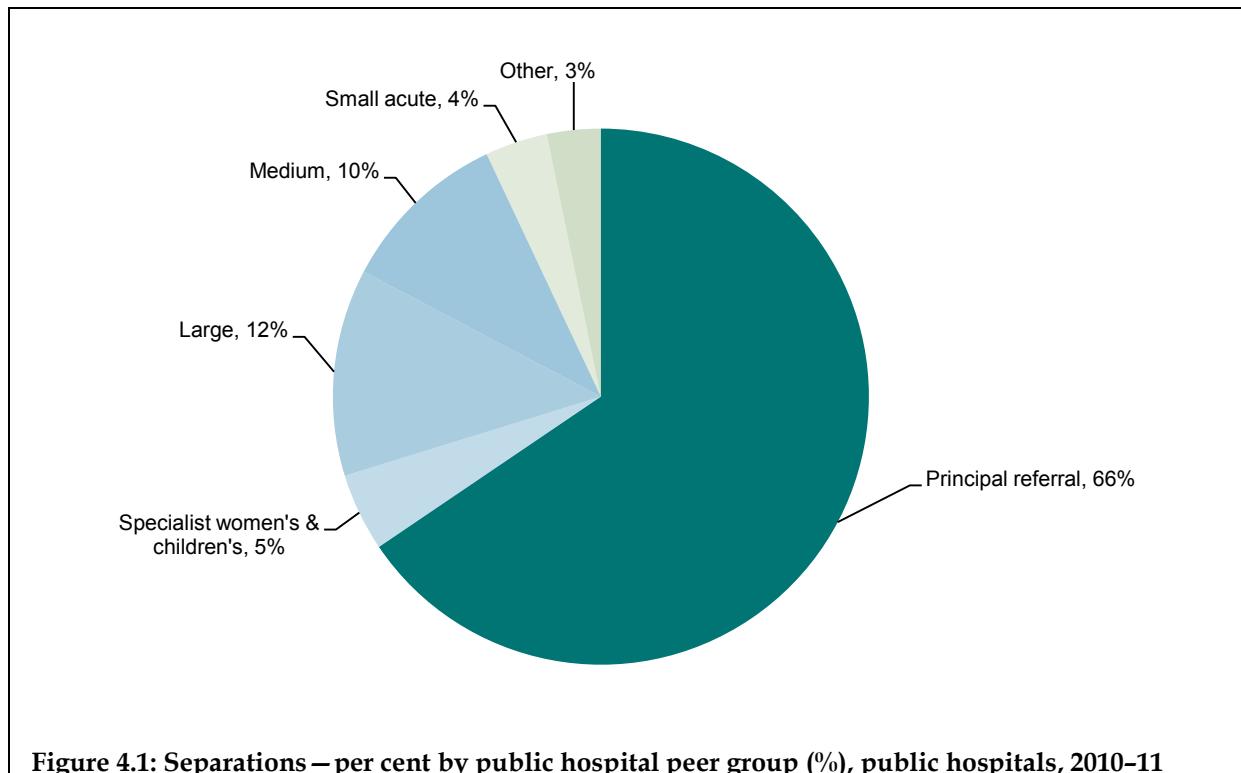
(b) This is the number of hospitals reporting establishment-level emergency occasions of service data to the National Public Hospital Establishments Database.

(c) This is the number of hospitals reporting outpatient clinic-level non-admitted patient data to the National Outpatient Care Database.

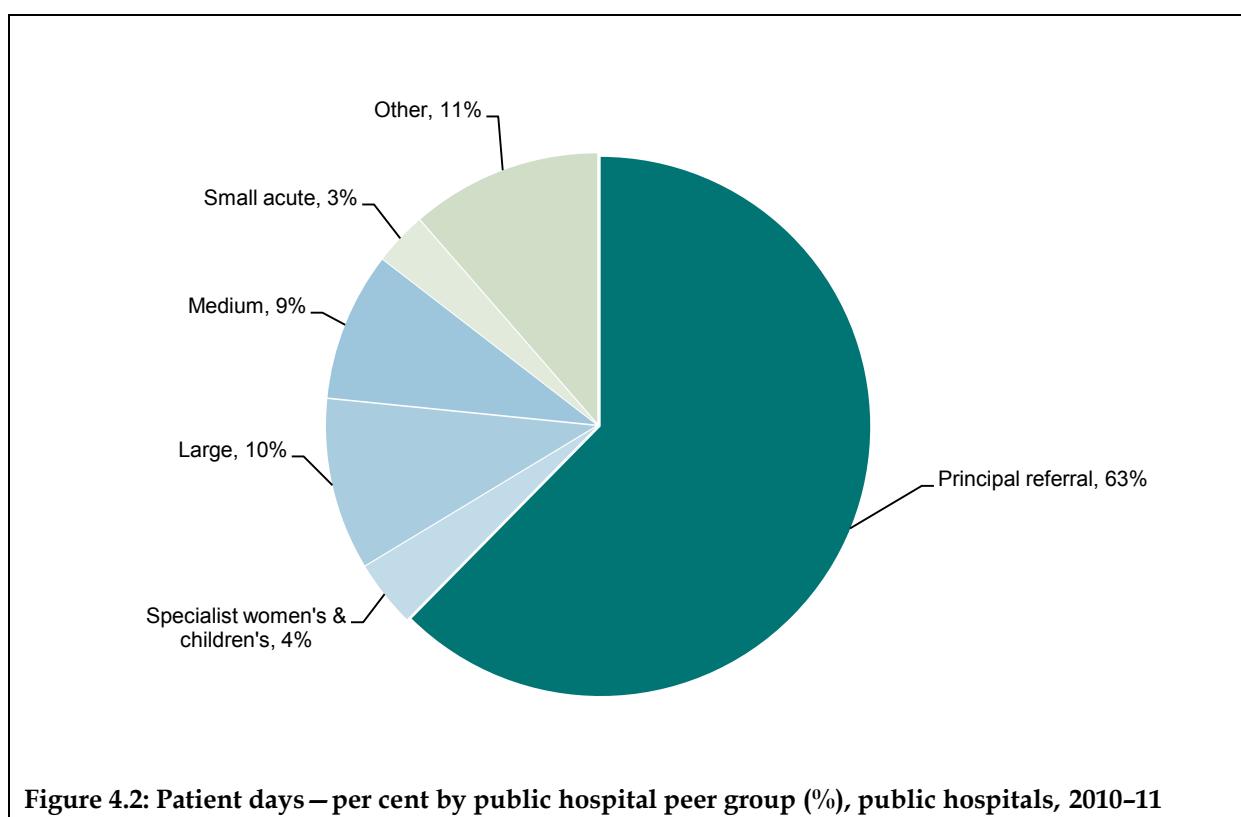
(d) This is the number of hospitals reporting data to the National Elective Surgery Waiting Times Data Collection.

(e) This is the average number of AR-DRGs for which there were at least five separations.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods.



**Figure 4.1: Separations – per cent by public hospital peer group (%), public hospitals, 2010–11**



**Figure 4.2: Patient days – per cent by public hospital peer group (%), public hospitals, 2010–11**

## How many public hospital beds?

Grouping hospitals by number of available beds showed that the majority of hospitals were very small (Table 4.6). This was particularly the case in jurisdictions that covered large geographical areas. The majority of beds were in larger hospitals and in more densely populated areas. The largest hospital had 1,011 beds and was located in Brisbane. Over 71% of hospitals had 50 or fewer beds.

The proportion of hospital beds in different size hospitals varied by jurisdiction. The Northern Territory did not have any public hospitals with either more than 500 beds or 10 beds or fewer. For Victoria, almost 38% of hospital beds were in hospitals with more than 200 to 500 beds (Table S4.1)

**Table 4.6: Number of public acute and psychiatric hospitals and average available beds, by hospital size, 2010–11**

Hospital size	Hospitals	Proportion of total public hospitals (%)	Total average available beds	Proportion of total public hospital beds (%)
10 or fewer beds	212	28.2	930	1.6
More than 10 to 50 beds	322	42.8	7,862	13.6
More than 50 to 100 beds	73	9.7	5,263	9.1
More than 100 to 200 beds	65	8.6	9,936	17.2
More than 200 to 500 beds	56	7.4	17,303	29.9
More than 500 beds	24	3.2	16,478	28.5
<b>Total</b>	<b>752</b>	<b>100.0</b>	<b>57,772</b>	<b>100.0</b>

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in Table S4.1 at the end of this chapter.

## Where are public hospitals located?

The remoteness area classification is used in Table 4.7 to present information on the geographical distribution of public hospitals and available beds, and on the number of available beds per 1,000 population. The highest number of hospitals was in *Outer regional* areas (225) and the largest number of beds was in *Major cities* (37,902 beds, 66% of total).

In 2010–11, there were 2.6 public hospital beds per 1,000 population. The number of public hospital beds per 1,000 population varied across remoteness areas. The ratio of available beds to the population does not necessarily indicate the accessibility of hospital services. A hospital can provide services for patients who usually reside in other areas of the state or territory, or in other jurisdictions. The patterns of bed availability across regions may also reflect a number of factors including the availability of other health-care services and patterns of disease and injury.

**Table 4.7: Number of hospitals, average available beds and number of average available beds per 1,000 population<sup>(a)</sup>, by remoteness area, public acute and psychiatric hospitals, 2010–11**

Remoteness area	Hospitals	Average available beds	Available beds per 1,000 population resident in area <sup>(a)</sup>
Major cities	179	37,902	2.5
<i>Total regional</i>	<b>418</b>	<b>17,935</b>	<b>2.8</b>
Inner regional	193	11,505	2.6
Outer regional	225	6,430	3.1
<i>Total remote</i>	<b>155</b>	<b>1,933</b>	<b>3.9</b>
Remote	79	1,383	4.2
Very Remote	76	551	3.2
<b>Total</b>	<b>752</b>	<b>57,772</b>	<b>2.6</b>

(a) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 30 June 2010.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in Table S4.2 at the end of this chapter.

## How much expenditure and revenue?

### Public hospital recurrent expenditure

**Salary expenditure** includes salaries and wages, payments to staff on paid leave, workers compensation leave and salaries paid to contract staff where the contract was for the supply of labour and where full-time equivalent staffing data were available.

**Non-salary expenditure** includes items such as payments to visiting medical officers, superannuation payments, drug supplies, medical and surgical supplies (which includes consumable supplies only and not equipment purchases), food supplies, domestic services, repairs and maintenance, patient transport, administrative expenses, interest payments, depreciation and other recurrent expenditure.

Information on gross recurrent expenditure, categorised into *Total recurrent expenditure* and *Total revenue*, is presented in Table 4.8.

Between 2006–07 and 2010–11, public hospital recurrent expenditure increased by an average of 5.9% per year in constant price terms (adjusted for inflation). The average annual increase in public hospital recurrent expenditure was highest for Queensland (10.0%).

Over the same period, public hospital revenue increased by an average of 9.8% per year (adjusted for inflation), ranging from an average decrease of 7.8% per year for Tasmania to an average increase of 18.6% per year for South Australia (Table 4.8). Between 2009–10 and 2010–11, public hospital revenue decreased for both Queensland and Tasmania.

**Table 4.8: Recurrent expenditure<sup>(a)</sup> and revenue (\$ million, constant prices<sup>(b)</sup>) public hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Total recurrent expenditure, constant prices (\$ million)</b>							
New South Wales <sup>(c)</sup>	10,210	10,509	10,738	10,793	11,554	3.1	7.1
Victoria	7,508	7,946	8,323	8,639	9,225	5.3	6.8
Queensland <sup>(d)</sup>	4,963	5,585	6,053	6,548	7,262	10.0	10.9
Western Australia	2,890	3,152	3,427	3,572	3,918	7.9	9.7
South Australia	2,218	2,526	2,595	2,675	2,935	7.3	9.7
Tasmania	677	681	792	833	880	6.7	5.5
Australian Capital Territory	519	567	616	640	697	7.6	8.9
Northern Territory	406	420	465	478	515	6.1	7.8
<b>All public hospitals</b>	<b>29,391</b>	<b>31,385</b>	<b>33,010</b>	<b>34,178</b>	<b>36,985</b>	<b>5.9</b>	<b>8.2</b>
<b>Total revenue, constant prices (\$ million)</b>							
New South Wales	1,152	1,182	1,166	1,353	1,709	10.4	26.4
Victoria	794	840	929	998	1,092	8.3	9.4
Queensland <sup>(d)</sup>	334	398	522	599	537	12.6	-10.3
Western Australia	178	188	206	208	238	7.5	14.6
South Australia	108	167	156	176	213	18.6	21.2
Tasmania	79	81	85	59	57	-7.8	-2.4
Australian Capital Territory	41	48	57	53	54	7.4	1.3
Northern Territory	16	17	20	23	25	12.4	10.4
<b>All public hospitals</b>	<b>2,700</b>	<b>2,922</b>	<b>3,139</b>	<b>3,468</b>	<b>3,925</b>	<b>9.8</b>	<b>13.2</b>

(a) Recurrent expenditure does not include the purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals.

(b) Expressed in terms of prices in the reference year 2010–11. The ABS Government Final Consumption Expenditure, State and Local – Hospitals & Nursing Homes deflator was used for public hospitals. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.

(c) New South Wales hospital expenditure recorded against special purposes and trust funds was not included.

(d) Pathology services were purchased from a state-wide pathology service rather than being provided by hospital employees in Queensland.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in Table S4.3 at the end of this chapter.

Nationally, total recurrent expenditure by public hospitals, excluding depreciation, was almost \$37 billion in 2010–11 (Table 4.9). Excluding payments to *Visiting medical officers* and payments for outsourced services, salary payments accounted for 62% of the \$37 billion spent within the public hospital system (Table 4.9).

Expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions. In 2010–11, depreciation ranged from 1% of total expenditure in the Northern Territory to over 6% in Victoria.

**Table 4.9: Recurrent expenditure(a) (\$ million), public acute and psychiatric hospitals, states and territories, 2010–11**

	NSW <sup>(b)</sup>	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
Salary expenditure	6,768	5,863	4,837	2,449	1,732	544	414	352	22,959
Non-salary expenditure	5,207	3,994	2,690	1,583	1,303	359	305	168	15,610
<b>Total recurrent expenditure including depreciation</b>	<b>11,975</b>	<b>9,857</b>	<b>7,527</b>	<b>4,033</b>	<b>3,035</b>	<b>903</b>	<b>719</b>	<b>520</b>	<b>38,569</b>
Public acute hospitals	11,716	9,807	7,390	3,942	2,957	901	719	520	37,951
Public psychiatric hospitals	259	50	138	91	78	2	..	..	618
<b>Total recurrent expenditure excluding depreciation</b>	<b>11,554</b>	<b>9,225</b>	<b>7,262</b>	<b>3,918</b>	<b>2,935</b>	<b>880</b>	<b>697</b>	<b>515</b>	<b>36,985</b>
Public acute hospitals	11,304	9,177	7,130	3,829	2,859	877	697	515	36,387
Public psychiatric hospitals	250	48	132	89	76	2	..	..	598

(a) Recurrent expenditure does not include the purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals.

(b) New South Wales hospital expenditure recorded against special purposes and trust funds was not included.

(c) Pathology services were purchased from a state-wide pathology service rather than being provided by hospital employees in Queensland.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in Table S4.3 at the end of this chapter.

Abbreviation: ..—not applicable.

## Public hospital revenue

**Revenue** is reported against three categories: *Patient revenue*, *Recoveries*, and *Other revenue*. **Recoveries** are income from the use of hospital facilities by salaried medical officers or private practitioners exercising their rights of private practice, and other recoveries. **Other revenue** includes investment income, income from charities, bequests and accommodation provided to visitors.

Australian public hospitals received \$3.9 billion in revenue in 2010–11 (Table 4.10). This was equivalent to 10.6% of total recurrent expenditure (excluding depreciation). Revenue as a proportion of total expenditure varied among the states and territories, ranging from 4.9% in the Northern Territory to 14.8% in New South Wales.

**Table 4.10: Revenue (\$ million), public acute and psychiatric hospitals, states and territories, 2010–11**

	NSW	Vic	Qld <sup>(a)</sup>	WA	SA <sup>(b)</sup>	Tas	ACT	NT	Total
Patient revenue	813	344	387	144	181	40	39	15	1,963
Recoveries	424	135	62	45	n.a.	10	13	10	699
Other revenue	472	613	87	49	32	7	3	0	1,264
<b>Total revenue</b>	<b>1,709</b>	<b>1,092</b>	<b>537</b>	<b>238</b>	<b>213</b>	<b>57</b>	<b>54</b>	<b>25</b>	<b>3,925</b>
Public acute	1,695	1,091	530	237	211	57	54	25	3,900
Public psychiatric	15	1	7	1	2	0	..	..	25

(a) Patient revenue in Queensland includes revenue for items such as pharmacy and ambulance, which may be considered to be *Recoveries*.

(b) South Australia did not identify any *Recoveries* due to a change in data recording practices.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods

Abbreviations: ..—not applicable, n.a.—not available.

## How many staff in public hospitals?

Information about the number of **staff** is summarised against six categories: salaried medical officers, nurses (including registered, enrolled and student nurses), other personal care staff, diagnostic and allied health professionals, administrative and clerical staff, and domestic and other staff.

Nationally, over 264,000 full-time equivalent staff were employed in the public hospital sector in 2010–11. *Nurses* accounted for 45% (over 119,000) of public hospital staff and there were around 32,500 *Salaried medical officers*, representing about 12% of the public hospital labour force (Table 4.11).

The average salary for full-time equivalent *Nurses* in 2010–11 was around \$83,700 nationally (Table 4.11), which was an increase of 2.1% compared with the average salary of \$82,000 in 2009–10 (AIHW 2011a). In 2010–11, the average salary for full-time equivalent *Salaried medical officers* was around \$170,000 which was a 1.2% increase over the previous year. Similar information for states and territories is available in Table S4.4.

The collection of data by staffing category was not consistent among states and territories and may explain some of the variation on average salaries reported.

Different reporting practices and use of outsourcing services with a large labour-related component (such as food services, domestic services and information technology) can have a substantial impact on staffing figures and may also explain some of the variation in average salaries reported between jurisdictions.

For medical officers, for example, this may be reflected in the variation in the proportion of total expenditure that was reported as being for visiting medical officers (VMOs) who were contracted by hospitals to provide services to public patients and paid on a sessional or fee-for-service basis (Table S4.3). Variations in the outsourcing arrangements may also be reflected in variations in other recurrent expenditure categories reported in tables 4.9 and S4.3.

**Table 4.11: Average full-time equivalent staff<sup>(a)</sup> and average salaries, public acute and psychiatric hospitals, 2010–11**

	Full-time equivalent staff numbers	Average salaries (\$)
Salaried medical officers	32,514	170,009
Total nurses	119,126	83,705
Other personal care staff	2,319	66,344
Diagnostic and allied health professionals	36,993	77,112
Administrative and clerical staff <sup>(b)</sup>	41,073	60,715
Domestic and other staff	31,602	62,014
<b>Total staff</b>	<b>263,623</b>	<b>87,090</b>

(a) Where average full-time equivalent staff numbers were not available, staff numbers at 30 June 2011 were used. Staff contracted to provide products (rather than labour) are not included.

(b) *Administrative and clerical staff* may include staff working to support clinicians, such as ward clerks.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. See Table S4.4 for more information by state and territory.

## What specialised services were provided?

### Specialised service units

In 2010–11, the most common specialised services offered by hospitals were *Domiciliary care service*, services provided by *Nursing home care units* and *Obstetric/maternity service* (Table 4.12).

The existence of a specialised unit does not necessarily imply the delivery of large numbers of services in that unit. For example, there were some smaller hospitals with an *Obstetric/maternity service* unit that had less than one delivery a week on average. There were also a few hospitals that did not report having an obstetric unit but reported one or more deliveries a day.

Data on specialised services were not available for a few hospitals so the services may be undercounted.

**Table 4.12: Number of public acute hospitals with selected specialised services, 2010–11**

Specialised service unit	Major cities	Regional	Remote	Total <sup>(a)</sup>
Domiciliary care service	83	233	52	<b>382</b>
Nursing home care unit	13	188	53	<b>269</b>
Obstetric/maternity service	65	141	23	<b>240</b>
Maintenance renal dialysis centre	71	77	18	<b>179</b>
Rehabilitation unit	86	61	2	<b>152</b>
Oncology unit	66	55	2	<b>128</b>
Intensive care unit (level III)	53	26	1	<b>80</b>
Major plastic/reconstructive surgery unit	42	3	0	<b>45</b>
Neonatal intensive care unit (level III)	21	7	0	<b>28</b>
In-vitro fertilisation unit	7	1	0	<b>9</b>

(a) Total includes specialised services reported by health service networks, for which the remoteness was not specified.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in Table S4.5.

### Service Related Groups

The Service Related Group (SRG) classification is based on aggregations of AR-DRGs, and categorises admitted patient episodes into groups representing clinical divisions of hospital activity. SRGs are used to assist in planning services, analysing and comparing hospital activity, examining patterns of service needs and access, and projecting potential trends in services. The method to assign records to SRGs largely involves aggregations of AR-DRG information. However, the assignment of some separations to SRGs is based on other information, such as procedures, diagnoses and care types. Separations may also be assigned to certain specialist SRGs depending on whether or not the hospital had a specialist neurosurgery, perinatology (neonatal intensive care unit) or cardiothoracic unit, as appropriate, as reported to the NPHED. For more information on the method used to allocate admitted patient records to SRGs, see Appendix 4.

Table 4.13 presents the number of public hospitals reporting more than 360 patient days for selected SRGs by remoteness area of the hospital. This has been included as an indicative measure of the number of specialty units. More detailed statistics are available in Table A4.1 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

**Table 4.13: Number of public hospitals reporting more than 360 patient days for the 20 most common Service Related Groups, by remoteness area of hospital, 2010–11**

Service Related Group	Major cities	Regional	Remote	Australia
Non subspecialty—medicine	114	278	37	<b>429</b>
Respiratory medicine	97	246	31	<b>374</b>
Orthopaedics	106	175	22	<b>303</b>
Cardiology	91	186	13	<b>290</b>
Rehabilitation	109	164	12	<b>285</b>
Gastroenterology	98	159	15	<b>272</b>
Non subspecialty—surgery	100	152	15	<b>267</b>
Maintenance	69	149	38	<b>256</b>
Neurology	92	145	8	<b>245</b>
Psychiatry—acute	106	124	13	<b>243</b>
Obstetrics	67	151	19	<b>237</b>
Renal dialysis	63	104	12	<b>179</b>
Diagnostic gastrointestinal endoscopy	82	83	1	<b>166</b>
Upper gastrointestinal surgery	80	80	6	<b>166</b>
Neurosurgery	81	77	7	<b>165</b>
Urology	84	72	4	<b>160</b>
Oncology	72	75	5	<b>152</b>
Colorectal surgery	76	72	2	<b>150</b>
Gynaecology	74	68	7	<b>149</b>
Plastic and reconstructive surgery	74	66	6	<b>146</b>

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is available in tables A4.1 to A4.5 at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## Additional information

Tables A4.2 and A4.3 (accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>) summarise the number of separations in each SRG category by state and territory for all public and private hospitals respectively.

Tables A4.4 and A4.5 (accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>) summarise the number of patient days in each SRG category by state and territory for all public and private hospitals respectively.

## **Supplementary tables**

The following supplementary tables provide more information on public hospital resources by state and territory.

### **Box 4.3 Notes – Chapter 4 supplementary tables**

#### **Table S4.2:**

- (a) The number of average available beds presented here may differ from the counts published elsewhere. For example counts based on bed numbers at a specified date such as 30 June may differ from the average available beds over the reporting period.
- (b) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 30 June 2011.
- (c) Remoteness area of hospital was based on the ABS 2006 remoteness area classification.
- (d) The count of hospitals in Victoria is a count of the campuses that report data separately to the National Hospital Morbidity Database.
- (e) The count of beds in Queensland was based on data as at June 2011.

**Table S4.1: Number of public acute and psychiatric hospitals and average available beds, by hospital size, states and territories, 2010–11**

	NSW	Vic <sup>(b)</sup>	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Hospital size<sup>(a)</sup></b>									
10 or fewer beds	29	40	74	43	11	14	1	0	212
More than 10 to 50 beds	118	50	62	31	54	5	0	2	322
More than 50 to 100 beds	30	22	10	3	6	1	0	1	73
More than 100 to 200 beds	22	19	9	10	3	1	0	1	65
More than 200 to 500 beds	18	16	10	5	4	1	1	1	56
More than 500 beds	9	4	5	2	2	1	1	0	24
<b>Total hospitals</b>	<b>226</b>	<b>151</b>	<b>170</b>	<b>94</b>	<b>80</b>	<b>23</b>	<b>3</b>	<b>5</b>	<b>752</b>
<b>Available beds</b>									
10 or fewer beds	122	209	224	239	51	76	10	0	930
More than 10 to 50 beds	3,026	1,220	1,394	761	1,328	81	0	52	7,862
More than 50 to 100 beds	2,146	1,596	697	226	452	87	0	60	5,263
More than 100 to 200 beds	3,278	2,839	1,505	1,496	519	116	0	183	9,936
More than 200 to 500 beds	5,473	5,065	3,111	1,469	1,262	333	223	367	17,303
More than 500 beds	5,887	2,480	4,186	1,302	1,428	503	693	0	16,478
<b>Total available beds</b>	<b>19,931</b>	<b>13,408</b>	<b>11,117</b>	<b>5,492</b>	<b>5,040</b>	<b>1,196</b>	<b>926</b>	<b>662</b>	<b>57,772</b>

(a) Size is based on the average number of available beds.

(b) The count of hospitals in Victoria is a count of the campuses that report data separately to the National Hospital Morbidity Database.

(c) The count of beds in Queensland was based on data as at 30 June 2011.

*Note:* See boxes 4.1 and 4.2 for notes on data limitations and methods.

*Abbreviation:* . .—not applicable.

Table S4.2: Number of hospitals, average available beds<sup>(a)</sup> and number of average available beds per 1,000 population resident in area<sup>(b)</sup>, by remoteness area<sup>(c)</sup>, public acute and psychiatric hospitals, states and territories, 2010–11

Remoteness area	NSW	Vic <sup>(d)</sup>	Qld <sup>(e)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Major cities	67	54	18	22	15	..	3	..	179
<i>Total regional</i>	<b>142</b>	<b>95</b>	<b>81</b>	<b>37</b>	<b>43</b>	<b>19</b>	<b>0</b>	<b>1</b>	<b>418</b>
Inner regional	77	59	27	9	15	6	0	..	193
Outer regional	65	36	54	28	28	13	..	1	225
<i>Total Remote</i>	<b>17</b>	<b>2</b>	<b>71</b>	<b>35</b>	<b>22</b>	<b>4</b>	..	<b>4</b>	<b>155</b>
Remote	12	2	27	21	13	2	..	2	79
Very remote	5	0	44	14	9	2	..	2	76
<b>Total all remoteness areas</b>	<b>226</b>	<b>151</b>	<b>170</b>	<b>94</b>	<b>80</b>	<b>23</b>	<b>3</b>	<b>5</b>	<b>752</b>
<b>Available beds<sup>(a)</sup></b>									
Major cities	13,783	9,690	6,166	3,975	3,362	..	926	..	37,902
<i>Total regional</i>	<b>5,938</b>	<b>3,704</b>	<b>4,377</b>	<b>1,103</b>	<b>1,272</b>	<b>1,174</b>	<b>0</b>	<b>367</b>	<b>17,935</b>
Inner regional	4,343	2,944	2,349	498	422	949	0	..	11,505
Outer regional	1,595	760	2,028	604	850	225	..	367	6,430
<i>Total Remote</i>	<b>210</b>	<b>14</b>	<b>574</b>	<b>414</b>	<b>404</b>	<b>22</b>	..	<b>295</b>	<b>1,933</b>
Remote	199	14	323	287	305	12	..	243	1,383
Very remote	11	0	251	128	99	10	..	52	551
<b>Total all remoteness areas</b>	<b>19,931</b>	<b>13,408</b>	<b>11,117</b>	<b>5,492</b>	<b>5,040</b>	<b>1,196</b>	<b>926</b>	<b>662</b>	<b>57,772</b>
<b>Number of available beds per 1,000 population resident in area<sup>(b)</sup></b>									
Major cities	2.6	2.3	2.3	2.4	2.8	..	2.6	..	2.5
<i>Total regional</i>	<b>3.1</b>	<b>2.7</b>	<b>2.6</b>	<b>2.2</b>	<b>3.3</b>	<b>2.4</b>	..	<b>2.9</b>	<b>2.8</b>
Inner regional	3.0	2.7	2.4	1.6	2.1	2.9	0.0	..	2.6
Outer regional	3.5	2.9	3.0	2.9	4.6	1.3	..	2.9	3.1
<i>Total Remote</i>	<b>5.6</b>	<b>3.0</b>	<b>4.2</b>	<b>2.8</b>	<b>6.7</b>	<b>2.1</b>	..	<b>2.9</b>	<b>3.9</b>
Remote	6.0	3.0	3.7	2.9	6.6	1.5	..	5.0	4.2
Very remote	2.4	..	4.9	2.6	7.0	3.9	..	1.0	3.2
<b>Total all remoteness areas</b>	<b>2.8</b>	<b>2.4</b>	<b>2.5</b>	<b>2.4</b>	<b>3.1</b>	<b>2.4</b>	<b>2.6</b>	<b>2.9</b>	<b>2.6</b>

Note: See boxes 4.1, 4.2 and 4.3 for notes on data limitations, methods and footnotes for this table.

Abbreviation: ..—not applicable.

**Table S4.3: Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2010–11**

Recurrent expenditure category	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld <sup>(d)</sup>	WA	SA <sup>(e)</sup>	Tas <sup>(f)</sup>	ACT	NT	Total
<b>Salary and wages expenditure</b>									
Salaried medical officers	1,418,185	1,296,215	1,311,844	688,912	468,453	149,444	105,470	89,069	5,527,592
Registered nurses	n.a.	n.a.	1,806,047	922,807	686,813	214,855	170,077	149,890	n.a.
Enrolled nurses	n.a.	n.a.	180,392	38,461	119,112	11,313	19,270	9,342	n.a.
Student nurses	..	..	2,443	..	4,390	3,290	..	..	10,123
<i>Total nurses</i>	<i>3,162,028</i>	<i>2,470,818</i>	<i>1,989,014</i>	<i>961,268</i>	<i>810,315</i>	<i>229,458</i>	<i>189,346</i>	<i>159,232</i>	<i>9,971,479</i>
Other personal care staff	n.a.	n.a.	71,697	n.a.	69,287	n.a.	12,137	705	153,825
Diagnostic and allied health professionals	865,346	950,719	503,054	241,463	163,173	47,026	48,322	33,526	2,852,629
Administrative and clerical staff <sup>(g)</sup>	802,416	583,356	507,917	304,340	150,085	64,779	49,437	31,392	2,493,721
Domestic and other staff	519,656	562,112	453,598	253,508	70,737	53,335	9,002	37,828	1,959,777
<b>Total salary and wages expenditure</b>	<b>6,767,631</b>	<b>5,863,220</b>	<b>4,837,124</b>	<b>2,449,491</b>	<b>1,732,051</b>	<b>544,042</b>	<b>413,714</b>	<b>351,752</b>	<b>22,959,024</b>
<b>Non-salary expenditure</b>									
Payments to visiting medical officers	581,793	145,333	96,148	124,694	120,129	452	38,077	12,051	1,118,677
Superannuation payments	615,344	503,321	416,467	205,669	155,127	59,577	52,426	0	2,007,930
Drug supplies	600,031	495,231	348,769	208,703	140,877	47,928	19,110	22,385	1,883,034
Medical and surgical supplies	1,270,035	807,654	778,982	251,897	197,673	118,052	62,132	38,177	3,524,602
Food supplies	91,482	95,303	52,582	28,466	21,901	7,819	5,186	4,457	307,197
Domestic services	385,773	213,879	162,021	100,283	57,247	17,473	25,763	12,525	974,964
Repairs and maintenance	264,693	168,571	137,580	146,873	67,440	11,380	8,649	12,956	818,141
Patient transport	95,482	54,746	31,962	44,743	20,183	6,760	1,461	22,205	277,543
Administrative expenses	678,183	578,430	399,792	178,852	95,692	41,690	51,825	16,690	2,041,155
Interest payments	6,299	0	0	3,649	4,698	0	129	0	14,774
Depreciation	420,591	632,448	265,438	115,021	100,056	23,740	22,555	4,675	1,584,525
Other recurrent expenditure	197,530	299,053	574	174,334	321,885	24,403	18,068	21,765	1,057,611
<b>Total non-salary expenditure excluding depreciation</b>	<b>4,786,646</b>	<b>3,361,522</b>	<b>2,424,876</b>	<b>1,468,161</b>	<b>1,202,852</b>	<b>335,534</b>	<b>282,825</b>	<b>163,211</b>	<b>14,025,629</b>
<b>Total non-salary expenditure including depreciation</b>	<b>5,207,237</b>	<b>3,993,971</b>	<b>2,690,314</b>	<b>1,583,182</b>	<b>1,302,908</b>	<b>359,275</b>	<b>305,380</b>	<b>167,886</b>	<b>15,610,154</b>

(continued)

**Table S4.3 (continued): Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2010–11**

Recurrent expenditure category	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld <sup>(d)</sup>	WA	SA <sup>(e)</sup>	Tas <sup>(f)</sup>	ACT	NT	Total
<b>Total expenditure excluding depreciation</b>	11,554,277	9,224,743	7,262,000	3,917,652	2,934,903	879,577	696,539	514,962	<b>36,984,653</b>
Public acute hospitals	11,304,020	9,176,538	7,130,151	3,828,706	2,858,550	877,433	696,539	514,962	<b>36,386,900</b>
Psychiatric hospitals	250,257	48,205	131,848	88,946	76,353	2,143	..	..	<b>597,753</b>
<b>Total expenditure including depreciation</b>	11,974,868	9,857,191	7,527,438	4,032,673	3,034,959	903,317	719,094	519,638	<b>38,569,178</b>
Public acute hospitals	11,716,271	9,807,205	7,389,794	3,941,546	2,956,661	901,167	719,094	519,638	<b>37,951,377</b>
Psychiatric hospitals	258,597	49,986	137,643	91,127	78,298	2,150	..	..	<b>617,802</b>

(a) Recurrent expenditure does not include the purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals.

(b) New South Wales hospital expenditure recorded against special purposes and trust funds is not included. *Other personal care staff* are included in *Diagnostic and allied health professionals* and *Domestic and other staff*. New South Wales was unable to provide information for each nurse category, although data on *Total nurses* were provided.

(c) Victorian *Other personal care staff* are included in *Domestic and other staff*. Victoria was unable to provide information for each nurse category, although data on *Total nurses* were provided.

(d) Pathology services were purchased from a state-wide pathology service rather than being provided by hospital employees in Queensland.

(e) South Australian *Interest payments* are included in *Administrative expenses*. Termination payments are included in *Other recurrent expenditure*.

(f) For Tasmania, data for *Other personal care staff* were not supplied separately and are included in other staffing categories. Data for two small hospitals in Tasmania were not supplied.

(g) *Administrative and clerical staff* may include staff working to support clinicians, such as ward clerks.

*Note:* See boxes 4.1 and 4.2 for notes on data limitations and methods.

*Abbreviations:* ..—not applicable; n.a.—not available.

**Table S4.4: Average full-time equivalent staff<sup>(a)</sup> and average salaries, public acute and psychiatric hospitals, states and territories, 2010–11**

	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld <sup>(d)</sup>	WA	SA	Tas <sup>(e)</sup>	ACT	NT	Total
<b>Full-time equivalent staff numbers</b>									
Salaried medical officers	9,418	8,139	7,056	3,173	2,647	977	671	434	32,514
Total nurses	37,451	31,238	22,465	11,102	10,379	2,801	2,140	1,550	119,126
Other personal care staff	n.a.	n.a.	1,143	n.a.	959	n.a.	208	10	2,319
Diagnostic and allied health professionals	11,010	14,330	5,377	2,838	1,901	565	593	379	36,993
Administrative and clerical staff <sup>(f)</sup>	11,596	11,754	7,439	4,531	3,442	1,095	748	468	41,073
Domestic and other staff	8,250	7,269	8,059	4,418	1,749	1,066	175	618	31,602
<b>Total staff</b>	<b>77,724</b>	<b>72,730</b>	<b>51,539</b>	<b>26,062</b>	<b>21,071</b>	<b>6,504</b>	<b>4,534</b>	<b>3,458</b>	<b>263,623</b>
<b>Average salaries (\$)</b>									
Salaried medical officers	150,590	159,261	185,911	217,145	177,006	152,978	157,232	205,195	170,009
Total nurses	84,432	79,098	88,538	86,582	78,072	81,908	88,464	102,758	83,705
Other personal care staff	n.a.	n.a.	62,744	n.a.	72,266	n.a.	58,464	73,821	66,344
Diagnostic and allied health professionals	78,600	66,344	93,549	85,069	85,843	83,238	81,476	88,496	77,112
Administrative and clerical staff <sup>(f)</sup>	69,195	49,630	68,280	67,171	43,606	59,155	66,119	67,056	60,715
Domestic and other staff	62,992	77,327	56,287	57,381	40,455	50,053	51,499	61,218	62,014
<b>Total staff</b>	<b>87,072</b>	<b>80,616</b>	<b>93,854</b>	<b>93,986</b>	<b>82,199</b>	<b>83,653</b>	<b>91,240</b>	<b>101,718</b>	<b>87,090</b>

(a) Where average full-time equivalent staff numbers were not available, staff numbers at 30 June 2011 were used. Staff contracted to provide products (rather than labour) are not included.

(b) In New South Wales, *Other personal care staff* were included in *Diagnostic and allied health professionals*, *Domestic and other staff* and *Total nurses*.

(c) For Victoria, *Other personal care staff* were included in *Domestic and other staff*.

(d) Queensland pathology services provided by staff employed by the state pathology service were not reported here.

(e) For Tasmania, data for *Other personal care staff* were not supplied separately and are included in other staffing categories. Data for two small hospitals in Tasmania were not supplied.

(f) *Administrative and clerical staff* may include staff working to support clinicians, such as ward clerks.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods.

Abbreviation: n.a.—not available.

**Table S4.5: Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2010–11**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Acute renal dialysis unit</b>	<b>23</b>	<b>14</b>	<b>16</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>67</b>
Major cities	16	13	6	4	4	..	1	..	44
Regional	7	1	10	0	0	2	0	1	21
Remote	0	0	0	1	0	0	0	1	2
<b>Acute spinal cord injury unit</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>
Major cities	4	2	1	2	1	..	0	..	10
<b>AIDS unit</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>16</b>
Major cities	8	1	1	1	1	..	1	..	13
Regional	1	0	1	0	0	0	0	0	2
Remote	0	0	0	0	0	0	0	1	1
<b>Alcohol and drug unit</b>	<b>75</b>	<b>12</b>	<b>10</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>105</b>
Major cities	23	9	4	3	2	..	1	..	42
Regional	51	2	6	0	1	0	0	0	60
Remote	1	0	0	0	0	0	0	1	2
<b>Burns unit (level III)</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>12</b>
Major cities	3	2	2	2	2	..	0	..	11
Regional	0	0	0	0	0	1	0	0	1
<b>Cardiac surgery unit</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>33</b>
Major cities	11	8	4	4	2	..	1	..	30
Regional	1	0	1	0	0	1	0	0	3
<b>Clinical genetics unit</b>	<b>14</b>	<b>9</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>32</b>
Major cities	10	9	1	3	2	..	1	..	26
Regional	4	0	1	0	0	1	0	0	6
<b>Coronary care unit</b>	<b>44</b>	<b>24</b>	<b>19</b>	<b>4</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>107</b>
Major cities	29	14	10	4	6	..	2	..	65
Regional	15	5	9	0	2	3	0	1	35
Remote	0	0	0	0	1	0	0	1	2
<b>Diabetes unit</b>	<b>21</b>	<b>21</b>	<b>13</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>71</b>
Major cities	19	17	8	6	5	..	1	..	56
Regional	2	2	5	0	0	3	0	1	13
<b>Domiciliary care service</b>	<b>161</b>	<b>92</b>	<b>25</b>	<b>56</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>382</b>
Major cities	39	28	3	6	7	..	0	..	83
Regional	113	50	13	30	27	0	0	0	233
Remote	9	0	9	20	13	0	0	1	52
<b>Geriatric assessment unit</b>	<b>73</b>	<b>40</b>	<b>2</b>	<b>23</b>	<b>14</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>157</b>
Major cities	39	26	2	6	7	..	2	..	82
Regional	32	9	0	15	6	3	0	0	65
Remote	2	0	0	2	1	0	0	0	5

(continued)

**Table S4.5 (continued): Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2010–11**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Hospice care unit</b>	<b>52</b>	<b>27</b>	<b>11</b>	<b>30</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>136</b>
Major cities	16	16	6	0	5	..	1	..	44
Regional	33	8	5	20	4	1	0	1	72
Remote	3	0	0	10	4	0	0	0	17
<b>Infectious diseases unit</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>49</b>
Major cities	13	13	7	5	4	..	1	..	43
Regional	1	0	3	0	0	1	0	0	5
Remote	0	0	0	0	0	0	0	1	1
<b>Intensive care unit (level III)</b>	<b>38</b>	<b>18</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>80</b>
Major cities	23	14	7	4	4	..	1	..	53
Regional	15	4	3	0	0	3	0	1	26
Remote	0	0	0	0	0	0	0	1	1
<b>In-vitro fertilisation unit</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>
Major cities	2	2	1	0	2	..	0	..	7
Regional	0	1	0	0	0	0	0	0	1
<b>Maintenance renal dialysis centre</b>	<b>63</b>	<b>65</b>	<b>13</b>	<b>13</b>	<b>18</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>179</b>
Major cities	24	29	4	7	6	..	1	..	71
Regional	33	24	4	4	9	2	0	1	77
Remote	6	0	5	2	2	0	0	3	18
<b>Major plastic/reconstructive surgery unit</b>	<b>13</b>	<b>13</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>45</b>
Major cities	13	13	6	5	4	..	1	..	42
Regional	0	0	2	0	0	1	0	0	3
<b>Neonatal intensive care unit (level III)</b>	<b>14</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>28</b>
Major cities	10	4	2	2	2	..	1	..	21
Regional	4	0	1	0	0	1	0	1	7
<b>Neurosurgical unit</b>	<b>13</b>	<b>8</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>35</b>
Major cities	13	8	5	3	3	..	1	..	33
Regional	0	0	1	0	0	1	0	0	2
<b>Nursing home care unit</b>	<b>81</b>	<b>75</b>	<b>7</b>	<b>53</b>	<b>43</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>269</b>
Major cities	1	11	0	1	0	..	0	..	13
Regional	68	49	3	29	32	7	0	0	188
Remote	12	0	4	23	11	3	0	0	53
<b>Obstetric/maternity service</b>	<b>77</b>	<b>55</b>	<b>40</b>	<b>30</b>	<b>28</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>240</b>
Major cities	27	16	8	8	4	..	2	..	65
Regional	49	28	26	14	20	3	0	1	141
Remote	1	0	6	8	4	0	0	4	23

(continued)

**Table S4.5 (continued): Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2010–11**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Oncology unit</b>	<b>44</b>	<b>38</b>	<b>18</b>	<b>14</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>128</b>
Major cities	21	21	8	7	7	..	2	..	66
Regional	23	12	9	6	2	3	0	0	55
Remote	0	0	1	1	0	0	0	0	2
<b>Psychiatric unit/ward</b>	<b>46</b>	<b>33</b>	<b>18</b>	<b>19</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>131</b>
Major cities	30	26	10	16	8	..	2	..	92
Regional	16	5	8	3	0	3	0	1	36
Remote	0	0	0	0	0	0	0	1	1
<b>Refractory epilepsy unit</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
Major cities	5	5	2	3	3	..	0	..	18
<b>Rehabilitation unit</b>	<b>64</b>	<b>37</b>	<b>16</b>	<b>19</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>152</b>
Major cities	35	23	8	12	6	..	2	..	86
Regional	28	11	8	7	3	3	0	1	61
Remote	1	0	0	0	0	0	0	1	2
<b>Sleep centre</b>	<b>11</b>	<b>10</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>38</b>
Major cities	11	9	5	3	4	..	0	..	32
Regional	0	0	2	0	1	2	0	0	5
<b>Specialist paediatric service</b>	<b>40</b>	<b>29</b>	<b>18</b>	<b>11</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>114</b>
Major cities	23	19	7	5	4	..	2	..	60
Regional	17	7	10	3	3	4	0	1	45
Remote	0	0	1	3	1	0	0	1	6
<b>Transplantation unit—bone marrow</b>	<b>11</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>28</b>
Major cities	11	7	4	3	1	..	1	..	27
Regional	0	0	0	0	0	1	0	0	1
<b>Transplantation unit—heart (including heart/lung)</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>
Major cities	1	2	1	2	0	..	0	..	6
<b>Transplantation unit—liver</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>
Major cities	2	2	2	2	1	..	0	..	9
<b>Transplantation unit—pancreas</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Major cities	1	1	0	0	0	..	0	..	2
<b>Transplantation unit—renal</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>
Major cities	7	1	10	0	0	2	0	1	21

(a) Excludes psychiatric hospitals. Rows for *Regional* and *Remote* with no units are omitted from the table.

(b) Data for a small number of hospitals in New South Wales were not available, so the number of services is therefore slightly under-enumerated.

(c) Data for Victoria may underestimate the number of specialised services as some small multi-campus rural services were reported at network rather than campus level. Consequently if two campuses within the group had a specialised type of service, they were counted as one.

(d) Includes hospitals for which remoteness area was not reported.

*Note:* See boxes 4.1 and 4.2 for notes on data limitations and methods.

*Abbreviation:* ..—not applicable.

# 5 Emergency department services

This chapter presents information on emergency department care in Australia's public hospitals. The chapter is particularly focused on information related to:

- total emergency services activity, including emergency departments and other emergency services
- characteristics of patients presenting to emergency departments
- emergency department waiting times
- the type of care received
- how patients arrived at, and left the emergency department.

## What data are reported?

### Emergency services

The data on emergency occasions of service include both presentations at formal emergency departments (see below) and emergency occasions of service provided through other arrangements, particularly in small and more remote hospitals.

Data on emergency occasions of service were sourced from the National Public Hospital Establishments Database (NPHED), which has essentially full coverage of public hospitals (see Appendix 1). For the purposes of this report, emergency occasions of service refer to those occasions of service reported with a type of non-admitted patient care of *Emergency services*. There were variations in the type of activity reported for emergency occasions of service. South Australia's NPHED occasions of service data excluded patients who were dead on arrival (no resuscitation attempted) and patients in country hospitals who did not wait for treatment.

Data on all emergency occasions of service reported to the NPHED are presented in Tables 5.1 and 5.3.

### Emergency department presentations

The National Non-admitted Patient Emergency Department Care Database (NNAPECD) is a compilation of episode-level data for emergency department presentations in public hospitals. The database is based on the National Minimum Data Set (NMDS) for Non-admitted patient emergency department care, as defined in the *National health data dictionary, version 14* (HDSC 2008).

Terms relevant to data for emergency department care are summarised in Box 5.1.

The scope of this NMDS in 2010–11 was non-admitted patients registered for care in emergency departments in public hospitals that were classified as either peer group A (*Principal referral and specialist women's and children's hospitals*) or peer group B (*Large hospitals*) for *Australian hospital statistics 2009–10* (AIHW 2011a). The peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see Appendix 2).

Timely provision of the NNAPECD data by state and territory health authorities allowed this information to be reported in *Australian hospital statistics 2010–11: emergency department*

*care and elective surgery waiting times* (AHS: EDES) (AIHW 2011c) in November 2011. This report presents selected headline statistics from the earlier report, as well as additional information not provided in that report because the data were not available.

For 2010–11, all states and territories provided episode-level data to the NNAPECD for all public hospitals in peer groups A and B that had emergency departments (all hospitals that were required to report episode-level data). Data were provided for 87 *Principal referral and specialist women's and children's* hospitals and 38 *Large* hospitals.

Some states and territories also provided episode-level data for public hospitals that were classified to peer groups other than A or B, and these data have been included in this chapter. Data were additionally provided for:

- 15 *Medium* hospitals, 18 *Small* hospitals and 6 *Unpeered/Other* hospitals in New South Wales
- 6 *Medium* hospitals in Victoria
- 4 *Medium* hospitals in Queensland
- 3 *Medium* hospitals and 2 *Small remote acute* hospitals in Western Australia
- 1 *Medium* hospital in South Australia
- 1 *Medium* hospital in Tasmania
- 3 *Small remote acute* hospitals in the Northern Territory.

In 2010–11, coverage for the NNAPECD (all peer group A and B hospitals) was 100%, and it provided detailed information for 81% of all public hospital emergency occasions of service, an increase from 78% in 2006–07 (Table 5.1). The proportion ranged from 68% for South Australia to 100% for the Australian Capital Territory and the Northern Territory (see Table S5.2 at the end of this chapter).

The detailed information presented for the NNAPECD data in this chapter should be interpreted with caution as the data may not be representative of emergency department presentations for hospitals which were not required to provide data for non-admitted patient emergency department care.

Data for public hospital emergency departments reporting to the NNAPECD is presented in Figures 5.1 to 5.7, Tables 5.1, 5.2, Tables 5.4 to 5.7 and supplementary tables S5.1 to S5.9.

### **Box 5.1: Summary of terms relating to non-admitted patient emergency department care**

The **triage category** indicates the urgency of the patient's need for medical and nursing care. It is usually assigned by triage nurses to patients at, or shortly after, the time of presentation to the emergency department, in response to the question: 'This patient should wait for medical assessment and treatment no longer than...?'. The National Triage Scale has five categories (as defined in the National health data dictionary, version 14 (HDSC 2008)) that incorporate the time by which the patient should receive care:

*Resuscitation*: immediate (within seconds)

*Emergency*: within 10 minutes

*Urgent*: within 30 minutes

*Semi-urgent*: within 60 minutes

*Non-urgent*: within 120 minutes.

These categories are equivalent to the Australasian Triage Scale triage categories—*Immediately life-threatening*, *Imminently life-threatening*, *Potentially life-threatening*, *Potentially serious* and *Less urgent* (respectively) (ACEM 2000).

The **type of visit** to the emergency department indicates the reason the patient presented to an emergency department.

The **episode end status** indicates the status of the patient at the end of the non-admitted patient emergency department service episode.

**Emergency presentations** include only presentations for which the type of visit was reported as *Emergency presentation*.

**Emergency department waiting time to service delivery** is 'the time elapsed for each patient from presentation in the emergency department to commencement of service by a treating medical officer or nurse' (HDSC 2008).

An emergency department care episode is considered to be **seen on time** if the waiting time to service delivery was within the time specified in the definition of the triage category. For the purpose of this report, a patient with a triage category of *Resuscitation* was considered to be seen on time if the waiting time to service delivery was less than or equal to 2 minutes.

There is some variation between jurisdictions in the criteria used to determine the proportion of *Resuscitation* patients seen on time, therefore these data may differ from those reported by individual jurisdictions.

The **median waiting time** indicates the time within which 50% of patients commenced treatment by a medical officer or a nurse.

An emergency department care episode is considered to **end in admission** if the episode end status was reported as *Admitted to this hospital*. This includes being admitted to units or beds within the emergency department.

**Box 5.2: What are the limitations of the data?**

- The NNAPEDCD provides information about occasions of service in public hospital emergency departments for hospitals that were mostly classified in peer groups A and B and located within major cities and inner regional areas. Other emergency occasions of service occur in public hospitals that do not have emergency departments, mostly in rural areas. Consequently, data for emergency department occasions of service may not be included for areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Disaggregations by socioeconomic status and remoteness should also be interpreted with caution.
- Statistics on emergency department presentations for non-admitted patients may be affected by variations in reporting practices across states and territories. Where possible, these variations have been noted in the text.
- From 2009–10, the data for the Albury Base Hospital has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria from 2009–10 whereas they were formerly reported by, and are included in statistics for New South Wales.

See Appendix 1 for more information.

**Box 5.3: What methods were used?**

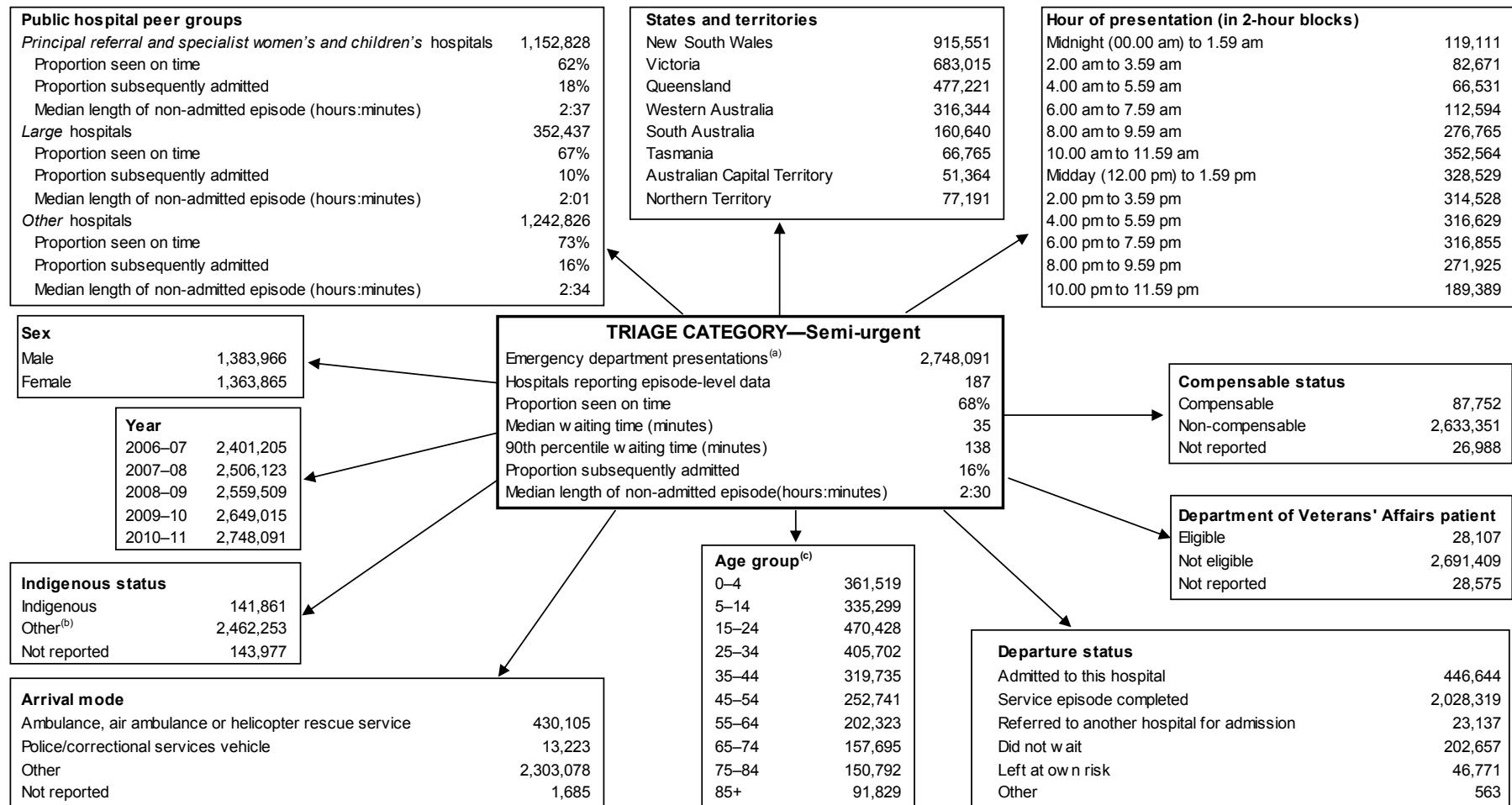
- Waiting times are determined from the time elapsed between presentation in the emergency department to commencement of service. The calculation is restricted to presentations with an *Emergency presentation* type of visit. Also, presentations were excluded if the waiting time was missing or invalid or the patient *Did not wait to be attended by a health care professional*, or was *Dead on arrival*.
- Approximately 32,000 records for which a valid waiting time was not recorded were not used (in either the numerator or denominator) to derive waiting time statistics.
- The proportion of presentations seen on time was determined as the proportion of presentations in each triage category with a waiting time less than or equal to the maximum waiting time stated in the definition (see Box 5.1). The calculation is restricted to presentations for which the waiting time could be calculated (see above). Records for which the triage category was not reported were excluded from this calculation but are included in the total number of emergency department presentations.
- The proportion of presentations ending in admission is determined as the proportion of presentations with an episode end status of *Admitted to this hospital*. The calculation is restricted to presentations with a type of visit of *Emergency presentation*.

See Appendix 2 for more information.

Figure 5.1 presents an example of the information available from the NNAPEDCD, for presentations for which patients were assigned a triage category of *Semi-urgent* (triage category 4) at the time of presentation at the emergency department.

In 2010–11:

- there were over 2.7 million emergency department presentations assigned a *Semi-urgent* triage category, reported by 187 hospitals
- slightly over two-thirds of *Semi-urgent* patients were seen on time (within 60 minutes)
- the median waiting time for *Semi-urgent* patients was 35 minutes, and 90% of *Semi-urgent* patients were seen within 138 minutes
- of *Semi-urgent* patients, 16% (about 1 in 6) were subsequently admitted to the same hospital (including admission within the emergency department)
- over half of *Semi-urgent* patients were aged 34 years or less
- the arrival mode for 16% of *Semi-urgent* patients was *Ambulance, air ambulance or helicopter rescue service*
- the number of *Semi-urgent* patients who presented to emergency departments in public hospitals increased by 14% between 2006–07 and 2010–11
- over half (58%) of *Semi-urgent* patients arrived between 8 am and 6 pm.



(a) For episodes with a type of visit of *Emergency presentation*.

(b) Includes records for which Indigenous status was not reported.

(c) Does not include records for which age was not reported.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

**Figure 5.1: Interrelationships of Semi-urgent triage category emergency department presentation with other data elements, 2010–11**

## How has activity changed over time?

Between 2006–07 and 2010–11 the number of emergency occasions of service reported to the NPHED increased from 6.7 million to 7.7 million, an average annual increase of 3.2%. Over the same period, the number of presentations reported to the NNAPECD increased by 4.0% per year, from 5.3 million to 6.2 million.

Over the same period, the proportion of occasions of service for which detailed episode-level data were available increased from 78% to 81% (Table 5.1).

**Table 5.1: Emergency department presentations and emergency occasions of service, public hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
Emergency occasions of service (NPHED)	6,741,304	7,100,618	7,171,667	7,390,459	7,651,233	3.2	3.5
Hospitals reporting to NNAPECD	164	165	184	184	186	3.2	1.1
Emergency department presentations (NNAPECD)	5,287,451	5,537,196	5,742,140	5,957,960	6,183,289	4.0	3.8
<b>Estimated proportion (%)<sup>(a)</sup></b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>	<b>0.8</b>	<b>0.2</b>

(a) The number of presentations reported to the NNAPECD divided by the number of emergency occasions of service reported to the NPHED as a percentage.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for public hospital peer groups is available in Table S5.2 at the end of this chapter.

Abbreviation: NNAPECD—National Non-Admitted Patient Emergency Department Care Database; NPHED—National Public Hospital Establishments Database.

Between 2006–07 and 2010–11, the proportion of *Emergency presentations* treated within an appropriate time, the median waiting time of *Emergency presentations* and the proportion of presentations ending in admission remained relatively stable. The time by which 90% of presentations were seen decreased over this period from 120 minutes to 114 minutes (Table 5.2).

**Table 5.2: Emergency presentation waiting time statistics, public hospital emergency departments, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11
Proportion seen on time (%)	70	69	70	70	70
Median waiting time to service delivery (minutes)	24	24	23	23	23
90th percentile waiting time to service delivery (minutes)	120	124	119	115	114
Proportion ending in admission (%)	27	27	27	27	28

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for public hospital peer groups is available in Table S5.2 at the end of this chapter.

Between 2006–07 and 2010–11, the number of emergency occasions of service reported increased by an average of 3.2% per year (Table 5.3). Over that period, Western Australia reported an average annual increase of 4.8%, and increased by 6.6% between 2009–10 and 2010–11.

The number of hospitals reporting emergency occasions of service data was relatively stable in most states and territories between 2006–07 and 2010–11. The number of reporting hospitals decreased in Tasmania between 2009–10 and 2010–11.

**Table 5.3: Emergency occasions of service, public hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(a)</sup></b>							
Occurrences of service	2,303,877	2,417,721	2,416,731	2,442,982	2,484,261	1.9	1.7
Number of hospitals	187	187	187	187	189		
<b>Victoria<sup>(a)</sup></b>							
Occurrences of service	1,468,474	1,522,573	1,537,510	1,591,819	1,654,943	3.0	4.0
Number of hospitals	90	91	90	88	90		
<b>Queensland</b>							
Occurrences of service	1,382,259	1,471,377	1,525,407	1,578,490	1,664,170	4.7	5.4
Number of hospitals	153	152	154	156	157		
<b>Western Australia</b>							
Occurrences of service	726,741	778,119	783,294	823,402	877,671	4.8	6.6
Number of hospitals	81	80	80	81	81		
<b>South Australia</b>							
Occurrences of service	515,928	544,439	531,575	554,906	562,293	2.2	1.3
Number of hospitals	70	70	73	73	73		
<b>Tasmania</b>							
Occurrences of service	124,902	142,633	146,085	159,472	154,220	5.4	-3.3
Number of hospitals	18	19	17	17	15		
<b>Australian Capital Territory</b>							
Occurrences of service	96,322	98,441	101,898	106,806	112,460	3.9	5.3
Number of hospitals	2	2	2	2	2		
<b>Northern Territory</b>							
Occurrences of service	122,801	125,315	129,167	132,582	141,215	3.6	6.5
Number of hospitals	5	5	5	5	5		
<b>Total</b>							
<b>Occurrences of service</b>	<b>6,741,304</b>	<b>7,100,618</b>	<b>7,171,667</b>	<b>7,390,459</b>	<b>7,651,233</b>	<b>3.2</b>	<b>3.5</b>
<b>Number of hospitals</b>	<b>606</b>	<b>606</b>	<b>608</b>	<b>609</b>	<b>612</b>		

(a) From 2009–10, the data for the Albury Base Hospital has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria from 2009–10 whereas they were formerly reported by, and are included in statistics for New South Wales.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for public hospital peer groups is available in Table S5.2 at the end of this chapter.

Between 2006–07 and 2010–11, the number of non-admitted patient emergency department presentations increased in all states and territories. Over this period, Western Australia, Queensland and Tasmania all had average annual increases in emergency department presentations that were higher than the national average annual increase of 4.0%.

Between 2006–07 and 2010–11, the number of hospitals reporting emergency department episode-level data increased most in New South Wales and Queensland, with Queensland having the greatest increase in the proportion of emergency occasions of services reported to the NNAPECD.

**Table 5.4: Emergency department presentations, public hospital emergency departments, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(a)</sup></b>							
Presentations	1,876,615	1,962,496	2,007,863	2,035,783	2,074,098	2.5	1.9
Number of hospitals	71	71	85	84	86		
Estimated proportion <sup>(b)</sup>	81	81	83	83	83		
<b>Victoria<sup>(a)</sup></b>							
Presentations	1,305,114	1,352,129	1,358,202	1,432,745	1,483,159	3.2	3.5
Number of hospitals	38	38	38	39	39		
Estimated proportion <sup>(b)</sup>	89	89	88	90	90		
<b>Queensland</b>							
Presentations	888,108	948,921	1,091,076	1,134,092	1,195,325	7.7	5.4
Number of hospitals	21	22	26	26	26		
Estimated proportion <sup>(b)</sup>	64	64	72	72	72		
<b>Western Australia</b>							
Presentations	523,966	560,688	566,411	600,613	649,215	5.5	8.1
Number of hospitals	16	16	16	16	17		
Estimated proportion <sup>(b)</sup>	72	72	72	73	74		
<b>South Australia</b>							
Presentations	355,295	364,549	357,417	373,700	383,992	2.0	2.8
Number of hospitals	8	8	8	8	8		
Estimated proportion <sup>(b)</sup>	69	67	67	67	68		
<b>Tasmania</b>							
Presentations	119,451	124,853	130,108	141,630	143,848	4.8	1.6
Number of hospitals	3	3	4	4	4		
Estimated proportion <sup>(b)</sup>	96	88	89	89	93		
<b>Australian Capital Territory</b>							
Presentations	96,312	98,441	101,898	106,814	112,233	3.9	5.1
Number of hospitals	2	2	2	2	2		
Estimated proportion <sup>(b)</sup>	100	100	100	100	100		
<b>Northern Territory</b>							
Presentations	122,590	125,119	129,165	132,583	141,419	3.6	6.7
Number of hospitals	5	5	5	5	5		
Estimated proportion <sup>(b)</sup>	100	100	100	100	100		
<b>Total</b>							
<b>Presentations</b>	<b>5,287,451</b>	<b>5,537,196</b>	<b>5,742,140</b>	<b>5,957,960</b>	<b>6,183,289</b>	<b>4.0</b>	<b>3.8</b>
<b>Number of hospitals</b>	<b>164</b>	<b>165</b>	<b>184</b>	<b>184</b>	<b>187</b>		
<b>Estimated proportion<sup>(b)</sup></b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>		

(a) From 2009–10, the data for the Albury Base Hospital has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria from 2009–10 whereas they were formerly reported by, and are included in statistics for New South Wales.

(b) The number of presentations reported to the NNAPEDCD divided by the number of emergency occasions of service reported to the NPHED as a percentage.

*Note:* See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for public hospital peer groups is available in Table S5.2 at the end of this chapter.

## How much activity was there in 2010–11?

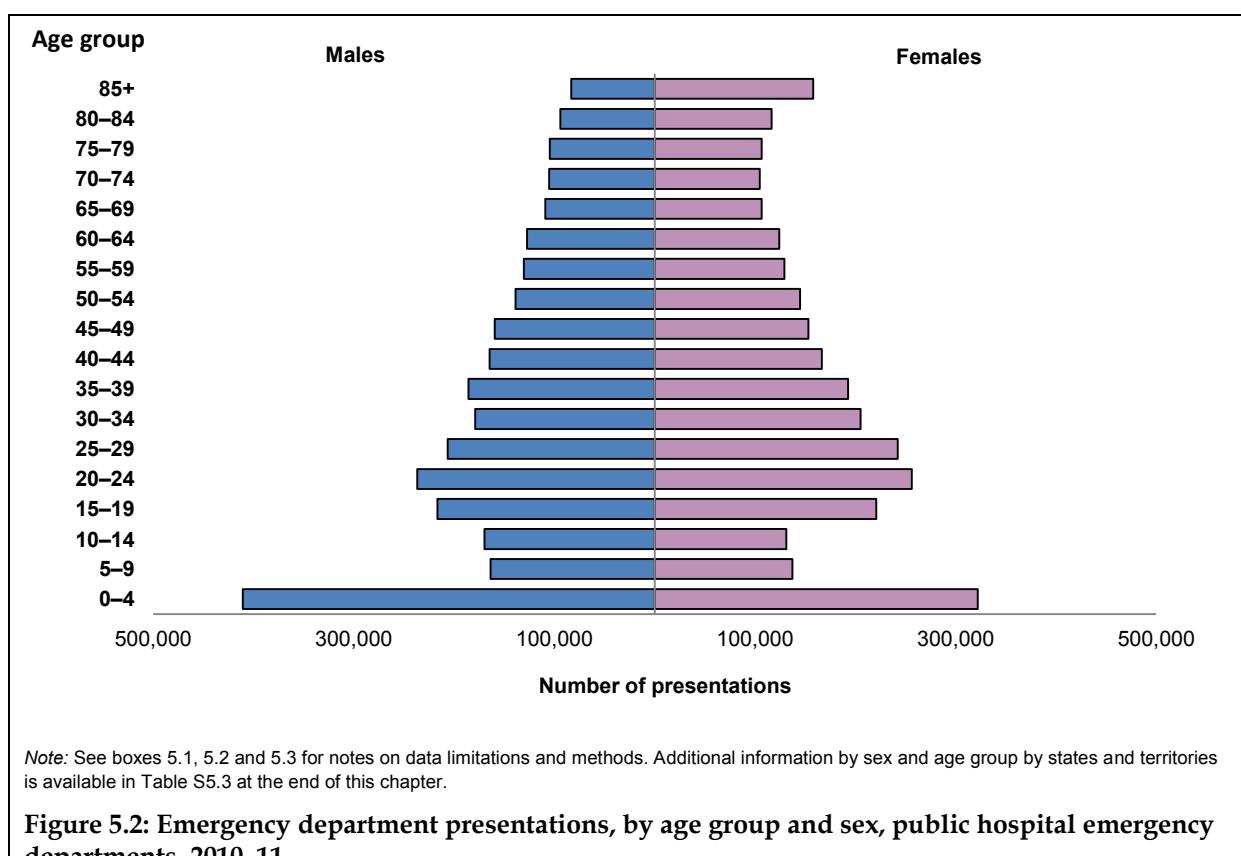
Detailed episode-level information was available for almost 6.2 million emergency department presentations (about 81% of emergency occasions of service). The detailed information presented below for NNAPEDCD data should be interpreted with caution as the data may not be representative of emergency department presentations for hospitals which were not required to provide data for non-admitted patient emergency department care.

## Who used these services?

### Sex and age group

Figure 5.2 presents data on the sex and age group of patients who presented to an emergency department. All states and territories supplied the date of birth of the patient, from which the age of the patient at the date of presentation was calculated.

Males accounted for slightly more than half of emergency department presentations, and there were more presentations for men than females in most age groups. Females aged 20–39 and 80 and over accounted for more presentations than males. The most common age groups reported for emergency department presentations were 0–4 (12%), followed by 20–24 (8%).



## Aboriginal and Torres Strait Islander people

### Box 5.4: Quality of Indigenous status data

The reported quality of the data provided for Indigenous status in 2010–11 for emergency department presentations varied by jurisdiction. Most states and territories advised that the Indigenous status data collected in an emergency department setting could be less accurate than the data collected for admitted patients. The data should, therefore, be used with caution. See Appendix 1 for more information on the quality of Indigenous status data in the NNAPECD.

Table 5.5 presents Indigenous status data by state and territory of the hospital. Nationally, 4.8% of all presentations were for Indigenous Australians. The Northern Territory had the highest proportion of emergency department presentations for Indigenous Australians (43.5%), while Victoria (1.4%) recorded the lowest proportion. Indigenous status was not reported for about 6% of presentations.

**Table 5.5: Emergency department presentations, by Indigenous status, public hospital emergency departments, states and territories, 2010–11**

	Indigenous Australians	Non-Indigenous	Not reported	Total
New South Wales	81,641	1,701,405	291,052	2,074,098
Victoria	20,440	1,454,060	8,659	1,483,159
Queensland	67,014	1,109,463	18,848	1,195,325
Western Australia	49,327	596,816	3,072	649,215
South Australia	10,457	346,357	27,178	383,992
Tasmania	5,685	134,400	3,763	143,848
Australian Capital Territory	2,783	107,630	1,820	112,233
Northern Territory	61,520	79,838	61	141,419
<b>Total</b>	<b>298,867</b>	<b>5,529,969</b>	<b>354,453</b>	<b>6,183,289</b>

*Note:* See boxes 5.1, 5.2, 5.3 and 5.4 for notes on data limitations and methods.

## How did people access these services?

The emergency department data element **arrival mode – transport** indicates the mode of transport by which the patient arrived at the emergency department. The category *Other* includes presentations for which patients walked to the emergency department or came by private transport, public transport, community transport or taxi.

In 2010–11, the majority of presentations to emergency departments reported an arrival mode of *Other* (Table 5.6). However, there was variation in arrival mode by triage category. For example, the proportion of presentations with an arrival mode of *Ambulance, air ambulance or helicopter rescue service*, ranged from 4% for *Non-urgent* patients to 85% for *Resuscitation* patients.

**Table 5.6: Emergency department presentations, by triage category and arrival mode, public hospital emergency departments, 2010–11**

Arrival mode	Triage category					Total <sup>(a)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
Ambulance, air ambulance or helicopter rescue service	35,966	274,259	692,659	432,796	32,089	1,468,310
Police/correctional services vehicle	304	6,906	20,539	13,311	4,878	45,956
Other	6,102	300,148	1,320,533	2,344,446	690,956	4,664,755
Not stated/unknown	63	295	1,062	1,690	574	4,268
<b>Total</b>	<b>42,435</b>	<b>581,608</b>	<b>2,034,793</b>	<b>2,792,243</b>	<b>728,497</b>	<b>6,183,289</b>

(a) Includes presentations for which the triage category was not reported.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for states and territories is available in Table S5.4 at the end of this chapter.

## When did people present to the emergency department?

The time of presentation at the emergency department is defined as the earliest occasion of being registered clerically or triaged. Time of presentation was reported for all non-admitted patient emergency department presentations reported to the NNAPEDCD.

Figure 5.3 presents the number of presentations by triage category and hour of presentation. This figure highlights the uneven use of emergency department resources throughout the average day. Over two-thirds of emergency department presentations occur between the hours of 8 am and 8 pm.

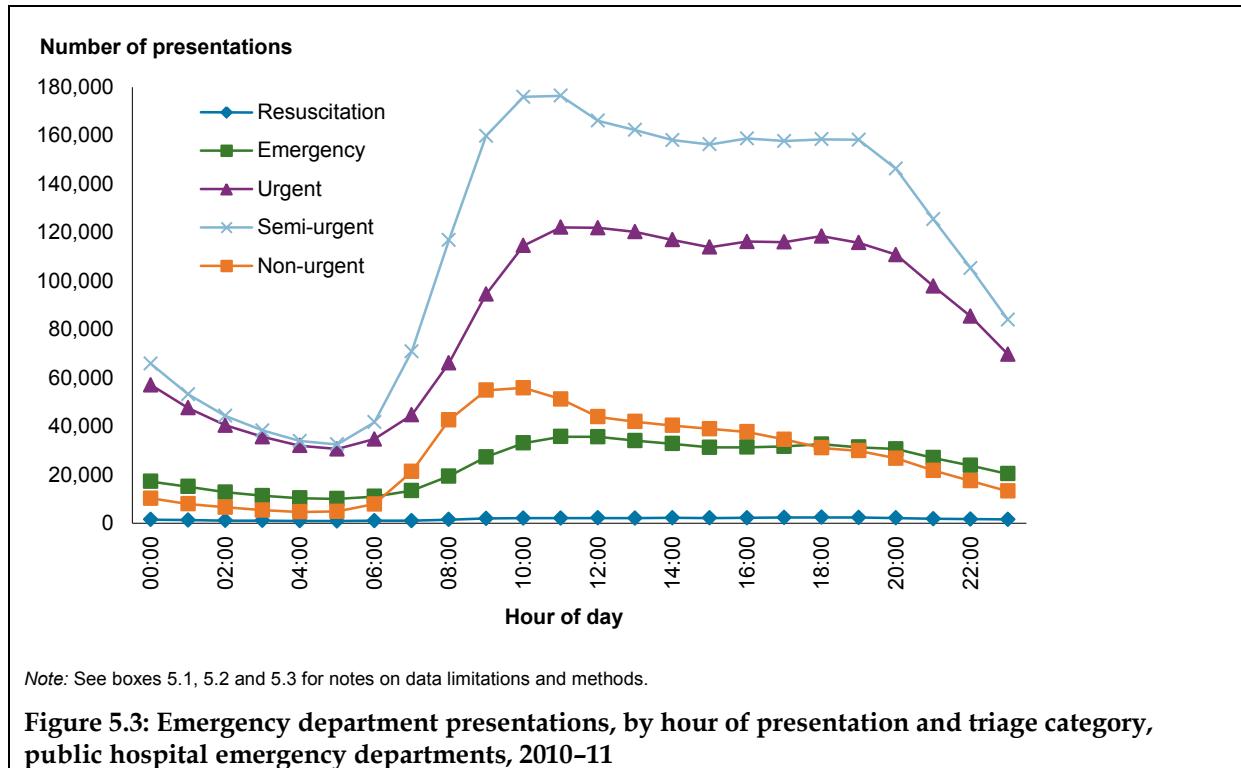
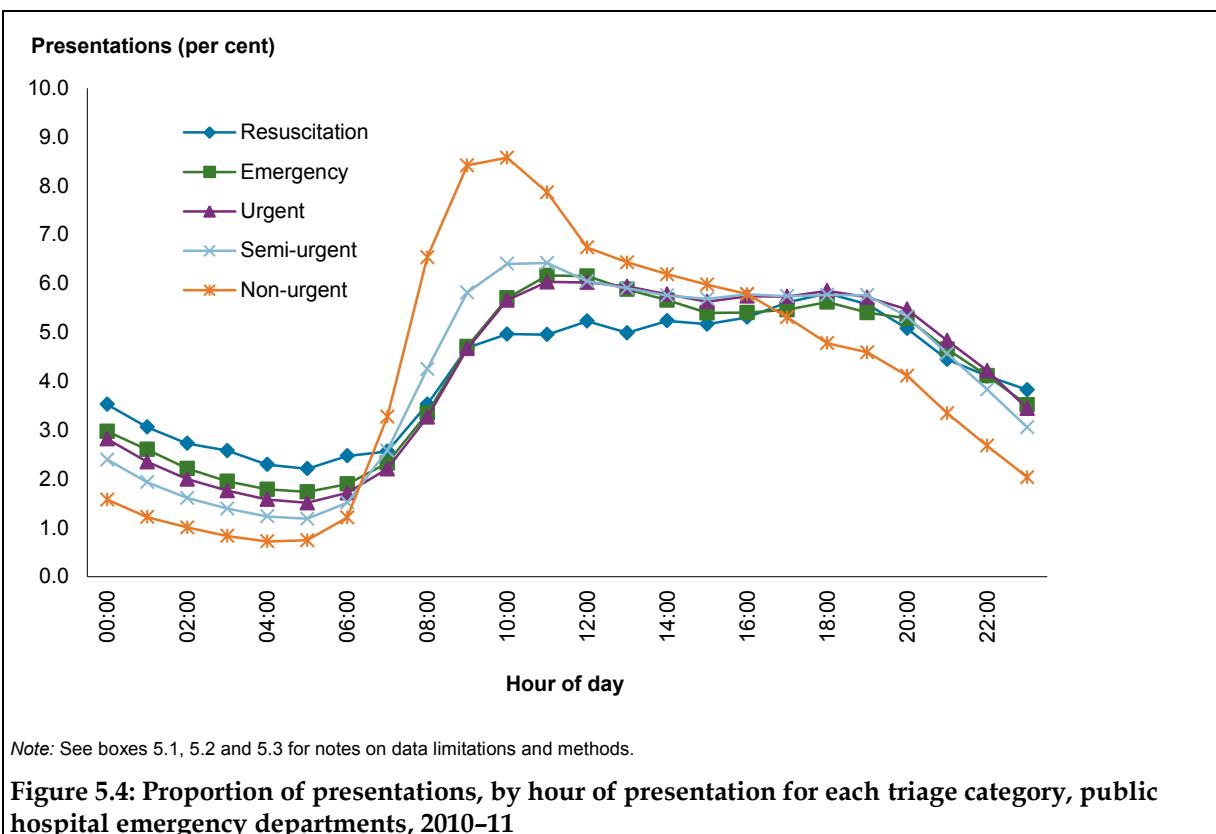


Figure 5.4 illustrates the relative distribution of use within each triage category across the 24-hour period. The figure shows that for the triage category *Resuscitation*, presentations are more evenly distributed throughout the day than for other triage categories.



## Why did people receive the care?

Type of visit to emergency department describes the reason the patient presented to the emergency department. The type of visit can be reported as:

- *Emergency presentation*: attendance for an actual or suspected condition which is sufficiently serious to require acute unscheduled care
- *Return visit, planned*: presentation is planned and is a result of a previous emergency department presentation or return visit
- *Pre-arranged admission*: patient who presents at the emergency department for either a clerical, nursing or medical process to be undertaken, and admission has been pre-arranged by the referring medical officer and a bed allocated
- *Patient in transit*: the emergency department is responsible for care and treatment of a patient awaiting transport to another facility
- *Dead on arrival*: a patient who is dead on arrival at the emergency department.

Data on the type of visit to emergency department by state and territory is detailed in Table S5.6 at the end of this chapter.

Of the 6.2 million presentations reported to the NNAPEDCD for 2010–11, about 98% of presentations were *Emergency presentations*, and 2% were *Return visit, planned*. The proportion of presentations by type of visit varied by state or territory. There is variation in the

reporting of information about patients who were *Dead on arrival*. For South Australia, patients who are *Dead on arrival* are not managed or reported by emergency departments. For Western Australia not all patients who are *Dead on Arrival* are managed and reported by emergency departments.

## How urgent was the care?

The triage category indicates the urgency of the patient's need for medical and nursing care (NHDC 2003). For more detail refer to Box 5.1.

Nationally in 2010–11, less than 1% of Emergency presentations were assigned a triage category of *Resuscitation*, and about 10% were assigned a triage category of *Emergency*. The majority of Emergency presentations were *Urgent* or *Semi-urgent*. There was some variation among the states and territories in the proportion of presentations in each triage category.

Information about triage category by peer group for states and territories is published in Table 2.14 of *Australian hospital statistics 2010–11: emergency department care and elective surgery waiting times* (AHS: EDES, AIHW 2011c).

## How long did people wait for care?

Patients who present to the emergency department with a type of visit of *Return visit*, *planned*; *Pre-arranged admission* or *Patient in transit* do not necessarily undergo the same processes as *Emergency presentations*, and their waiting times may rely on factors outside the control of the emergency department. Therefore, waiting time statistics (including the proportion of presentations seen on time) are only presented for patients with a type of visit of *Emergency presentation*.

The proportion of presentations seen on time was determined as the proportion of *Emergency presentations* in each triage category with a waiting time less than or equal to the maximum waiting time stated in the National Triage Scale definition. For more detail, refer to Box 5.3 and Appendix 2.

Emergency department waiting times are regarded as indicators of access to hospitals. The *National health data dictionary* definition for **emergency department waiting time to service delivery** is: 'The time elapsed for each patient from presentation in the emergency department to commencement of service by a treating medical officer or nurse' (HDSC 2008).

Table 5.7 presents the proportion of all *Emergency presentations* reported to the NNAPEDCD that were seen on time, by state and territory and triage category for 2010–11. As indicated in Box 5.3, certain *Emergency presentations* are excluded from the calculation of the figures provided in this table. For 2010–11, there were almost 347,000 presentations with an episode end status of *Did not wait* or *Dead on arrival* which were excluded from this analysis.

Approximately 32,000 additional presentations with missing or invalid waiting times were also excluded.

For 2010–11, for all triage categories combined (excluding those whose triage category was *Not reported*), the overall proportion of *Emergency presentations* seen on time was 70%. The proportion varied by state and territory, ranging from 58% in the Northern Territory and Australian Capital Territory, to 76% in New South Wales (Table 5.7). The proportion also varied by triage category. About 100% of *Resuscitation* patients and 79% of *Emergency* patients were seen on time.

**Table 5.7: Proportion (%) of emergency presentations seen on time by triage category, public hospital emergency departments<sup>(a)</sup>, states and territories, 2010–11**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	100	99	100	100	100	100	100
Emergency	83	81	78	71	78	72	82	65	79
Urgent	71	70	60	50	66	55	54	53	65
Semi-urgent	73	65	67	65	70	63	49	54	68
Non-urgent	88	86	90	92	88	83	76	90	88
<b>Total</b>	<b>76</b>	<b>71</b>	<b>67</b>	<b>63</b>	<b>71</b>	<b>62</b>	<b>58</b>	<b>58</b>	<b>70</b>

(a) Values are derived from all hospitals that reported to the NNAPEDCD. In addition to providing data to the NNAPEDCD for all hospitals classified to peer group A (*Principal referral and specialist women's and children's hospitals*) and B (*Large hospitals*), some states and territories provided data to the NNAPEDCD for public hospitals that were classified to other peer groups. Therefore, the proportions of emergency presentations seen on time provided here are not directly comparable to the proportions of emergency presentations seen on time provided in tables 3.7 and 3.8 for hospitals in peer groups A and B only.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information by peer group for states and territories is available in Table S5.6 at the end of this chapter.

In 2010–11, 50% of all emergency presentations were attended by a medical officer or nurse within 23 minutes and 90% were attended within 114 minutes. There was marked variation between states and territories in these waiting time measures. The median varied from 19 minutes in New South Wales to 40 minutes for the Australian Capital Territory (Figure 5.5). The 90th percentile varied from 108 minutes in South Australia to 188 minutes in the Australian Capital Territory.

Additional information by peer group for states and territories is available in Table S2.14 of *AHS: EDES* (AIHW 2011c).



Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

**Figure 5.5: Median and 90th percentile waiting times for emergency presentations<sup>(a)</sup>, public hospital emergency departments, states and territories, 2010–11**

## How long did patients stay?

Measures of the amount of time associated with emergency department activity include:

- **duration of the service event** – measured as the time from the commencement of service by a treating medical officer or nurse to the conclusion of the non-admitted component of care (episode end). The service event represents a measure of the amount of time during which the patient receives service (is treated and/or observed)
- **duration of non-admitted patient episode** – measured from the time of presentation to the conclusion of the non-admitted component of care (episode end). The length of patient episode consists of the emergency department waiting time and duration of the service event
- **total time in the emergency department** – measured from the time of presentation to the time of physical departure of the patient from the emergency department.

These measures are restricted to presentations with type of visit emergency presentation. The calculations also exclude presentations with an episode end status of *Did not wait*, *Left at own risk* or *Dead on arrival*. For more detailed information, see Box 5.3.

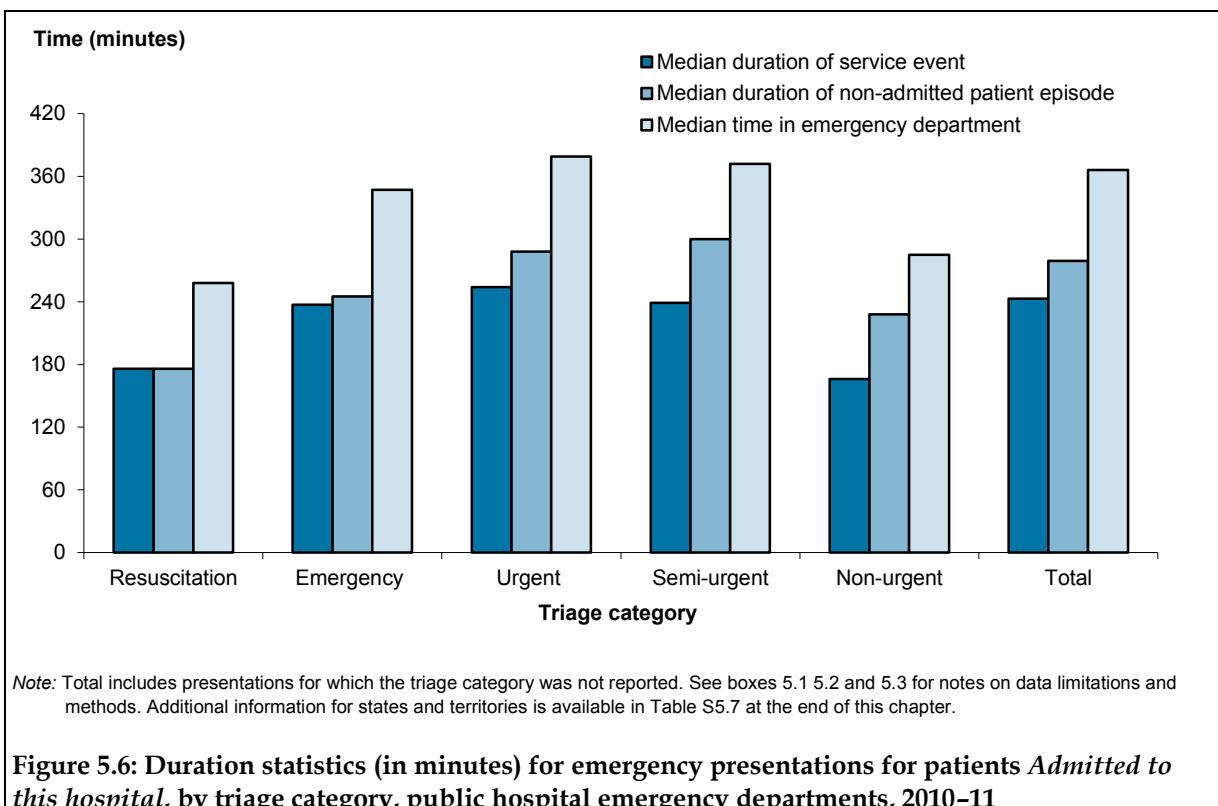
The timing and duration of emergency department activity are affected by whether or not the patient presenting to the emergency department is subsequently admitted to the same hospital. As a result, summary length of presentation statistics are presented separately for patients subsequently admitted to hospital (those with an episode end status of *Admitted to this hospital*, Figure 5.6) and for patients not subsequently admitted to hospital (including those referred to another hospital, Figure 5.7).

Generally, the durations of service event and non-admitted patient episode were greater for patients *Admitted to this hospital* than for other patients. This indicates that those *Admitted to this hospital* generally required more lengthy treatment (in the emergency department) than other patients. *Resuscitation* was the only triage category for which patients *Admitted to this hospital* had shorter durations of service event than those not admitted (figures 5.6 and 5.7).

### Patients subsequently admitted to the same hospital

Overall, for patients with an episode end status of *Admitted to this hospital*, the median duration of service event was 4 hours and 3 minutes (243 minutes) and the median duration of non-admitted patient episode was 4 hours and 39 minutes (279 minutes) (Figure 5.6).

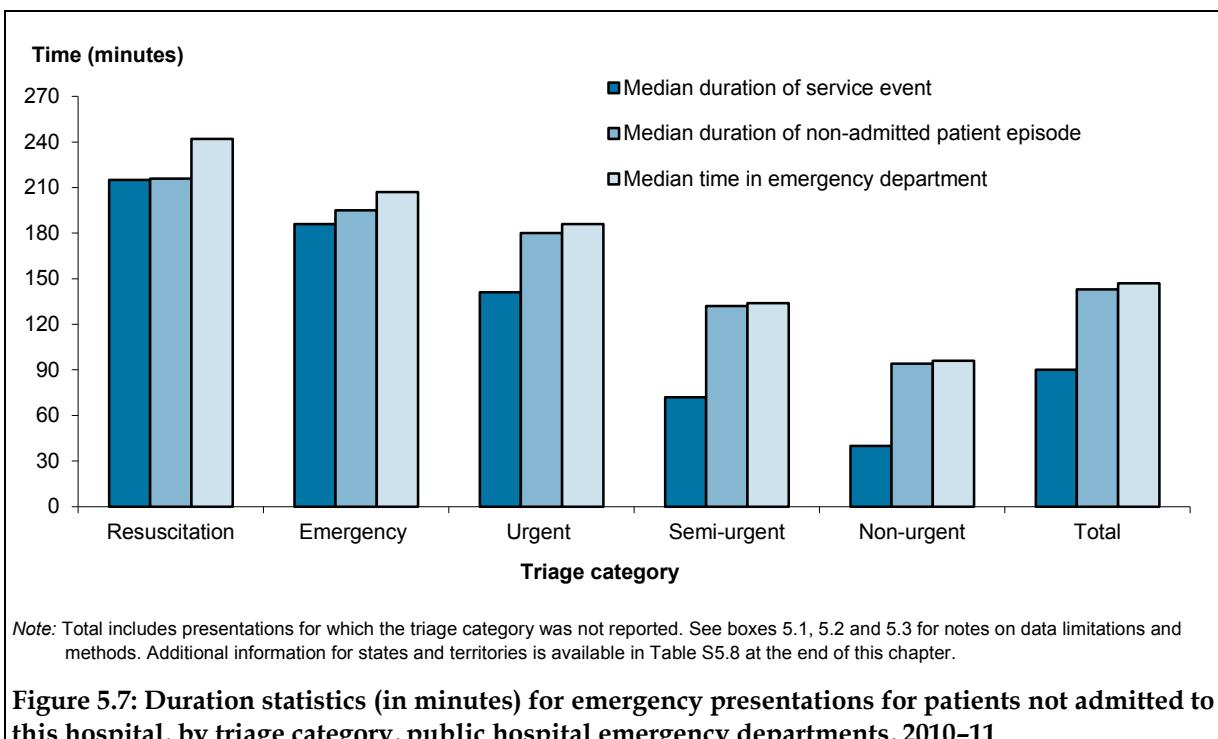
The median presentation length varied by triage category. For *Resuscitation* patients, the median duration of non-admitted patient episode was generally the same as the median duration of the service event, which reflects the short waiting times for these patients. *Non-urgent* patients who were *Admitted to this hospital* had the shortest median duration of the service event.



### **Patients not subsequently admitted to the same hospital**

Figure 5.7 presents summary length of presentation statistics for patients who did not have an episode end status of *Admitted to this hospital*. Overall, the median duration of the service event was 1 hour and 30 minutes (90 minutes) and the median duration of the non-admitted patient episode was 2 hours and 23 minutes (143 minutes).

The median presentation length varied by triage category, decreasing with the urgency of the triage category. For example, the median duration of service event for *Resuscitation* patients was 3 hours and 35 minutes (215 minutes) and for *Non-urgent* patients it was 40 minutes. As for patients who were *Admitted to this hospital*, the median duration of non-admitted patient episode for *Resuscitation* patients was generally the same as the median duration of the service event.



## How was the care completed?

**Episode end status** describes the status of the patient at the conclusion of the non-admitted patient episode in the emergency department. The episode end status can be reported as:

- *Admitted to this hospital* (including to units or beds within the emergency department)
- Non-admitted patient emergency department service episode completed - *Departed without being admitted or referred to another hospital*
- Non-admitted patient emergency department service episode completed - *Referred to another hospital for admission*
- *Did not wait* to be attended by a health-care professional
- *Left at own risk* after being attended by a health-care professional but before the non-admitted patient emergency department service episode was complete
- *Died in emergency department* as a non-admitted patient
- *Dead on arrival*, not treated in emergency department.

Information about episode end status is published in Table S5.9 at the end of this chapter and in Table 2.13 of *AHS: EDES* (AIHW 2011c).

For 2010–11, the majority of presentations reported an episode end status of *Departed without being admitted or referred to another hospital*. However, the proportion varied markedly by triage category, increasing as the triage category became less urgent. Approximately 27% of presentations had an episode end status of *Admitted to this hospital*. Queensland had the lowest proportion of *Resuscitation* patients with an episode end status of *Admitted to this hospital*. Victoria had a higher proportion of presentations *Admitted to this hospital* than the national figures in all triage categories except *Non-urgent*.

Overall, 5.5% of emergency department presentations had an episode end status of *Did not wait*. The proportion of presentations with an episode end status of *Did not wait* also varied by triage category, and was highest for *Non-urgent* and *Semi-urgent* patients.

Tasmania had the highest proportion of presentations with an episode end status of *Departed without being admitted or referred to another hospital*. Western Australia had the lowest overall proportion of presentations where the patient *Did not wait*.

The comparability of the data may be influenced by the comparability of the triage categories among the states and territories. Although the triage category is not a measure of the need for admission to hospital, the proportion of presentations in each category that had an episode end status of *Admitted to this hospital* can be used as an indication of the comparability of the triage categorisation. Information on emergency presentations with an episode end status of *Admitted to this hospital*, by triage category, is published in Table S5.7, and in Table 2.13 of *AHS: EDES* (AIHW 2011c).

## Additional information

Further detailed information on non-admitted patient emergency department care by state or territory of hospitalisation and public hospital peer groups, including patient characteristics, and triage categories is available in the following supplementary tables and in the tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## Supplementary tables

### Box 5.5: Notes – Chapter 5 Supplementary tables

#### Tables S5.2 and 5.3

- (a) The number of presentations reported to the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) divided by the number of emergency occasions of service reported to the National Public Hospital Establishments Database (NPHED) as a percentage.
- (b) Records for which the type of visit was reported as *Emergency presentation*.
- (c) Includes records for which the triage category was not reported.
- (d) The proportion of presentations for which the waiting time to service delivery was within the time specified in the definition of the triage category.
- (e) This proportion is based on presentations for which the episode end status was reported as *Admitted to this hospital*.
- (f) *All hospitals includes hospitals not classified as peer groups A or B.*

#### Table S5.6

- (a) For Western Australia not all patients who are *Dead on arrival* are managed and reported by emergency departments.
- (b) South Australia does not provide non-admitted patient emergency department care data for patients who were *Dead on arrival* (no resuscitation attempted) at the emergency department.
- (c) Tasmania did not provide presentations for which the type of visit was *Pre-arranged admission, Patient in transit* or *Dead on arrival*.

*(continued)*

**Box 5.5 (continued)****Tables S5.7 and S5.8**

- (a) Records for which the type of visit was reported as *Emergency presentation*.
- (b) The duration of non-admitted patient episode is the length of time between the time of presentation to the emergency department and the end of the non-admitted patient episode.
- (c) The duration of the presentation is the length of time between when a health-care professional first takes responsibility for the patient's care and the end of the non-admitted patient episode.
- (d) The time in emergency department is the length of time between presentation and physical departure from the emergency department.
- (e) Presentations for which the triage category was not reported.

**Table S5.9**

- (a) In New South Wales, presentations that end with the death of the patient in the emergency department had an episode end status of *Admitted to this hospital*.
- (b) For Western Australia not all patients who are *Dead on arrival* are managed and reported by emergency departments.
- (c) South Australia does not provide non-admitted patient emergency department care data for patients who were *Dead on arrival* (no resuscitation attempted) at the emergency department.

**Table S5.1: Emergency presentation waiting time statistics, public hospital emergency departments, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11
<b>New South Wales<sup>(a)</sup></b>					
Median waiting time (minutes)	20	20	20	20	19
Proportion seen on time (%)	76	76	75	75	76
<b>Victoria<sup>(a)</sup></b>					
Median waiting time (minutes)	22	23	20	22	22
Proportion seen on time (%)	74	71	73	72	71
<b>Queensland</b>					
Median waiting time (minutes)	29	28	25	24	23
Proportion seen on time (%)	62	63	66	66	67
<b>Western Australia</b>					
Median waiting time (minutes)	28	30	29	28	30
Proportion seen on time (%)	64	61	62	64	63
<b>South Australia</b>					
Median waiting time (minutes)	26	29	27	24	20
Proportion seen on time (%)	63	61	64	67	71
<b>Tasmania</b>					
Median waiting time (minutes)	27	32	31	29	29
Proportion seen on time (%)	64	60	62	63	62
<b>Australian Capital Territory</b>					
Median waiting time (minutes)	44	40	38	35	40
Proportion seen on time (%)	54	58	60	63	58
<b>Northern Territory</b>					
Median waiting time (minutes)	39	42	39	38	38
Proportion seen on time (%)	55	52	54	56	58
<b>Total</b>					
<b>Median waiting time (minutes)</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>23</b>	<b>23</b>
<b>Proportion seen on time (%)</b>	<b>70</b>	<b>69</b>	<b>70</b>	<b>70</b>	<b>70</b>

(a) From 2009–10, the data for Albury Base Hospital have been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Therefore, data for Albury Base Hospital are included in statistics for Victoria for 2009–10 and 2010–11.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

**Table S5.2: Emergency department presentations, public hospital emergency departments, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Hospitals reporting emergency department presentations	29	22	18	7	5	2	2	2	87
Emergency department presentations	1,287,494	1,060,694	932,125	366,031	292,789	91,304	112,233	103,446	4,246,116
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100	100	100	100	100
<b>Large hospitals</b>									
Hospitals reporting emergency department presentations	14	11	4	7	2	1	0	..	39
Emergency department presentations	380,853	324,653	157,089	244,565	43,454	26,396	..	..	1,177,010
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100	100	..	..	100
<b>Coverage of episode-level data for hospitals in peer groups A and B</b>									
	<b>100</b>								
<b>Other hospitals</b>									
Hospitals reporting emergency department presentations	43	6	4	2	1	1	..	3	60
Emergency department presentations	405,751	97,812	106,111	38,619	47,749	26,148	..	37,973	760,163
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	50	36	19	14	21	72	..	100	34
<b>Total</b>									
Hospitals reporting emergency department presentations	86	39	26	16	8	4	2	5	186
Emergency department presentations	2,074,000	1,483,159	1,195,325	649,215	383,992	143,848	112,233	141,419	6,183,289
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	83	90	72	74	68	93	100	100	81

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

Abbreviation: ..—not applicable.

**Table S5.3: Emergency department presentation statistics, by triage category, public hospital emergency departments, 2006–07 to 2010–11**

Triage category and peer group	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Coverage of episode-level data for hospitals in peer groups A and B</b>					
Hospitals reporting emergency department presentations	119	124	122	125	126
Emergency department presentations	4,607,684	4,895,446	4,916,995	5,183,568	5,388,944
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
<b>Principal referral and specialist women's and children's hospitals</b>					
Hospitals reporting emergency department presentations	81	81	83	84	87
Emergency department presentations	3,526,341	3,648,559	3,801,547	4,000,972	4,246,116
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
Proportion by triage category (%) <sup>(b)</sup>					
Resuscitation	1	1	1	1	1
Emergency	10	10	10	11	11
Urgent	35	35	35	35	36
Semi-urgent	45	44	44	43	43
Non-urgent	10	10	10	10	10
<i>Total</i> <sup>(c)</sup>	100	100	100	100	100
Proportion seen on time (%) <sup>(b)(d)</sup>					
Resuscitation	99	100	100	100	100
Emergency	76	74	75	77	79
Urgent	63	60	61	62	62
Semi-urgent	63	62	63	64	65
Non-urgent	86	85	86	86	85
<i>Total</i>	66	65	66	67	67
Median waiting time to service delivery (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	0
Emergency	5	6	6	5	5
Urgent	22	24	23	22	22
Semi-urgent	41	42	41	39	38
Non-urgent	33	34	34	33	34
<i>Total</i> <sup>(c)</sup>	25	26	25	24	24

*(continued)*

**Table S5.3 (continued): Emergency department statistics, by triage category, public hospital emergency departments, 2006–07 to 2010–11**

Triage category and peer group	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Principal referral and specialist women's and children's hospitals (continued)</b>					
90th percentile waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	1
Emergency	22	24	23	21	20
Urgent	96	107	103	98	98
Semi-urgent	158	161	157	151	149
Non-urgent	142	146	145	144	147
<i>Total<sup>(c)</sup></i>	127	132	127	122	121
Proportion ending in admission (%) <sup>(b)(e)</sup>					
Resuscitation	82	81	82	81	80
Emergency	64	64	64	64	63
Urgent	44	44	43	43	43
Semi-urgent	19	18	18	18	19
Non-urgent	6	6	6	6	6
<i>Total<sup>(c)</sup></i>	31	31	31	31	32
<b>Large hospitals</b>					
Hospitals reporting emergency department presentations	38	43	39	41	39
Emergency department presentations	1,081,343	1,246,887	1,115,448	1,182,596	1,177,010
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
Proportion by triage category (%) <sup>(b)</sup>					
Resuscitation	<1	<1	<1	<1	<1
Emergency	6	6	6	7	7
Urgent	27	27	28	28	30
Semi-urgent	48	49	48	48	49
Non-urgent	19	19	18	16	13
<i>Total<sup>(c)</sup></i>	100	100	100	100	100

(continued)

**Table S5.3 (continued): Emergency department presentation statistics, by triage category, public hospital emergency departments, 2006–07 to 2010–11**

Triage category and peer group	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Large hospitals (continued)</b>					
Proportion seen on time (%) <sup>(e)</sup>					
Resuscitation	99	99	99	99	99
Emergency	82	81	82	80	81
Urgent	70	70	72	72	70
Semi-urgent	69	69	71	71	70
Non-urgent	87	86	86	85	88
<i>Total<sup>(c)</sup></i>	73	73	74	74	73
Median waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	5	5	5	5	5
Urgent	18	18	17	18	18
Semi-urgent	34	33	32	33	32
Non-urgent	35	34	34	36	31
<i>Total<sup>(c)</sup></i>	25	24	22	23	22
90th percentile waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	18	18	17	18	18
Urgent	74	73	71	71	74
Semi-urgent	132	133	126	124	129
Non-urgent	142	146	145	148	135
<i>Total<sup>(c)</sup></i>	116	117	110	110	109
Proportion ending in admission (%) <sup>(e)</sup>					
Resuscitation	66	64	65	63	63
Emergency	57	55	54	52	50
Urgent	37	35	36	35	33
Semi-urgent	13	13	14	13	13
Non-urgent	3	3	3	3	4
<i>Total<sup>(c)</sup></i>	21	20	21	21	21
<b>All hospitals<sup>(f)</sup></b>					
<b>Hospitals reporting emergency department presentations</b>	<b>164</b>	<b>165</b>	<b>184</b>	<b>184</b>	<b>186</b>
<b>Emergency department presentations</b>	<b>5,287,451</b>	<b>5,537,196</b>	<b>5,742,140</b>	<b>5,957,960</b>	<b>6,183,289</b>
<b>Estimated proportion of emergency occasions of service (%)<sup>(c)(d)</sup></b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>

(continued)

**Table S5.3 (continued): Emergency department presentation statistics, by triage category, public hospital emergency departments, 2006–07 to 2010–11**

Triage category and peer group	2006–07	2007–08	2008–09	2009–10	2010–11
<b>All hospitals (continued)</b>					
Proportion by triage category (%) <sup>(b)</sup>					
Resuscitation	1	1	1	1	1
Emergency	8	8	9	9	9
Urgent	31	31	32	32	33
Semi-urgent	46	46	45	45	45
Non-urgent	13	13	13	13	12
<b>Total<sup>(c)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Proportion seen on time (%) <sup>(b)(d)</sup>					
Resuscitation	99	100	100	100	100
Emergency	78	76	77	78	79
Urgent	65	63	64	65	65
Semi-urgent	66	66	67	68	68
Non-urgent	88	87	88	88	88
<b>Total</b>	<b>70</b>	<b>69</b>	<b>70</b>	<b>70</b>	<b>70</b>
Median waiting time to service delivery (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	0
Emergency	5	6	5	5	5
Urgent	20	21	21	20	21
Semi-urgent	36	36	35	35	35
Non-urgent	28	28	28	28	29
<b>Total<sup>(c)</sup></b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>23</b>	<b>23</b>
90th percentile waiting time to service delivery (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	1
Emergency	21	23	21	20	20
Urgent	90	97	93	90	91
Semi-urgent	146	148	143	139	138
Non-urgent	133	137	134	134	133
<b>Total<sup>(c)</sup></b>	<b>120</b>	<b>124</b>	<b>119</b>	<b>115</b>	<b>114</b>
Proportion ending in admission (%) <sup>(b)(e)</sup>					
Resuscitation	79	78	79	78	77
Emergency	62	61	61	61	60
Urgent	42	41	40	40	40
Semi-urgent	16	16	16	16	16
Non-urgent	5	4	5	5	5
<b>Total<sup>(c)</sup></b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>28</b>

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. See Box 5.5 for footnotes specific to this table.

**Table S5.4: Emergency department presentations, by age group and sex, public hospital emergency departments, states and territories, 2010–11**

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Males</b>										
	0–4	140,075	94,792	79,230	49,177	24,233	7,663	7,094	8,380	410,644
	5–14	118,186	79,266	68,863	39,249	19,392	7,061	5,896	7,099	345,012
	15–24	150,666	105,349	98,810	52,163	26,539	12,643	9,679	11,027	466,876
	25–34	129,905	94,688	84,006	44,210	22,957	9,595	8,066	12,108	405,535
	35–44	120,814	86,882	74,345	38,127	21,439	8,524	6,364	12,086	368,581
	45–54	109,865	77,107	63,965	32,831	19,754	8,049	5,842	10,332	327,745
	55–64	99,755	68,788	54,242	27,702	17,514	7,292	5,055	7,154	287,502
	65–74	87,062	58,844	44,253	22,394	14,195	6,445	3,920	3,942	241,055
	75–84	79,115	55,461	35,234	19,097	15,009	5,032	3,339	1,703	213,990
	85 and over	38,271	24,003	13,872	8,600	8,219	1,913	1,394	290	96,562
	<i>Total<sup>(a)</sup></i>	<b>1,073,835</b>	<b>745,181</b>	<b>616,820</b>	<b>333,550</b>	<b>189,251</b>	<b>74,226</b>	<b>56,649</b>	<b>74,126</b>	<b>3,163,638</b>
<b>Females</b>										
	0–4	110,314	72,464	63,412	38,763	18,859	6,053	5,301	6,802	321,968
	5–14	88,918	62,253	53,966	31,021	16,060	5,958	4,664	5,696	268,536
	15–24	146,543	110,797	104,023	51,892	30,208	12,537	9,836	11,492	477,328
	25–34	132,828	118,407	85,695	48,356	31,138	9,180	9,072	12,709	447,385
	35–44	110,381	90,769	71,075	37,849	22,596	8,104	6,736	12,028	359,538
	45–54	97,530	71,130	59,175	30,451	17,898	7,635	5,548	8,980	298,347
	55–64	87,297	62,351	46,883	24,645	15,360	6,450	4,968	5,449	253,403
	65–74	76,753	53,084	37,215	19,177	13,673	5,437	3,578	2,432	211,349
	75–84	85,380	58,058	33,997	19,441	16,453	5,126	3,365	1,202	223,022
	85 and over	63,647	38,659	22,994	13,993	12,485	3,134	2,511	503	157,926
	<i>Total<sup>(a)</sup></i>	<b>999,651</b>	<b>737,974</b>	<b>578,435</b>	<b>315,588</b>	<b>194,730</b>	<b>69,621</b>	<b>55,580</b>	<b>67,293</b>	<b>3,018,872</b>
	<b>All persons<sup>(a)(b)</sup></b>	<b>2,074,098</b>	<b>1,483,159</b>	<b>1,195,325</b>	<b>649,215</b>	<b>383,992</b>	<b>143,848</b>	<b>112,233</b>	<b>141,419</b>	<b>6,183,289</b>

(a) Includes presentations for which the age group of the patient was not reported.

(b) Includes presentations for which the sex of the patient was not reported.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

**Table S5.5: Emergency department presentations, by triage category and arrival mode, public hospital emergency departments, states and territories, 2010–11**

Triage category and arrival mode	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Ambulance, air ambulance or helicopter rescue service	10,325	6,452	9,508	4,334	3,810	561	425	551	35,966
Police/correctional services vehicle	62	94	74	49	9	2	2	12	304
Other <sup>(a)</sup>	1,733	1,306	1,333	739	663	60	70	198	6,102
Not stated/unknown	54	0	0	9	0	0	0	0	63
<i>Total</i>	<i>12,174</i>	<i>7,852</i>	<i>10,915</i>	<i>5,131</i>	<i>4,482</i>	<i>623</i>	<i>497</i>	<i>761</i>	<i>42,435</i>
<b>Emergency</b>									
Ambulance, air ambulance or helicopter rescue service	83,224	59,467	67,545	26,890	23,397	5,773	4,366	3,597	274,259
Police/correctional services vehicle	1,494	1,558	1,981	793	150	264	458	208	6,906
Other <sup>(a)</sup>	88,212	71,706	57,051	44,144	23,725	4,179	6,290	4,841	300,148
Not stated/unknown	103	0	0	179	6	0	7	0	295
<i>Total</i>	<i>173,033</i>	<i>132,731</i>	<i>126,577</i>	<i>72,006</i>	<i>47,278</i>	<i>10,216</i>	<i>11,121</i>	<i>8,646</i>	<i>581,608</i>
<b>Urgent</b>									
Ambulance, air ambulance or helicopter rescue service	213,824	158,853	179,594	51,180	51,041	18,011	10,154	10,002	692,659
Police/correctional services vehicle	5,624	3,646	4,796	2,936	1,323	710	491	1,013	20,539
Other <sup>(a)</sup>	401,051	305,026	298,213	150,998	86,485	29,565	23,773	25,422	1,320,533
Not stated/unknown	146	0	0	894	7	0	15	0	1,062
<i>Total</i>	<i>620,645</i>	<i>467,525</i>	<i>482,603</i>	<i>206,008</i>	<i>138,856</i>	<i>48,286</i>	<i>34,433</i>	<i>36,437</i>	<i>2,034,793</i>
<b>Semi-urgent</b>									
Ambulance, air ambulance or helicopter rescue service	177,951	98,191	77,662	28,470	23,986	10,643	6,372	9,521	432,796
Police/correctional services vehicle	3,752	1,531	2,132	2,131	654	427	385	2,299	13,311
Other <sup>(a)</sup>	743,566	594,487	408,925	287,759	139,330	58,544	44,653	67,182	2,344,446
Not stated/unknown	26	3	0	1,649	6	0	6	0	1,690
<i>Total</i>	<i>925,295</i>	<i>694,212</i>	<i>488,719</i>	<i>320,009</i>	<i>163,976</i>	<i>69,614</i>	<i>51,416</i>	<i>79,002</i>	<i>2,792,243</i>

(continued)

**Table S5.5 (continued): Emergency department presentations, by triage category and arrival mode, public hospital emergency departments, states and territories, 2010–11**

Triage category and arrival mode	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Non-urgent</b>									
Ambulance, air ambulance or helicopter rescue service	19,680	4,167	3,825	1,045	1,768	474	455	675	32,089
Police/correctional services vehicle	2,015	277	928	425	261	475	72	425	4,878
Other <sup>(a)</sup>	320,172	174,184	81,758	44,032	27,353	13,746	14,238	15,473	690,956
Not stated/unknown	16	3	0	536	18	0	1	0	574
<b>Total</b>	<b>341,883</b>	<b>178,631</b>	<b>86,511</b>	<b>46,038</b>	<b>29,400</b>	<b>14,695</b>	<b>14,766</b>	<b>16,573</b>	<b>728,497</b>
<b>Total<sup>(b)</sup></b>									
Ambulance, air ambulance or helicopter rescue service	505,061	327,197	338,134	111,923	104,002	35,875	21,772	24,346	1,468,310
Police/correctional services vehicle	12,950	7,120	9,911	6,334	2,397	1,879	1,408	3,957	45,956
Other <sup>(a)</sup>	1,555,158	1,148,836	847,280	527,691	277,556	106,094	89,024	113,116	4,664,755
Not stated/unknown	929	6	0	3,267	37	0	29	0	4,268
<b>Total<sup>(b)</sup></b>	<b>2,074,098</b>	<b>1,483,159</b>	<b>1,195,325</b>	<b>649,215</b>	<b>383,992</b>	<b>143,848</b>	<b>112,233</b>	<b>141,419</b>	<b>6,183,289</b>

(a) Includes presentations for which the patient walked in, came by private transport, public transport, community transport or taxi.

(b) Includes presentations for which the triage category was not reported.

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods.

**Table S5.6: Emergency department presentations, by type of visit, public hospital emergency departments, states and territories, 2010–11**

Peer group and type of visit	NSW	Vic	Qld	WA <sup>(a)</sup>	SA <sup>(b)</sup>	Tas <sup>(c)</sup>	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Emergency presentation	1,269,827	1,045,721	915,762	358,787	288,695	88,963	112,078	102,315	4,182,148
Return visit, planned	12,496	13,289	12,090	6,441	3,082	2,341	122	1,071	50,932
Pre-arranged admission	2,749	306	3,827	350	575	0	2	0	7,809
Patient in transit	25	141	371	0	0	0	5	27	569
Dead on arrival	2,024	1,237	75	0	..	0	26	33	3,395
Not reported	373	0	0	453	437	0	0	0	1,263
<i>Total</i>	<i>1,287,494</i>	<i>1,060,694</i>	<i>932,125</i>	<i>366,031</i>	<i>292,789</i>	<i>91,304</i>	<i>112,233</i>	<i>103,446</i>	<i>4,246,116</i>
<b>Large hospitals</b>									
Emergency presentation	373,628	307,900	150,091	243,020	42,850	24,866	..	..	1,142,355
Return visit, planned	6,378	15,495	6,682	1,499	458	1,530	..	..	32,042
Pre-arranged admission	361	817	287	40	117	0	..	..	1,622
Patient in transit	7	32	17	0	0	0	..	..	56
Dead on arrival	169	409	12	0	..	0	..	..	590
Not reported	310	0	0	6	29	0	..	..	345
<i>Total</i>	<i>380,853</i>	<i>324,653</i>	<i>157,089</i>	<i>244,565</i>	<i>43,454</i>	<i>26,396</i>	<i>..</i>	<i>..</i>	<i>1,177,010</i>
<b>Other hospitals</b>									
Emergency presentation	385,148	92,956	100,727	38,619	45,188	24,039	..	34,720	721,397
Return visit, planned	20,006	4,012	5,222	0	2,084	2,109	..	3,229	36,662
Pre-arranged admission	305	277	109	0	22	0	..	0	713
Patient in transit	14	3	15	0	0	0	..	22	54
Dead on arrival	270	564	38	0	..	0	..	2	874
Not reported	8	0	0	0	455	0	..	0	463
<i>Total</i>	<i>405,751</i>	<i>97,812</i>	<i>106,111</i>	<i>38,619</i>	<i>47,749</i>	<i>26,148</i>	<i>..</i>	<i>37,973</i>	<i>760,163</i>
<b>All hospitals</b>									
Emergency presentation	2,028,603	1,446,577	1,166,580	640,426	376,733	137,868	112,078	137,035	6,045,900
Return visit, planned	38,880	32,796	23,994	7,940	5,624	5,980	122	4,300	119,636
Pre-arranged admission	3,415	1,400	4,223	390	714	0	2	0	10,144
Patient in transit	46	176	403	0	0	0	5	49	679
Dead on arrival	2,463	2,210	125	0	..	0	26	35	4,859
Not reported	691	0	0	459	921	0	0	0	2,071
<b>Total presentations</b>	<b>2,074,098</b>	<b>1,483,159</b>	<b>1,195,325</b>	<b>649,215</b>	<b>383,992</b>	<b>143,848</b>	<b>112,233</b>	<b>141,419</b>	<b>6,183,289</b>

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Abbreviation: .. —not applicable.

**Table S5.7: Emergency department presentation length statistics (hours: minutes) for *Emergency presentations<sup>(a)</sup>* with an episode end status of *Admitted to this hospital*, by triage category, public hospital emergency departments, states and territories, 2010–11**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Median duration of presentation <sup>(b)</sup>	3:28	4:09	2:43	1:26	1:56	2:38	3:16	1:22	2:56
Median duration of service event <sup>(c)</sup>	3:28	4:09	2:43	1:26	1:56	2:38	3:16	1:22	2:56
Median time in emergency department <sup>(d)</sup>	4:38	4:13	4:49	3:28	3:49	3:41	3:18	3:59	4:18
<b>Emergency</b>									
Median duration of presentation <sup>(b)</sup>	4:44	5:19	3:42	2:10	2:41	4:47	5:00	1:48	4:05
Median duration of service event <sup>(c)</sup>	4:36	5:12	3:34	2:00	2:34	4:38	4:52	1:36	3:57
Median time in emergency department <sup>(d)</sup>	6:14	5:21	6:35	4:05	5:41	6:13	5:04	6:54	5:47
<b>Urgent</b>									
Median duration of presentation <sup>(b)</sup>	5:34	5:46	4:15	2:39	3:17	5:59	6:26	2:19	4:48
Median duration of service event <sup>(c)</sup>	5:01	5:18	3:36	1:53	2:45	5:06	5:28	1:35	4:14
Median time in emergency department <sup>(d)</sup>	6:52	5:48	7:13	4:15	6:12	7:19	6:30	6:39	6:19
<b>Semi-urgent</b>									
Median duration of presentation <sup>(b)</sup>	5:46	5:42	4:06	2:47	3:30	6:06	6:47	2:38	5:00
Median duration of service event <sup>(c)</sup>	4:48	4:45	3:02	1:43	2:33	4:41	4:30	1:14	3:59
Median time in emergency department <sup>(d)</sup>	6:53	5:43	6:59	4:16	6:12	7:21	6:52	6:01	6:12
<b>Non-urgent</b>									
Median duration of presentation <sup>(b)</sup>	4:27	4:01	2:39	2:03	2:13	4:20	5:10	1:48	3:48
Median duration of service event <sup>(c)</sup>	3:23	3:07	1:43	1:16	1:13	2:48	3:19	0:58	2:46
Median time in emergency department <sup>(d)</sup>	5:30	4:02	4:37	3:37	4:01	5:39	5:11	2:40	4:45
<b>Total<sup>(e)</sup></b>									
Median duration of presentation <sup>(b)</sup>	5:24	5:37	4:02	2:31	3:07	5:42	6:08	2:17	4:39
Median duration of service event <sup>(c)</sup>	4:48	5:04	3:28	1:51	2:36	4:49	5:00	1:28	4:03
Median time in emergency department <sup>(d)</sup>	6:40	5:39	6:56	4:11	5:58	7:01	6:12	6:21	6:06

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. See Box 5.5 for footnotes specific to this table.

**Table S5.8: Emergency department presentation length statistics (hours: minutes) for *Emergency presentations<sup>(a)</sup>* with an episode end status other than *Admitted to this hospital*, by triage category, public hospital emergency departments, states and territories, 2010–11**

Triage category	NSW	Vic	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Total
<b>Resuscitation</b>									
Median duration of presentation <sup>(b)</sup>	3:39	3:55	3:34	3:37	3:21	3:23	2:35	3:33	3:36
Median duration of service event <sup>(c)</sup>	3:39	3:55	3:33	3:34	3:21	3:23	2:35	3:33	3:35
Median time in emergency department <sup>(d)</sup>	4:02	4:03	4:24	3:37	3:54	3:47	3:01	3:33	4:02
<b>Emergency</b>									
Median duration of presentation <sup>(b)</sup>	3:41	3:08	3:12	2:50	3:04	3:53	3:46	3:12	3:15
Median duration of service event <sup>(c)</sup>	3:33	2:58	3:03	2:40	2:55	3:42	3:36	3:01	3:06
Median time in emergency department <sup>(d)</sup>	3:54	3:08	3:39	2:50	3:17	4:01	3:56	3:12	3:27
<b>Urgent</b>									
Median duration of presentation <sup>(b)</sup>	3:15	2:55	2:55	2:31	3:15	3:12	3:34	2:49	3:00
Median duration of service event <sup>(c)</sup>	2:43	2:22	2:14	1:45	2:39	2:20	2:39	2:03	2:21
Median time in emergency department <sup>(d)</sup>	3:24	2:56	3:08	2:31	3:22	3:15	3:41	2:49	3:06
<b>Semi-urgent</b>									
Median duration of presentation <sup>(b)</sup>	2:23	2:16	2:02	1:50	2:29	2:03	2:56	2:10	2:12
Median duration of service event <sup>(c)</sup>	1:30	1:12	1:03	0:55	1:37	1:01	1:22	0:57	1:12
Median time in emergency department <sup>(d)</sup>	2:29	2:16	2:06	1:50	2:30	2:04	3:01	2:10	2:14
<b>Non-urgent</b>									
Median duration of presentation <sup>(b)</sup>	1:41	1:33	1:20	1:18	1:46	1:28	2:08	1:17	1:34
Median duration of service event <sup>(c)</sup>	0:48	0:35	0:33	0:35	0:53	0:32	0:45	0:31	0:40
Median time in emergency department <sup>(d)</sup>	1:45	1:33	1:23	1:18	1:46	1:30	2:10	1:17	1:36
<b>Total<sup>(e)</sup></b>									
Median duration of presentation <sup>(b)</sup>	2:31	2:21	2:22	2:01	2:41	2:23	3:01	2:13	2:23
Median duration of service event <sup>(c)</sup>	1:42	1:24	1:30	1:09	1:57	1:21	1:40	1:05	1:30
Median time in emergency department <sup>(d)</sup>	2:37	2:21	2:30	2:01	2:45	2:25	3:06	2:13	2:27

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. See Box 5.5 for footnotes specific to this table.

**Table S5.9: Emergency department presentations, by triage category and episode end status, public hospital emergency departments, states and territories, 2010–11**

Triage category and episode end status	NSW <sup>(a)</sup>	Vic	Qld	WA <sup>(b)</sup>	SA <sup>(c)</sup>	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Admitted to this hospital	9,915	6,803	7,341	3,717	3,395	482	372	582	32,607
Departed without being admitted or referred	981	598	2,202	364	613	22	45	125	4,950
Referred to another hospital for admission	1,161	226	699	585	299	42	34	2	3,048
Did not wait	5	0	13	5	0	0	1	0	24
Left at own risk	54	40	146	30	23	0	3	2	298
Died in emergency department	0	182	497	430	148	73	38	50	1,418
Dead on arrival	47	0	17	0	0	4	4	0	72
Not reported	11	3	0	0	4	0	0	0	18
<i>Total</i>	<i>12,174</i>	<i>7,852</i>	<i>10,915</i>	<i>5,131</i>	<i>4,482</i>	<i>623</i>	<i>497</i>	<i>761</i>	<i>42,435</i>
<b>Emergency</b>									
Admitted to this hospital	108,018	91,874	65,965	39,089	27,328	5,395	6,001	5,402	349,072
Departed without being admitted or referred	54,971	37,188	51,683	27,840	16,413	4,510	4,742	3,110	200,457
Referred to another hospital for admission	7,450	2,043	6,201	4,188	2,931	216	279	28	23,336
Did not wait	420	409	329	141	94	10	16	9	1,428
Left at own risk	2,100	1,084	2,216	673	401	51	69	95	6,689
Died in emergency department	0	123	181	67	46	30	14	2	463
Dead on arrival	6	0	2	0	0	0	0	0	8
Not reported	68	10	0	8	65	4	0	0	155
<i>Total</i>	<i>173,033</i>	<i>132,731</i>	<i>126,577</i>	<i>72,006</i>	<i>47,278</i>	<i>10,216</i>	<i>11,121</i>	<i>8,646</i>	<i>581,608</i>
<b>Urgent</b>									
Admitted to this hospital	257,671	229,485	153,348	78,690	56,258	15,401	12,825	16,698	820,376
Departed without being admitted or referred	319,043	215,967	292,724	118,212	72,975	30,528	19,247	18,510	1,087,206
Referred to another hospital for admission	16,925	4,304	12,910	6,327	4,872	539	903	60	46,840
Did not wait	14,711	12,104	15,814	1,474	3,395	1,587	1,228	825	51,138
Left at own risk	12,090	5,571	7,691	1,254	1,110	180	210	343	28,449
Died in emergency department	0	67	91	34	29	24	20	1	266
Dead on arrival	19	0	25	0	0	0	0	0	44
Not reported	186	27	0	17	217	27	0	0	474
<i>Total</i>	<i>620,645</i>	<i>467,525</i>	<i>482,603</i>	<i>206,008</i>	<i>138,856</i>	<i>48,286</i>	<i>34,433</i>	<i>36,437</i>	<i>2,034,793</i>

(continued)

**Table S5.9 (continued): Emergency department presentations, by triage category and episode end status, public hospital emergency departments, states and territories, 2010–11**

Triage category and episode end status	NSW <sup>(a)</sup>	Vic	Qld	WA <sup>(b)</sup>	SA <sup>(c)</sup>	Tas	ACT	NT	Total
<b>Semi-urgent</b>									
Admitted to this hospital	166,457	142,493	51,055	42,721	25,347	7,336	6,978	12,184	454,571
Departed without being admitted or referred	657,636	480,771	383,082	266,024	124,702	56,720	36,434	57,522	2,062,891
Referred to another hospital for admission	10,470	2,389	4,074	3,613	2,156	342	409	68	23,521
Did not wait	66,912	58,382	41,042	6,424	10,416	4,974	7,019	8,557	203,726
Left at own risk	23,625	10,067	9,453	1,149	1,197	211	569	671	46,942
Died in emergency department	0	21	12	12	3	2	7	0	57
Dead on arrival	23	0	1	0	0	0	0	0	24
Not reported	172	89	0	66	155	29	0	0	511
<i>Total</i>	<i>925,295</i>	<i>694,212</i>	<i>488,719</i>	<i>320,009</i>	<i>163,976</i>	<i>69,614</i>	<i>51,416</i>	<i>79,002</i>	<i>2,792,243</i>
<b>Non-urgent</b>									
Admitted to this hospital	19,250	8,744	2,875	1,962	2,482	607	543	826	37,289
Departed without being admitted or referred	272,888	144,093	72,437	41,711	23,888	12,544	11,148	12,934	591,643
Referred to another hospital for admission	1,274	171	259	146	188	34	52	29	2,153
Did not wait	39,796	23,630	9,872	2,017	2,549	1,456	2,836	2,655	84,811
Left at own risk	5,922	1,975	982	181	243	12	187	94	9,596
Died in emergency department	0	1	6	2	0	0	0	0	9
Dead on arrival	2,677	0	80	0	0	0	0	35	2,792
Not reported	76	17	0	19	50	42	0	0	204
<i>Total</i>	<i>341,883</i>	<i>178,631</i>	<i>86,511</i>	<i>46,038</i>	<i>29,400</i>	<i>14,695</i>	<i>14,766</i>	<i>16,573</i>	<i>728,497</i>
<b>All triage categories</b>									
Admitted to this hospital	561,370	479,407	280,584	166,194	114,810	29,221	26,719	35,692	1,693,997
Departed without being admitted or referred	1,305,688	878,617	802,128	454,156	238,591	104,324	71,616	92,201	3,947,321
Referred to another hospital for admission	37,280	9,133	24,143	14,859	10,446	1,173	1,677	187	98,898
Did not wait	122,087	94,525	67,070	10,061	16,454	8,027	11,100	12,046	341,370
Left at own risk	43,799	18,737	20,488	3,287	2,974	454	1,038	1,205	91,982
Died in emergency department	0	394	787	548	226	130	79	53	2,217
Dead on arrival	2,780	2,200	125	0	0	417	4	35	5,561
Not reported	1,094	146	0	110	491	102	0	0	1,943
<b>Total</b>	<b>2,074,098</b>	<b>1,483,159</b>	<b>1,195,325</b>	<b>649,215</b>	<b>383,992</b>	<b>143,848</b>	<b>112,233</b>	<b>141,419</b>	<b>6,183,289</b>

Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. See Box 5.5 for footnotes specific to this table. Abbreviation: . .—not applicable

# 6 Outpatient care

This chapter presents information on outpatient services and other non-admitted, non-emergency patient services provided by public hospitals in Australia. Detailed information on non-admitted patient emergency department care for Australia's public hospitals is in Chapter 5 of this report.

## What data are reported?

### Non-admitted patient occasions of service

The National Public Hospital Establishments Database (NPHED) has almost complete coverage of public hospitals and includes data on non-admitted patient occasions of service for 14 non-admitted patient service types. Outpatient-related occasions of service sourced from the NPHED are those individual and group sessions for the non-admitted patient service type of *Allied health, Dental, Dialysis, Endoscopy and related procedures* and *Other medical/surgical/obstetric*.

In addition to these outpatient-related services, the NPHED also includes a range of non-admitted patient care services that are not in scope for the National Outpatient Care Database (NOCD). Other non-admitted patient service types reported to the NPHED analysed in this chapter include the service types of *Alcohol and other drugs, Community health services, District nursing, Mental health, Other outreach services, Pathology, Pharmacy and Radiology and organ imaging*.

### Outpatient clinic activity

The National Outpatient Care Database (NOCD) is a compilation of summary data for outpatient clinic occasions of service in public hospitals. The data supplied are based on the National Minimum Data Set (NMDS) for Outpatient care, as defined in the *National health data dictionary version 14* (HDSC 2008). These data were provided to the AIHW for 2010–11 as counts of individual occasions of service and group sessions for 24 types of outpatient clinics.

The scope for the Outpatient care NMDS for 2010–11 was for services provided to non-admitted, non-emergency patients registered for care in outpatient clinics of public hospitals that were classified as either peer group A (*Principal referral and specialist women's and children's hospitals*) or B (*Large hospitals*) in *Australian hospital statistics 2009–10* (AIHW 2011a). The public hospital peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see Appendix 1).

For 2010–11, most states and territories were able to provide summary data to the NOCD for all public hospitals in peer groups A and B that managed outpatient clinic services. Some states and territories also provided outpatient care data for public hospitals which were classified to other peer groups:

- New South Wales provided data for 2 *Medium* hospitals
- Victoria provided data for 1 *Medium* hospital
- Western Australia provided data for 3 *Medium* hospitals, 1 *Small regional acute* hospital, 2 *Remote acute* hospitals, 1 *Small non-acute* hospital and 1 *Rehabilitation* hospital

- South Australia provided data for 1 *Medium* hospital
- Tasmania provided data for 1 *Medium* hospital.

These data have also been included in analyses of NOCD data presented in this chapter. The proportion of individual outpatient occasions of service and group sessions for which clinic-level data were available was 96% for peer groups A and B. For all public hospitals the proportion was about 80% for individual occasions of service and 79% for group sessions (see Table S6.1).

#### **Box 6.1: What are the limitations of the data?**

When interpreting the data presented, the reader should note the following:

- The data presented are counts of occasions of service, not persons. A person may have multiple occasions of service, at a variety of outpatient clinics or departments reported in a reference year.
- States and territories may differ in the extent to which outpatient services are provided in non-hospital settings (such as community health services) which are beyond the scope of the NPHED and NOCD.
- There is considerable variation among states and territories and between reporting years in the way in which non-admitted patient occasions of service data are collected for the NPHED. Differing admission practices between the states and territories also lead to variation among jurisdictions in the services reported.
- Data from the NOCD should be interpreted with caution as they may not be representative of outpatient clinic activity for hospitals that were not required to provide data for the NOCD. The proportion of individual outpatient-related occasions of service and group sessions for which clinic-level data were available was 96% for peer groups A (*Principal referral and specialist women's and children's hospitals*) and B (*Large hospitals*). The proportion for all public hospitals was about 80% for individual occasions of service and 79% for group sessions.
- NOCD data should be interpreted with caution as the comparability of the data may be influenced by variation in admission practices, the type of facility providing these services and in the allocation of outpatient services to the 24 clinic types among the states and territories.
- For South Australia, the increase in outpatient activity between 2006–07 and 2007–08 was due largely to a change in admission practices for chemotherapy and selected endoscopies. In 2006–07, these were treated as same-day admissions, and from 2007–08 onwards, were treated as outpatient occasions of service.
- For 2010–11, some states re-categorised some outpatient clinics to align with the Activity Based Funding Tier 2 clinics structure (IHPA 2011). Therefore, these data may not be comparable to data reported for previous years.
- For Western Australia, counts of outpatient group sessions reported to the NOCD reflect the number of individuals who attended group sessions. The data for Western Australian group sessions are therefore not directly comparable to the data provided for group sessions presented for other states and territories.

(continued)

**Box 6.1 (continued)**

- For 2009–10, Tasmania were not able to provide outpatient care data for one *Principal referral hospital*, which reported about 180,000 occasions of service to the NPHED and about 134,000 occasions of service to the NOCD in 2010–11.
- For 2010–11, Tasmania was able to exclude counts of outpatient occasions of service provided at public hospitals by private specialists. In previous years, these were included in Tasmania’s public hospital counts.

**Box 6.2: What methods were used?**

- Outpatient-related occasions of service sourced from the NPHED refer to occasions of service and group sessions reported with a non-admitted patient service type of *Allied health, Dental, Dialysis, Endoscopy and related procedures and Other medical/surgical/obstetric*.
- The numbers of occasions of service for the non-admitted patient service type *emergency services* are not presented in this chapter. See Chapter 5 of this report.
- The proportion of outpatient occasions of service for which NOCD clinic-level data was available was calculated as the number of outpatient occasions of service reported to the NOCD divided by the number of outpatient-related occasions of service (as defined above), from the NPHED, as a percentage. Where the number of occasions of service reported to the NOCD was greater than the number of outpatient-related occasions of service reported to the NPHED, the proportion is presented as 100%.

## How has activity changed over time?

Table 6.1 shows the number of individual occasions of service for outpatient-related services and other non-admitted patient services reported to the NPHED for public acute hospitals between 2006–07 and 2010–11.

Between 2006–07 and 2010–11, outpatient care delivered in specialist outpatient clinics increased by an average of almost 2% per year, with *Endoscopy and related procedures* showing the largest relative increase in number of individual occasions of service (by an average of almost 27% per year). Over the same period *Dialysis* decreased by an average of about 8% per year; *Dental* services decreased by an average of 5% per year; and *Community health, Outreach and District nursing* decreased by just over 1% per year (Table 6.1).

## States and territories

Table 6.2 shows the number of individual occasions of service for outpatient-related services and other non-admitted patient services reported to the NPHED for public acute hospitals across states and territories between 2006–07 and 2010–11.

Between 2006–07 and 2010–11, individual *Outpatient* occasions of service increased by an average of 1.3% per year, with the Australian Capital Territory reporting the highest increase of 10.7% (average per year). Between 2006–07 and 2010–11, *Other non-admitted* patient occasions of service increased by an average of 2.3% per year with the Northern Territory reporting the highest increase (7.7% per year) (Table 6.2).

For Tasmania, there was a marked decrease in the numbers of *Other non-admitted* patient occasions of service reported for 2010–11 due to the exclusion of outpatient occasions of service provided at public hospitals by private specialists. In previous years, these were included in Tasmania's public hospital counts.

After adjusting for the exclusion of non-public funded outpatient occasions of service for Tasmania in 2010–11 and an undercount in 2009–10, it is estimated that the national average increase for outpatient-related services and other non-admitted patient services was about 2.5% per year.

**Table 6.1: Number of individual occasions of service ('000) for outpatient and other non-admitted patient services, public acute hospitals, 2006–07 to 2010–11<sup>(a)</sup>**

	2006–07	2007–08	2008–09	2009–10 <sup>(b)</sup>	2010–11	<b>Change (per cent)</b>	
						Average since 2006–07	Since 2009–10
<b>Individual occasions of service</b>					<b>('000)</b>		
Outpatient-related care							
Allied health	3,660	3,716	3,752	3,848	3,908	1.7	1.6
Dental	1,084	1,035	775	864	886	-4.9	2.5
Dialysis	33	25	26	50	23	-8.3	-53.6
Endoscopy and related procedures	24	47	58	55	63	26.9	15.9
Other medical/surgical/obstetric	11,031	11,546	11,906	11,972	11,801	1.7	-1.4
<i>Total outpatient-related occasions of service</i>	<i>15,832</i>	<i>16,369</i>	<i>16,516</i>	<i>16,789</i>	<i>16,682</i>	<i>1.3</i>	<i>-0.6</i>
Pharmacy, pathology and radiology and organ imaging	14,910	16,213	17,066	16,815	17,197	3.6	2.3
Mental health, alcohol and drug services	3,155	3,078	3,042	3,180	3,385	1.8	6.5
Community health, outreach and district nursing	5,503	5,595	5,365	5,296	5,261	-1.1	-0.7
<b>Total individual occasions of service</b>	<b>39,400</b>	<b>41,255</b>	<b>41,989</b>	<b>42,081</b>	<b>42,526</b>	<b>1.9</b>	<b>1.1</b>

(a) Reporting arrangements have varied significantly across years and across jurisdictions.

(b) For 2009–10, Tasmania was not able to provide occasions of service data for one hospital that reported about 180,000 non-admitted patient occasions of service to the NPHED in 2010–11.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods.

**Table 6.2: Individual occasions of service for outpatient and other non-admitted patient services, public acute hospitals, states and territories, 2006–07 to 2010–11<sup>(a)</sup>**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(b)</sup></b>							
Outpatient	6,255,445	6,400,364	6,549,516	6,450,592	6,022,466	-0.9	-6.6
Other non-admitted <sup>(c)</sup>	11,725,443	12,414,382	13,137,117	12,523,328	12,827,589	2.3	2.4
Total <sup>(d)</sup>	17,980,888	18,814,746	19,686,633	18,973,920	18,850,055	1.2	-0.7
<b>Victoria<sup>(b)</sup></b>							
Outpatient	2,831,379	2,864,208	2,939,829	3,094,084	3,334,130	4.2	7.8
Other non-admitted <sup>(c)</sup>	2,968,958	3,115,414	3,081,479	3,246,556	3,393,818	3.4	4.5
Total <sup>(d)</sup>	5,800,337	5,979,622	6,021,308	6,340,640	6,727,948	3.8	6.1
<b>Queensland</b>							
Outpatient	3,200,518	3,324,742	3,190,117	3,344,905	3,259,578	0.5	-2.6
Other non-admitted <sup>(c)</sup>	5,365,228	5,867,454	6,023,488	6,155,172	6,267,074	4.0	1.8
Total <sup>(d)</sup>	8,565,746	9,192,196	9,213,605	9,500,077	9,526,652	2.7	0.3
<b>Western Australia</b>							
Outpatient	1,595,387	1,697,777	1,775,362	1,902,060	2,021,564	6.1	6.3
Other non-admitted <sup>(c)</sup>	2,344,718	2,287,313	1,969,478	2,195,464	2,458,701	1.2	12.0
Total <sup>(d)</sup>	3,940,105	3,985,090	3,744,840	4,097,524	4,480,265	3.3	9.3
<b>South Australia<sup>(e)</sup></b>							
Outpatient	1,136,274	1,203,133	1,130,999	1,136,319	1,142,192	0.1	0.5
Other non-admitted <sup>(c)</sup>	487,254	456,785	444,769	482,368	458,092	-1.5	-5.0
Total <sup>(d)</sup>	1,623,528	1,659,918	1,575,768	1,618,687	1,600,284	-0.4	-1.1
<b>Tasmania<sup>(f)</sup></b>							
Outpatient <sup>(b)</sup>	430,586	459,539	454,806	334,946	358,322	-4.5	7.0
Other non-admitted <sup>(c)</sup>	367,214	399,480	453,849	295,280	30,335	-46.4	-89.7
Total <sup>(d)</sup>	797,800	859,019	908,655	630,226	388,657	-16.5	-38.3
<b>Australian Capital Territory</b>							
Outpatient	264,547	296,259	343,383	379,974	396,566	10.7	4.4
Other non-admitted <sup>(c)</sup>	131,550	150,878	158,941	169,808	170,225	6.7	0.2
Total <sup>(d)</sup>	396,097	447,137	502,324	549,782	566,791	9.4	3.1
<b>Northern Territory</b>							
Outpatient	118,161	122,694	131,993	146,607	147,188	5.6	0.4
Other non-admitted <sup>(c)</sup>	176,930	194,087	203,994	223,292	237,874	7.7	6.5
Total <sup>(d)</sup>	295,091	316,781	335,987	369,899	385,062	6.9	4.1
<b>Australia</b>							
Outpatient	<b>15,832,297</b>	<b>16,368,716</b>	<b>16,516,005</b>	<b>16,789,487</b>	<b>16,682,006</b>	<b>1.3</b>	<b>-0.6</b>
Other non-admitted <sup>(c)</sup>	<b>23,567,295</b>	<b>24,885,793</b>	<b>25,473,115</b>	<b>25,291,268</b>	<b>25,843,708</b>	<b>2.3</b>	<b>2.2</b>
Total <sup>(d)</sup>	<b>39,399,592</b>	<b>41,254,509</b>	<b>41,989,120</b>	<b>42,080,755</b>	<b>42,525,714</b>	<b>1.9</b>	<b>1.1</b>

- (a) Reporting arrangements have varied significantly across years and across jurisdictions.
- (b) From 2009–10, the data for the Albury Base Hospital are included in statistics for Victoria whereas they were formerly reported by, and included in statistics for New South Wales.
- (c) *Other Pharmacy, Pathology, Radiology and organ imaging, Mental health, Alcohol and drug, Community health and Outreach and District Nursing.*
- (d) Total individual occasions of service.
- (e) For South Australia, the increase in outpatient activity between 2006–07 and 2007–08 was due largely to a change in admission practices for chemotherapy and selected endoscopies. In 2006–07, these were treated as same-day admissions, and from 2007–08 onwards, were treated as outpatient occasions of service.
- (f) For 2010–11, Tasmania was able to exclude counts of outpatient occasions of service provided at public hospitals by private specialists. In previous years, these were included in Tasmania's public hospital counts.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods.

## How much activity was there in 2010–11?

Table 6.3 shows the number of individual occasions of service for outpatient-related services and other non-admitted patient services reported to the NPHED for public acute hospitals by state and territory. Emergency non-admitted patient services are not included (see Chapter 5).

In 2010–11, public hospitals provided almost 43 million service episodes for non-admitted patients, including:

- 17.2 million services for *Pharmacy, Pathology and Radiology and organ imaging*
- 16.7 million service episodes delivered in specialist outpatient clinics with the chief contributors being *Medical/surgical/obstetric* and *Allied health*
- 5.3 million *Community health, Outreach and District nursing* services.
- 3.4 million services for *Mental health* and *Alcohol and drug* services

**Table 6.3: Number of individual occasions of service ('000) for outpatient and other non-admitted patient services, public acute hospitals, states and territories, 2010–11<sup>(a)</sup>**

Type of service	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT <sup>(c)</sup>	Total
Outpatient-related care									
Allied health	659	1,136	597	1,173	177	120	32	12	3,908
Dental	404	462	..	12	8	..	..	..	886
Dialysis	23	..	..	..	..	..	..	..	23
Endoscopy and related procedures	23	..	13	..	25	..	3	..	63
Other medical/surgical/obstetric	4,913	1,735	2,650	836	932	238	362	135	11,801
<i>Total outpatient-related occasions of service</i>	<i>6,022</i>	<i>3,334</i>	<i>3,260</i>	<i>2,022</i>	<i>1,142</i>	<i>358</i>	<i>397</i>	<i>147</i>	<i>16,682</i>
Pharmacy <sup>(d)</sup> , pathology, radiology and organ imaging	7,622	1,971	5,728	1,273	240	..	126	238	17,197
Mental health, alcohol and drug	2,299	856	134	79	16	2	1	..	3,385
Community health, outreach and district nursing <sup>(e)</sup>	2,907	567	406	1,107	202	29	43	..	5,261
<b>Total individual occasions of service</b>	<b>18,850</b>	<b>6,728</b>	<b>9,527</b>	<b>4,480</b>	<b>1,600</b>	<b>389</b>	<b>567</b>	<b>385</b>	<b>42,526</b>

(a) Reporting arrangements have varied significantly across years and across jurisdictions.

(b) *Radiology* figures for the Northern Territory are underestimated and *Pathology* figures relate only to three of the five hospitals.

(c) Includes only those states and territories for which data were available.

(d) Justice Health in New South Wales reported a large number of occasions of service for *Pharmacy* which may not be typical for other hospitals.

(e) Justice Health in New South Wales reported a large number of occasions of service which may not be typical of *District nursing*.

Note: Also refer to boxes 6.1 and 6.2 for more information on data limitations and methods of analysis. Additional information for states and territories is available in Table S6.2 at the end of this chapter.

Abbreviation: ..—not applicable.

The proportion of non-admitted patient occasions of service which are related to outpatient care varied across states, from 32% in New South Wales to 92% in Tasmania. For all states except Western Australia, the largest contributor to outpatient-related services was *Other medical/surgical/obstetric* followed by *Allied health*, whereas in Western Australia the order was reversed. There was also considerable variation in activity for other non-admitted patient service types across states and territories. These variations are likely to reflect differences in data recording practices.

In 2010–11, almost 318,000 non-admitted patient care occasions of service were reported to the NPHED for group sessions (care provided to more than one patient at a time), with *Mental health*, *Alcohol and drug* and *Community health* accounting for 34% of these sessions (see Table S6.2).

## **Individual occasions of service**

In 2010–11, clinic-level data were provided to the NOCD for over 13.3 million occasions of service for individuals (Table 6.4). Just over half of individual outpatient occasions of service reported to the NOCD were provided by *Allied health*, *Medical* and *Obstetrics* clinics.

The estimated proportions of individual occasions of service reported to the NOCD for 2010–11 varied significantly by state and territory, ranging from 68% for Western Australia to 100% for the Tasmania (Table S6.1).

## **Group occasions of service**

In 2010–11, there were 166,000 group sessions reported for non-admitted patient outpatient clinic care (Table 6.5). Over 55% of group sessions reported to the NOCD were provided by *Allied health* clinics.

The estimated proportions of group occasions of service reported to the NOCD for 2010–11 varied significantly by state and territory, ranging from 28% for the Australian Capital Territory to 100% for Western Australia, the Northern Territory and Tasmania (Table S6.1).

**Table 6.4: Outpatient care individual occasions of service<sup>(a)</sup>, by outpatient clinic type, selected hospitals, states and territories, 2010–11**

Clinic type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Allied health	557,835	816,997	497,647	394,344	180,539	109,610	30,036	11,745	2,598,753
Dental	190,991	285,276	0	3,906	7,961	0	0	0	488,134
Gynaecology	53,011	49,462	67,101	22,070	35,186	23,811	5,278	6,605	262,524
Obstetrics	790,458	351,487	384,899	134,228	108,260	22,827	59,521	26,415	1,878,095
Cardiology	80,279	21,760	92,351	36,200	25,285	12,260	11,809	1,930	281,874
Endocrinology	165,135	48,727	62,730	47,244	31,850	22,019	13,791	2,037	393,533
Oncology	325,112	118,594	83,835	60,037	15,020	34,839	14,986	3,350	655,773
Respiratory	151,078	13,671	61,114	21,267	32,618	4,559	6,288	2,428	293,023
Gastroenterology	36,959	19,457	35,708	14,607	19,771	3,995	6,762	1,154	138,413
Medical	1,196,643	247,901	331,163	285,121	124,442	25,510	38,129	22,380	2,271,289
General practice /primary care	214,453	279	22,338	275	0	769	18,057	0	256,171
Paediatric	104,710	9,427	53,566	10,454	30,989	13,194	7,864	7,627	237,831
Endoscopy	19,372	0	12,737	0	17,231	772	2,972	1,076	54,160
Plastic surgery	35,407	88,335	32,097	49,964	28,123	11,479	5,553	1,499	252,457
Urology	21,467	48,672	49,514	22,809	14,869	4,170	2,444	644	164,589
Orthopaedic	263,398	209,879	282,374	93,159	71,044	28,013	17,066	14,023	978,956
Ophthalmology	118,896	96,277	77,313	58,359	63,715	8,135	10,010	12,563	445,268
Ear, nose and throat surgery	36,619	46,157	47,425	26,515	20,028	2,488	4,042	4,430	187,704
Pre-admission and pre-anaesthesia	171,605	86,119	137,483	43,915	45,668	15,587	8,433	7,670	516,480
Chemotherapy	80,956	0	2,338	0	22,446	14,845	6,033	3,209	129,827
Dialysis	22,904	0	0	994	0	0	0	5,206	29,104
Surgery	88,469	148,886	150,605	50,767	67,601	24,958	8,983	16,282	556,551
Paediatric surgery	6,193	9,843	7,309	420	3,536	434	1,574	0	29,309
Renal medicine	130,317	0	55,507	921	19,827	3,356	6,552	0	216,480
<b>Total</b>	<b>4,862,267</b>	<b>2,717,206</b>	<b>2,547,154</b>	<b>1,377,576</b>	<b>986,009</b>	<b>387,630</b>	<b>286,183</b>	<b>152,273</b>	<b>13,316,298</b>

(a) There were variations among jurisdictions in the reporting of occasions of service because of differences in admission practices and in the types of facilities offering these services.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods. Source: National Outpatient Care Database.

**Table 6.5: Outpatient care group occasions of service<sup>(a)</sup>, by outpatient clinic type, selected hospitals, states and territories, 2010–11**

Clinic type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Allied health	13,313	9,894	7,839	53,504	7,493	0	147	0	92,190
Dental	30	0	0	4	0	0	0	0	34
Gynaecology	6	0	1	0	0	0	0	0	7
Obstetrics	2,839	0	1,930	525	1,214	0	183	0	6,691
Cardiology	1,071	0	1,300	817	357	0	1	0	3,546
Endocrinology	1,464	0	318	4,021	188	0	54	0	6,045
Oncology	543	0	37	375	0	0	0	0	955
Respiratory	2,457	0	49	596	113	0	0	0	3,215
Gastroenterology	91	0	0	52	74	0	0	0	217
Medical	16,034	526	260	8,343	5,183	0	14	9	30,369
General practice/primary care	129	10	1	28	0	0	0	0	168
Paediatric	562	0	48	41	516	0	0	0	1,167
Plastic surgery	5	0	0	9,697	685	0	0	0	10,387
Urology	13	0	2	232	0	0	0	0	247
Orthopaedic	335	0	0	7,465	12	0	0	0	7,812
Ophthalmology	1	0	0	92	0	0	0	0	93
Ear, nose and throat surgery	1	0	0	595	0	0	0	0	596
Pre-admission and pre-anaesthesia	96	0	5	607	0	0	0	0	708
Chemotherapy	165	0	1	0	0	0	0	0	166
Dialysis	7	0	0	0	0	0	0	0	7
Surgery	49	0	140	313	114	0	1	0	617
Renal medicine	377	0	29	2	6	0	0	0	414
<b>Total</b>	<b>39,588</b>	<b>10,430</b>	<b>11,960</b>	<b>87,309</b>	<b>15,955</b>	<b>0</b>	<b>400</b>	<b>9</b>	<b>165,651</b>

(a) There were variations among jurisdictions in the reporting of occasions of service because of differences in admission practices and in the types of facilities offering these services. There were no group sessions reported for *Endoscopy* and *Paediatric Surgery*.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods. Source: National Outpatient Care Database.

## Supplementary tables

The following supplementary tables provide more detailed information on non-admitted patient care by state and territory.

### Box 6.3: Notes – Chapter 6 supplementary tables

#### Table S6.2

- (a) Non-admitted patient care sourced from the National Public Hospital Establishments Database.
- (b) *Radiology* figures for the Northern Territory are underestimated and *Pathology* figures relate only to three of the five hospitals.
- (c) *Other medical/surgical/obstetric* relates to the NOCD outpatient services of *Gynaecology; Obstetrics; Cardiology; Endocrinology; Oncology; Respiratory; Gastroenterology; Medical; General practice primary care; Paediatric; Plastic surgery, Urology; Orthopaedic surgery; Ophthalmology; Ear, nose and throat; Chemotherapy; Paediatric surgery and Renal medical*.
- (d) Justice Health (formerly known as Corrections Health) in New South Wales reported a large number of occasions of service for *Pharmacy* which may not be typical for other hospitals.
- (e) Justice Health (formerly known as Corrections Health) in New South Wales reported a large number of occasions of service which may not be typical of *District nursing*.
- (f) Includes any group sessions for *Dialysis* and *Endoscopy and related procedures*.

**Table S6.1: Outpatient occasions of service, by public hospital peer group, states and territories, 2010–11**

Peer group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Hospitals reporting to NOCD									
Individual occasions of service	30	22	19	6	5	2	2	2	88
Group occasions of service	29	14	13	6	5	0	2	1	70
Occurrences of service									
Individual	4,201,473	2,262,794	2,365,559	985,142	847,653	289,779	286,183	152,273	11,390,856
Group	31,409	7,247	11,316	57,719	13,473	0	400	9	121,573
<b>Large hospitals</b>									
Hospitals reporting to NOCD									
Individual	14	13	4	6	2	1	0	..	40
Group	13	9	3	6	2	0	0	..	33
Occurrences of service reported									
Individual	604,216	420,029	181,595	218,476	126,946	61,102	..	..	1,612,364
Group	6,963	2,735	644	10,785	2,302	0	..	..	23,429
<b>Other hospitals</b>									
Hospitals reporting to NOCD									
Individual	2	1	0	8	1	1	0	0	13
Group	56,578	34,383	..	173,958	11,410	36,749	..	..	313,078
<b>Total</b>									
Hospitals reporting to NOCD									
Individual	46	36	23	20	8	4	2	2	141
Group	44	24	16	19	8	0	2	1	114
Occurrences of service reported									
Individual	4,862,267	2,717,206	2,547,154	1,377,576	986,009	387,630	286,183	152,273	13,316,298
Group	39,588	10,430	11,960	87,309	15,955	0	400	9	165,651
Estimated proportion of occasions of service in NOCD <sup>(a)</sup>									
Individual	81	81	78	68	86	100	72	93	80
Group	65	40	76	100	95	100	28	100	79

(a) The number of outpatient occasions of service reported to the NOCD divided by the number of outpatient-related occasions of service reported to the NPHED, as a percentage.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods.

Abbreviation: .. –not applicable; NOCD—National Outpatient Care Database.

**Table S6.2 Outpatient occasions of service<sup>(a)</sup>, public acute hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(b)</sup>	Total
<b>Individual occasions of service</b>									
Outpatient-related care									
Allied health	659,262	1,136,492	597,136	1,172,949	177,208	120,329	32,074	12,477	3,907,927
Dental	403,713	462,359	..	12,123	7,962	0	..	..	886,157
Dialysis	23,235	..	..	..	0	..	..	..	23,235
Endoscopy and related procedures	22,930	..	12,789	..	24,713	..	2,972	..	63,404
Other medical/surgical/obstetric <sup>(c)</sup>	4,913,326	1,735,276	2,649,653	836,492	932,309	237,993	361,520	134,711	11,801,280
<i>Total outpatient-related occasions of service</i>	<i>6,022,466</i>	<i>3,334,127</i>	<i>3,259,578</i>	<i>2,021,564</i>	<i>1,142,192</i>	<i>358,322</i>	<i>396,566</i>	<i>147,188</i>	<i>16,682,003</i>
Mental health	936,365	759,138	69,343	79,086	15,641	1,548	1,051	..	1,862,172
Alcohol and drug	1,362,297	96,520	64,488	..	..	..	..	..	1,523,305
Pharmacy <sup>(d)</sup>	3,506,719	475,610	608,615	260,086	..	..	1,075	38,066	4,890,171
Community health	1,284,822	322,937	131,870	826,455	2,803	28,787	22,049	..	2,619,723
District nursing <sup>(e)</sup>	1,237,829	238,754	142,509	153,158	6,340	..	..	..	1,778,590
Pathology	3,228,491	836,422	4,099,874	545,648	..	..	36,042	115,279	8,861,756
Radiology and organ imaging	886,291	659,285	1,019,153	467,095	239,967	..	89,056	84,529	3,445,376
Other outreach	384,775	5,152	131,222	127,173	193,341	0	20,952	..	862,615
<b>Total individual occasions of service</b>	<b>18,850,055</b>	<b>6,727,945</b>	<b>9,526,652</b>	<b>4,480,265</b>	<b>1,600,284</b>	<b>388,657</b>	<b>566,791</b>	<b>385,062</b>	<b>42,525,711</b>
<b>Group sessions</b>									
Outpatient care									
Allied health	15,857	23,824	10,507	14,482	7,849	..	493	..	73,012
Dental	59	..	..	6	..	..	0	..	65
Other medical/surgical/obstetric <sup>(c)</sup>	39,829	2,028	5,252	5	8,946	..	912	9	56,981
<i>Total outpatient-related group occasions of service<sup>(f)</sup></i>	<i>55,752</i>	<i>25,852</i>	<i>15,759</i>	<i>14,493</i>	<i>16,795</i>	<i>..</i>	<i>1,405</i>	<i>9</i>	<i>130,065</i>
Mental health	28,102	..	1	3,658	473	..	4	..	32,238
Alcohol and drug	755	..	218	..	0	..	0	..	973
Community health	38,272	7	1,172	34,447	0	..	0	..	73,898
District nursing	2,733	..	91	1,854	0	..	0	..	4,678
Other outreach	9,259	..	142	2,412	63,831	..	50	..	75,694
Other	139	n.a.	0	79	0	..	..	n.a.	225
<b>Total group sessions</b>	<b>135,012</b>	<b>25,859</b>	<b>17,383</b>	<b>56,943</b>	<b>81,099</b>	<b>0</b>	<b>1,459</b>	<b>9</b>	<b>317,764</b>

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods. See Box 6.3 for footnotes specific to this table.

Abbreviations: ..—not applicable; n.a.—not available.

Source: National Public Hospital Establishments Database.

# **7 Admitted patient care: overview**

This chapter draws on data from the National Hospital Morbidity Database (NHMD) to present an overview of admitted patient care in Australia's hospitals, focusing particularly on information related to total admitted patient activity.

Subsequent chapters present information on the following subsets of admitted patient care:

- same-day acute admitted patient care (Chapter 8)
- overnight acute admitted patient care (Chapter 9)
- surgery for admitted patients (Chapter 10)
- sub-acute and non-acute care (Chapter 11).

## **Data on admitted patients**

The NHMD contains episode-level records from admitted patient morbidity data collection systems in Australian hospitals. The data presented in this chapter include administrative, demographic and clinical data.

Administrative data provides information on:

- how patients were admitted
- how patient care ended
- length of stay in hospital
- the source of funding.

Demographic data provides information on:

- patient age
- patient sex
- Indigenous status
- remoteness area of usual residence
- socioeconomic status of area of usual residence.

Clinical data provides information on:

- the type of care provided
- principal and additional diagnoses
- procedures
- Australian Refined-Diagnosis Related Groups (AR-DRGs).

Terms relevant to admitted patient care data are summarised in Box 7.1.

### **Box 7.1: Summary of terms and classifications relating to admitted patient care**

Statistics on admitted patients are compiled when an **admitted patient** (a patient who undergoes a hospital's formal admission process) completes an episode of admitted patient care and 'separates' from the hospital. This is because most of the data on the use of hospitals by admitted patients are based on information provided at the end of the patients' episodes of care, rather than at the beginning. The length of stay and the procedures carried out are then known and the diagnostic information is more accurate.

**Separation** is the term used to refer to the episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). 'Separation' also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care.

**Patient day** means the occupancy of a hospital bed (or chair in the case of some same-day patients) by an admitted patient for all or part of a day. The length of stay for an overnight patient is calculated by subtracting the date the patient is admitted from the date of separation and deducting days the patient was on leave. A same-day patient is allocated a length of stay of 1 day.

A **same-day** separation occurs when a patient is admitted and separated from the hospital on the same date. An **overnight** separation occurs when a patient is admitted to and separated from the hospital on different dates.

The **principal diagnosis** is the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of admitted patient care. An **additional diagnosis** is a condition or complaint that either coexists with the principal diagnosis or arises during the episode of care. Additional diagnoses are reported if the conditions affect patient management.

A **procedure** is a clinical intervention that is surgical in nature, carries an anaesthetic risk, requires specialised training and/or requires special facilities or services available only in an acute care setting. Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays. Patient support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

**Australian Refined Diagnosis Related Groups (AR-DRG)** is an Australian classification system of diagnoses related groups (AR-DRGs). AR-DRGs provide a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources required by the hospital. Each AR-DRG represents a class of patients with similar clinical conditions requiring similar hospital resources. The AR-DRG system is partly hierarchical, with 23 Major Diagnostics Categories, divided into *Surgical*, *Medical* and *Other* partitions, and then into 698 individual AR-DRGs (in version 6.0 AR-DRGs).

In 2010–11, diagnoses and external causes of injury were recorded using the 7th edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2010). It comprises classifications of diseases and external causes of injuries and poisoning, based on the World Health Organization's version of ICD-10. The ICD-10-AM classification is hierarchical, with 20 summary disease chapters that are divided into a large number of more specific disease groupings (represented by 3-character codes).

(continued)

### **Box 7.1 (continued)**

Most of the 3-character codes are divided into even larger numbers of very specific disease categories represented by 4- and 5-character codes, grouped according to chapters, covering broad groups of conditions. In this publication, most diagnosis information is presented at the chapter and 3-character level.

Procedures were recorded using the 7th edition of the *Australian Classification of Health Interventions* (ACHI) (NCCH 2010). The ACHI classification is divided into 20 chapters by anatomical site. These subchapters are further divided into more specific procedure blocks, ordered from the least invasive to the most invasive. The blocks, which are numbered sequentially, group the very specific procedure information. In this publication, procedures are mostly presented based on the ACHI procedure chapters and the ACHI procedure blocks.

### **Box 7.2: What are the limitations of the data?**

When interpreting the data presented, the reader should note the following:

- Coverage for the NHMD is essentially complete. For 2010–11, all public hospitals were included except for a small mothercraft hospital in the Australian Capital Territory. Private hospital data were not provided for private free-standing day hospital facilities in the Australian Capital Territory and the Northern Territory, and for one private free-standing day facility in Tasmania.
- Hospitals may be re-categorised as public or private between or within years (see Appendix 1).
- For Victoria, the decrease in private hospital separations between 2009–10 and 2010–11 was mainly due to the reclassification of some same-day mental health care as non-admitted patient activity (which was previously classified as admitted patient activity).
- From 2009–10, the data for the Albury Base Hospital are included in statistics for Victoria whereas they were formerly reported by, and included in statistics for New South Wales.
- For South Australia, the decrease in public hospital separations between 2006–07 and 2007–08 was due largely to a change in admission practices for chemotherapy and selected endoscopies. In 2006–07, these were treated as same-day admissions, and from 2007–08 onwards, were treated as outpatient occasions of service.
- For 2010–11, some psychiatric care provided by Tasmanian public hospitals was categorised as residential care. In previous years, this care was categorised as admitted patient care.
- There may be variation among states and territories in the use of statistical discharges and the assignment of care types (see Appendix 1).
- The overall quality of the data provided for Indigenous status in 2010–11 is considered to be in need of some improvement, being considered acceptable for analysis purposes for New South Wales, Victoria, Queensland, Western Australia, South Australia and public hospitals in the Northern Territory (see Appendix 1).

*(continued)*

**Box 7.2 (continued)**

- In 2010–11, there were 173 separations that did not have sex reported as male or female, and 98 separations for which date of birth was not reported (age could not be calculated).
- Data on state of hospitalisation should be interpreted with caution because of cross-border flows of patients (see Appendix 1). This is particularly important for the Australian Capital Territory. In 2010–11, about 23% of separations for the Australian Capital Territory hospitals were for patients who resided in New South Wales.
- The 7th edition of ICD-10-AM was implemented in Australian hospitals from 1 July 2010. Three major changes to the following Australian Coding Standards (ACS) occurred between the 6th and 7th editions of this classification:
  - Deletion of ACS 1505 *Single spontaneous vaginal delivery*: between 2009–10 and 2010–11, there was a very large increase in the volume of separations reported with principal diagnoses of O80 to O84 and decreases in other obstetric related principal diagnoses.
  - ACS 0042 *Procedures not normally coded*: the addition of all procedure codes in ACHI Chapter 20 *Imaging services* (except trans oesophageal echocardiogram) to ACS 0042 resulted in an 88% decrease in the numbers of *Imaging services* procedures reported between 2009–10 and 2010–11, including some services that were previously reported in the '20 most common' procedures for both same-day and overnight acute separations.
  - ACS 0401 *Diabetes mellitus and Impaired glucose regulation*: due to changes between ICD-10-AM 5th, 6th and 7th editions, the number of diagnoses reported for diabetes and impaired glucose regulation (E09–E14) decreased from almost 903,000 in 2007–08 to about 330,000 in 2010–11.

See Appendix 2 for more information.

**Box 7.3: What methods were used?**

- Unless otherwise indicated in footnotes, separations with a care type of *Newborn* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.
- The patient's age is calculated at the date of admission.
- In tables by age group and sex, separations for which age and sex were not reported are included in totals.
- Separation rates are age standardised as detailed in Appendix 2.
- In some tables, separation rates are accompanied by the standardised separation rate ratio (SRR). If the SRR is greater than 1, then the rate for the category was higher than the national average (or, in the case of Indigenous status, than other Australians) (see Appendix 2).

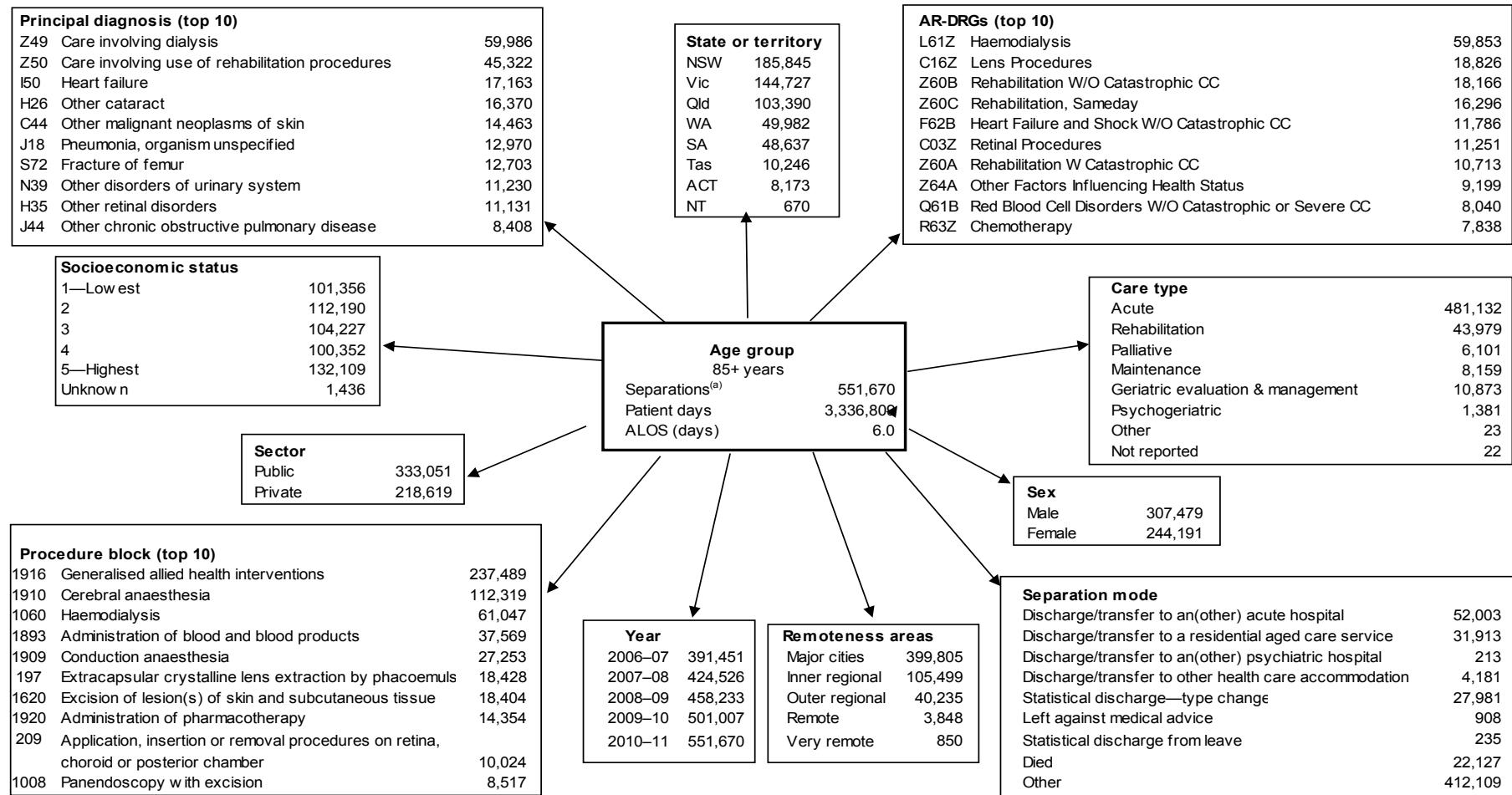
(continued)

**Box 7.3 (continued)**

- The data presented on area of usual residence were provided as state or territory and statistical local area (SLA) and/or postcode, and have been aggregated to remoteness areas under the Australian Standard Geographical Classification (ABS 2006) (see Appendix 2).
- Socioeconomic status (SES) groups in this report are based on the Index of Relative Socio-Economic Disadvantage (IRSD) (ABS 2008) for the area of usual residence (SLA) of the patient. The SLAs are ranked from lowest to highest according to the IRSD. The SLAs are then grouped together so that each of the resulting SES groups contains about 20% of the total Australian population (see Appendix 2).

Figure 7.1 demonstrates some of the data included in the NHMD using the example of separations for admitted patients aged 85 and over. In 2010–11:

- there were about 552,000 separations for people aged 85 and over
- the number of separations for people aged 85 and over increased by 41% over the period 2006–07 to 2010–11, an average annual increase of 8.6%
- most of these separations were for acute care (87%) or rehabilitation care (8%)
- 56% of these separations were for men
- 60% of these separations were in public hospitals
- the majority of separations (75%) had a separation mode of *Other*, suggesting that these patients went home at the end of their care, about 9% were discharged or transferred to another hospital, and 6% were discharged or transferred to a residential aged care service
- about 5% had a separation mode of *Statistical discharge – type change*, indicating that they went on to receive another type of care, for example, rehabilitation, within the same hospital
- among the most common principal diagnoses were heart failure, cataracts and hip fractures (fracture of the femur)
- the most common AR-DRG was *Haemodialysis*
- the most common procedure was *Generalised allied health intervention*, which includes interventions such as physiotherapy, occupational therapy, social work and dietetics.



Abbreviations: ALOS—average length of stay; AR-DRG—Australian Refined Diagnosis Related Group; Cat—catastrophic; CC—complication or comorbidity; O.R.—operating room; Sev—severe; URI—upper respiratory infection; W—with; W/O—without.

Figure 7.1: Data reported for separations for persons aged 85 and over, all hospitals, 2010–11

## How has activity changed over time?

From 2009–10 to 2010–11, separations rose 3.8% to 8.9 million (Table 7.1). The increase in separations was higher in public hospitals (4.5%) than in private hospitals (3.2%). After adjusting for changes in the reporting of some Victorian private hospital separations for 2010–11, the increase in separations between 2009–10 and 2010–11 was estimated at about 4.0% per year, 4.1% for public hospitals and 3.9% for private hospitals.

Between 2006–07 and 2010–11, the number of separations rose by an average of 3.9% per year (Table 7.1). Over that period, the average annual rise in separations was higher in private hospitals than in public hospitals. After adjusting for the changes in reporting for some Victorian private hospital patient days for previous years, it is estimated that the national average increase between 2006–07 and 2010–11 was about 3.9% per year, 3.2% for public hospitals and 5.2% for private hospitals.

For both public and private hospitals, the rate and direction of change in the number of separations varied between funding sources.

**Table 7.1: Separations, by principal source of funds, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public <sup>(a)</sup>	4,030,707	4,081,111	4,188,501	4,316,004	4,491,588	2.7	4.1
Private health insurance	382,085	415,919	451,591	501,416	526,546	8.3	5.0
Self-funded	53,385	54,765	58,226	58,675	65,466	5.2	11.6
Workers compensation	22,550	23,296	22,478	21,563	22,354	-0.2	3.7
Motor vehicle third party personal claim	21,664	21,880	23,102	24,980	27,666	6.3	10.8
Department of Veterans' Affairs	130,908	124,664	122,656	118,301	117,284	-2.7	-0.9
Other <sup>(b)</sup>	19,981	22,426	24,469	28,349	28,228	9.0	-0.4
<i>Total</i>	<i>4,661,280</i>	<i>4,744,061</i>	<i>4,891,023</i>	<i>5,069,288</i>	<i>5,279,132</i>	<i>3.2</i>	<i>4.1</i>
<b>Private hospitals</b>							
Public <sup>(a)</sup>	49,095	76,227	100,619	102,014	104,951	20.9	2.9
Private health insurance	2,348,872	2,497,892	2,579,128	2,767,947	2,869,064	5.1	3.7
Self-funded	260,940	267,179	278,086	285,850	291,402	2.8	1.9
Workers compensation	50,735	50,163	54,788	57,555	61,035	4.7	6.0
Motor vehicle third party personal claim	4,610	4,840	4,719	6,376	7,134	11.5	11.9
Department of Veterans' Affairs	207,511	199,629	198,277	199,732	197,041	-1.3	-1.3
Other <sup>(b)</sup>	19,874	33,955	41,808	42,241	42,791	21.1	1.3
<i>Total</i>	<i>2,941,637</i>	<i>3,129,885</i>	<i>3,257,425</i>	<i>3,461,715</i>	<i>3,573,418</i>	<i>5.0</i>	<i>3.2</i>
<b>All hospitals</b>	<b>7,602,917</b>	<b>7,873,946</b>	<b>8,148,448</b>	<b>8,531,003</b>	<b>8,852,550</b>	<b>3.9</b>	<b>3.8</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefit Scheme.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## States and territories

Between 2006–07 and 2010–11, the number of public hospital separations increased at a greater rate than the national average in Victoria, Queensland, Western Australia, the Australian Capital Territory and the Northern Territory (Table 7.2).

**Table 7.2: Separations for public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(a)</sup></b>							
Public hospitals	1,462,129	1,466,737	1,505,969	1,542,968	1,582,804	2.0	2.6
Private hospitals	808,376	857,920	907,214	960,706	1,011,887	5.8	5.3
All hospitals	2,270,505	2,324,657	2,413,183	2,503,674	2,594,691	3.4	3.6
<b>Victoria<sup>(a)</sup></b>							
Public hospitals	1,314,242	1,351,171	1,379,624	1,424,663	1,496,041	3.3	5.0
Private hospitals	761,417	802,291	811,020	885,776	875,470	3.6	-1.2
All hospitals	2,075,659	2,153,462	2,190,644	2,310,439	2,371,511	3.4	2.6
<b>Queensland</b>							
Public hospitals	784,630	831,965	883,340	922,970	964,349	5.3	4.5
Private hospitals	742,014	780,299	813,941	844,953	859,202	3.7	1.7
All hospitals	1,526,644	1,612,264	1,697,281	1,767,923	1,823,551	4.5	3.1
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	450,896	458,202	467,433	505,909	548,272	5.0	8.4
Private hospitals	289,163	325,418	362,162	381,300	417,761	9.6	9.6
All hospitals	740,059	783,620	829,595	887,209	966,033	6.9	8.9
<b>South Australia<sup>(a)</sup></b>							
Public hospitals	390,647	368,330	374,540	383,055	390,154	0.0	1.9
Private hospitals	229,324	243,597	255,500	270,015	283,281	5.4	4.9
All hospitals	619,971	611,927	630,040	653,070	673,435	2.1	3.1
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	97,156	96,270	94,892	101,673	99,333	0.6	-2.3
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	75,767	81,127	89,869	88,356	93,745	5.5	6.1
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	85,813	90,258	95,356	99,694	104,434	5.0	4.8
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>All hospitals</b>							
<b>Public hospitals</b>	<b>4,661,280</b>	<b>4,744,060</b>	<b>4,891,023</b>	<b>5,069,288</b>	<b>5,279,132</b>	<b>3.2</b>	<b>4.1</b>
<b>Private hospitals</b>	<b>2,941,637</b>	<b>3,129,885</b>	<b>3,257,425</b>	<b>3,461,715</b>	<b>3,573,418</b>	<b>5.0</b>	<b>3.2</b>
<b>All hospitals</b>	<b>7,602,917</b>	<b>7,873,945</b>	<b>8,148,448</b>	<b>8,531,003</b>	<b>8,852,550</b>	<b>3.9</b>	<b>3.8</b>

(a) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Box 7.2 for more information.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S7.1 at the end of this chapter.

*Abbreviations:* n.p.—not published.

Large single year increases in the number of hospital separations between 2009–10 and 2010–11 were recorded for Western Australia (both public and private hospitals) and for public hospitals in Victoria and the Australian Capital Territory (Table 7.2). For Victoria, the decrease in private hospital separations was mainly due to the reclassification of some same-day mental health care as non-admitted patient activity (which was previously classified as admitted patient activity).

After adjusting for the changes in reporting for some Victorian private hospital separations for 2010–11, it is estimated that private hospital separations in Victoria increased by about 4.2% between 2006–07 and 2010–11 and about 3.7% between 2009–10 and 2010–11.

Between 2006–07 and 2010–11, consistent with the increase in separations, the numbers of public hospital patient days also increased at an above average rate in Victoria, Queensland, Western Australia, the Australian Capital Territory and the Northern Territory (Table 7.3).

Over the same period, above average increases in the number of private hospital separations were recorded in New South Wales, Western Australia and South Australia, and these were accompanied by similar increases in the numbers of private hospital patient days.

After adjusting for the exclusion of the Victorian private hospital patient days for 2010–11, it is estimated that the national average increase between 2006–07 and 2010–11 was about 1.9% per year, 1.5% for public hospitals and 3.0% for private hospitals. Using the same adjustment, the increase in patient days between 2009–10 and 2010–11 was about 2.1% per year, 2.1% for public hospitals and 2.0% for private hospitals.

Between 2009–10 and 2010–11, above average increases in the number of public hospital patient days were recorded for the Northern Territory, the Australian Capital Territory and Western Australia. Western Australia and New South Wales private hospitals recorded above average single year increases in this year (Table 7.3).

**Table 7.3: Patient days for public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(a)</sup></b>							
Public hospitals	6,015,425	6,226,798	6,114,244	6,061,168	6,192,497	0.7	2.2
Private hospitals	1,970,718	2,062,431	2,121,237	2,225,185	2,330,294	4.3	4.7
All hospitals	7,986,143	8,289,229	8,235,481	8,286,353	8,522,791	1.6	2.9
<b>Victoria<sup>(a)</sup></b>							
Public hospitals	4,419,117	4,447,962	4,499,508	4,606,599	4,722,672	1.7	2.5
Private hospitals	1,994,122	2,091,331	2,060,800	2,235,086	2,166,659	2.1	-3.1
All hospitals	6,413,239	6,539,293	6,560,308	6,841,685	6,889,331	1.8	0.7
<b>Queensland</b>							
Public hospitals	2,872,078	2,992,821	3,072,713	3,128,097	3,206,398	2.8	2.5
Private hospitals	1,900,834	1,950,420	2,005,809	2,062,543	2,093,296	2.4	1.5
All hospitals	4,772,912	4,943,241	5,078,522	5,190,640	5,299,694	2.7	2.1
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	1,610,062	1,630,285	1,647,019	1,722,439	1,779,052	2.5	3.3
Private hospitals	743,581	782,787	819,851	829,497	886,003	4.5	6.8
All hospitals	2,353,643	2,413,072	2,466,870	2,551,936	2,665,055	3.2	4.4
<b>South Australia<sup>(a)</sup></b>							
Public hospitals	1,598,163	1,615,367	1,598,610	1,591,333	1,614,514	0.3	1.5
Private hospitals	589,917	613,980	609,747	617,179	625,664	1.5	1.4
All hospitals	2,188,080	2,229,347	2,208,357	2,208,512	2,240,178	0.6	1.4
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	406,365	384,723	394,285	423,915	372,761	-2.1	-12.1
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	260,346	277,429	292,947	296,483	311,607	4.6	5.1
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	257,532	260,559	269,856	272,712	287,518	2.8	5.4
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>All hospitals</b>							
<b>Public hospitals</b>	<b>17,439,088</b>	<b>17,835,944</b>	<b>17,889,182</b>	<b>18,102,746</b>	<b>18,487,019</b>	<b>1.5</b>	<b>2.1</b>
<b>Private hospitals</b>	<b>7,485,477</b>	<b>7,806,573</b>	<b>7,892,929</b>	<b>8,262,177</b>	<b>8,407,813</b>	<b>2.9</b>	<b>1.8</b>
<b>All hospitals</b>	<b>24,924,565</b>	<b>25,642,517</b>	<b>25,782,111</b>	<b>26,364,923</b>	<b>26,894,832</b>	<b>1.9</b>	<b>2.0</b>

(a) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Box 7.2 for more information.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S7.1 at the end of this chapter.

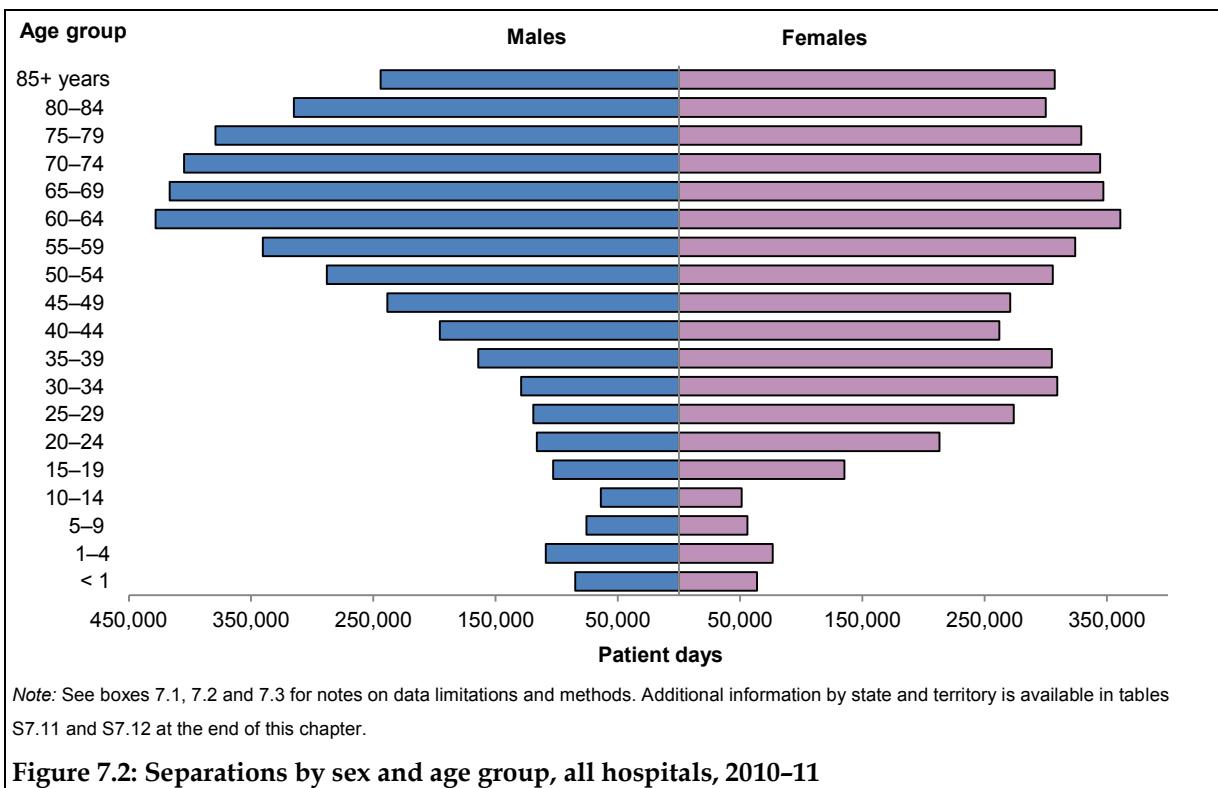
*Abbreviations:* n.p.—not published.

## Who used these services?

### Sex and age group

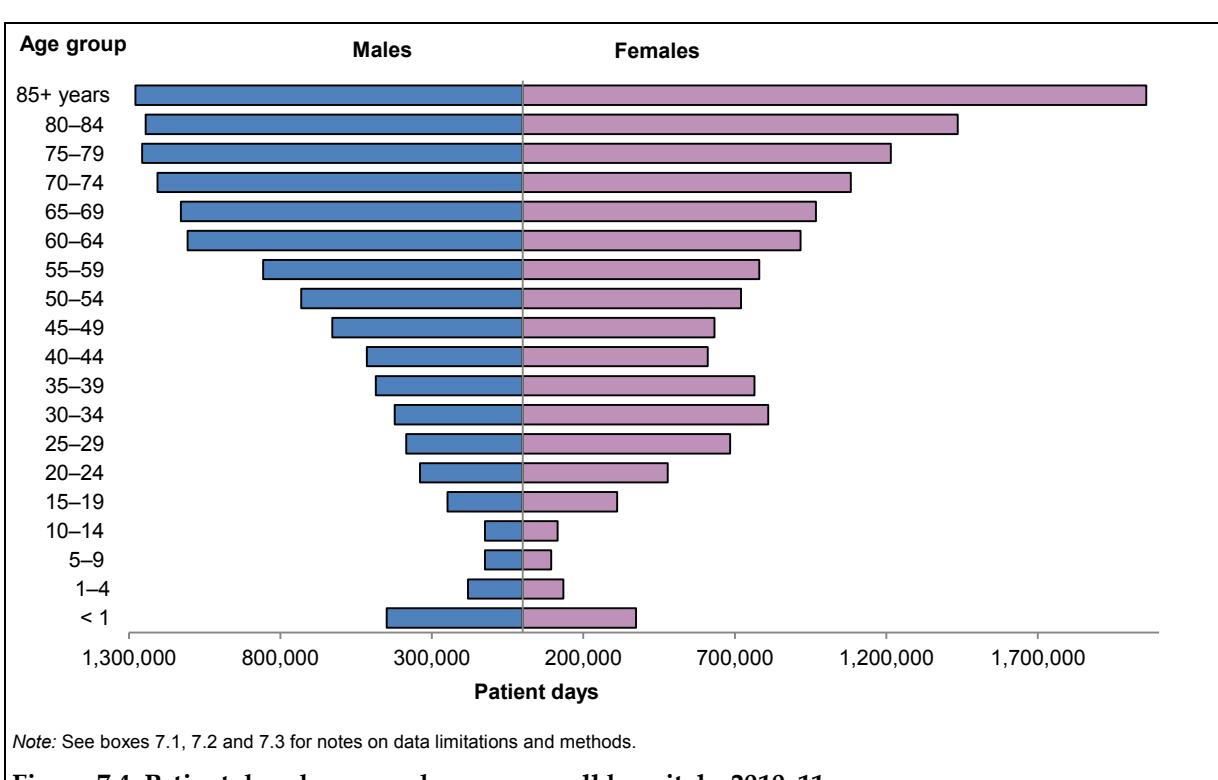
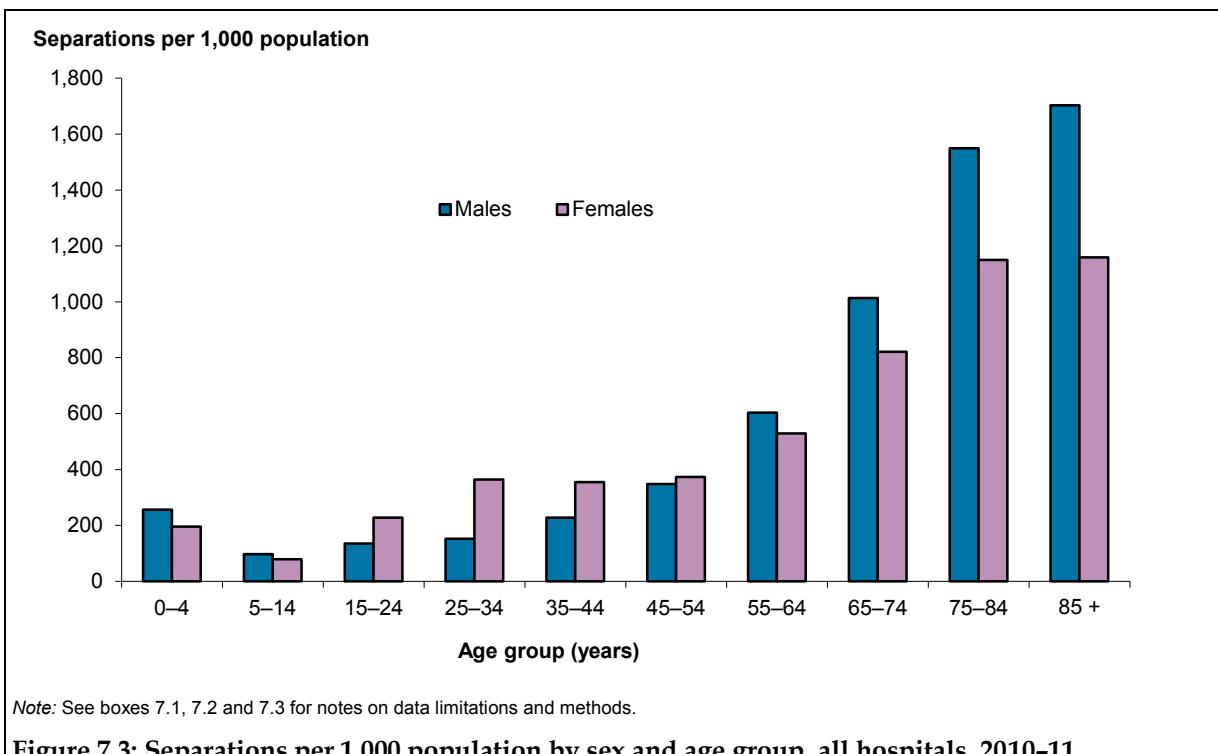
#### Sex and age group profile for 2010–11

In 2010–11, overall there were about 4.6 million separations for females compared with about 4.2 million separations for males. People aged 65 and over accounted for 38% of separations (Figure 7.2).



In 2010–11, there were more separations per 1,000 population for females than for males aged 15 to 54 (Figure 7.3). Separation rates increased with age for both males and females aged 55 and above.

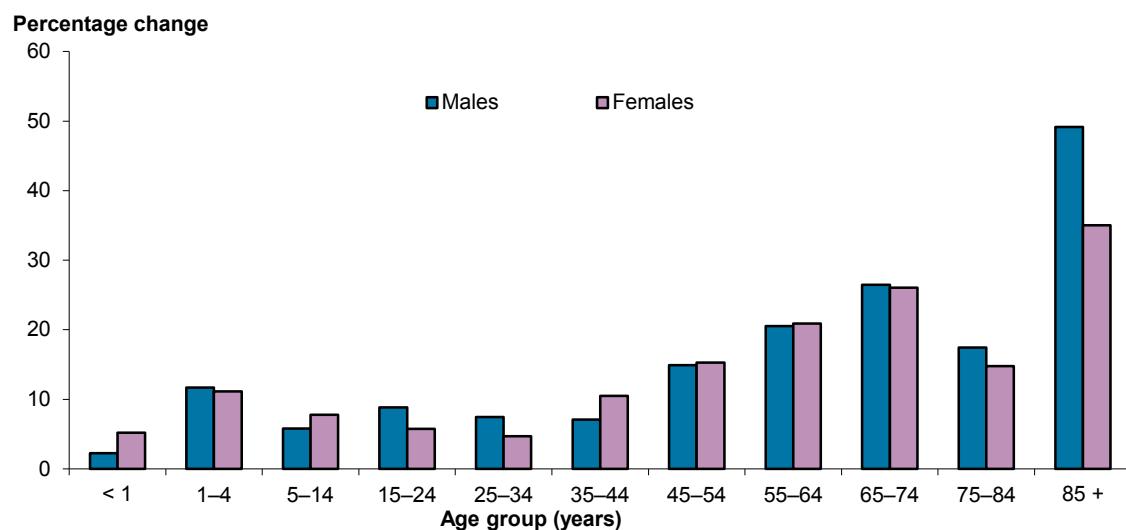
Females accounted for more patient days than males (Figure 7.4). People aged 65 and over accounted for over 48% of patient days in 2010–11.



## Changes in activity by patients' sex and age group, over time

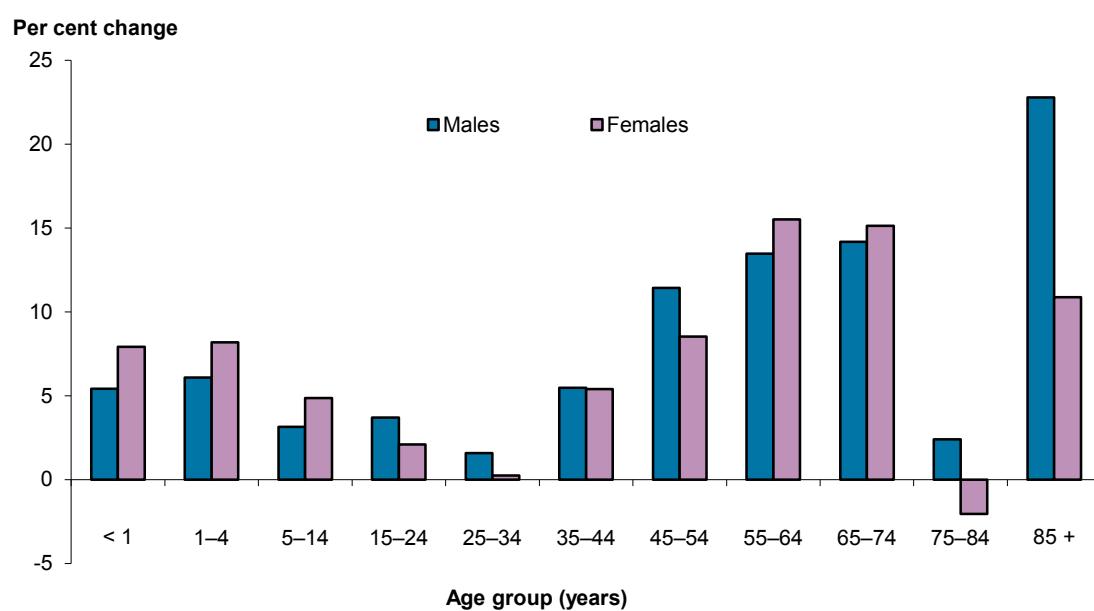
Between 2006–07 and 2010–11, the increase in separations was more marked for males than females, particularly for men aged 75 and over (Figure 7.5). For persons aged 85 and over, there was an overall increase of 41% in separations between 2006–07 and 2010–11, an average increase of 9% each year.

Between 2006–07 and 2010–11, patient days in all hospitals increased by 9.3% for males, and by 6.7% for females (Figure 7.6). The relative size and direction of change in patient days varied by sex and age group.



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.5: Percentage change in separations by sex and age group, all hospitals, 2006–07 to 2010–11**



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.6: Percentage change in patient days by sex and age group, all hospitals, 2006–07 to 2010–11**

## Aboriginal and Torres Strait Islander people

### Box 7.4: Quality of Indigenous status data

The AIHW report *Indigenous identification in hospital separations data: quality report* (AIHW 2010f) found that the level of Indigenous identification was acceptable for analysis purposes (greater than 80%) for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (public hospitals only).

Nationally, about 89% of Indigenous Australians were identified correctly in hospital admissions data, and the 'true' number of separations for Indigenous Australians was about 12% higher than reported.

Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. It should also be noted that data presented for the six jurisdictions noted above are not necessarily representative of the jurisdictions excluded. See Appendix 1 for more information on the quality of Indigenous status data in the NHMD.

In 2010–11, there were about 334,000 separations for Aboriginal and Torres Strait Islander people. About 98% of these separations were reported for the six jurisdictions with data of sufficient quality for analysis purposes (see above and Appendix 1). Other Australians includes separations for which the Indigenous status was not reported.

For the six jurisdictions:

- almost 92% of separations for Indigenous Australians were reported as *Aboriginal but not Torres Strait Islander origin*, 5% were reported as *Torres Strait Islander but not Aboriginal origin* and 4% were reported as *Aboriginal and Torres Strait Islander origin*
- 92% of separations for Indigenous Australians in 2010–11 were from the public sector (302,000), whereas 58% of separations for other Australians were from the public sector.

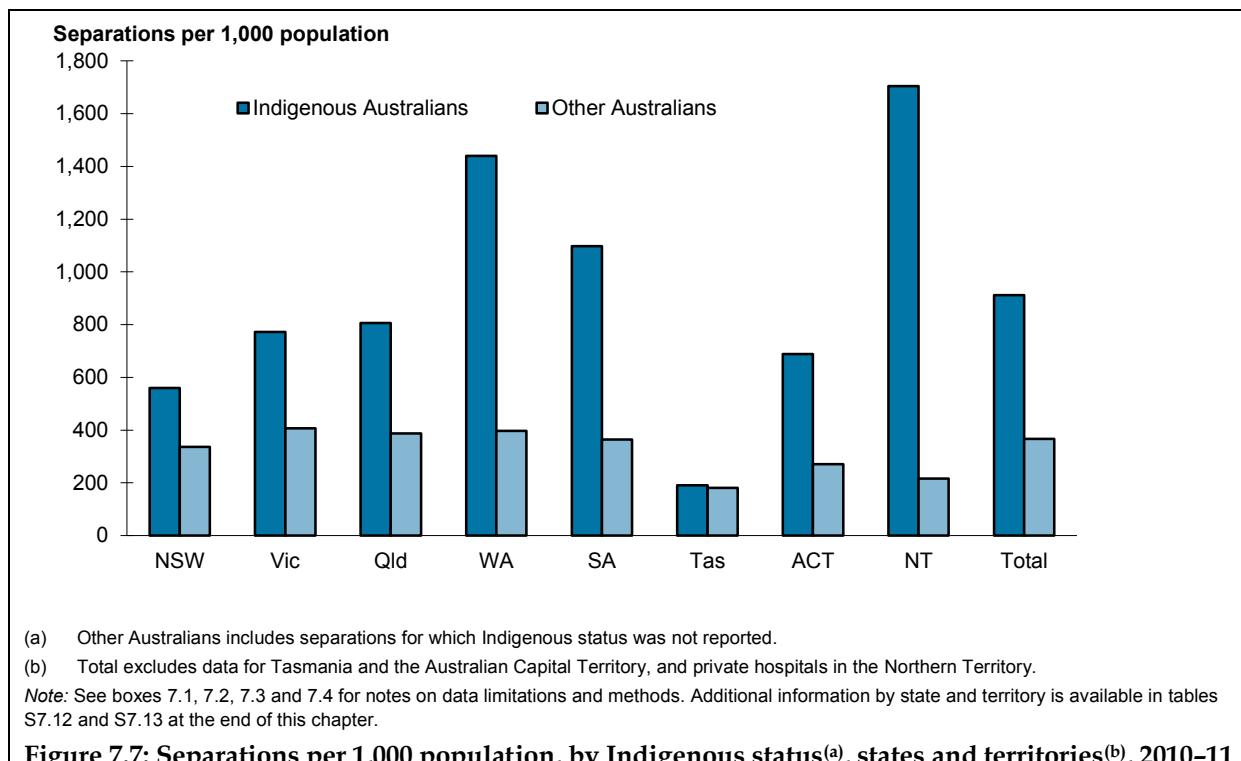
In 2010–11, there were 911 separations per 1,000 population for Indigenous Australians (Figure 7.7), 2.5 times the separation rate for other Australians. About 80% of the difference between these rates was due to higher separation rates for Indigenous Australians admitted for maintenance kidney dialysis (see Chapter 8).

The Northern Territory had the highest separation rate for Indigenous Australians (1,704 separations per 1,000), nearly 8 times the rate for other Australians in the Northern Territory.

### Under-identification of Indigenous persons

Using the national estimated Indigenous under-identification level of 89% (see above) (and assuming that the age distributions for unidentified and identified Indigenous Australians is similar), the 'true' number of separations for Indigenous Australians for 2010–11 could be estimated at about 374,000 separations. As other Australians may include unidentified Aboriginal and Torres Strait Islander people, the 'true' number of other Australians would be reduced and could be estimated at about 8,478,000 separations.

Using the same method, the 'true' separation rates for Indigenous Australians and other Australians for 2010–11 could be estimated as about 1,023 per 1,000 population and 364 per 1,000, respectively. These rates indicate that, after adjusting for under-identification, Indigenous Australians were hospitalised at about 2.8 times the rate for other Australians.



### Sex and age group

Table 7.4 presents separations for the six jurisdictions by Indigenous status, sex and age group. In 2010–11:

- 56% of separations for Indigenous Australians were for females, compared to 52% for other Australians
- 12% of separations for Indigenous Australians were for people aged 65 and over, compared with 39% of separations for other Australians.

In 2010–11, separation rates for Indigenous males and females were higher than those for other males and females across all age groups (Figure 7.8). Separation rates for Indigenous Australians in older age groups are subject to variability because of the relatively small populations in these age groups.

**Table 7.4: Separations by Indigenous status, sex and age group, selected states and territories<sup>(a)</sup>, 2010–11**

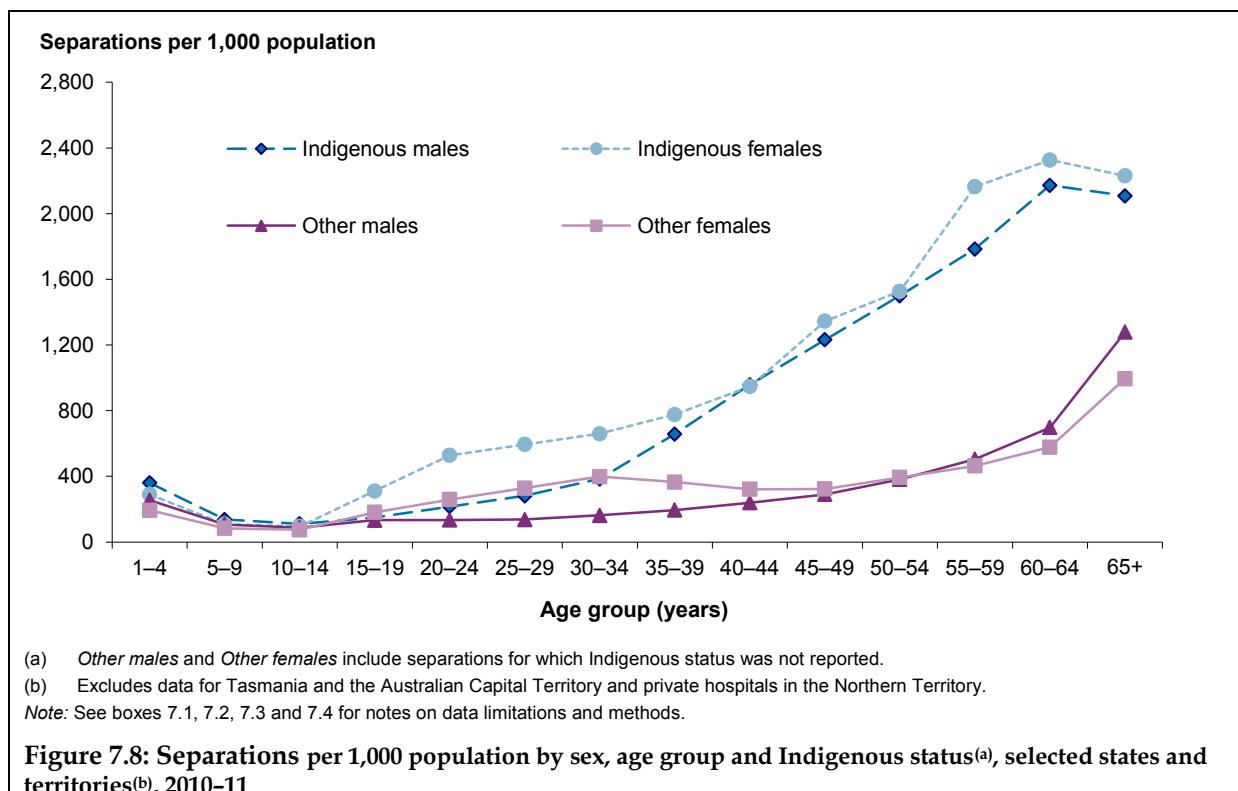
Age group	Indigenous Australians			Other Australians <sup>(b)</sup>		
	Males	Females	Persons	Males	Females	Persons
0–4	12,181	9,391	21,572	175,043	126,429	301,480
5–9	4,319	3,282	7,601	68,842	50,839	119,681
10–14	3,505	2,885	6,390	57,918	46,578	104,497
15–19	4,720	9,233	13,954	94,270	121,205	215,476
20–24	5,452	12,742	18,194	106,439	192,498	298,941
25–29	5,836	11,998	17,834	109,040	251,705	360,747
30–34	6,502	11,518	18,020	117,378	286,683	404,063
35–39	11,014	13,912	24,926	147,237	279,551	426,790
40–44	14,372	15,630	30,002	174,401	236,077	410,482
45–49	15,999	19,223	35,222	213,757	241,793	455,556
50–54	16,008	17,640	33,648	261,735	275,774	537,510
55–59	14,235	19,266	33,501	313,324	293,080	606,407
60–64	12,240	15,056	27,296	399,821	332,730	732,557
65+	16,367	22,905	39,272	1,681,840	1,550,090	3,231,938
<b>Total<sup>(c)</sup></b>	<b>142,751</b>	<b>184,683</b>	<b>327,435</b>	<b>3,921,052</b>	<b>4,285,043</b>	<b>8,206,220</b>

(a) Excludes data for Tasmania and the Australian Capital Territory, and private hospitals in the Northern Territory.

(b) Other Australians includes separations for which Indigenous status was not reported.

(c) Total includes separations for which the age was not reported.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods. Additional information by state and territory is available in tables S7.13 and S7.14 at the end of this chapter.



## **State or territory of residence**

The admitted patient care data includes information on the patient's area of usual residence, including the state or territory of usual residence and the statistical local area.

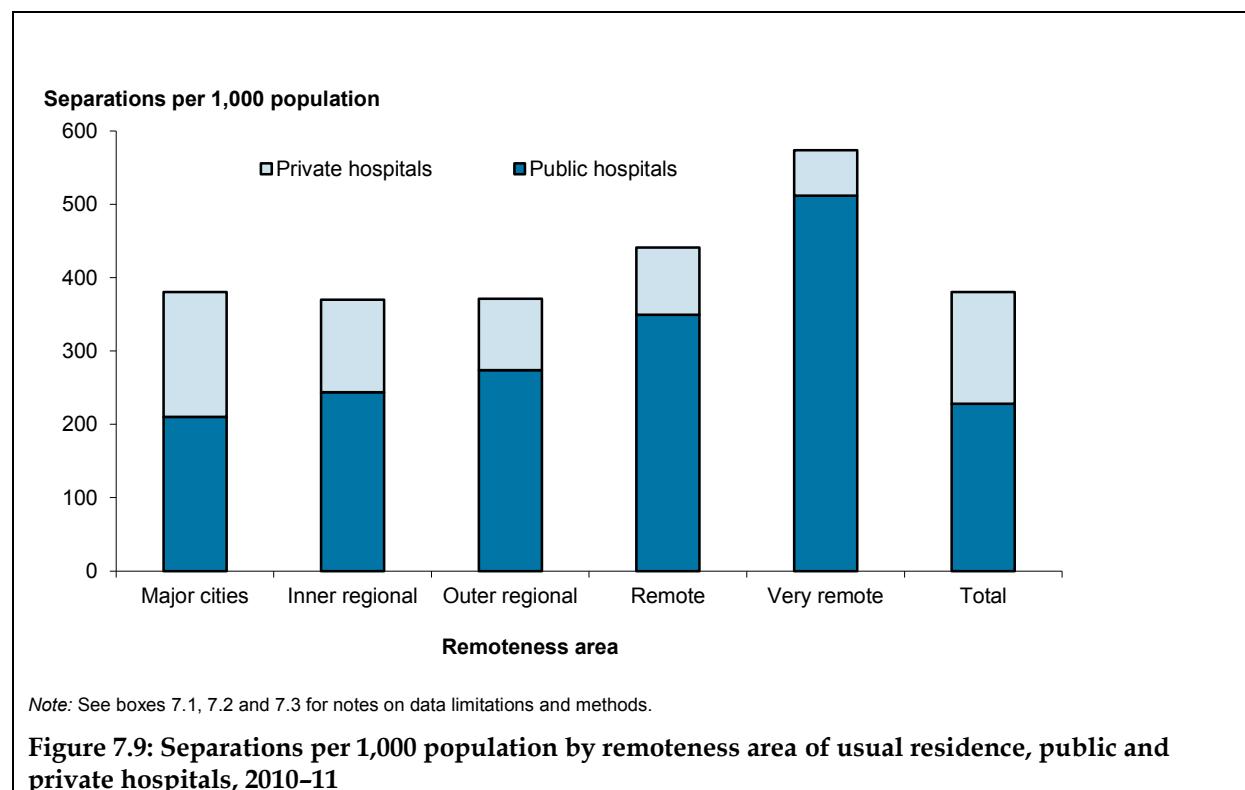
Table S7.4 (at the end of this chapter) presents separations and age-standardised separation rates (per 1,000 population) by both the state or territory of hospitalisation and the state or territory of usual residence of the patient. For 2010–11, about 97% of separations (8.6 million) were for people who were hospitalised in their state or territory of residence. However, in the Australian Capital Territory, only 77% of hospital separations were for Australian Capital Territory residents, with most of the remainder being residents of New South Wales.

## **Remoteness area of residence**

The statistical local area of usual residence can be used to derive the patient's remoteness area of usual residence. Remoteness area categories divide Australia into areas depending on distances from population centres.

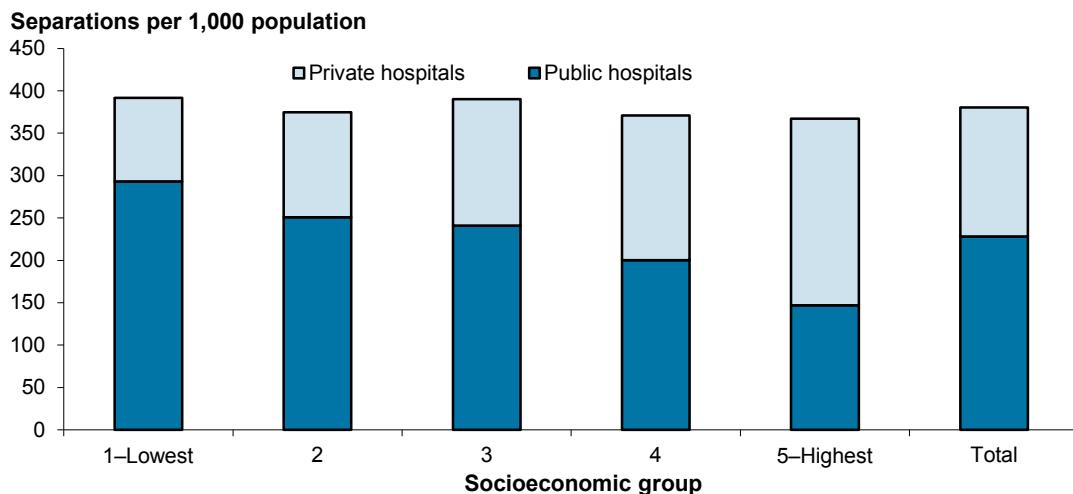
The number of separations per 1,000 population varied by remoteness area. Overall, separation rates were highest for persons residing in *Remote* and *Very remote* areas (440 and 574 per 1,000 population respectively) (Figure 7.9).

The separation rates for public and private sectors varied across remoteness areas. *Very remote* areas, which had the highest separation rate overall, had the highest rate for public hospital separations and the lowest rate for private hospital separations. *Major cities* had the lowest separation rate for public hospitals and the highest rate for private hospitals.



## Socioeconomic status

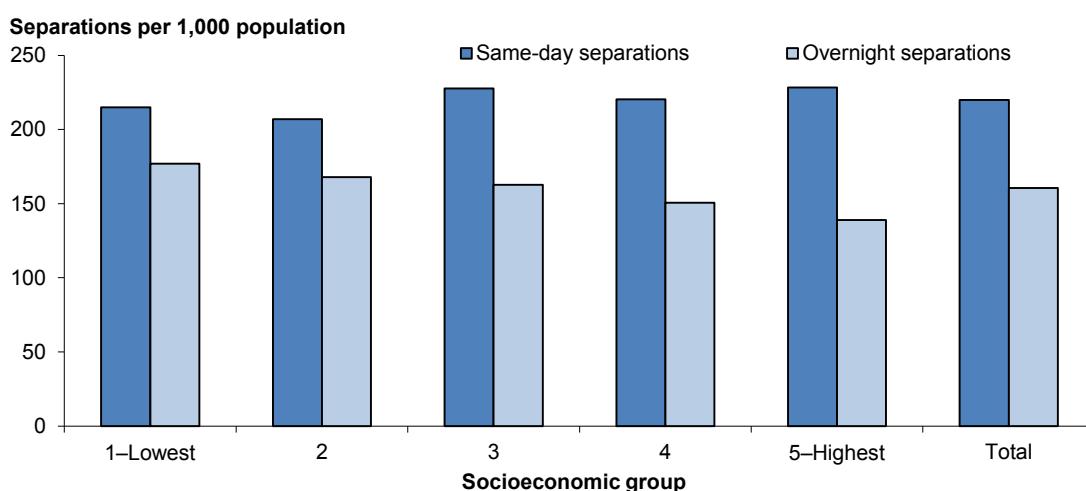
In 2010–11, separation rates varied across socioeconomic status (SES) groups and between public and private hospitals (Figure 7.10). Separation rates for patients living in areas classified as the lowest SES group were slightly above the overall rate. However, for this SES group, rates were relatively high for public hospitals and low for private hospitals.



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.10: Separations per 1,000 population by socioeconomic status group, public and private hospitals, 2010–11**

The separation rates for same-day separations versus overnight separations varied across SES groups (Figure 7.11). The highest rate of same-day separations occurred for patients living in areas classified as being in the three highest SES groups. The highest rate of overnight separations occurred for patients living in areas classified as being in the lowest SES group.



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.11: Same-day and overnight separations per 1,000 population, by socioeconomic status group, all hospitals, 2010–11**

## How did people access these services?

The **mode of admission** records the mechanism by which an admitted patient begins an episode of care. Patients may have the following modes of admission:

- *Admitted patient transferred from another hospital*
- *Statistical admission: care type change*—where a new admitted patient episode is created as a result of a change in the clinical intent of care (for example, a patient's care may move from a focus on acute care to a focus on Rehabilitation or Palliative care), within the same hospital
- *Other*—the term used to refer to all other planned and unplanned admissions.

In 2010–11, most separations in both public and private hospitals had a mode of admission of *Other* (95%). Public hospitals had a higher proportion of transfers than private hospitals (4.6% and 2.8%, respectively). Public hospitals also reported higher proportions of *Statistical admissions* than private hospitals (1.6% and 0.4%, respectively) (Table 7.5).

**Table 7.5: Separations by mode of admission, public and private hospitals, 2010–11**

Mode of admission	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	245,163	99,481	344,644
Statistical admission: type change	84,761	15,906	100,667
Other	4,929,714	3,439,853	8,369,567
Not reported	19,494	18,178	37,672
<b>Total</b>	<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S7.7 at the end of this chapter.

## Why did people receive the care?

The reason that a patient receives admitted patient care is usually described in terms of the principal diagnosis. The principal diagnosis is the diagnosis established after study to be chiefly responsible for occasioning the episode of admitted patient care.

Where a patient has a diagnosis related to injury and poisoning, additional information is available on the cause of the injury (for example, a traffic accident or fall). In some cases, the principal diagnosis is described in terms of a treatment for an ongoing condition (for example, care involving dialysis).

### Principal diagnosis

In 2010–11, over one-quarter of separations in public and private hospitals had a principal diagnosis in the *Factors influencing health status and contact with health services* chapter, which includes care involving dialysis and chemotherapy (Table 7.6).

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For example, over 80% of separations for *Injury, poisoning and certain other consequences of external causes* were from public hospitals and over 70% of separations for *Diseases of the eye and adnexa* were from private hospitals.

**Table 7.6: Separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2010–11**

Principal diagnosis chapter		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	113,814	21,856	135,670
C00–D48	Neoplasms	272,563	309,700	582,263
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	84,286	40,036	124,322
E00–E90	Endocrine, nutritional and metabolic diseases <sup>(a)</sup>	81,053	40,798	121,851
F00–F99	Mental and behavioural disorders	184,067	144,982	329,049
G00–G99	Diseases of the nervous system	128,508	93,835	222,343
H00–H59	Diseases of the eye and adnexa	89,955	211,776	301,731
H60–H95	Diseases of the ear and mastoid process	31,254	29,424	60,678
I00–I99	Diseases of the circulatory system	337,295	173,457	510,752
J00–J99	Diseases of the respiratory system	300,319	91,079	391,398
K00–K93	Diseases of the digestive system	406,977	483,023	890,000
L00–L99	Diseases of the skin and subcutaneous tissue	105,024	45,114	150,138
M00–M99	Diseases of the musculoskeletal system and connective tissue	182,948	293,680	476,628
N00–N99	Diseases of the genitourinary system	237,752	178,141	415,893
O00–O99	Pregnancy, childbirth and the puerperium	331,888	145,231	477,119
P00–P96	Certain conditions originating in the perinatal period	43,053	11,735	54,788
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	24,106	10,452	34,558
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	425,020	201,762	626,782
S00–T98	Injury, poisoning and certain other consequences of external causes	475,585	104,909	580,494
Z00–Z99	Factors influencing health status and contact with health services	1,422,783	939,122	2,361,905
	Not reported	882	3,306	4,188
<b>Total</b>		<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

(a) A new standard for diabetes coding was introduced on 1 July 2010 that resulted in a decrease in the reporting of diabetes diagnoses and consequently a decrease for the ICD-10-AM chapter *Endocrine, nutritional and metabolic diseases and disorders*. See Appendix 2 for more information.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

### Aboriginal and Torres Strait Islander people

Over 47% of separations for Indigenous Australians were for *Factors influencing health status and contact with health services*, compared to 26% for other Australians (Table 7.7). *Injury, poisoning and certain other consequences of external causes* was the second most common principal diagnosis among Indigenous Australians, accounting for about 7.4% of separations for Indigenous Australians.

**Table 7.7: Separations by principal diagnosis in ICD-10-AM chapters, by Indigenous status, selected states and territories<sup>(a)</sup>, 2010–11**

Principal diagnosis chapter		Indigenous Australians	Other Australians <sup>(b)</sup>	Total
A00–B99	Certain infectious and parasitic diseases	5,742	126,201	131,943
C00–D48	Neoplasms	4,689	556,395	561,084
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,722	118,199	119,921
E00–E90	Endocrine, nutritional and metabolic diseases <sup>(c)</sup>	4,800	111,904	116,704
F00–F99	Mental and behavioural disorders	13,824	302,657	316,481
G00–G99	Diseases of the nervous system	4,049	210,457	214,506
H00–H59	Diseases of the eye and adnexa	2,217	286,212	288,429
H60–H95	Diseases of the ear and mastoid process	2,433	56,094	58,527
I00–I99	Diseases of the circulatory system	9,817	481,921	491,738
J00–J99	Diseases of the respiratory system	19,471	358,551	378,022
K00–K93	Diseases of the digestive system	16,647	840,151	856,798
L00–L99	Diseases of the skin and subcutaneous tissue	7,730	136,985	144,715
M00–M99	Diseases of the musculoskeletal system and connective tissue	5,956	449,296	455,252
N00–N99	Diseases of the genitourinary system	8,618	391,669	400,287
O00–O99	Pregnancy, childbirth and the puerperium	20,524	438,653	459,177
P00–P96	Certain conditions originating in the perinatal period	3,232	49,066	52,298
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,086	32,276	33,362
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	15,470	591,259	606,729
S00–T98	Injury, poisoning and certain other consequences of external causes	24,365	535,574	559,939
Z00–Z99	Factors influencing health status and contact with health services	154,977	2,128,585	2,283,562
	Not reported	66	4,115	4,181
<b>Total</b>		<b>327,435</b>	<b>8,206,220</b>	<b>8,533,655</b>

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

(b) Other Australians includes separations for which the Indigenous status was not reported.

(c) A new standard for diabetes coding was introduced on 1 July 2010 that resulted in a decrease in the reporting of diabetes diagnoses and consequently a decrease for the ICD-10-AM chapter *Endocrine, nutritional and metabolic diseases and disorders*. See Appendix 2 for more information.

*Note:* See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods.

## How many separations were due to injury and poisoning?

The number of separations with a principal diagnosis of injury or poisoning is a National Healthcare Agreement performance indicator.

Some hospitalisations for injury or poisoning may be considered potentially avoidable. It should be noted that the admitted patient care data provide only a partial picture of the overall burden of injury because it does not include injuries treated by general practitioners and in the emergency departments that do not require admission to hospital.

In 2010–11, over 580,000 separations had a principal diagnosis of *Injury, poisoning and certain other consequences of external causes*. The majority (82%) of these were treated in public hospitals (Table 7.8).

**Table 7.8: Separations with a principal diagnosis of injury or poisoning, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
S00-S19	Injuries to head & neck	86,927	6,909	93,836
S20-S39	Injuries to thorax, abdomen, back, spine & pelvis	44,620	5,738	50,358
S40-S99	Injuries to upper & lower limbs	211,236	52,177	263,413
T00-T19	Injuries to multi- or unspecified region; foreign body effects	10,638	1,360	11,998
T20-T35	Burns and frostbite	8,439	253	8,692
T36-T65	Poisoning and toxic effects	37,751	568	38,319
T66-T79	Other and unspecified effects of external causes	11,341	1,081	12,422
T80-T88	Complications of medical and surgical care	64,475	36,733	101,208
T89-T98	Other trauma complications; external cause sequelae	158	90	248
<b>Total</b>		<b>475,585</b>	<b>104,909</b>	<b>580,494</b>
<b>Separations per 1,000 population</b>		<b>20.7</b>	<b>4.5</b>	<b>25.2</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

### Aboriginal and Torres Strait Islander people

Indigenous Australians were hospitalised with a principal diagnosis of injury and poisoning at about twice the rate of other Australians (Table 7.9). *Injuries to the head and neck* accounted for almost 26% of these separations for Indigenous Australians and 16% for other Australians. *Complications of medical and surgical care* accounted for a higher proportion of these separations for other Australians (18%) compared with Indigenous Australians (12%).

**Table 7.9: Separations with a principal diagnosis of injury or poisoning, by Indigenous status, selected states and territories<sup>(a)</sup>, 2010–11**

Principal diagnosis		Indigenous Australians	Other Australians <sup>(b)</sup>	Total
S00-S19	Injuries to head & neck	6,281	84,998	91,279
S20-S39	Injuries to thorax, abdomen, back, spine & pelvis	1,856	47,019	48,875
S40-S99	Injuries to upper & lower limbs	9,858	243,495	253,353
T00-T19	Injuries to multi- or unspecified region; foreign body effects	518	11,088	11,606
T20-T35	Burns and frostbite	674	7,779	8,453
T36-T65	Poisoning and toxic effects	1,821	35,396	37,217
T66-T79	Other and unspecified effects of external causes	524	11,518	12,042
T80-T88	Complications of medical and surgical care	2,818	94,055	96,873
T89-T98	Other trauma complications; external cause sequelae	15	226	241
<b>Total</b>		<b>24,365</b>	<b>535,574</b>	<b>559,939</b>
<b>Separations per 1,000 population</b>		<b>51.1</b>	<b>25.0</b>	<b>25.6</b>

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

(b) Other Australians includes separations for which the Indigenous status was not reported.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods.

## What were the causes of injury and poisoning?

An **external cause** is defined as the environmental event, circumstance or condition that was the cause of injury, poisoning or adverse event. Whenever a patient has a principal or additional diagnosis of an injury or poisoning, an external cause code should be recorded.

A place of occurrence code is also usually recorded and, for most records, the activity of the person at the time of the event should be recorded (HDSC 2008).

In 2010–11, there were 1.0 million separations that reported an external cause of injury or poisoning for either a principal or an additional diagnosis of injury or poisoning (Table 7.10). About 77% of these separations were from public hospitals. The most frequently reported group of external causes in both public and private hospitals was *Complications of medical and surgical care*, followed by *Falls*. Public hospitals had notably higher proportions of separations with external causes of *Intentional self-harm* and *Assault* than private hospitals.

**Table 7.10: Separations, by external cause in ICD-10-AM groupings, public and private hospitals, 2010–11**

External cause		Public hospitals	Private hospitals	Total
V00–V99	Transport accidents	61,145	7,631	68,776
W00–W19	Falls	226,495	50,559	277,054
W20–W64	Exposure to mechanical forces	91,168	11,625	102,793
W65–W74	Accidental drowning and submersion	602	14	616
W75–W84	Other accidental threats to breathing	12,144	1,472	13,616
W85–W99	Exposure to electricity, radiation, extreme temperature/pressure	1,311	186	1,497
X00–X19	Exposure to smoke, fire, flames, hot substances	9,065	383	9,448
X20–X39	Exposure to venomous plants, animals, forces of nature	5,381	338	5,719
X40–X49	Accidental poisoning	12,079	629	12,708
X50–X59	Other external causes of accidental injury	43,068	37,945	81,013
X60–X84	Intentional self-harm	31,507	796	32,303
X85–Y09	Assault	26,501	463	26,964
Y10–Y34	Events of undetermined intent	7,058	381	7,439
Y35–Y36	Legal intervention and operations of war	165	342	507
Y40–Y84	Complications of medical and surgical care	280,994	126,977	407,971
Y85–Y98	Sequelae and supplementary factors	25,790	9,421	35,211
<b>Total<sup>(a)</sup></b>		<b>790,988</b>	<b>241,453</b>	<b>1,032,441</b>

(a) As more than one external cause can be reported for a separation, the totals may not equal the sums of the columns.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

More information on the place of occurrence and the activity when injured is available in tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## Aboriginal and Torres Strait Islander people

*Complications of medical and surgical care* was the most commonly reported external cause of injury and poisoning for hospitalisations for Indigenous Australians. *Assault* accounted for 19% of external causes reported for Indigenous Australians, compared to 2.0% of external causes reported for other Australians (Table 7.11).

**Table 7.11: Separations, by external cause in ICD-10-AM groupings and Indigenous status, selected states and territories<sup>(a)</sup>, 2010–11**

External cause		Indigenous Australians	Other Australians <sup>(b)</sup>	Total
V00–V99	Transport accidents	2,379	63,535	65,914
W00–W19	Falls	5,964	261,958	267,922
W20–W64	Exposure to mechanical forces	5,000	93,998	98,998
W65–W74	Accidental drowning and submersion	41	562	603
W75–W84	Other accidental threats to breathing	383	13,030	13,413
W85–W99	Exposure to electricity, radiation, extreme temperature/pressure	43	1,416	1,459
X00–X19	Exposure to smoke, fire, flames, hot substances	706	8,491	9,197
X20–X39	Exposure to venomous plants, animals, forces of nature	232	5,379	5,611
X40–X49	Accidental poisoning	659	11,711	12,370
X50–X59	Other external causes of accidental injury	2,225	75,877	78,102
X60–X84	Intentional self-harm	1,984	29,382	31,366
X85–Y09	Assault	6,789	19,516	26,305
Y10–Y34	Events of undetermined intent	479	6,690	7,169
Y35–Y36	Legal intervention and operations of war	15	488	503
Y40–Y84	Complications of medical and surgical care	8,560	382,267	390,827
Y85–Y98	Sequelae and supplementary factors	1,867	31,797	33,664
<b>Total<sup>(c)</sup></b>		<b>35,487</b>	<b>958,397</b>	<b>993,884</b>

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

(b) Other Australians includes separations for which the Indigenous status was not reported.

(c) As more than one external cause can be reported for a separation, the total may not equal the sum of the column.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods.

## How many separations were potentially preventable?

### Potentially preventable hospitalisations

The rate of potentially preventable hospitalisations (PPHs) is a National Healthcare Agreement (NHA) performance indicator, and the proportion of total separations is an NHA benchmark.

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 PPHs 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.

*(continued)*

### Potentially preventable hospitalisations (continued)

There are three broad categories of PPHs. These were originally sourced from the Victorian Ambulatory Care Sensitive Conditions Study (DHS, Victoria 2002) and are classified as:

- *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*. These conditions may be preventable through behaviour modification and lifestyle change, but they can also be managed effectively through timely care (usually non-hospital) to prevent deterioration and hospitalisation. These conditions include diabetes complications, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease.
- Appendix 5 presents more information on the PPH classification.

In 2010–11, over 646,000 separations in public and private hospitals were classified as PPHs (Table 7.12). PPHs accounted for 7.3% of all hospital separations, 9.3% of public hospital separations and 4.3% of private hospital separations. Over three-quarters of PPHs (77%) were reported for public hospitals.

**Table 7.12: Separations for potentially preventable hospitalisations, public and private hospitals, 2010–11**

PPH category	Public hospitals	Private hospitals	Total
Vaccine-preventable conditions	14,891	2,432	17,323
Acute conditions	238,005	85,676	323,681
<i>Chronic conditions<sup>(a)</sup></i>	243,856	64,028	307,884
Diabetes complications <sup>(b)</sup>	61,162	25,612	86,774
Chronic conditions (excluding diabetes)	189,288	39,615	228,903
<b>Total</b>	<b>494,436</b>	<b>151,836</b>	<b>646,272</b>
<b>Proportion of total separations</b>	<b>9.3</b>	<b>4.3</b>	<b>7.3</b>

(a) As more than one chronic condition may be reported for a separation, the sum of *Diabetes complications* and *Chronic conditions* (excluding diabetes) does not necessarily equal the total number of separations for *Chronic conditions*.

(b) Changes in coding standards for the recording of diabetes-related conditions took effect from 1 July 2010. See Appendix 2 for more information.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by residence state is available in Table S7.10 at the end of this chapter.

Between 2009–10 and 2010–11, there was a 7.8% decrease in PPHs overall, mostly due to decreases in the number of hospitalisations for *Chronic conditions* (18%). Between 2006–07 and 2010–11, 3 editions of the ICD-10-AM classification were used. ICD-10-AM 5th edition was reported for 2006–07 and 2007–08, ICD-10-AM 6th edition was reported for 2008–09 and 2009–10 and ICD-10-AM 7th edition was reported for 2010–11.

Table 7.13 shows that the decrease in *Diabetes complications* conditions between 2009–10 and 2010–11 was much greater (48%) than for *Chronic conditions* overall. This reflects changes in coding standards for diabetes-related conditions that took effect from 1 July 2010 (for 7th edition ICD-10-AM/ACHI). See Appendix 2 for more information.

In addition, changes in coding standards between 2007–08 and 2008–09 (for 6th edition ICD-10-AM/ACHI) for both diabetes complications and for the reporting of gastrointestinal disorders (an *Acute condition*) resulted in marked decreases in the rates of reported PPHs over this period.

**Table 7.13: Separations per 1,000 population (age-standardised) for potentially preventable hospitalisations, by PPH category, all hospitals, 2006–07 to 2010–11**

PPH category	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
Vaccine preventable conditions	0.6	0.7	0.7	0.8	0.8	6.4	-4.5
Acute conditions	10.8	11.1	11.2	13.6	14.2	7.0	3.9
<i>Chronic conditions</i> <sup>(a)</sup>	19.0	19.4	16.5	15.8	12.9	-9.3	-18.1
<i>Diabetes complications</i> <sup>(b)</sup>	10.4	10.7	7.7	7.1	3.7	-23.0	-48.0
<i>Chronic conditions (excluding diabetes)</i>	9.7	9.8	9.4	9.3	9.6	-0.4	3.3
<b>Total</b>	<b>32.5</b>	<b>33.3</b>	<b>30.6</b>	<b>30.0</b>	<b>27.7</b>	<b>-3.9</b>	<b>-7.8</b>

(a) As more than one chronic condition may be reported for a separation, the sum of *Diabetes complications* and *Chronic conditions (excluding diabetes)* does not necessarily equal the total number of separations for *Chronic conditions*.

(b) Changes in coding standards for the recording of diabetes-related conditions took effect from 1 July 2010. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

For 2010–11, the overall rate of PPHs was highest for residents of *Remote* and *Very remote* areas (57 and 64 per 1,000 population, respectively) and lowest for residents of *Major cities* (26 per 1,000 population). Notably high rates for *Diabetes complications* were reported for residents of *Remote* and *Very remote* areas (18 and 14 per 1,000 population respectively).

Separations for patients living in areas classified as being in the lowest SES group were more likely to be hospitalised for a PPH than residents of other SES groups. The rate of PPH separations decreased with increased levels of advantage (Table 7.14).

**Table 7.14: Separations per 1,000 population (age-standardised) for potentially preventable hospitalisations, by remoteness area and socioeconomic status, all hospitals, 2010–11**

	Vaccine-preventable conditions	Acute conditions	Total chronic conditions <sup>(a)</sup>	Diabetes complications	Chronic conditions (excluding diabetes)	Total
<b>Remoteness</b>						
Major cities	0.7	13.2	12.0	3.3	8.9	25.8
Inner regional	0.7	15.2	13.1	3.5	9.9	28.9
Outer regional	0.8	16.3	14.6	3.7	11.3	31.6
Remote	1.6	23.6	32.4	17.7	15.3	57.3
Very remote	3.1	29.2	32.4	13.5	20.0	64.0
<b>SES group</b>						
1–Lowest	1.0	16.0	17.2	5.6	12.1	34.1
2	0.7	15.0	13.7	3.6	10.5	29.3
3	0.7	14.6	13.9	4.5	9.8	29.1
4	0.7	13.2	10.9	2.7	8.4	24.7
5–Highest	0.6	11.9	8.4	1.9	6.7	20.9
<b>Total</b>	<b>0.8</b>	<b>14.2</b>	<b>12.9</b>	<b>3.7</b>	<b>9.6</b>	<b>27.7</b>

(a) As more than one chronic condition may be reported for a separation, the sum of *Diabetes complications* and *Chronic conditions* (excluding diabetes) does not necessarily equal the total number of separations for *Chronic conditions*.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviations: SES—socioeconomic status.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours) or *Elective* (required at some stage beyond 24 hours). Emergency/elective status is not assigned for some admissions (for example, obstetric care and planned care, such as dialysis). This section classifies separations as *Emergency* or *Non-emergency* (includes elective and other planned care).

Table 7.15 includes information on urgency of admission and whether the separations were considered to be *Childbirth*, *Specialist mental health*, *Surgical*, *Medical* and *Other*. See the section ‘What care was provided?’ for more information on these types of care.

In 2010–11, 68% of separations were *Non-emergency* admissions, accounting for about 87% of same-day separations and 42% of overnight separations. Private hospitals accounted for about 53% of *Non-emergency* admissions and public hospitals accounted for about 92% of *Emergency* admissions (Table 7.15).

**Table 7.15: Same-day and overnight separations by broad category of service, public and private hospitals, states and territories, 2010–11**

	Public hospitals	Private hospitals	Total
<b>Same-day separations</b>			
Childbirth	7,287	145	7,432
Specialist mental health	10,641	98,822	109,463
Emergency			
Surgical	20,686	3,893	24,579
Medical	518,281	10,120	528,401
Other	3,886	2,739	6,625
Non-emergency			
Surgical	352,606	757,940	1,110,546
Medical	1,513,234	871,221	2,384,455
Other	258,527	690,389	948,916
<i>Total same-day separations</i>	<i>2,685,148</i>	<i>2,435,269</i>	<i>5,120,417</i>
<b>Overnight separations</b>			
Childbirth	206,133	79,859	285,992
Specialist mental health	90,566	30,350	120,916
Emergency			
Surgical	223,155	32,724	255,879
Medical	1,293,948	134,429	1,428,377
Other	53,565	11,228	64,793
Non-emergency			
Surgical	334,509	533,149	867,658
Medical	369,262	277,021	646,283
Other	22,846	39,389	62,235
<i>Total overnight separations</i>	<i>2,593,984</i>	<i>1,138,149</i>	<i>3,732,133</i>
<b>Total separations</b>	<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

Note: See Box 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S7.8 and S7.9 at the end of this chapter.

## What care was provided?

The care that is provided can be described in terms of:

- the broad category of service – *Childbirth*, *Specialist mental health*, *Medical* (not involving a procedure), *Surgical* (involving an operating room procedure) or *Other* (involving a non-operating room procedure, such as endoscopy)
- the intent of care – acute, sub-acute (such as *Rehabilitation* or *Palliative*) or non-acute (such as *Maintenance* care)
- Major Diagnostic Categories and Australian Refined Diagnosis Related Groups (AR-DRGs) – based on the AR-DRG classification of acute care separations.

## Broad category of service

This section presents information describing care by the following broad categories of service:

- *Childbirth*: separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health*: separations for which specialised psychiatric care days were reported.
- *Surgical*: separations for which the AR-DRG belonged to the *Surgical* partition (involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Medical*: separations for which the AR-DRG belonged to the *Medical* partition (not involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Other*: separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions (involving a non-operating room procedure, such as endoscopy), excluding separations for *Childbirth* and *Specialist mental health*.

In 2010–11, almost 18% of separations in public hospitals were for *Surgical* care and 70% were for *Medical* care, compared to 37% and 36% in private hospitals, respectively (Table 7.15). Around 3.3% of separations had a broad category of service reported as *Childbirth*.

There were over 230,000 separations for *Specialist mental health care*. Private hospitals provided about 56% of these, accounting for over 90% of same-day separations and 25% of overnight separations for *Specialist mental health care*.

## Care type

The **care type** describes the overall nature of a clinical service provided to an admitted patient during an episode of care.

The care type can be classified as *Acute*, *Rehabilitation*, *Palliative*, *Geriatric evaluation and management*, *Psychogeriatric*, *Maintenance*, *Newborn* and *Other admitted patient care*.

For public and private sectors combined, 95% of separations were classified as episodes of *Acute* care, 0.9% as *Newborn* (with qualified days) and 3.2% as *Rehabilitation* care (Table 7.16). Public and private sectors varied in the proportions of separations and the separation rates for each care type. The proportion of patient days and days per 1,000 population varied for each care type and between public and private sectors.

In public hospitals, the average length of stay for episodes of *Acute* care (2.9 days) was longer than that for private hospitals (2.1 days). The average length of stay for *Rehabilitation* care was 17.4 days in public hospitals, and 4.8 days in private hospitals. In part, this reflects a high proportion of same-day rehabilitation separations in the private sector, as well as a number of very long stay rehabilitation separations in the public sector. More information on sub- and non-acute care is available in Chapter 11.

**Table 7.16: Selected separation statistics by care type, public and private hospitals, 2010–11**

Care type and sector	Separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population <sup>(a)</sup>	Average length of stay
<b>Public hospitals</b>					
Acute care	5,063,825	218.9	14,879,019	636.0	2.9
Newborn total <sup>(b)</sup>	231,418	10.5	900,310	38.1	3.9
Newborn with qualified days only	39,347	1.8	406,529	18.4	10.3
Newborn with a mixture of qualified days and unqualified days <sup>(c)</sup>	11,059	0.5	36,092	1.6	3.3
Rehabilitation care	86,426	3.6	1,501,869	62.6	17.4
Other non-acute care <sup>(d)</sup>	78,475	3.1	1,663,510	67.0	21.2
<i>Total</i>	<i>5,279,132</i>	<i>227.9</i>	<i>18,944,708</i>	<i>785.5</i>	<i>3.6</i>
<b>Private hospitals</b>					
Acute care	3,340,429	142.7	7,176,581	302.7	2.1
Newborn total <sup>(b)</sup>	62,595	2.8	301,851	13.0	4.8
Newborn with qualified days only	15,637	0.7	101,102	4.6	6.5
Newborn with a mixture of qualified days and unqualified days <sup>(c)</sup>	1,869	0.1	8,018	0.4	4.3
Rehabilitation care	200,808	8.2	964,215	38.7	4.8
Other non-acute care <sup>(d)</sup>	14,675	0.6	157,897	6.3	10.8
<i>Total</i>	<i>3,573,418</i>	<i>152.3</i>	<i>8,600,544</i>	<i>352.9</i>	<i>2.4</i>
<b>All hospitals</b>	<b>8,852,550</b>	<b>380.3</b>	<b>27,545,252</b>	<b>1,138.4</b>	<b>3.1</b>

(a) Rates are directly age-standardised to the 31 December 2010 Australian population as detailed in Appendix 2.

(b) For *Newborns* with a mixture of qualified and unqualified days, the number of patient days includes only the qualified days for these separations. Unqualified days for these separations are not included in counts of patient days in this report.

(c) The totals do not include separations and unqualified days for *Newborns* (without qualified days). For information on *Newborn* (without qualified days), see tables S7.5 and S7.6.

(d) Includes separations for *Palliative care*, *Geriatric evaluation and management*, *Psychogeriatric care*, *Maintenance care* and *Other admitted patient care*.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S7.5 and S7.6 at the end of this chapter.

## Major Diagnostic Categories

The AR-DRG classification contains 23 Major Diagnostic Categories (MDCs).

Table 7.17 presents acute separations by MDCs for public and private hospitals. *Diseases and disorders of the kidney and urinary tract* accounted for almost 23% of acute separations for public hospitals and *Diseases and disorders of the digestive system* was the most common MDC for private hospitals. Over 68% of acute separations for *Diseases and disorders of the eye* were from private hospitals.

**Table 7.17: Separation(a) statistics, by Major Diagnostic Category version 6.0 and Medical/Surgical/Other partition, public and private hospitals, 2010–11**

<b>Major Diagnostic Category</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	13,319	2,944	16,263
01	Diseases and disorders of the nervous system	254,551	67,655	322,206
02	Diseases and disorders of the eye	101,023	216,498	317,521
03	Diseases and disorders of the ear, nose, mouth and throat	188,051	219,630	407,681
04	Diseases and disorders of the respiratory system	292,818	97,717	390,535
05	Diseases and disorders of the circulatory system	434,156	167,627	601,783
06	Diseases and disorders of the digestive system	522,199	572,220	1,094,419
07	Diseases and disorders of the hepatobiliary system and pancreas	96,278	35,464	131,742
08	Diseases and disorders of the musculoskeletal system and connective tissue	382,474	363,715	746,189
09	Diseases and disorders of the skin, subcutaneous tissue and breast	198,106	194,035	392,141
10	Endocrine, nutritional and metabolic diseases and disorders	72,832	41,629	114,461
11	Diseases and disorders of the kidney and urinary tract	1,160,210	310,561	1,470,771
12	Diseases and disorders of the male reproductive system	46,256	68,598	114,854
13	Diseases and disorders of the female reproductive system	116,383	165,305	281,688
14	Pregnancy, childbirth and puerperium	347,915	148,145	496,060
15	Newborns and other neonates	60,142	19,322	79,464
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	95,361	44,611	139,972
17	Neoplastic disorders (haematological and solid neoplasms)	193,056	238,648	431,704
18	Infectious and parasitic diseases	62,497	13,072	75,569
19	Mental diseases and disorders	135,651	110,843	246,494
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	36,236	28,600	64,836
21	Injuries, poisoning and toxic effects of drugs	157,586	24,448	182,034
22	Burns	8,558	313	8,871
23	Factors influencing health status and other contacts with health services	133,212	199,215	332,427
ED	Error DRGs <sup>(b)</sup>	5,503	7,151	12,654
	<i>Surgical DRG</i>	995,936	1,363,081	2,359,017
	<i>Medical DRG</i>	3,775,302	1,246,378	5,021,680
	<i>Other DRG</i>	343,135	748,507	1,091,642
<b>Total</b>		<b>5,114,373</b>	<b>3,357,966</b>	<b>8,472,339</b>

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

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

## What was the cost of the care?

### Admitted patient expenditure—public hospitals

In 2010–11, approximately \$26 billion was spent on admitted patient services in public hospitals (Table 7.18). This figure is based on the total expenditure reported for public hospitals, multiplied by the estimated ‘admitted patient cost proportion’ provided for each public hospital (see chapters 3 and 4 for more information).

**Table 7.18: Estimated expenditure on admitted patient care (\$ million), public hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
\$ million									
Total expenditure	11,554	9,225	7,262	3,918	2,935	880	697	515	36,985
Estimated admitted patient cost proportion <sup>(a)</sup>	0.70	0.69	0.71	0.67	0.70	0.68	0.71	0.78	0.70
Estimated admitted patient expenditure <sup>(b)</sup>	8,079	6,409	5,085	2,626	2,073	552	491	404	25,716

(a) Estimated admitted patient cost proportion is based on the weighted mean of reported admitted patient cost proportions for all benchmarking hospitals in the state or territory.

(b) Admitted patient expenditure includes expenditure on non-benchmarking hospitals (see Chapter 3) in the state or territory.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

### Average cost weights

The cost estimates for admitted patient care are approximations of the relative costs of hospital services during 2010–11. They should be used with caution in any comparisons between the states and territories. They are not derived from, nor comparable to, the expenditure and cost per casemix-adjusted separation information presented in chapters 3 and 4.

Estimated total admitted patient costs are not directly comparable between public and private hospitals. Private hospital treatment may include medical, pharmacy and pathology costs that are not included in existing private hospital cost information. These costs are included in public hospital cost information.

The ‘cost weight’ for a separation is the ratio of the estimated average cost for the separation (based on AR-DRG version 5.2) compared to the average cost for all acute separations. For 2010–11, the 2008–09 AR-DRG version 5.2 cost weights obtained from the National Hospital Cost Data Collection (NHCDC) (DoHA 2010) were applied to each separation. Separate cost weights are estimated and used here for the public and private sectors because of the differences in the range of costs recorded in public and private hospitals. For more information on the NHCDC, see Appendix 3.

In public hospitals, separations for *Public patients* generally had lower average cost weights than other patients (Table 7.19). In private hospitals, *Self-funded* separations had lower average costs than other separations. In the public sector, separations funded by *Motor vehicle third party personal claim* had higher average cost weights than most other separations.

**Table 7.19: Average cost weight of separations, by principal source of funds, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.03	0.94	0.99	0.90	1.05	1.07	0.98	0.67	0.98
Private health insurance	1.08	1.04	0.98	1.33	1.31	0.88	1.42	0.99	1.08
Self-funded <sup>(b)</sup>	1.36	0.75	1.05	0.79	0.82	0.69	1.09	1.11	1.13
Workers compensation	1.17	1.20	1.32	1.16	1.20	1.42	1.49	1.26	1.22
Motor vehicle third party personal claim	1.67	2.17	2.25	2.27	2.04	2.25	2.66	2.61	2.05
Department of Veterans' Affairs	1.19	1.16	1.13	1.07	1.28	1.10	0.87	1.31	1.16
Other <sup>(c)</sup>	1.65	1.30	1.34	1.19	1.21	1.77	1.02	1.29	1.34
<b>Total</b>	<b>1.06</b>	<b>0.96</b>	<b>1.00</b>	<b>0.94</b>	<b>1.08</b>	<b>1.05</b>	<b>1.00</b>	<b>0.69</b>	<b>1.00</b>
<b>Private hospitals<sup>(d)</sup></b>									
Public patients <sup>(a)</sup>	1.19	0.67	0.56	0.15	0.29	n.p.	n.p.	n.p.	0.32
Private health insurance	0.86	0.82	0.83	0.86	0.84	n.p.	n.p.	n.p.	0.84
Self-funded <sup>(b)</sup>	0.71	0.60	0.49	0.52	0.66	n.p.	n.p.	n.p.	0.61
Workers compensation	1.20	1.08	1.00	1.03	1.22	n.p.	n.p.	n.p.	1.11
Motor vehicle third party personal claim	0.91	0.90	0.91	1.06	1.18	n.p.	n.p.	n.p.	0.95
Department of Veterans' Affairs	1.17	1.16	0.91	1.08	1.10	n.p.	n.p.	n.p.	1.04
Other <sup>(c)</sup>	0.59	0.74	0.73	0.67	0.74	n.p.	n.p.	n.p.	0.79
<b>Total</b>	<b>0.86</b>	<b>0.82</b>	<b>0.80</b>	<b>0.73</b>	<b>0.85</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.82</b>

(a) *Public patients* includes separations for Medicare-eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a public patient election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefit Scheme.

(b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.

(c) *Other* includes separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a *Public patient* election status), *Other, No charge raised* (in private hospitals) and not reported.

(d) AR-DRG version 5.2 public cost weights 2008–09 were used for public hospitals and AR-DRG version 5.2 private cost weights 2008–09 were used for private hospitals. Estimated total admitted patient costs are not directly comparable between public and private hospitals. Private hospital treatment may include medical, pharmacy and pathology costs that are not included in existing private hospital cost information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

## Who paid for the care?

The **funding source** describes the principal source of funds for the admitted patient episode.

There may be some variation between jurisdictions in the definitions of funding source categories and in the way in which state- or territory- level information was mapped to the *National health data dictionary* domain values (see *Appendix 1*).

In 2010–11, about 85% of separations in public hospitals were for *Public patients*, compared to about 3% in private hospitals. Just over 80% of private hospital separations were funded by *Private health insurance* (Table 7.20).

**Table 7.20: Separations, by principal source of funds, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	4,491,588	104,951	4,596,539
Private health insurance	526,546	2,869,064	3,395,610
Self-funded	65,466	291,402	356,868
Workers compensation	22,354	61,035	83,389
Motor vehicle third party personal claim	27,666	7,134	34,800
Department of Veterans' Affairs	117,284	197,041	314,325
Other <sup>(b)</sup>	28,228	42,791	71,019
<b>Total</b>	<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

- (a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* (in public hospitals) were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefit Scheme.
- (b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S7.2 and S7.3 at the end of this chapter.

## How much care was contracted between hospitals?

**Inter-hospital contracted patient separations** are episodes of care for admitted patients whose treatment and/or care is provided under an arrangement between a hospital purchaser of hospital care and a provider of an admitted service for which the activity is recorded by both hospitals (HDSC 2008).

These data should be interpreted with caution as the activity reported here includes separations under contract between hospitals, but does not include separations under contract between private hospitals and the jurisdiction or between private hospitals and regional or area health services.

As inter-hospital contracted patients are admitted patients of both the contracting and contracted hospital, these separations may represent double-counting of hospital activity in the NHMD.

In 2010–11, there were over 78,000 separations for inter-hospital contracted patients (Table 7.21). The total number of inter-hospital contracted patients was higher for private hospitals than for public hospitals. Over 98% of all contracted care provided by private hospitals (62,300 separations) was purchased by public hospitals.

**Table 7.21: Separations, by inter-hospital contracted patient status, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
Inter-hospital contracted patient from public sector	10,566	61,219	71,785
Inter-hospital contracted patient from private sector	5,499	1,045	6,544
Not inter-hospital contracted patient	5,178,350	3,460,616	8,638,966
Not reported	84,717	50,538	135,255
<b>Total</b>	<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S7.16 at the end of this chapter.

## How much hospital care was provided in the patient's home?

Most states and territories have hospital-in-the-home (HITH) programs under which admitted patients are provided with hospital care in the home. This care has been defined as occurring in the patient's (permanent or temporary) place of residence as a substitute for hospital accommodation and within an episode of care for an admitted patient (HDSC 2008). In 2010–11, New South Wales and Tasmania did not provide information on HITH activity to the NHMD. HITH days are counted as patient days in the data presented in this report (see Table S7.17 at the end of this chapter).

## How long did patients stay?

In 2010–11, public hospitals accounted for 60% of separations and 69% of patient days. The average length of stay per separation was higher in the public sector, at 3.5 days, than in the private sector, at 2.4 days. Same-day separations accounted for 51% of public hospital separations and 68% of private hospital separations. The average length of stay for overnight separations was longer in public hospitals (6.1 days) than in private hospitals (5.2 days) (Table 7.22).

**Table 7.22 Average length of stay, public and private hospitals, 2010–11**

	Separations	Same-day separations	Patient days	Average length of stay (ALOS)	ALOS (excluding same-day)
Public hospitals	5,279,132	2,685,148	18,487,019	3.5	6.1
Private hospitals	3,573,418	2,435,269	8,407,813	2.4	5.2
<b>Total</b>	<b>8,852,550</b>	<b>5,120,417</b>	<b>26,894,832</b>	<b>3.0</b>	<b>5.8</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S7.2 and S7.3 at the end of this chapter.

*Abbreviation:* ALOS—average length of stay.

## How was the care completed?

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

About 92% of separations (8.2 million) had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 7.23). This was particularly the case

in the private sector, where 97% of separations (3.5 million) were categorised as *Other*, compared with 89% (4.7 million) in the public sector.

There is a discrepancy between the number of separations with a mode of separation of *Discharge/transfer to an(other) hospital (acute and psychiatric)* (371,000; see Table 7.23) and the number of separations with a mode of admission of *Admitted patient transferred from another hospital* (345,000; see Table 7.5). This may indicate that not all patients who are transferred from one hospital to another are having this recorded as their mode of admission, or that some patients were admitted and separated in different reporting years.

**Table 7.23: Separations, by mode of separation, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	314,653	55,847	370,500
Discharge/transfer to residential aged care service <sup>(a)</sup>	59,494	7,554	67,048
Discharge/transfer to an (other) psychiatric hospital	6,631	189	6,820
Discharge/transfer to other health care accommodation <sup>(b)</sup>	14,321	8,746	23,067
Statistical discharge: type change	85,680	17,298	102,978
Left against medical advice/discharge at own risk	43,577	2,156	45,733
Statistical discharge from leave	6,054	129	6,183
Died	61,279	13,537	74,816
Other <sup>(c)</sup>	4,686,017	3,467,941	8,153,958
Not reported	1,426	21	1,447
<b>Total</b>	<b>5,279,132</b>	<b>3,573,418</b>	<b>8,852,550</b>

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

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S7.15 at the end of this chapter.

## Additional information

At the time of writing, 2010–11 cost weights and average costs were not available for AR-DRG version 6.0, which has been used for the majority of tables that present data for Diagnosis Related Groups and Major Diagnostic Categories. Therefore, cost by volume information was not available. After this report is published, the website will include updates for the tables that use AR-DRG cost weight and/or average cost /cost by volume information.

More detailed information on admitted patient care, including data by state and territory for principal diagnoses and procedures, is provided online at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)>.

## **Supplementary tables**

The following supplementary tables provide more information on administrative data such as funding source, care type, sex and age group, Indigenous status, modes of admission and separation, urgency of admission, inter-hospital contracted patients and hospital-in-the-home care by state and territory.

### **Box 7.5: Methods – Chapter 7 supplementary tables**

#### **Table S7.4**

- (a) Rates are directly age-standardised to the 31 December 2010 Australian population as detailed in Appendix 2.
- (b) Includes Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory.
- (c) Includes *Resident overseas*, *At sea* and *No fixed address*.

#### **Tables S7.5 and S7.6**

- (a) The reporting of *Newborns* (without qualified days) only is not compulsory for the Victorian private sector, resulting in a low number of separations in this category.
- (b) Tasmania and the Northern Territory did not supply *Newborn* care according to the National health data dictionary definition and did not report any separations with both qualified and unqualified days.
- (c) Total separations include records for *Newborn* (without qualified days).
- (d) Total patient days exclude unqualified days for *Newborns*.

#### **Table S7.10**

- (a) These conditions are defined using ICD-10-AM codes in Appendix 2.
- (b) Includes other territories and excludes overseas residents and unknown state of residence.
- (c) Excludes multiple diagnoses for the same separation within the same group.
- (d) *Rheumatic heart disease* includes acute rheumatic fever as well as the chronic disease.

#### **Tables S7.11 and S7.12**

- (a) Totals include separations where age group was not reported.

#### **Table S7.13 and S7.14**

- (a) Identification of Indigenous patients is not considered to be complete and completeness varies among the jurisdictions. See Appendix 1 for further detail.
- (b) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory. See Box 7.4 for more information. Caution should be used in the interpretation of these data because of jurisdictional differences in data quality.
- (c) Totals include separations for which Indigenous status was not reported.
- (d) The separation rate for other Australians includes Indigenous status not reported.
- (e) The rate ratio is equal to the separation rate for Indigenous Australians divided by the separation rate for other Australians.

**Table S7.1: Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Separations</b>									
<i>Public hospitals</i>	1,582,804	1,496,041	964,349	548,272	390,154	99,333	93,745	104,434	5,279,132
Public acute hospitals	1,576,866	1,495,555	964,025	546,785	388,483	99,118	93,745	104,434	5,269,011
Public psychiatric hospitals	5,938	486	324	1,487	1,671	215	..	..	10,121
<i>Private hospitals<sup>(a)</sup></i>	1,011,887	875,470	859,202	417,761	283,281	n.p.	n.p.	n.p.	3,573,418
Private free-standing day hospital facilities	217,490	197,625	209,869	114,032	60,904	n.p.	n.p.	n.p.	809,158
Other private hospitals <sup>(a)</sup>	794,397	677,845	649,333	303,729	222,377	n.p.	n.p.	n.p.	2,764,260
<i>Public acute and private hospitals</i>	2,588,753	2,371,025	1,823,227	964,546	671,764	n.p.	n.p.	n.p.	8,842,429
<b>Total</b>	<b>2,594,691</b>	<b>2,371,511</b>	<b>1,823,551</b>	<b>966,033</b>	<b>673,435</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,852,550</b>
<b>Overnight separations</b>									
<i>Public hospitals</i>	875,005	645,995	472,812	255,849	212,421	49,703	43,849	38,350	2,593,984
Public acute hospitals	869,273	645,515	472,492	254,433	211,101	49,496	43,849	38,350	2,584,509
Public psychiatric hospitals	5,732	480	320	1,416	1,320	207	..	..	9,475
<i>Private hospitals<sup>(a)</sup></i>	291,052	297,911	278,427	130,156	93,085	n.p.	n.p.	n.p.	1,138,149
Private free-standing day hospital facilities	154	7	0	1,201	0	n.p.	n.p.	n.p.	1,363
Other private hospitals <sup>(a)</sup>	290,898	297,904	278,427	128,955	93,085	n.p.	n.p.	n.p.	1,136,786
<i>Public acute and private hospitals</i>	1,160,325	943,426	750,919	384,589	304,186	n.p.	n.p.	n.p.	3,722,658
<b>Total</b>	<b>1,166,057</b>	<b>943,906</b>	<b>751,239</b>	<b>386,005</b>	<b>305,506</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,732,133</b>
<b>Same-day separations</b>									
<i>Public hospitals</i>	707,799	850,046	491,537	292,423	177,733	49,630	49,896	66,084	2,685,148
Public acute hospitals	707,593	850,040	491,533	292,352	177,382	49,622	49,896	66,084	2,684,502
Public psychiatric hospitals	206	6	4	71	351	8	..	..	646
<i>Private hospitals<sup>(a)</sup></i>	720,835	577,559	580,775	287,605	190,196	n.p.	n.p.	n.p.	2,435,269
Private free-standing day hospital facilities	217,336	197,618	209,869	112,831	60,904	n.p.	n.p.	n.p.	807,795
Other private hospitals <sup>(a)</sup>	503,499	379,941	370,906	174,774	129,292	n.p.	n.p.	n.p.	1,627,474
<i>Public acute and private hospitals</i>	1,428,428	1,427,599	1,072,308	579,957	367,578	n.p.	n.p.	n.p.	5,119,771
<b>Total</b>	<b>1,428,634</b>	<b>1,427,605</b>	<b>1,072,312</b>	<b>580,028</b>	<b>367,929</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5,120,417</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations as a % of total</b>									
<i>Public hospitals</i>	44.7	56.8	51.0	53.3	45.6	50.0	53.2	63.3	50.9
Public acute hospitals	44.9	56.8	51.0	53.5	45.7	50.1	53.2	63.3	50.9
Public psychiatric hospitals	3.5	1.2	1.2	4.8	21.0	3.7	..	..	6.4
<i>Private hospitals<sup>(a)</sup></i>	71.2	66.0	67.6	68.8	67.1	n.p.	n.p.	n.p.	68.1
Private free-standing day hospital facilities	99.9	100.0	100.0	98.9	100.0	n.p.	n.p.	n.p.	99.8
Other private hospitals <sup>(a)</sup>	63.4	56.1	57.1	57.5	58.1	n.p.	n.p.	n.p.	58.9
<i>Public acute and private hospitals</i>	55.2	60.2	58.8	60.1	54.7	n.p.	n.p.	n.p.	57.9
<b>Total</b>	<b>55.1</b>	<b>60.2</b>	<b>58.8</b>	<b>60.0</b>	<b>54.6</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>57.8</b>
<b>Separations per 1,000 population<sup>(b)</sup></b>									
<i>Public hospitals</i>	205.7	255.7	209.4	235.2	217.2	181.4	272.3	504.5	225.9
Public acute hospitals	204.8	255.6	209.3	234.6	216.2	180.9	272.3	504.5	225.5
Public psychiatric hospitals	0.8	0.1	0.1	0.6	1.0	0.5	0.0	0.0	0.5
<i>Private hospitals<sup>(a)</sup></i>	130.2	148.1	184.4	178.0	151.8	n.p.	n.p.	n.p.	150.9
Private free-standing day hospital facilities	28.1	33.5	45.0	48.9	32.0	n.p.	n.p.	n.p.	34.3
Other private hospitals <sup>(a)</sup>	102.1	114.6	139.4	129.1	119.8	n.p.	n.p.	n.p.	116.6
<i>Public acute and private hospitals</i>	335.0	403.7	393.7	412.6	368.0	n.p.	n.p.	n.p.	376.3
<b>Total</b>	<b>335.9</b>	<b>403.8</b>	<b>393.7</b>	<b>413.2</b>	<b>369.0</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>376.8</b>
<b>Average public cost weight of separations<sup>(c)</sup></b>									
<i>Public hospitals</i>	1.06	0.96	1.00	0.94	1.08	1.05	1.00	0.69	1.00
Public acute hospitals	1.05	0.96	1.00	0.93	1.07	1.05	1.00	0.69	1.00
Public psychiatric hospitals	2.66	4.18	4.20	3.33	2.32	0.86	..	..	2.75
<i>Private hospitals<sup>(a)</sup></i>	0.94	0.91	0.88	0.81	0.93	n.p.	n.p.	n.p.	0.90
Private free-standing day hospital facilities	0.55	0.45	0.49	0.34	0.42	n.p.	n.p.	n.p.	0.47
Other private hospitals <sup>(a)</sup>	1.06	1.05	1.01	0.99	1.08	n.p.	n.p.	n.p.	1.04
<i>Public acute and private hospitals</i>	1.01	0.94	0.94	0.88	1.01	n.p.	n.p.	n.p.	0.96
<b>Total</b>	<b>1.01</b>	<b>0.94</b>	<b>0.94</b>	<b>0.88</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.96</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average private cost weight of separations<sup>(d)</sup></b>									
<i>Private hospitals<sup>(a)</sup></i>	0.86	0.82	0.80	0.73	0.85	n.p.	n.p.	n.p.	0.82
Private free-standing day hospital facilities	0.44	0.30	0.34	0.25	0.30	n.p.	n.p.	n.p.	0.35
Other private hospitals <sup>(a)</sup>	1.00	0.97	0.96	0.92	1.01	n.p.	n.p.	n.p.	0.97
<b>Patient days</b>									
<i>Public hospitals</i>	6,192,497	4,722,672	3,206,398	1,779,052	1,614,514	372,761	311,607	287,518	18,487,019
Public acute hospitals	5,918,473	4,680,071	3,104,545	1,718,891	1,501,643	371,508	311,607	287,518	17,894,256
Public psychiatric hospitals	274,024	42,601	101,853	60,161	112,871	1,253	..	..	592,763
<i>Private hospitals<sup>(a)</sup></i>	2,330,294	2,166,659	2,093,296	886,003	625,664	n.p.	n.p.	n.p.	8,407,813
Private free-standing day hospital facilities	217,606	197,719	209,869	114,032	60,904	n.p.	n.p.	n.p.	809,368
Other private hospitals <sup>(a)</sup>	2,112,688	1,968,940	1,883,427	771,971	564,760	n.p.	n.p.	n.p.	7,598,445
<i>Public acute and private hospitals</i>	8,248,767	6,846,730	5,197,841	2,604,894	2,127,307	n.p.	n.p.	n.p.	26,302,069
<b>Total</b>	<b>8,522,791</b>	<b>6,889,331</b>	<b>5,299,694</b>	<b>2,665,055</b>	<b>2,240,178</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>26,894,832</b>
<b>Patient days per 1,000 population<sup>(b)</sup></b>									
<i>Public hospitals</i>	785.7	790.1	694.9	762.9	853.2	654.3	916.2	1,554.8	777.9
Public acute hospitals	748.6	782.4	672.1	737.2	789.5	651.5	916.2	1,554.8	751.7
Public psychiatric hospitals	37.1	7.6	22.8	25.7	63.7	2.8	0.0	0.0	26.2
<i>Private hospitals<sup>(a)</sup></i>	293.7	357.8	447.4	378.3	322.3	n.p.	n.p.	n.p.	348.9
Private free-standing day hospital facilities	28.2	33.5	45.0	48.9	32.0	n.p.	n.p.	n.p.	34.3
Other private hospitals <sup>(a)</sup>	265.6	324.2	402.4	329.5	290.3	n.p.	n.p.	n.p.	314.6
<i>Public acute and private hospitals</i>	1,042.3	1,140.2	1,119.5	1,115.5	1,111.8	n.p.	n.p.	n.p.	1,100.6
<b>Total</b>	<b>1,079.4</b>	<b>1,147.9</b>	<b>1,142.4</b>	<b>1,141.2</b>	<b>1,175.5</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,126.8</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average length of stay (days)</b>									
<i>Public hospitals</i>	3.9	3.2	3.3	3.2	4.1	3.8	3.3	2.8	3.5
Public acute hospitals	3.8	3.1	3.2	3.1	3.9	3.7	3.3	2.8	3.4
Public psychiatric hospitals <sup>(e)</sup>	46.1	87.7	314.4	40.5	67.5	5.8	..	..	58.6
<i>Private hospitals<sup>(a)</sup></i>	2.3	2.5	2.4	2.1	2.2	n.p.	n.p.	n.p.	2.4
Private free-standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.p.	1.0
Other private hospitals <sup>(a)</sup>	2.7	2.9	2.9	2.5	2.5	n.p.	n.p.	n.p.	2.7
<i>Public acute and private hospitals</i>	3.2	2.9	2.9	2.7	3.2	n.p.	n.p.	n.p.	3.0
<b>Total</b>	<b>3.3</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	<b>3.3</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3.0</b>
<b>Average length of stay, excluding same-day separations (days)</b>									
<i>Public hospitals</i>	6.3	6.0	5.7	5.8	6.8	6.5	6.0	5.8	6.1
Public acute hospitals	6.0	5.9	5.5	5.6	6.3	6.5	6.0	5.8	5.9
Public psychiatric hospitals <sup>(e)</sup>	47.8	88.7	318.3	42.4	85.2	6.0	..	..	62.5
<i>Private hospitals<sup>(a)</sup></i>	5.5	5.3	5.4	4.6	4.7	n.p.	n.p.	n.p.	5.2
Private free-standing day hospital facilities	1.8	14.4	..	1.0	..	n.p.	n.p.	n.p.	1.2
Other private hospitals <sup>(a)</sup>	5.5	5.3	5.4	4.6	4.7	n.p.	n.p.	n.p.	5.3
<i>Public acute and private hospitals</i>	5.9	5.7	5.5	5.3	5.8	n.p.	n.p.	n.p.	5.7
<b>Total</b>	<b>6.1</b>	<b>5.8</b>	<b>5.6</b>	<b>5.4</b>	<b>6.1</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5.8</b>

(a) Includes private psychiatric hospitals.

(b) Rates are directly age-standardised to the December 2010 Australian population as detailed in Appendix 1.

(c) Separations for which the care type was reported as *Acute*, or as *Newborn* (with qualified days), or was not reported. AR-DRG version 5.2 national public sector estimated cost weights 2008–09 were applied to AR-DRG version 5.2 DRGs for all rows in *Average public cost weight of separations*.

(d) Separations for which the care type was reported as *Acute*, or as *Newborn* (with qualified days), or was not reported. AR-DRG version 5.2 national private sector estimated cost weights for 2008–09 were applied to AR-DRG version 5.2 DRGs for all rows in *Average private cost weight of separations*.

(e) Caution should be used with average length of stay data for public psychiatric hospitals. The figures include a small percentage of long-stay patients who can affect the average markedly.

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviations: ..—not applicable; n.p.—not published.

**Table S7.2: Separations by funding source, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public <sup>(a)</sup>	1,225,748	1,287,549	872,391	497,600	344,226	80,548	82,193	101,333	4,491,588
Private health insurance	253,815	140,181	52,661	31,244	27,709	14,313	6,029	594	526,546
Self-funded <sup>(b)</sup>	33,357	14,457	14,407	713	1,694	n.a.	156	602	65,466
Workers compensation	6,915	6,149	4,896	1,892	1,306	410	400	386	22,354
Motor vehicle third party personal claim	7,817	8,834	3,815	3,373	2,357	737	252	481	27,666
Department of Veterans' Affairs	49,483	26,778	15,244	8,653	10,082	2,901	3,909	234	117,284
Other <sup>(c)</sup>	5,669	12,093	935	4,797	2,780	344	806	804	28,228
<i>Total</i>	<i>1,582,804</i>	<i>1,496,041</i>	<i>964,349</i>	<i>548,272</i>	<i>390,154</i>	<i>99,333</i>	<i>93,745</i>	<i>104,434</i>	<i>5,279,132</i>
<b>Private hospitals</b>									
Public <sup>(a)</sup>	8,830	2,842	18,146	71,483	3,593	n.p.	n.p.	n.p.	104,951
Private health insurance	817,637	737,928	676,320	299,772	248,045	n.p.	n.p.	n.p.	2,869,064
Self-funded <sup>(b)</sup>	111,752	79,855	65,632	18,841	10,709	n.p.	n.p.	n.p.	291,402
Workers compensation	22,625	11,727	12,674	7,617	4,636	n.p.	n.p.	n.p.	61,035
Motor vehicle third party personal claim	1,268	3,883	516	764	465	n.p.	n.p.	n.p.	7,134
Department of Veterans' Affairs	46,388	36,093	78,089	16,584	13,667	n.p.	n.p.	n.p.	197,041
Other <sup>(c)</sup>	3,387	3,142	7,825	2,700	2,166	n.p.	n.p.	n.p.	42,791
<i>Total</i>	<i>1,011,887</i>	<i>875,470</i>	<i>859,202</i>	<i>417,761</i>	<i>283,281</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,573,418</i>
<b>All hospitals</b>	<b>2,594,691</b>	<b>2,371,511</b>	<b>1,823,551</b>	<b>966,033</b>	<b>673,435</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,852,550</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefit Scheme.

(b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.

(c) *Other* includes separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a *Public patient* election status), *Other, No charge raised* (in private hospitals) and not reported.

*Note:* See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

*Abbreviations:* n.a.—not available; n.p.—not published.

**Table S7.3: Patient days by funding source, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public <sup>(a)</sup>	4,631,174	3,863,258	2,884,229	1,522,111	1,350,749	295,675	264,225	273,513	15,084,934
Private health insurance	999,871	546,372	180,139	159,723	156,022	46,633	28,459	1,318	2,118,537
Self-funded <sup>(b)</sup>	139,592	22,016	26,939	4,682	2,565	n.a.	498	2,036	198,433
Workers compensation	20,977	17,186	17,007	5,936	5,387	1,448	1,357	1,405	70,703
Motor vehicle third party personal claim	45,932	44,480	22,857	25,006	15,565	4,484	2,085	4,048	164,457
Department of Veterans' Affairs	275,148	150,303	71,741	41,187	73,903	17,558	12,312	1,398	643,550
Other <sup>(c)</sup>	79,803	79,057	3,486	20,407	10,323	6,858	2,671	3,800	206,405
<i>Total</i>	<i>6,192,497</i>	<i>4,722,672</i>	<i>3,206,398</i>	<i>1,779,052</i>	<i>1,614,514</i>	<i>372,761</i>	<i>311,607</i>	<i>287,518</i>	<i>18,487,019</i>
<b>Private hospitals</b>									
Public <sup>(a)</sup>	13,728	4,365	50,720	92,875	4,717	n.p.	n.p.	n.p.	166,748
Private health insurance	1,867,050	1,786,618	1,620,190	665,737	539,190	n.p.	n.p.	n.p.	6,693,181
Self-funded <sup>(b)</sup>	186,637	150,691	74,349	21,584	13,587	n.p.	n.p.	n.p.	452,339
Workers compensation	50,316	29,985	21,965	12,827	9,945	n.p.	n.p.	n.p.	128,980
Motor vehicle third party personal claim	3,244	23,184	1,029	1,638	1,936	n.p.	n.p.	n.p.	33,122
Department of Veterans' Affairs	201,157	165,516	310,661	86,108	51,262	n.p.	n.p.	n.p.	841,351
Other <sup>(c)</sup>	8,162	6,300	14,382	5,234	5,027	n.p.	n.p.	n.p.	92,092
<i>Total</i>	<i>2,330,294</i>	<i>2,166,659</i>	<i>2,093,296</i>	<i>886,003</i>	<i>625,664</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,407,813</i>
<b>All hospitals</b>	<b>8,522,791</b>	<b>6,889,331</b>	<b>5,299,694</b>	<b>2,665,055</b>	<b>2,240,178</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>26,894,832</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a public patient election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefit Scheme.

(b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.

(c) *Other* includes separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a public patient election status), *Other, No charge raised* (in private hospitals) and not reported.

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviations: n.a.—not available; n.p.—not published.

**Table S7.4: Separations, by state or territory of usual residence, public and private hospitals, states and territories, 2010–11**

State or territory of usual residence	State or territory of hospitalisation								Separations per 1,000 population <sup>(a)</sup>
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	
<b>Public hospitals</b>									
New South Wales	1,552,557	29,907	10,850	721	1,763	211	21,196	399	1,617,604
Victoria	3,606	1,453,122	2,127	718	2,326	309	307	431	1,462,946
Queensland	12,125	1,621	943,713	631	459	205	189	511	959,454
Western Australia	543	639	433	543,249	308	63	44	2,357	547,636
South Australia	581	1,957	483	319	382,589	73	59	3,320	389,381
Tasmania	260	1,763	281	94	109	97,330	27	43	99,907
Australian Capital Territory	3,184	305	161	40	58	15	71,832	30	75,625
Northern Territory	187	326	434	256	1,961	5	22	97,007	100,198
Other Australian territories <sup>(b)</sup>	n.p.	18	6	165	0	0	0	3	n.p.
Not elsewhere classified <sup>(c)</sup>	n.p.	5,537	4,937	2,046	145	72	69	331	n.p.
Not reported	77	846	924	33	436	0	0	0	3,368
<i>Total</i>	<i>1,582,804</i>	<i>1,496,041</i>	<i>964,349</i>	<i>548,272</i>	<i>390,154</i>	<i>99,333</i>	<i>93,745</i>	<i>104,434</i>	<i>5,279,132</i>
<b>Private hospitals</b>									
New South Wales	994,462	8,232	31,014	403	1,714	n.p.	n.p.	n.p.	1,043,635
Victoria	7,746	862,827	1,470	315	1,646	n.p.	n.p.	n.p.	874,288
Queensland	4,288	1,037	824,055	419	279	n.p.	n.p.	n.p.	830,219
Western Australia	290	386	295	415,804	117	n.p.	n.p.	n.p.	416,998
South Australia	299	503	320	346	277,850	n.p.	n.p.	n.p.	279,366
Tasmania	244	1,375	271	79	79	n.p.	n.p.	n.p.	70,201
Australian Capital Territory	2,380	206	186	43	50	n.p.	n.p.	n.p.	33,090
Northern Territory	379	413	659	198	1,347	n.p.	n.p.	n.p.	14,626
Other Australian territories <sup>(b)</sup>	276	2	66	54	0	n.p.	n.p.	n.p.	n.p.
Not elsewhere classified <sup>(c)</sup>	1,523	471	593	97	12	n.p.	n.p.	n.p.	n.p.
Not reported	0	0	273	0	187	n.p.	n.p.	n.p.	491
<i>Total</i>	<i>1,011,887</i>	<i>875,470</i>	<i>859,202</i>	<i>417,761</i>	<i>283,281</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,573,418</i>
<b>Total</b>	<b>2,594,691</b>	<b>2,371,511</b>	<b>1,823,551</b>	<b>966,033</b>	<b>673,435</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,852,550</b>
<b>376.8</b>									

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.5: Separations by care type, public and private hospitals, states and territories, 2010–11**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	1,510,980	1,446,301	919,598	529,774	371,880	96,124	86,828	102,340	5,063,825
Rehabilitation care	30,832	14,776	19,385	9,496	7,664	1,114	2,718	441	86,426
Palliative care	10,919	6,659	6,599	1,234	1,678	217	629	320	28,255
Geriatric evaluation and management	5,624	15,293	2,172	804	1,701	141	707	42	26,484
Psychogeriatric care	808	0	596	730	288	1	21	1	2,445
Maintenance care	7,919	621	5,863	1,384	2,803	437	1,570	292	20,889
Newborn—qualified days only	10,690	10,856	7,431	4,142	2,900	1,281	1,125	922	39,347
Newborn—qualified and unqualified days <sup>(b)</sup>	5,028	1,401	2,536	708	1,240	0	146	0	11,059
Newborn—unqualified days only	62,019	44,278	35,563	18,423	11,553	3,267	3,286	2,623	181,012
<i>Newborn total</i>	<i>77,737</i>	<i>56,535</i>	<i>45,530</i>	<i>23,273</i>	<i>15,693</i>	<i>4,548</i>	<i>4,557</i>	<i>3,545</i>	<i>231,418</i>
Other admitted patient care	0	0	169	0	0	14	1	76	260
Not reported	4	134	0	0	0	4	0	0	142
<i>Total</i>	<i>1,644,823</i>	<i>1,540,319</i>	<i>999,912</i>	<i>566,695</i>	<i>401,707</i>	<i>102,600</i>	<i>97,031</i>	<i>107,057</i>	<i>5,460,144</i>
<b>Private hospitals</b>									
Acute care	881,401	848,373	821,649	409,635	260,035	n.p.	n.p.	n.p.	3,340,429
Rehabilitation care	122,431	17,453	30,929	2,241	22,185	n.p.	n.p.	n.p.	200,808
Palliative care	475	617	1,715	2,317	264	n.p.	n.p.	n.p.	5,507
Geriatric evaluation and management	0	0	22	2	49	n.p.	n.p.	n.p.	77
Psychogeriatric care	0	5,339	3	992	0	n.p.	n.p.	n.p.	6,336
Maintenance care	139	38	2,321	126	12	n.p.	n.p.	n.p.	2,665
Newborn—qualified days only	7,002	3,576	2,107	1,530	736	n.p.	n.p.	n.p.	15,637
Newborn—qualified and unqualified days <sup>(b)</sup>	439	74	402	918	0	n.p.	n.p.	n.p.	1,869
Newborn—unqualified days only	15,905	629	16,265	7,949	808	n.p.	n.p.	n.p.	45,089
<i>Newborn total</i>	<i>23,346</i>	<i>4,279</i>	<i>18,774</i>	<i>10,397</i>	<i>1,544</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>62,595</i>
Other admitted patient care	0	0	54	0	0	n.p.	n.p.	n.p.	59
Not reported	0	0	0	0	0	n.p.	n.p.	n.p.	31
<i>Total<sup>(c)</sup></i>	<i>1,027,792</i>	<i>876,099</i>	<i>875,467</i>	<i>425,710</i>	<i>284,089</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,618,507</i>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.6: Patient days, by care type, public and private hospitals, states and territories, 2010–11**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	5,122,792	3,793,901	2,499,320	1,451,845	1,202,469	315,963	236,678	256,051	14,879,019
Rehabilitation care	518,213	305,253	302,574	180,410	131,237	25,958	29,358	8,866	1,501,869
Palliative care	122,669	91,926	56,862	13,311	19,249	4,478	7,648	3,516	319,659
Geriatric evaluation and management	70,613	346,469	42,644	6,281	26,666	4,820	8,940	1,123	507,556
Psychogeriatric care	49,429	0	9,144	36,658	24,856	6	758	18	120,869
Maintenance care	188,114	63,817	207,455	47,751	168,270	11,258	17,259	7,373	711,297
Newborn-qualified days	120,091	119,596	86,959	42,796	41,767	10,131	10,965	10,316	442,621
Newborn-unqualified days	162,344	111,939	79,005	47,860	31,920	9,903	7,367	7,351	457,689
Newborn total	282,435	231,535	165,964	90,656	73,687	20,034	18,332	17,667	900,310
Other admitted patient care	0	0	1,440	0	0	21	1	255	1,717
Not reported	576	1,710	0	0	0	126	0	0	2,412
<i>Total<sup>(b)</sup></i>	<i>6,192,497</i>	<i>4,722,672</i>	<i>3,206,398</i>	<i>1,779,052</i>	<i>1,614,514</i>	<i>372,761</i>	<i>311,607</i>	<i>287,518</i>	<i>18,487,019</i>
<b>Private hospitals</b>									
Acute care	1,851,006	1,867,286	1,853,730	790,506	549,017	n.p.	n.p.	n.p.	7,176,581
Rehabilitation total	432,773	242,214	148,127	39,839	67,250	n.p.	n.p.	n.p.	964,215
Palliative care	5,630	7,433	26,848	21,946	4,105	n.p.	n.p.	n.p.	67,142
Geriatric evaluation and management	0	0	187	2	336	n.p.	n.p.	n.p.	575
Psychogeriatric care	0	27,438	29	16,272	0	n.p.	n.p.	n.p.	43,758
Maintenance care	1,565	937	38,272	4,204	282	n.p.	n.p.	n.p.	46,101
Newborn-qualified days	39,320	21,351	25,919	13,234	4,674	n.p.	n.p.	n.p.	109,120
Newborn-unqualified days	69,816	2,875	64,617	37,528	3,277	n.p.	n.p.	n.p.	192,731
Newborn total	109,136	24,226	90,536	50,762	7,951	n.p.	n.p.	n.p.	301,851
Other admitted patient care	0	0	184	0	0	n.p.	n.p.	n.p.	229
Not reported	0	0	0	0	0	n.p.	n.p.	n.p.	92
<i>Total<sup>(b)</sup></i>	<i>2,330,294</i>	<i>2,166,659</i>	<i>2,093,296</i>	<i>886,003</i>	<i>625,664</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,407,813</i>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.7: Separations, by mode of admission, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Admitted patient transferred from another hospital	83,902	67,855	32,383	37,336	18,415	1,546	3,485	241	245,163
Statistical admission: type change	27,231	13,067	22,362	8,345	5,482	1,894	4,884	1,496	84,761
Other	1,454,499	1,414,633	909,604	502,591	364,652	95,662	85,376	102,697	4,929,714
Not reported	17,172	486	0	0	1,605	231	0	0	19,494
<i>Total</i>	<b>1,582,804</b>	<b>1,496,041</b>	<b>964,349</b>	<b>548,272</b>	<b>390,154</b>	<b>99,333</b>	<b>93,745</b>	<b>104,434</b>	<b>5,279,132</b>
<b>Private hospitals</b>									
Admitted patient transferred from another hospital	38,014	29,777	16,946	7,292	5,736	n.p.	n.p.	n.p.	99,481
Statistical admission: type change	3,971	2,787	5,974	1,922	573	n.p.	n.p.	n.p.	15,906
Other	966,712	842,906	836,282	408,547	276,802	n.p.	n.p.	n.p.	3,439,853
Not reported	3,190	0	0	0	170	n.p.	n.p.	n.p.	18,178
<i>Total</i>	<b>1,011,887</b>	<b>875,470</b>	<b>859,202</b>	<b>417,761</b>	<b>283,281</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,573,418</b>
<b>All hospitals</b>									
Admitted patient transferred from another hospital	121,916	97,632	49,329	44,628	24,151	n.p.	n.p.	n.p.	344,644
Statistical admission: type change	31,202	15,854	28,336	10,267	6,055	n.p.	n.p.	n.p.	100,667
Other	2,421,211	2,257,539	1,745,886	911,138	641,454	n.p.	n.p.	n.p.	8,369,567
Not reported	20,362	486	0	0	1,775	n.p.	n.p.	n.p.	37,672
<i>Total</i>	<b>2,594,691</b>	<b>2,371,511</b>	<b>1,823,551</b>	<b>966,033</b>	<b>673,435</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>8,852,550</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.8: Same-day and overnight separations by broad category of service, public hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	2,521	1,053	2,018	604	485	139	295	172	7,287
Specialist mental health	4,054	478	4,689	461	790	7	131	31	10,641
Emergency									
Surgical	7,389	5,907	2,480	2,224	1,246	434	842	164	20,686
Medical	126,629	171,859	113,517	53,409	32,461	3,523	8,679	8,204	518,281
Other	1,585	677	529	588	245	125	124	13	3,886
Non-emergency									
Surgical	99,826	109,628	54,476	37,527	35,393	7,389	4,477	3,890	352,606
Medical	395,545	469,718	277,515	157,769	98,613	30,203	31,761	52,110	1,513,234
Other	70,250	90,726	36,313	39,841	8,500	7,810	3,587	1,500	258,527
<i>Total same-day separations</i>	<i>707,799</i>	<i>850,046</i>	<i>491,537</i>	<i>292,423</i>	<i>177,733</i>	<i>49,630</i>	<i>49,896</i>	<i>66,084</i>	<i>2,685,148</i>
<b>Overnight separations</b>									
Childbirth	69,745	51,012	40,436	20,253	14,098	3,877	3,836	2,876	206,133
Specialist mental health	31,383	19,788	17,609	9,851	7,723	2,166	1,214	832	90,566
Emergency									
Surgical	72,491	54,112	37,342	25,808	18,292	5,337	5,535	4,238	223,155
Medical	454,462	300,851	236,543	130,372	110,240	20,886	18,536	22,058	1,293,948
Other	19,670	12,367	7,891	5,623	4,819	1,326	1,019	850	53,565
Non-emergency									
Surgical	100,550	94,549	62,142	32,440	29,169	7,109	5,935	2,615	334,509
Medical	120,144	106,682	65,653	30,036	26,001	8,538	7,582	4,626	369,262
Other	6,560	6,634	5,196	1,466	2,079	464	192	255	22,846
<i>Total overnight separations</i>	<i>875,005</i>	<i>645,995</i>	<i>472,812</i>	<i>255,849</i>	<i>212,421</i>	<i>49,703</i>	<i>43,849</i>	<i>38,350</i>	<i>2,593,984</i>
<b>Total</b>	<b>1,582,804</b>	<b>1,496,041</b>	<b>964,349</b>	<b>548,272</b>	<b>390,154</b>	<b>99,333</b>	<b>93,745</b>	<b>104,434</b>	<b>5,279,132</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Table S7.9: Same-day and overnight separations by broad category of service, private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	42	26	27	12	10	n.p.	n.p.	n.p.	145
Specialist mental health	38,997	23,262	28,637	4,776	458	n.p.	n.p.	n.p.	98,822
Emergency									
Surgical	425	390	513	499	2,045	n.p.	n.p.	n.p.	3,893
Medical	1,569	1,859	3,059	1,783	1,809	n.p.	n.p.	n.p.	10,120
Other	190	193	260	138	1,951	n.p.	n.p.	n.p.	2,739
Non-emergency									
Surgical	243,218	183,830	164,708	78,332	56,461	n.p.	n.p.	n.p.	757,940
Medical	231,752	171,589	231,804	133,218	82,474	n.p.	n.p.	n.p.	871,221
Other	204,642	196,410	151,767	68,847	44,988	n.p.	n.p.	n.p.	690,389
<i>Total same-day separations</i>	<i>720,835</i>	<i>577,559</i>	<i>580,775</i>	<i>287,605</i>	<i>190,196</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,435,269</i>
<b>Overnight separations</b>									
Childbirth	22,622	19,822	17,982	10,037	4,923	n.p.	n.p.	n.p.	79,859
Specialist mental health	10,014	8,481	6,299	3,493	1,402	n.p.	n.p.	n.p.	30,350
Emergency									
Surgical	3,621	8,574	10,735	5,055	4,188	n.p.	n.p.	n.p.	32,724
Medical	13,751	33,722	53,207	15,757	15,623	n.p.	n.p.	n.p.	134,429
Other	856	3,440	3,951	1,467	1,299	n.p.	n.p.	n.p.	11,228
Non-emergency									
Surgical	155,134	129,590	112,037	66,915	44,526	n.p.	n.p.	n.p.	533,149
Medical	75,452	81,646	63,713	24,870	18,288	n.p.	n.p.	n.p.	277,021
Other	9,602	12,636	10,503	2,562	2,836	n.p.	n.p.	n.p.	39,389
<i>Total overnight separations</i>	<i>291,052</i>	<i>297,911</i>	<i>278,427</i>	<i>130,156</i>	<i>93,085</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,138,149</i>
<b>Total</b>	<b>1,011,887</b>	<b>875,470</b>	<b>859,202</b>	<b>417,761</b>	<b>283,281</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,573,418</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.10: Separations for selected potentially preventable hospitalisations<sup>(a)</sup>, by state or territory of usual residence, all hospitals, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Vaccine-preventable conditions</b>									
Influenza and pneumonia	3,858	2,937	2,707	1,134	1,298	180	143	524	12,791
Other vaccine-preventable conditions	1,031	1,621	992	342	417	33	23	107	4,571
<i>Total vaccine-preventable conditions<sup>(c)</sup></i>	<i>4,879</i>	<i>4,546</i>	<i>3,688</i>	<i>1,476</i>	<i>1,710</i>	<i>213</i>	<i>165</i>	<i>631</i>	<i>17,323</i>
<b>Acute conditions</b>									
Appendicitis with generalised peritonitis	388	403	281	150	98	29	23	35	1,409
Cellulitis	13,917	10,418	10,405	4,019	3,068	726	481	798	43,893
Convulsions and epilepsy	11,149	8,263	7,098	3,431	2,691	554	437	723	34,441
Dehydration and gastroenteritis	20,541	20,110	12,857	6,411	4,985	1,164	587	523	67,234
Dental conditions	16,102	15,937	12,173	8,461	5,350	1,099	725	707	60,590
Ear, nose and throat infections	11,346	8,821	8,550	4,343	3,593	560	358	606	38,222
Gangrene	1,350	2,024	1,290	691	393	154	43	178	6,128
Pelvic inflammatory disease	1,366	1,311	1,139	441	371	103	55	147	4,938
Perforated/bleeding ulcer	1,525	1,343	905	519	427	124	90	30	4,971
Pyelonephritis	19,687	16,179	12,934	6,153	4,718	914	785	651	62,074
<i>Total acute conditions<sup>(c)</sup></i>	<i>97,322</i>	<i>84,743</i>	<i>67,581</i>	<i>34,599</i>	<i>25,676</i>	<i>5,423</i>	<i>3,582</i>	<i>4,389</i>	<i>323,681</i>
<b>Chronic conditions</b>									
Angina	8,739	7,676	8,573	3,489	2,707	580	215	383	32,391
Asthma	12,027	10,879	7,251	2,886	3,229	499	413	463	37,696
Chronic obstructive pulmonary disease	20,906	16,145	14,191	5,367	5,627	1,575	612	1,091	65,570
Congestive cardiac failure	15,999	14,423	9,463	4,552	4,177	969	604	559	50,786
Diabetes complications	19,728	18,471	19,257	20,168	5,656	1,357	734	1,333	86,774
Hypertension	2,446	1,857	1,918	560	584	104	46	61	7,585
Iron deficiency anaemia	8,929	10,377	5,137	3,537	2,553	838	333	210	31,936
Nutritional deficiencies	90	57	76	10	28	5	15	13	294
Rheumatic heart disease <sup>(d)</sup>	649	574	643	281	236	35	17	209	2,645
<i>Total chronic conditions<sup>(c)</sup></i>	<i>87,410</i>	<i>78,124</i>	<i>64,806</i>	<i>40,144</i>	<i>24,253</i>	<i>5,800</i>	<i>2,913</i>	<i>4,161</i>	<i>307,884</i>
<i>Total chronic conditions, excluding diabetes<sup>(c)</sup></i>	<i>69,785</i>	<i>61,988</i>	<i>47,252</i>	<i>20,682</i>	<i>19,141</i>	<i>4,605</i>	<i>2,255</i>	<i>2,989</i>	<i>228,903</i>
<b>Total selected potentially preventable hospitalisations<sup>(c)</sup></b>	<b>189,006</b>	<b>166,741</b>	<b>135,499</b>	<b>75,897</b>	<b>51,386</b>	<b>11,399</b>	<b>6,639</b>	<b>9,053</b>	<b>646,272</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.11: Separations, by age group and sex, public hospitals, states and territories, 2010–11**

<b>Sex</b>	<b>Age group</b>	<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
<b>Males</b>	Under 1	22,928	16,203	13,086	6,986	5,117	1,270	1,360	1,446	68,396
	1–4	27,298	20,641	17,073	9,515	6,817	1,263	1,314	1,601	85,522
	5–14	34,459	27,008	21,665	12,198	7,547	1,828	2,043	1,837	108,585
	15–24	41,304	41,146	29,307	17,113	10,113	2,529	2,799	2,721	147,032
	25–34	45,196	47,043	33,906	20,458	11,611	2,960	3,414	3,828	168,416
	35–44	62,210	64,624	43,519	26,274	15,729	4,052	4,415	7,794	228,617
	45–54	87,389	88,044	61,777	34,480	22,945	6,176	5,236	10,458	316,505
	55–64	120,377	123,565	80,598	45,123	30,154	7,923	8,639	9,447	425,826
	65–74	139,604	142,623	83,931	46,195	32,668	9,819	8,855	5,066	468,761
	75–84	141,626	131,149	68,311	40,477	36,679	8,255	7,122	1,765	435,384
<b>Females</b>	85 and over	50,629	38,653	19,057	12,632	13,345	2,292	3,109	210	139,927
	<i>Total<sup>(a)</sup></i>	<b>773,025</b>	<b>740,699</b>	<b>472,230</b>	<b>271,451</b>	<b>192,728</b>	<b>48,367</b>	<b>48,306</b>	<b>46,173</b>	<b>2,592,979</b>
<b>Females</b>	Under 1	17,847	12,182	10,462	5,248	4,019	1,054	983	1,131	52,926
	1–4	19,953	13,912	12,467	6,805	4,886	909	784	1,285	61,001
	5–14	24,767	20,194	16,698	8,657	5,874	1,383	1,369	1,452	80,394
	15–24	64,681	60,592	52,452	25,654	18,647	4,477	4,162	5,353	236,018
	25–34	112,297	103,747	71,808	35,847	26,686	6,251	6,582	8,040	371,258
	35–44	84,327	88,883	58,102	32,249	21,723	5,903	5,995	9,542	306,724
	45–54	78,668	88,038	57,245	34,452	21,090	7,029	4,737	12,723	303,982
	55–64	88,778	100,570	63,157	36,963	22,470	7,041	5,429	12,306	336,714
	65–74	116,975	108,506	66,508	37,631	25,681	7,174	6,539	5,056	374,070
	75–84	127,744	108,321	55,733	35,073	29,638	6,625	5,669	1,035	369,838
<b>Total<sup>(a)</sup></b>	85 and over	73,646	50,396	27,485	18,241	16,710	3,119	3,189	338	193,124
	<i>Total<sup>(a)</sup></i>	<b>809,696</b>	<b>755,341</b>	<b>492,117</b>	<b>276,820</b>	<b>197,424</b>	<b>50,965</b>	<b>45,438</b>	<b>58,261</b>	<b>2,686,062</b>
		<b>1,582,804</b>	<b>1,496,041</b>	<b>964,349</b>	<b>548,272</b>	<b>390,154</b>	<b>99,333</b>	<b>93,745</b>	<b>104,434</b>	<b>5,279,132</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

**Table S7.12: Separations, by age group and sex, private hospitals, states and territories, 2010–11**

<b>Sex</b>	<b>Age group</b>	<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
<b>Males</b>	Under 1	5,581	3,755	2,902	2,765	952	n.p.	n.p.	n.p.	16,503
	1–4	7,352	4,668	5,398	3,138	2,002	n.p.	n.p.	n.p.	23,430
	5–14	9,476	7,000	7,346	3,810	2,238	n.p.	n.p.	n.p.	30,979
	15–24	20,305	18,338	15,044	9,289	6,201	n.p.	n.p.	n.p.	72,111
	25–34	22,812	19,240	17,277	11,469	5,916	n.p.	n.p.	n.p.	79,852
	35–44	37,042	32,932	29,596	18,145	9,159	n.p.	n.p.	n.p.	131,420
	45–54	57,651	51,642	48,147	28,745	16,221	n.p.	n.p.	n.p.	210,212
	55–64	94,726	79,710	86,857	41,009	28,054	n.p.	n.p.	n.p.	342,685
	65–74	99,179	79,920	90,273	40,960	30,821	n.p.	n.p.	n.p.	352,642
	75–84	71,529	63,375	63,800	29,408	23,034	n.p.	n.p.	n.p.	258,861
	85 and over	29,910	26,549	26,741	9,616	8,472	n.p.	n.p.	n.p.	104,264
	<i>Total<sup>(a)</sup></i>	<b>455,563</b>	<b>387,129</b>	<b>393,381</b>	<b>198,354</b>	<b>133,070</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1,622,959</b>
<b>Females</b>	Under 1	3,967	2,450	1,936	1,778	388	n.p.	n.p.	n.p.	10,918
	1–4	5,034	2,944	3,661	2,080	1,385	n.p.	n.p.	n.p.	15,626
	5–14	8,284	6,217	6,243	3,253	1,945	n.p.	n.p.	n.p.	26,892
	15–24	30,789	30,029	26,544	14,262	6,675	n.p.	n.p.	n.p.	112,429
	25–34	59,311	54,729	50,295	26,282	12,862	n.p.	n.p.	n.p.	212,129
	35–44	73,643	71,623	58,686	30,905	15,487	n.p.	n.p.	n.p.	260,235
	45–54	73,361	69,394	65,730	32,624	21,105	n.p.	n.p.	n.p.	272,797
	55–64	98,438	83,916	82,681	41,064	29,789	n.p.	n.p.	n.p.	348,380
	65–74	93,900	74,975	77,607	33,018	27,235	n.p.	n.p.	n.p.	317,469
	75–84	77,936	62,903	62,331	24,648	23,226	n.p.	n.p.	n.p.	259,147
	85 and over	31,660	29,129	30,107	9,493	10,110	n.p.	n.p.	n.p.	114,355
	<i>Total<sup>(a)</sup></i>	<b>556,323</b>	<b>488,309</b>	<b>465,821</b>	<b>219,407</b>	<b>150,207</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1,950,377</b>
	<b>Total<sup>(a)</sup></b>	<b>1,011,887</b>	<b>875,470</b>	<b>859,202</b>	<b>417,761</b>	<b>283,281</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,573,418</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.13: Separations, by Indigenous status<sup>(a)</sup>, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	NT <sup>(b)</sup>	Sub-total—selected states and territories <sup>(b)</sup>	Total
<b>Public hospitals</b>										
Aboriginal but not Torres Strait Islander origin	59,866	14,073	63,440	48,997	20,396	2,568	2,007	71,527	278,299	282,874
Torres Strait Islander but not Aboriginal origin	1,151	444	9,742	295	352	121	28	331	12,315	12,464
Aboriginal and Torres Strait Islander origin	1,368	1,899	5,081	843	78	148	93	1,062	10,331	10,572
<i>Indigenous people</i>	<i>62,385</i>	<i>16,416</i>	<i>78,263</i>	<i>50,135</i>	<i>20,826</i>	<i>2,837</i>	<i>2,128</i>	<i>72,920</i>	<i>300,945</i>	<i>305,910</i>
Neither Aboriginal nor Torres Strait Islander origin	1,507,520	1,468,985	872,535	498,137	351,331	94,652	90,172	31,513	4,730,021	4,914,845
Not reported	12,899	10,640	13,551	0	17,997	1,844	1,445	1	55,088	58,377
<i>Total</i>	<i>1,582,804</i>	<i>1,496,041</i>	<i>964,349</i>	<i>548,272</i>	<i>390,154</i>	<i>99,333</i>	<i>93,745</i>	<i>104,434</i>	<i>5,086,054</i>	<i>5,279,132</i>
<b>Private hospitals</b>										
Aboriginal but not Torres Strait Islander origin	1,405	687	1,999	16,971	496	n.p.	n.p.	n.p.	21,558	22,025
Torres Strait Islander but not Aboriginal origin	111	1,226	1,107	392	62	n.p.	n.p.	n.p.	2,898	2,926
Aboriginal and Torres Strait Islander origin	369	783	385	446	51	n.p.	n.p.	n.p.	2,034	2,152
<i>Indigenous people</i>	<i>1,885</i>	<i>2,696</i>	<i>3,491</i>	<i>17,809</i>	<i>609</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>26,490</i>	<i>27,103</i>
Neither Aboriginal nor Torres Strait Islander origin	980,483	862,310	790,644	399,952	244,411	n.p.	n.p.	n.p.	3,277,800	3,377,407
Not reported	29,519	10,464	65,067	0	38,261	n.p.	n.p.	n.p.	143,311	168,908
<i>Total</i>	<i>1,011,887</i>	<i>875,470</i>	<i>859,202</i>	<i>417,761</i>	<i>283,281</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,447,601</i>	<i>3,573,418</i>
<b>All hospitals</b>										
<i>Indigenous people</i>	<i>64,270</i>	<i>19,112</i>	<i>81,754</i>	<i>67,944</i>	<i>21,435</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>327,435</i>	<i>333,013</i>
<i>Other Australians<sup>(c)</sup></i>	<i>2,530,421</i>	<i>2,352,399</i>	<i>1,741,797</i>	<i>898,089</i>	<i>652,000</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,206,220</i>	<i>8,519,537</i>
<i>Total</i>	<b><i>2,594,691</i></b>	<b><i>2,371,511</i></b>	<b><i>1,823,551</i></b>	<b><i>966,033</i></b>	<b><i>673,435</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>8,533,655</i></b>	<b><i>8,852,550</i></b>
Separation rate for Indigenous people per 1,000	559.2	771.9	805.7	1,439.6	1,097.4	190.5	688.6	1704.3	911.4	n.p.
Separation rate <sup>(d)</sup> for Other Australians per 1,000	335.9	406.3	387.6	397.4	364.3	181.5	270.7	216.1	366.5	n.p.
Separation rate for all people per 1,000	339.4	407.9	396.5	417.7	372.3	181.6	274.1	513.3	374.9	n.p.
Rate ratio <sup>(e)</sup>	1.7	1.9	2.1	3.6	3.0	1.0	2.5	7.9	2.5	n.p.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.14: Overnight separations, by Indigenous status(a), public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	NT <sup>(b)</sup>	Sub-total—selected states and territories <sup>(b)</sup>	Total
<b>Public hospitals</b>										
Aboriginal but not Torres Strait Islander origin	30,139	5,783	26,000	24,197	8,134	1,468	934	21,093	115,346	117,748
Torres Strait Islander but not Aboriginal origin	572	219	3,925	72	262	59	19	108	5,158	5,236
Aboriginal and Torres Strait Islander origin	942	827	2,012	231	49	84	66	295	4,356	4,506
<i>Indigenous people</i>	<i>31,653</i>	<i>6,829</i>	<i>31,937</i>	<i>24,500</i>	<i>8,445</i>	<i>1,611</i>	<i>1,019</i>	<i>21,496</i>	<i>124,860</i>	<i>127,490</i>
Neither Aboriginal nor Torres Strait Islander origin	835,278	633,985	433,787	231,349	194,789	46,996	41,916	16,854	2,346,042	2,434,954
Not reported	8,074	5,181	7,088	0	9,187	1,096	914	0	29,530	31,540
<i>Total</i>	<i>875,005</i>	<i>645,995</i>	<i>472,812</i>	<i>255,849</i>	<i>212,421</i>	<i>49,703</i>	<i>43,849</i>	<i>38,350</i>	<i>2,500,432</i>	<i>2,593,984</i>
<b>Private hospitals</b>										
Aboriginal but not Torres Strait Islander origin	438	227	549	151	117	n.p.	n.p.	n.p.	1,482	1,667
Torres Strait Islander but not Aboriginal origin	42	41	176	7	21	n.p.	n.p.	n.p.	287	296
Aboriginal and Torres Strait Islander origin	117	258	110	35	17	n.p.	n.p.	n.p.	537	574
<i>Indigenous people</i>	<i>597</i>	<i>526</i>	<i>835</i>	<i>193</i>	<i>155</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,306</i>	<i>2,537</i>
Neither Aboriginal nor Torres Strait Islander origin	282,857	291,561	262,332	129,963	85,624	n.p.	n.p.	n.p.	1,052,337	1,090,621
Not reported	7,598	5,824	15,260	0	7,306	n.p.	n.p.	n.p.	35,988	44,991
<i>Total</i>	<i>291,052</i>	<i>297,911</i>	<i>278,427</i>	<i>130,156</i>	<i>93,085</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,090,631</i>	<i>1,138,149</i>
<b>All hospitals</b>										
<i>Indigenous people</i>	<i>32,250</i>	<i>7,355</i>	<i>32,772</i>	<i>24,693</i>	<i>8,600</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>127,166</i>	<i>130,027</i>
<i>Other Australians<sup>(c)</sup></i>	<i>1,133,807</i>	<i>936,551</i>	<i>718,467</i>	<i>361,312</i>	<i>296,906</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,463,897</i>	<i>3,602,106</i>
<i>Total</i>	<b><i>1,166,057</i></b>	<b><i>943,906</i></b>	<b><i>751,239</i></b>	<b><i>386,005</i></b>	<b><i>305,506</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>3,591,063</i></b>	<b><i>3,732,133</i></b>
Separation rate for Indigenous people per 1,000	252.4	259.8	279.2	395.8	366.6	104.4	315.6	380.4	296.5	n.p.
Separation rate <sup>(d)</sup> for Other Australians per 1,000	152.1	162.6	161.0	161.1	168.1	92.0	126.0	118.0	156.5	n.p.
Separation rate for all people per 1,000	153.9	163.2	164.2	167.9	171.1	92.3	127.7	183.3	159.5	n.p.
Rate ratio <sup>(e)</sup>	1.7	1.6	1.7	2.5	2.2	1.1	2.5	3.2	1.9	n.p.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods and Box 7.5 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S7.15: Separations, by mode of separation, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Discharge/transfer to an(other) acute hospital	102,100	96,544	56,169	26,238	23,602	3,701	2,933	3,366	314,653
Discharge/transfer to residential aged care service <sup>(a)</sup>	17,215	22,224	4,760	5,921	7,717	882	459	316	59,494
Discharge/transfer to an(other) psychiatric hospital	2,420	1,300	125	1,035	1,043	673	32	3	6,631
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	4,360	2,884	1,883	1,045	1,106	410	593	2,040	14,321
Statistical discharge: type change	27,157	13,603	22,439	8,328	5,468	2,392	4,911	1,382	85,680
Left against medical advice/discharge at own risk	16,166	6,937	8,467	4,857	2,844	346	337	3,623	43,577
Statistical discharge from leave	3,690	41	615	1,586	122	0	0	0	6,054
Died	23,435	16,115	9,966	3,964	4,831	1,521	989	458	61,279
Other <sup>(c)</sup>	1,386,197	1,336,393	859,925	495,298	343,420	88,047	83,491	93,246	4,686,017
Not reported	64	64	0	0	0	1	1,361	0	0
<i>Total</i>	<i>1,582,804</i>	<i>1,496,041</i>	<i>964,349</i>	<i>548,272</i>	<i>390,154</i>	<i>99,333</i>	<i>93,745</i>	<i>104,434</i>	<i>5,279,132</i>
<b>Private hospitals</b>									
Discharge/transfer to an(other) acute hospital	20,175	17,824	8,051	2,690	6,085	n.p.	n.p.	n.p.	55,847
Discharge/transfer to residential aged care service <sup>(a)</sup>	1,260	2,811	987	1,063	1,178	n.p.	n.p.	n.p.	7,554
Discharge/transfer to an(other) psychiatric hospital	58	63	0	47	19	n.p.	n.p.	n.p.	189
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	7,355	8	880	59	213	n.p.	n.p.	n.p.	8,746
Statistical discharge: type change	4,619	2,974	5,995	1,947	576	n.p.	n.p.	n.p.	17,298
Left against medical advice/discharge at own risk	841	600	425	212	54	n.p.	n.p.	n.p.	2,156
Statistical discharge from leave	10	0	98	18	1	n.p.	n.p.	n.p.	129
Died	2,182	3,216	4,495	2,014	1,138	n.p.	n.p.	n.p.	13,537
Other <sup>(c)</sup>	975,387	847,974	838,271	409,711	273,996	n.p.	n.p.	n.p.	3,467,941
Not reported	0	0	0	0	21	n.p.	n.p.	n.p.	21
<i>Total</i>	<i>1,011,887</i>	<i>875,470</i>	<i>859,202</i>	<i>417,761</i>	<i>283,281</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,573,418</i>

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

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.16: Separations by inter-hospital contracted patient status, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Inter-hospital contracted patient from public sector	1,722	393	0	6,479	1,971	0	0	1	10,566
Inter-hospital contracted patient from private sector	5,162	101	0	1	0	231	0	4	5,499
Not inter-hospital contracted patient	1,571,492	1,494,847	964,349	541,792	388,183	92,471	20,787	104,429	5,178,350
Not reported	4,428	700	0	0	0	6,631	72,958	0	84,717
<b>Total</b>	<b>1,582,804</b>	<b>1,496,041</b>	<b>964,349</b>	<b>548,272</b>	<b>390,154</b>	<b>99,333</b>	<b>93,745</b>	<b>104,434</b>	<b>5,279,132</b>
<b>Private hospitals</b>									
Inter-hospital contracted patient from public sector	4,100	1,560	6,516	42,889	3,219	n.p.	n.p.	n.p.	61,219
Inter-hospital contracted patient from private sector	0	2	1,040	1	2	n.p.	n.p.	n.p.	1,045
Not inter-hospital contracted patient	1,007,787	873,908	851,102	374,871	280,060	n.p.	n.p.	n.p.	3,460,616
Not reported	0	0	544	0	0	n.p.	n.p.	n.p.	50,538
<b>Total</b>	<b>1,011,887</b>	<b>875,470</b>	<b>859,202</b>	<b>417,761</b>	<b>283,281</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,573,418</b>
<b>All hospitals</b>									
Inter-hospital contracted patient from public sector	5,822	1,953	6,516	49,368	5,190	n.p.	n.p.	n.p.	71,785
Inter-hospital contracted patient from private sector	5,162	103	1,040	2	2	n.p.	n.p.	n.p.	6,544
Not inter-hospital contracted patient	2,579,279	2,368,755	1,815,451	916,663	668,243	n.p.	n.p.	n.p.	8,638,966
Not reported	4,428	700	544	0	0	n.p.	n.p.	n.p.	135,255
<b>Total separations</b>	<b>2,594,691</b>	<b>2,371,511</b>	<b>1,823,551</b>	<b>966,033</b>	<b>673,435</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>8,852,550</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.17: Separations with hospital-in-the-home care, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld <sup>(a)</sup>	WA	SA <sup>(a)</sup>	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Same day separations	n.a.	3,642	460	235	134	n.a.	12	12	4,495
Overnight separations	n.a.	21,581	2,893	9,225	6,795	n.a.	1,155	755	42,602
<i>Total patient days</i>	n.a.	291,062	39,012	148,972	90,630	n.a.	14,870	13,193	601,037
Hospital in the home days	n.a.	175,328	26,016	104,338	63,563	n.a.	10,514	8,496	390,581
Average length of stay	n.a.	13.5	13.5	16.1	13.3	n.a.	12.9	17.5	14.1
Average number of hospital-in-the-home days	n.a.	8.1	9.0	11.3	9.4	n.a.	9.1	11.3	9.2
<b>Private hospitals</b>									
Same day separations	n.a.	2,653	2,847	0	6,535	n.a.	n.p.	n.p.	12,035
Overnight separations	n.a.	2,216	104	293	15	n.a.	n.p.	n.p.	2,628
<i>Total patient days</i>	n.a.	34,879	3,864	7,258	6,626	n.a.	n.p.	n.p.	52,627
Hospital in the home days	n.a.	24,175	3,864	4,374	6,626	n.a.	n.p.	n.p.	39,039
Average length of stay	n.a.	15.7	37.2	24.8	441.7	n.a.	n.p.	n.p.	20.0
Average number of hospital-in-the-home days	n.a.	10.9	37.2	14.9	441.7	n.a.	n.p.	n.p.	5.2
<b>All hospitals</b>									
Same day separations	n.a.	6,295	3,307	235	6,669	n.a.	n.p.	n.p.	16,530
Overnight separations	n.a.	23,797	2,997	9,518	6,810	n.a.	n.p.	n.p.	45,230
<i>Total patient days</i>	n.a.	325,941	42,876	156,230	97,256	n.a.	n.p.	n.p.	653,664
Hospital in the home days	n.a.	199,503	29,880	108,712	70,189	n.a.	n.p.	n.p.	429,620
Average length of stay	n.a.	13.7	14.3	16.4	14.3	n.a.	n.p.	n.p.	14.5
Average number of hospital-in-the-home days	n.a.	8.4	10.0	11.4	10.3	n.a.	n.p.	n.p.	9.5

(a) For private hospitals in Queensland and South Australia, separations with hospital-in-the-home care were reported with hospital-in-the-home days only.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviations: n.a.—not available; n.p.—not published.

## 8 Same-day acute admitted patient care

This chapter presents information on same-day acute admitted patient care provided by public and private hospitals in Australia.

A same-day separation is one in which the patient is admitted and separated on the same day. Acute admitted patient care includes separations for which the care type was reported as *Acute*, *Newborn* (with qualified days) or was not reported. Separations for other care types were excluded. The data are sourced from the AIHW's National Hospital Morbidity Database (NHMD). For definitions of terms and classifications, and more information on data limitations and methods, see Chapter 7 (boxes 7.1, 7.2 and 7.3).

Of all same-day separations, 97% were reported as *Acute* with a higher proportion in the public sector (99%) than in the private sector (94%).

### How has activity changed over time?

From 2009–10 to 2010–11, same-day acute separations increased by 3.7% to 4.9 million, a smaller increase than the average per year between 2006–07 and 2010–11 (4.4%) (Table 8.1). The growth rate in same-day acute separations between 2009–10 and 2010–11 was higher in public hospitals than in private hospitals, contrasting with the rate for private hospitals over the period 2006–07 to 2010–11. The greatest increase in same-day acute separations occurred in private free-standing day hospital facilities, increasing from 566,000 in 2006–07 to 806,000 in 2010–11.

Table 8.1: Same-day acute separations, public and private hospitals, 2006–07 to 2010–11

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent) <sup>(a)</sup>	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public acute hospitals	2,311,123	2,340,658	2,438,288	2,548,148	2,660,010	3.6	4.4
Public psychiatric hospitals	2,147	1,798	630	690	630	-26.4	-8.7
<i>Total</i>	<i>2,313,270</i>	<i>2,342,456</i>	<i>2,438,918</i>	<i>2,548,838</i>	<i>2,660,640</i>	<i>3.6</i>	<i>4.4</i>
<b>Private hospitals</b>							
Private free-standing day hospital facilities	566,190	664,151	726,572	780,690	806,409	9.2	3.3
Other private hospitals	1,276,154	1,319,030	1,356,396	1,436,250	1,476,434	3.7	2.8
<i>Total</i>	<i>1,842,344</i>	<i>1,983,181</i>	<i>2,082,968</i>	<i>2,216,940</i>	<i>2,282,843</i>	<i>5.5</i>	<i>3.0</i>
<b>All hospitals</b>	<b>4,155,614</b>	<b>4,325,637</b>	<b>4,521,886</b>	<b>4,765,778</b>	<b>4,943,483</b>	<b>4.4</b>	<b>3.7</b>

(a) Annual average change, not adjusted for changes in coverage and re-categorisation of hospitals as public or private.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Between 2006–07 and 2010–11, the number of same-day acute public hospital separations increased at a greater rate than the national average in Queensland, the Northern Territory, Western Australia and the Australian Capital Territory. Over the same period, above average increases in the number of same-day acute private hospital separations were recorded in Western Australia and South Australia. For Victoria, the decrease in private hospital

separations was mainly due to the reclassification of some same-day mental health care as non-admitted patient activity (which was previously classified as admitted patient activity).

**Table 8.2: Same-day acute separations, public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent) <sup>(a)</sup>	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(b)</sup></b>							
Public hospitals	632,739	631,985	654,272	679,911	697,804	2.5	2.6
Private hospitals	506,749	535,887	563,959	592,552	618,824	5.1	4.4
All hospitals	1,139,488	1,167,872	1,218,231	1,272,463	1,316,628	3.7	3.5
<b>Victoria<sup>(b)</sup></b>							
Public hospitals	736,981	766,885	789,255	809,244	849,798	3.6	5.0
Private hospitals	483,211	515,376	531,609	581,364	573,363	4.4	-1.4
All hospitals	1,220,192	1,282,261	1,320,864	1,390,608	1,423,161	3.9	2.3
<b>Queensland</b>							
Public hospitals	377,599	398,415	433,612	459,402	482,271	6.3	5.0
Private hospitals	474,782	502,405	530,024	549,879	556,567	4.1	1.2
All hospitals	852,381	900,820	963,636	1,009,281	1,038,838	5.1	2.9
<b>Western Australia<sup>(b)</sup></b>							
Public hospitals	236,029	235,065	239,899	269,408	292,117	5.5	8.4
Private hospitals	177,384	209,893	242,941	260,654	287,160	12.8	10.2
All hospitals	413,413	444,958	482,840	530,062	579,277	8.8	9.3
<b>South Australia<sup>(b)</sup></b>							
Public hospitals	188,646	160,514	164,745	170,177	173,794	-2.0	2.1
Private hospitals	134,977	148,420	153,881	162,859	172,395	6.3	5.9
All hospitals	323,623	308,934	318,626	333,036	346,189	1.7	3.9
<b>Tasmania<sup>(b)</sup></b>							
Public hospitals	48,579	50,426	49,338	51,080	49,606	0.5	-2.9
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	40,981	43,513	48,248	47,081	49,304	4.7	4.7
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	51,716	55,652	59,549	62,535	65,946	6.3	5.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Total</b>							
<b>Public hospitals</b>	<b>2,313,270</b>	<b>2,342,455</b>	<b>2,438,918</b>	<b>2,548,838</b>	<b>2,660,640</b>	<b>3.6</b>	<b>4.4</b>
<b>Private hospitals</b>	<b>1,842,344</b>	<b>1,983,181</b>	<b>2,082,968</b>	<b>2,216,940</b>	<b>2,282,843</b>	<b>5.5</b>	<b>3.0</b>
<b>All hospitals</b>	<b>4,155,614</b>	<b>4,325,636</b>	<b>4,521,886</b>	<b>4,765,778</b>	<b>4,943,483</b>	<b>4.4</b>	<b>3.7</b>

(a) Annual average change, not adjusted for changes in coverage and re-categorisation of hospitals as public or private.

(b) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Box 7.2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviations: n.p.—not published.

Large single year increases in the number of same-day acute hospital separations between 2009–10 and 2010–11 were recorded for Western Australia (both public and private hospitals), public hospitals in the Northern Territory, Victoria, Queensland and the

Australian Capital Territory together with private hospitals in South Australia and New South Wales (Table 8.2).

## Who used these services?

### Sex and age group

Just over half (51%) of same-day acute separations were for females (Figure 8.1). However, there were more same-day separations for males aged 0 to 14 and aged 55 and over. People aged 55 and over accounted for over half of all same-day separations.

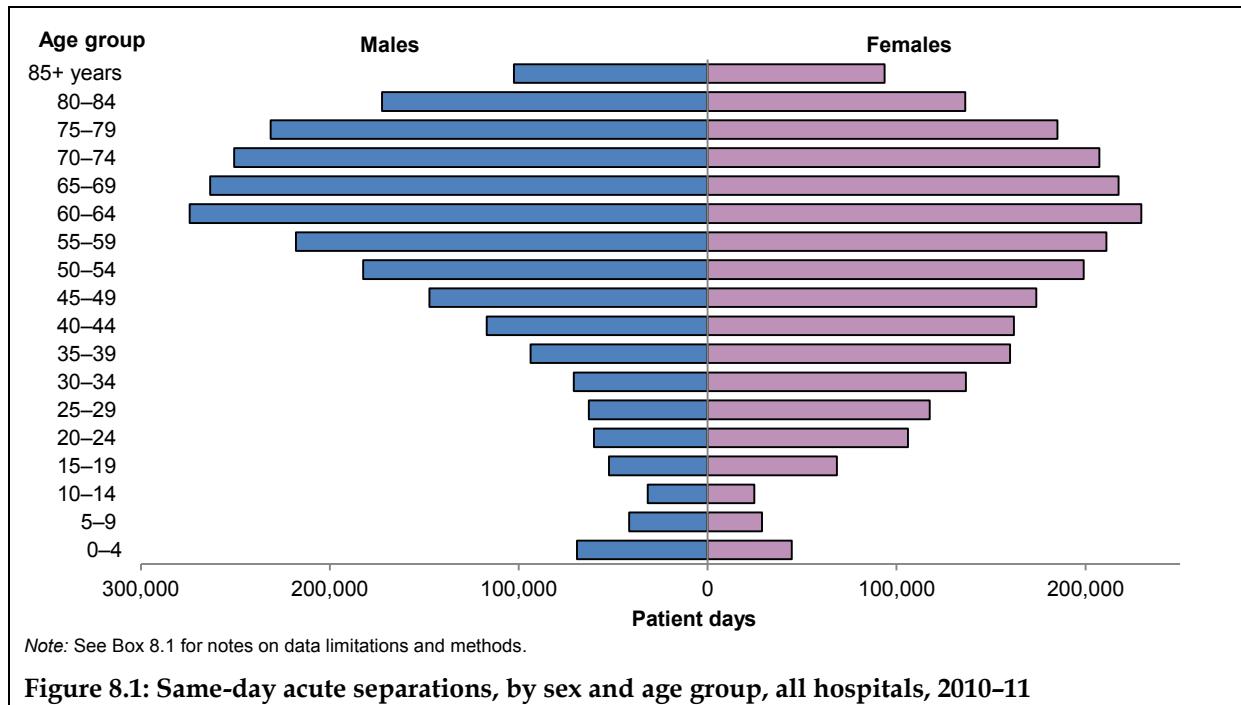


Figure 8.1: Same-day acute separations, by sex and age group, all hospitals, 2010-11

### Aboriginal and Torres Strait Islander people

#### Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2010-11 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix 1 for more information on the quality of Indigenous data in the NHMD.

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. It should also be noted that data presented for the six jurisdictions with data of acceptable quality for analysis purposes are not necessarily representative of the jurisdictions excluded.

Nationally, 4.1% of all same-day acute separations were for Aboriginal or Torres Strait Islander people.

In 2010-11, the same-day acute separation rate for Indigenous Australians was over 3 times the rate for other Australians (Table 8.3). The Northern Territory had the highest rate of same-day acute separations for Indigenous Australians.

For both Indigenous and other Australians, *Care involving dialysis* accounted for a large proportion of same-day separations, particularly for Indigenous Australians, who

were 11 times more likely to be admitted for dialysis than other Australians. Excluding separations for dialysis, Indigenous Australians had a higher same-day acute separation rate than other Australians in Victoria and the Northern Territory.

**Table 8.3: Same-day acute separations per 1,000 population, by Indigenous status<sup>(a)</sup>, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
Indigenous Australians	305.3	512.2	524.2	1043.4	729.3	85.8	368.7	1323.3	635.7
Excluding Care involving dialysis	106.7	231.6	143.3	134.7	139.5	73.1	138.7	123.2	132.1
Other Australians <sup>(c)</sup>	169.9	243.0	219.3	236.0	185.0	89.4	143.0	97.3	206.6
Excluding Care involving dialysis	131.2	192.5	178.8	180.6	146.2	63.9	69.6	73.9	161.2
<b>Total<sup>(d)</sup></b>	<b>171.6</b>	<b>244.0</b>	<b>225.0</b>	<b>249.5</b>	<b>190.1</b>	<b>89.3</b>	<b>144.8</b>	<b>329.3</b>	<b>212.3</b>
<b>Excluding Care involving dialysis</b>	<b>131.0</b>	<b>192.7</b>	<b>178.4</b>	<b>180.1</b>	<b>146.3</b>	<b>64.0</b>	<b>70.2</b>	<b>86.5</b>	<b>162.7</b>

(a) For Tasmania, the Australian Capital Territory and the Northern Territory, separation rates by Indigenous status are calculated for public hospitals only.

(b) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

(c) Other Australians includes separations for which Indigenous status was not reported.

(d) The separation rate presented in this table differs from the separation rate presented in Table 3.11 because all care types (that is, including sub- and non-acute care) are included in Table 3.11.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Remoteness area

In 2010–11, people who lived in *Very remote* areas had 301 same-day acute separations per 1,000 population, compared with almost 213 per 1,000 nationally (Table 8.4). The standardised separation rate ratio (SRR) for *Very remote* areas was 1.42, indicating that the separation rate was 42% higher than the national separation rate.

**Table 8.4: Selected same-day acute separation statistics, by remoteness area of usual residence, all hospitals, 2010–11**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
Separations	3,408,224	965,669	430,919	71,438	47,652	4,943,483
Separation rate	218.1	198.3	192.9	218.6	301.2	212.6
Standardised separation rate ratio	1.03	0.93	0.91	1.03	1.42	

(a) Total includes separations for which the remoteness area was not able to be categorised.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Socioeconomic status

Socioeconomic status (SES) groups in this report are based on the Index of Relative Socio-Economic Disadvantage (from SEIFA 2006) for the area of usual residence (SLA) of the patient. See Appendix 1 for details.

Each SES group accounted for between 19% and 21% of total same-day acute separations. The separation rates varied from 202 per 1,000 population for people living in areas classified as being the second lowest SES group to 222 per 1,000 for the middle SES group (Table 8.5).

**Table 8.5: Selected same-day acute separation statistics, by socioeconomic status group, all hospitals, 2010–11**

	Socioeconomic status group					<b>Total<sup>(a)</sup></b>
	<b>1—Lowest</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5—Highest</b>	
Separations	993,896	978,014	1,016,182	948,973	986,133	4,943,483
Separation rate	211.0	201.6	221.7	212.4	214.1	212.7
Standardised separation rate ratio	0.99	0.95	1.04	1.00	1.01	

(a) Total includes separations for which socioeconomic status group was not able to be categorised.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## How did people access these services?

The **mode of admission** records the mechanism by which a patient begins an episode of care.

In both public and private hospitals, most same-day separations had a mode of admission of *Other* (99% overall), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions. Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals (1.1% and 0.3%, respectively) (Table 8.6).

**Table 8.6: Same-day acute separations, by mode of admission, public and private hospitals, 2010–11**

	<b>Public hospitals</b>	<b>Private free-standing day facilities</b>	<b>Other private hospitals</b>	<b>Total</b>
Admitted patient transferred from another hospital	29,422	3,647	3,286	36,355
Statistical admission: type change	2,741	..	265	3,006
Other	2,612,310	802,749	1,462,347	4,877,406
Not reported	16,167	13	10,536	26,716
<b>Total</b>	<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviations: ..—not applicable.

## Why did people receive the care?

The reason that a patient receives admitted patient care can be described in terms of the principal diagnosis. The **principal diagnosis** is the diagnosis established after study to be chiefly responsible for occasioning the episode of admitted patient care.

### Principal diagnosis

In 2010–11, almost half (47%) of same-day acute separations in public hospitals and 31% in private hospitals had a principal diagnosis in the *Factors influencing health status and contact with health services* chapter (Table 8.7). The major contributors to the *Factors influencing health status and contact with health services* separations were for *Care involving dialysis* and *chemotherapy* (Table 8.8).

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For example, about 64% of same-day acute separations for *Factors influencing health status and contact with health services* were from the public hospitals, while about 72% of same-day acute separations for *Diseases of the eye and adnexa* were from private hospitals.

**Table 8.7: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2010–11**

Principal diagnosis chapter		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	33,817	2,185	8,171	44,173
C00–D48	Neoplasms	123,980	70,852	130,845	325,677
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	55,782	10,741	20,530	87,053
E00–E90	Endocrine, nutritional and metabolic diseases <sup>(a)</sup>	29,514	5,082	11,612	46,208
F00–F99	Mental and behavioural disorders	45,437	189	104,612	150,238
G00–G99	Diseases of the nervous system	60,454	4,131	27,693	92,278
H00–H59	Diseases of the eye and adnexa	77,215	124,379	76,983	278,577
H60–H95	Diseases of the ear and mastoid process	17,962	3,525	19,589	41,076
I00–I99	Diseases of the circulatory system	77,853	19,983	44,102	141,938
J00–J99	Diseases of the respiratory system	50,686	3,581	14,245	68,512
K00–K93	Diseases of the digestive system	172,556	149,828	230,478	552,862
L00–L99	Diseases of the skin and subcutaneous tissue	36,938	10,768	20,132	67,838
M00–M99	Diseases of the musculoskeletal system and connective tissue	72,566	18,115	108,682	199,363
N00–N99	Diseases of the genitourinary system	105,766	18,511	84,352	208,629
O00–O99	Pregnancy, childbirth and the puerperium	70,930	38,872	15,014	124,816
P00–P96	Certain conditions originating in the perinatal period	1,832	4	457	2,293
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	12,038	1,400	5,013	18,451
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	197,964	43,814	100,184	341,962
S00–T98	Injury, poisoning and certain other consequences of external causes	157,350	5,448	25,530	188,328
Z00–Z99	Factors influencing health status and contact with health services	1,259,425	273,546	427,001	1,959,972
	Not reported	575	1,455	1,209	3,239
<b>Total</b>		<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

(a) A new standard for diabetes coding was introduced on 1 July 2010 that resulted in a decrease in the reporting of diabetes diagnoses and consequently a decrease for the ICD-10-AM chapter *Endocrine, nutritional and metabolic diseases and disorders*. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.2 and S8.3 at the end of this chapter.

Public and private hospitals also differed substantially in the relative distributions of principal diagnoses at the 3-character level. Public hospitals accounted for the majority (82%) of same-day acute separations for *Care involving dialysis*, but private hospitals provided more same-day acute separations (59%) for *Other medical care* (which includes chemotherapy for neoplasms), *Other cataract* (67%) and *Other malignant neoplasms of skin* (71%) (Table 8.8).

**Table 8.8: Separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings with the highest number of same-day acute separations, public and private hospitals, 2010–11**

Principal diagnosis	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Z49 Care involving dialysis	970,989	120,830	88,887	1,180,706
Z51 Other medical care	148,344	59,117	151,619	359,080
H26 Other cataract	53,499	53,535	55,250	162,284
R10 Abdominal and pelvic pain	40,802	19,731	26,494	87,027
C44 Other malignant neoplasms of skin	23,406	24,797	31,871	80,074
K01 Embedded and impacted teeth	7,911	19,086	47,153	74,150
Z45 Adjustment and management of implanted device	22,865	7,093	39,085	69,043
R07 Pain in throat and chest	51,248	1,403	7,385	60,036
K21 Gastro-oesophageal reflux disease	14,527	19,471	25,395	59,393
Z31 Procreative management	5,728	31,270	22,327	59,325
Z09 Follow-up examination after treatment for conditions other than malignant neoplasms	16,804	13,644	28,155	58,603
D12 Benign neoplasm of colon, rectum, anus and anal canal	12,319	17,891	26,645	56,855
Z12 Special screening examination for neoplasms	10,754	15,480	26,943	53,177
K92 Other diseases of digestive system	19,777	8,445	22,493	50,715
R19 Other symptoms and signs involving the digestive system and abdomen	15,357	9,600	25,680	50,637
M23 Internal derangement of knee	10,012	3,334	35,867	49,213
Z08 Follow-up examination after treatment for malignant neoplasms	20,108	4,641	23,246	47,995
O04 Medical abortion	9,454	37,575	951	47,980
I84 Haemorrhoids	10,251	14,804	15,313	40,368
H35 Other retinal disorders	1,871	28,521	5,874	36,266
Other	1,194,614	296,141	769,801	2,260,556
<b>Total</b>	<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.4 and S8.5 at the end of this chapter.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours) or *Elective* (required at some stage beyond 24 hours). Emergency/elective status is not assigned for some admissions (for example, obstetric care and planned care, such as dialysis). This section classifies separations as *Emergency* or *Non-emergency* (includes elective and other planned care).

Table 8.9 includes information on urgency of admission and whether the separations were considered to be *Childbirth*, *Specialist mental health*, *Surgical*, *Medical* and *Other*. See the section ‘What care was provided?’ for more information on these types of care.

In 2010–11, about 11% of same day acute separations were *Emergency* admissions, with 97% of these occurring in public hospitals. Over 86% of same-day acute separations were *Non-emergency* admissions, and these occurred equally in public and private hospitals (Table 8.9).

**Table 8.9: Same-day acute separations, by urgency of admission and broad category of service, public and private hospitals, 2010–11**

	Public hospitals		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	7,286	0.3	145	0.0	7,431	0.2
Specialist mental health	10,572	0.4	93,764	4.1	104,336	2.1
Emergency						
Surgical	20,684	0.8	3,893	0.2	24,577	0.5
Medical	517,560	19.5	9,825	0.4	527,385	10.7
Other	3,885	0.1	2,739	0.1	6,624	0.1
<i>Total emergency</i>	<i>542,129</i>	<i>20.4</i>	<i>16,457</i>	<i>0.3</i>	<i>558,586</i>	<i>11.3</i>
Non-emergency						
Surgical	352,568	13.3	757,915	33.2	1,110,483	22.5
Medical	1,489,602	56.0	724,211	31.7	2,213,813	44.8
Other	258,483	9.7	690,351	30.2	948,834	19.2
<i>Total non-emergency</i>	<i>2,100,653</i>	<i>79.0</i>	<i>2,172,477</i>	<i>95.2</i>	<i>4,273,130</i>	<i>86.4</i>
<b>Total</b>	<b>2,660,640</b>	<b>100.0</b>	<b>2,282,843</b>	<b>100.0</b>	<b>4,943,483</b>	<b>100.0</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S8.6 at the end of this chapter.

## What care was provided?

This section presents information on same-day acute separations describing care by:

- the broad category of service—*Childbirth*, *Specialist mental health*, *Medical* (not involving a procedure), *Surgical* (involving an operating room procedure) or *Other* (involving a non-operating room procedure, such as endoscopy). See Chapter 7 for more information.
- Major Diagnostic Categories and Australian Refined Diagnosis Related Groups (AR-DRGs)—based on the AR-DRG classification of acute care separations
- the type of surgical or other procedure undertaken.

## Broad categories of service

In 2010–11, over half (55%) of same-day acute separations were reported as *Medical*, 23% were *Surgical* and 19% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 8.9). The majority of *Medical* care occurred in public hospitals (73%) and the majority of *Surgical* care occurred in private hospitals (67%). *Specialist mental health* admissions accounted for about 2.1% of same-day acute separations.

## Major Diagnostic Categories

The AR-DRG classification contains 23 Major Diagnostic Categories (MDCs).

Table 8.10 presents same-day acute separations by MDCs for public and private hospitals. *Diseases and disorders of the kidney and urinary tract* accounted for one in four same-day acute separations for the combined public and private sectors, with 80% of this activity occurring in public hospitals. Over 70% of same-day acute separations for *Mental diseases and disorders* and 71% for *Diseases and disorders of the eye* were from private hospitals.

**Table 8.10: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0, public and private hospitals, 2010–11**

<b>Major Diagnostic Category</b>		<b>Public hospitals</b>	<b>Private free-standing day facilities</b>	<b>Other private hospitals</b>	<b>Total</b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	294	15	143	452
01	Diseases and disorders of the nervous system	98,566	5,831	29,987	134,384
02	Diseases and disorders of the eye	83,694	126,697	78,832	289,223
03	Diseases and disorders of the ear, nose, mouth and throat	88,389	42,711	113,869	244,969
04	Diseases and disorders of the respiratory system	48,679	891	7,260	56,830
05	Diseases and disorders of the circulatory system	131,518	6,805	39,103	177,426
06	Diseases and disorders of the digestive system	249,766	190,383	271,055	711,204
07	Diseases and disorders of the hepatobiliary system and pancreas	18,584	701	4,141	23,426
08	Diseases and disorders of the musculoskeletal system and connective tissue	136,055	20,034	129,863	285,952
09	Diseases and disorders of the skin, subcutaneous tissue and breast	95,652	55,353	83,438	234,443
10	Endocrine, nutritional and metabolic diseases and disorders	21,666	3,728	10,869	36,263
11	Diseases and disorders of the kidney and urinary tract	1,049,813	129,159	138,818	1,317,790
12	Diseases and disorders of the male reproductive system	25,408	7,709	35,605	68,722
13	Diseases and disorders of the female reproductive system	72,070	43,710	80,282	196,062
14	Pregnancy, childbirth and puerperium	80,445	38,872	16,301	135,618
15	Newborns and other neonates	3,174	566	1,008	4,748
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	64,557	12,210	23,039	99,806
17	Neoplastic disorders (haematological and solid neoplasms)	173,693	65,024	162,654	401,371
18	Infectious and parasitic diseases	12,357	500	1,480	14,337
19	Mental diseases and disorders	35,077	181	83,368	118,626
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	10,326	1	21,561	31,888
21	Injuries, poisoning and toxic effects of drugs	58,793	2,168	7,004	67,965
22	Burns	3,198	30	87	3,315
23	Factors influencing health status and other contacts with health services	97,318	51,136	134,567	283,021
ED	Error DRGs	1,548	1,994	2,100	5,642
	<i>Surgical</i>	373,501	295,282	466,577	1,135,360
	<i>Medical</i>	2,020,458	253,944	569,115	2,843,517
	<i>Other</i>	266,681	257,183	440,742	964,606
	<b>Total</b>	<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.7 and S8.8 at the end of this chapter.

Abbreviations: AR-DRG—Australian Refined Diagnosis Related Group; ECMO—Extracorporeal Membrane Oxygenation.

## Most common AR-DRGs

In 2010–11, the 20 most common AR-DRGs accounted for two-thirds of same-day acute separations. Almost one-quarter of same-day acute separations were for *Haemodialysis* with *Chemotherapy* being the next most common (Table 8.11).

There was variation in the types of same-day acute admitted care by hospital sector. Public hospitals provided the majority of same-day separations for *Haemodialysis*, *Antenatal and other obstetric admission – same-day* and *Chest pain*. Private hospitals provided over 80% of separations for *Dental extractions and restorations* and *Retinal procedures*.

**Table 8.11: Separations for the top 20 AR-DRGs version 6.0 with the highest number of same-day acute separations, public and private hospitals, 2010–11**

AR-DRG		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
L61Z	Haemodialysis	965,382	120,290	88,720	1,174,392
R63Z	Chemotherapy	143,492	57,831	151,073	352,396
G48C	Colonoscopy, same day	62,672	82,271	111,264	256,207
C16Z	Lens procedures	58,943	74,315	59,637	192,895
G47C	Other gastroscopy, same day	40,371	52,471	58,280	151,122
Z40Z	Endoscopy with diagnoses of other contacts with health services, same day	40,774	35,479	70,350	146,603
G46C	Complex gastroscopy, same day	29,165	48,571	64,092	141,828
D40Z	Dental extractions and restorations	23,015	28,569	67,353	118,937
Z64B	Other factors influencing health status, same day	45,360	13,926	54,714	114,000
U60Z	Mental health treatment, same day, W/O ECT	22,390	181	78,133	100,704
J11Z	Other skin, subcutaneous tissue and breast procedures	35,683	24,107	34,714	94,504
I18Z	Other knee procedures	14,712	4,592	52,782	72,086
O05Z	Abortion with OR procedure	21,459	38,118	9,288	68,865
N07Z	Other uterine and adnexa procedures for non-malignancy	14,788	19,207	31,391	65,386
Q61B	Red blood cell disorders W/O catastrophic or severe CC	40,781	7,436	15,394	63,611
L41Z	Cystourethroscopy, same day	24,043	3,876	26,266	54,185
F74Z	Chest pain	47,686	880	3,141	51,707
O66Z	Antenatal and other obstetric admission	39,809	21	4,515	44,345
C03Z	Retinal procedures	4,053	31,274	6,896	42,223
I68C	Non-surgical spinal disorders, same day	18,656	6,636	16,638	41,930
	Other	967,406	156,358	471,793	1,595,557
<b>Total</b>		<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.9 and S8.10 at the end of this chapter.

*Abbreviations:* CC— complications and comorbidities; ECT—electroconvulsive therapy; OR—operating room; W/O—without.

## Procedures

A **procedure** is defined as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in an acute care setting (HDSC 2008).

Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays and chemotherapy. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

In 2010–11, 7.4 million procedures were reported for same-day acute separations, with over 4.3 million in the private sector. Public hospitals accounted for close to half (49%) of the same-day acute separations for which a procedure was reported (Table 8.12). In public hospitals, 80% of same-day acute separations involved a procedure, compared to 97% of separations in private hospitals. See Box 7.1 and Appendix 2 for information on the classification of procedures.

**Table 8.12: Same-day acute separations, by procedure in ACHI chapters, public and private hospitals, 2010–11**

Procedure chapters		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
1–86	Procedures on nervous system	27,536	12,602	37,792	77,930
110–129	Procedures on endocrine system	254	2	140	396
160–256	Procedures on eye and adnexa	76,388	122,680	75,866	274,934
300–333	Procedures on ear and mastoid process	16,909	3,578	21,176	41,663
370–422	Procedures on nose, mouth and pharynx	20,066	8,583	23,168	51,817
450–490	Dental services	24,882	32,051	72,945	129,878
520–570	Procedures on respiratory system	18,051	338	6,922	25,311
600–777	Procedures on cardiovascular system	46,458	8,050	35,200	89,708
800–817	Procedures on blood and blood-forming organs	12,878	1,949	4,782	19,609
850–1011	Procedures on digestive system	226,303	237,433	364,592	828,328
1040–1129	Procedures on urinary system	1,033,057	131,431	160,028	1,324,516
1160–1203	Procedures on male genital organs	22,437	7,765	36,241	66,443
1240–1299	Gynaecological procedures	86,479	81,889	87,258	255,626
1330–1347	Obstetric procedures	7,451	50	1,417	8,918
1360–1579	Procedures on musculoskeletal system	76,680	16,284	116,473	209,437
1600–1718	Dermatological and plastic procedures	89,768	57,683	88,815	236,266
1740–1759	Procedures on breast	7,702	5,064	10,186	22,952
1786–1799	Radiation oncology procedures	1,492	45	595	2,132
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	995,306	528,895	1,236,295	2,760,496
1940–2016	Imaging services <sup>(a)</sup>	20,309	2,924	17,539	40,772
	Procedures reported <sup>(b)</sup>	3,125,910	1,475,606	2,829,687	7,431,203
	No procedure or not reported	526,610	2,795	62,311	591,716
<b>Total same-day acute separations</b>		<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

(a) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked overall decrease in the reporting of *Imaging services*. See Appendix 2 for more information.

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

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.11 and S8.12 at the end of this chapter.

*Abbreviation:* n.e.c.—not elsewhere classified.

In 2010–11, *Cerebral anaesthesia* (general anaesthesia) was the most common procedure overall, reflecting that it is a companion procedure for many other procedures (Table 8.13). Apart from *Cerebral anaesthesia*, *Haemodialysis*, *Administration of pharmacotherapy* (including chemotherapy) and *Fibreoptic colonoscopy* were the most frequently reported procedure groups.

**Table 8.13: Procedure statistics<sup>(a)</sup> for the top 20 ACHI procedure blocks with the highest<sup>(b)</sup> number of same-day acute separations, public and private hospitals, 2010–11**

Procedure block		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
1910	Cerebral anaesthesia	622,030	431,384	920,323	1,973,737
1060	Haemodialysis	967,948	122,851	88,738	1,179,537
1920	Administration of pharmacotherapy	211,060	63,572	182,564	457,196
905	Fibreoptic colonoscopy	69,721	90,819	128,435	288,975
911	Fibreoptic colonoscopy with excision	64,556	84,953	136,742	286,251
1008	Panendoscopy with excision	67,836	87,658	126,669	282,163
197	Extracapsular crystalline lens extraction by phacoemulsification	58,178	72,688	56,584	187,450
1909	Conduction anaesthesia	59,927	53,502	56,091	169,520
1620	Excision of lesion(s) of skin and subcutaneous tissue	47,664	37,311	59,048	144,023
1265	Curettage and evacuation of uterus	53,258	42,200	44,318	139,776
1893	Administration of blood and blood products	75,852	17,363	26,176	119,391
458	Surgical removal of tooth	12,236	25,108	61,195	98,539
1089	Examination procedures on bladder	34,595	6,219	41,616	82,430
1005	Panendoscopy	19,506	29,797	24,131	73,434
1916	Generalised allied health interventions	36,902	610	30,739	68,251
1297	Procedures for reproductive medicine	5,594	34,750	22,104	62,448
1259	Examination procedures on uterus	26,960	3,345	28,759	59,064
1922	Other procedures related to pharmacotherapy	14,104	6,876	31,361	52,341
1517	Arthroscopic meniscectomy of knee with repair	6,365	3,180	32,370	41,915
668	Coronary angiography	16,063	3,930	19,505	39,498
Other		655,555	257,490	712,219	1,625,264
<i>Total procedures reported</i>		3,125,910	1,475,606	2,829,687	7,431,203
Separations with no procedure reported		526,610	2,795	62,311	591,716
<b>Total same-day acute separations</b>		<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

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

(b) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the Imaging services chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked overall decrease in the reporting of *Imaging services*, such as *Computerised tomography of the brain* and *Computerised tomography of the abdomen* which were included in this list for 2009–10. See Appendix 2 for more information.

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S8.13 and S8.14 at the end of this chapter.

## Who paid for the care?

Almost 90% of same-day acute separations from public hospitals were *Public patients*, and about 80% of same-day acute separations from private hospitals were funded by *Private health insurance* (Table 8.14). About two-thirds of same-day separations that were funded by the *Department of Veterans' Affairs* occurred in private hospitals. One in ten same-day acute separations from private hospitals were *Self-funded*, with a higher proportion occurring in *Private free-standing day facilities* (17%) than in *Other private hospitals* (6.5%).

**Table 8.14: Same-day acute separations, by principal source of funds, public and private hospitals, 2010–11**

	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Public patients <sup>(a)</sup>	2,318,237	72,321	23,880	2,414,438
Private health insurance	237,457	559,314	1,242,361	2,039,132
Self-funded	33,790	138,404	95,409	267,603
Workers compensation	8,859	3,269	23,375	35,503
Motor vehicle third party personal claim	8,266	1,369	2,169	11,804
Department of Veterans' Affairs	44,710	23,696	71,367	139,773
Other <sup>(b)</sup>	9,321	8,036	17,873	35,230
<b>Total same-day acute separations</b>	<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefit Scheme.

(b) *Other* includes separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a *Public patient* election status), *Other, No charge raised* (in private hospitals) and not reported.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## How was the care completed?

Over 96% of same-day acute separations had a mode of separation of *Other*, suggesting that most patients went home after their episode of care. In private hospitals, 99% of separations reported a mode of separation of *Other*, compared to 94% in public hospitals. A higher proportion of separations ended with a *Transfer to another hospital* (acute or psychiatric) in public hospitals compared with private hospital (4.4% and 0.6% respectively) (Table 8.15).

**Table 8.15: Same-day acute separations, by mode of separation, public and private hospitals, 2010–11**

Mode of separation	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Discharge/transfer to an (other) acute hospital	117,556	9,000	5,042	131,598
Discharge/transfer to residential aged care service <sup>(a)</sup>	8,425	18	367	8,810
Discharge/transfer to an (other) psychiatric hospital	2,160	10	26	2,196
Discharge/transfer to other health care accommodation	2,113	71	3,881	6,065
Statistical discharge: type change	4,060	0	201	4,261
Left against medical advice/discharge at own risk	14,439	56	570	15,065
Statistical discharge from leave	471	0	55	526
Died	5,799	4	312	6,115
Other <sup>(b)</sup>	2,504,270	797,250	1,465,969	4,767,489
Not reported	1,347	0	11	1,358
<b>Total</b>	<b>2,660,640</b>	<b>806,409</b>	<b>1,476,434</b>	<b>4,943,483</b>

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## **Supplementary tables**

The following supplementary tables provide more diagnosis and procedures information for same-day acute separations, by state and territory.

### **Box 8.1: Notes – Chapter 8 supplementary tables**

#### **Table S8.6**

- (a) The type of care is assigned according to the *Medical/Surgical/Other* partitions of the AR-DRG classification.

#### **Tables S8.7 to S8.8**

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

*Abbreviations:* MDC – Major Diagnostic Category; DRG – Diagnosis Related Group; ECMO – Extracorporeal Membrane Oxygenation; CC – complications and comorbidities; ECT – electroconvulsive therapy; Gastroent – gastroenteritis; misc – miscellaneous; O.R. – operating room; URI – upper respiratory tract infection; W – with; W/O – without.

#### **Tables S8.11 to S8.12**

- (a) For tables with counts of separations by groups of procedures, a separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.
- (b) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures contained in the *Imaging services* chapter, if they were considered ‘standard treatment’ for the particular diagnosis or procedure performed. This has resulted in a marked overall decrease in the reporting of *Imaging services*, such as *Computerised tomography of the brain* and *Computerised tomography of the abdomen*.

*Abbreviation:* n.e.c. – not elsewhere classified.

#### **Tables S8.13 to S8.14**

- (a) For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation. These are counts of Australian Classification of Health Interventions (ACHI) procedure codes. It is possible that a single procedure code may represent multiple procedures or that a specific procedure may require the reporting of more than one code. Therefore the number of procedure codes reported does not necessarily equal the number of separate procedures performed.

**Table S8.1: Same-day acute separations, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute	697,609	849,792	482,271	292,046	173,444	49,598	49,304	65,946	2,660,010
Public psychiatric	195	6	0	71	350	8	..	..	630
<i>Total</i>	<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>
Separation rate	91.6	146.7	105.7	126.7	97.4	90.1	146.2	320.5	114.9
<b>Private hospitals</b>									
Private free-standing day facilities	217,336	197,618	208,487	112,831	60,903	n.p.	n.p.	n.p.	806,409
Other private hospitals	401,488	375,745	348,080	174,329	111,492	n.p.	n.p.	n.p.	1,476,434
<i>Total</i>	<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>2,282,843</b>
Separation rate	80.9	98.6	120.7	123.9	93.7	n.p.	n.p.	n.p.	97.6
<b>All hospitals</b>	<b>1,316,628</b>	<b>1,423,161</b>	<b>1,038,838</b>	<b>579,277</b>	<b>346,189</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>4,943,483</b>
<b>Separation rate</b>	<b>172.4</b>	<b>245.3</b>	<b>226.4</b>	<b>250.6</b>	<b>191.1</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>212.6</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

*Abbreviations:* ..—not applicable; n.p.—not published.

**Table S8.2: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2010–11**

<b>Principal diagnosis</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	7,332	12,827	7,363	3,593	1,781	231	350	340	33,817
C00–D48	Neoplasms	30,143	41,486	23,704	13,495	10,348	2,981	940	883	123,980
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	12,620	20,754	8,679	7,276	3,992	1,191	1,033	237	55,782
E00–E90	Endocrine, nutritional and metabolic diseases <sup>(a)</sup>	5,777	11,298	4,304	4,293	1,886	919	406	631	29,514
F00–F99	Mental and behavioural disorders	14,190	12,981	9,015	3,969	3,222	1,037	338	685	45,437
G00–G99	Diseases of the nervous system	13,483	23,139	10,837	6,157	3,717	1,548	1,237	336	60,454
H00–H59	Diseases of the eye and adnexa	23,092	21,975	9,799	11,619	7,647	982	1,401	700	77,215
H60–H95	Diseases of the ear and mastoid process	3,530	5,299	4,776	1,795	1,842	250	238	232	17,962
I00–I99	Diseases of the circulatory system	21,284	24,782	13,735	8,510	6,257	1,255	1,480	550	77,853
J00–J99	Diseases of the respiratory system	12,734	16,177	12,401	3,953	3,324	749	604	744	50,686
K00–K93	Diseases of the digestive system	48,533	56,489	29,700	21,895	6,740	4,709	2,849	1,641	172,556
L00–L99	Diseases of the skin and subcutaneous tissue	8,125	10,936	7,287	3,581	4,885	1,316	315	493	36,938
M00–M99	Diseases of the musculoskeletal system and connective tissue	17,952	22,089	12,261	8,808	7,107	1,975	1,699	675	72,566
N00–N99	Diseases of the genitourinary system	29,446	34,346	19,450	10,423	7,450	2,032	1,579	1,040	105,766
O00–O99	Pregnancy, childbirth and the puerperium	19,910	18,857	14,792	5,106	7,957	1,051	835	2,422	70,930
P00–P96	Certain conditions originating in the perinatal period	557	476	418	176	97	46	40	22	1,832
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	4,053	3,551	1,958	1,082	907	224	209	54	12,038
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	48,639	68,742	36,236	24,385	11,338	3,431	3,253	1,940	197,964
S00–T98	Injury, poisoning and certain other consequences of external causes	42,299	48,230	34,340	15,760	9,298	1,954	2,801	2,668	157,350
Z00–Z99	Factors influencing health status and contact with health services	333,585	395,311	221,216	136,241	73,999	21,723	27,697	49,653	1,259,425
	Not reported	520	53	0	0	0	2	0	0	575
<b>Total</b>		<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>

(a) A new standard for diabetes coding was introduced on 1 July 2010 that resulted in a decrease in the reporting of diabetes diagnoses and consequently a decrease for the ICD-10-AM chapter *Endocrine, nutritional and metabolic diseases and disorders*. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Table S8.3: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2010–11**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	2,781	2,263	2,712	1,348	807	n.p.	n.p.	n.p.	10,356
C00–D48	Neoplasms	55,418	41,667	56,478	21,909	19,226	n.p.	n.p.	n.p.	201,697
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	6,971	7,856	10,834	2,100	2,542	n.p.	n.p.	n.p.	31,271
E00–E90	Endocrine, nutritional and metabolic diseases	3,492	4,790	4,125	2,417	1,115	n.p.	n.p.	n.p.	16,694
F00–F99	Mental and behavioural disorders	40,329	21,765	31,287	5,650	513	n.p.	n.p.	n.p.	104,801
G00–G99	Diseases of the nervous system	7,697	7,451	8,429	4,863	2,259	n.p.	n.p.	n.p.	31,824
H00–H59	Diseases of the eye and adnexa	70,951	43,712	45,173	18,383	12,873	n.p.	n.p.	n.p.	201,362
H60–H95	Diseases of the ear and mastoid process	7,014	5,606	4,107	2,664	2,703	n.p.	n.p.	n.p.	23,114
I00–I99	Diseases of the circulatory system	21,034	17,110	10,890	7,150	4,737	n.p.	n.p.	n.p.	64,085
J00–J99	Diseases of the respiratory system	6,385	3,856	4,394	1,304	1,245	n.p.	n.p.	n.p.	17,826
K00–K93	Diseases of the digestive system	113,730	108,792	83,768	36,308	25,945	n.p.	n.p.	n.p.	380,306
L00–L99	Diseases of the skin and subcutaneous tissue	8,537	8,222	5,860	3,745	3,507	n.p.	n.p.	n.p.	30,900
M00–M99	Diseases of the musculoskeletal system and connective tissue and substances at sites of joint capsule, bursa and synovial membrane	33,881	31,628	24,481	16,564	14,582	n.p.	n.p.	n.p.	126,797
N00–N99	Diseases of the genitourinary system	36,657	24,978	21,497	9,526	6,238	n.p.	n.p.	n.p.	102,863
O00–O99	Pregnancy, childbirth and the puerperium	10,182	18,929	15,219	7,723	939	n.p.	n.p.	n.p.	53,886
P00–P96	Certain conditions originating in the perinatal period	65	167	70	89	37	n.p.	n.p.	n.p.	461
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	2,178	1,460	1,464	588	518	n.p.	n.p.	n.p.	6,413
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	40,526	42,794	30,200	16,802	8,300	n.p.	n.p.	n.p.	143,998
S00–T98	Injury, poisoning and certain other consequences of external causes	8,766	6,636	6,717	3,034	4,635	n.p.	n.p.	n.p.	30,978
Z00–Z99	Factors influencing health status and contact with health services	142,228	171,021	188,862	124,993	59,674	n.p.	n.p.	n.p.	700,547
	Not reported	2	2,660	0	0	0	n.p.	n.p.	n.p.	2,664
<b>Total</b>		<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,282,843</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S8.4: Same-day acute separations, for the top 20 principal diagnoses, public hospitals, states and territories, 2010–11**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Z49	Care involving dialysis	296,011	272,802	158,194	92,069	64,731	14,888	24,862	47,432	970,989
Z51	Other medical care	4,174	81,214	30,497	27,662	397	2,822	969	609	148,344
H26	Other cataract	16,520	15,715	5,782	7,932	5,275	725	1,113	437	53,499
R07	Pain in throat and chest	11,017	16,763	10,971	6,430	3,986	444	1,178	459	51,248
R10	Abdominal and pelvic pain	10,352	15,220	7,187	4,947	1,592	568	507	429	40,802
C44	Other malignant neoplasms of skin	5,150	6,222	6,128	2,370	2,523	712	90	211	23,406
Z45	Adjustment and management of implanted device	2,226	6,184	9,325	2,402	594	1,393	625	116	22,865
Z08	Follow-up examination after treatment for malignant neoplasms	5,120	6,420	4,002	2,532	1,370	442	157	65	20,108
K92	Other diseases of digestive system	7,404	5,155	3,125	2,938	252	659	119	125	19,777
A09	Other gastroenteritis and colitis of infectious and unspecified origin	3,794	7,533	2,981	1,820	729	97	170	106	17,230
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	4,550	5,688	2,968	2,448	459	383	250	58	16,804
R19	Other symptoms and signs involving the digestive system and abdomen	4,909	4,113	1,916	3,115	31	966	157	150	15,357
D50	Iron deficiency anaemia	3,468	5,377	2,148	2,156	998	428	216	107	14,898
K21	Gastro-oesophageal reflux disease	4,415	4,468	2,235	2,445	285	397	211	71	14,527
K02	Dental caries	3,186	3,994	2,744	855	928	427	155	308	12,597
D64	Other anaemias	2,597	4,646	1,756	1,932	1,188	338	91	39	12,587
G56	Mononeuropathies of upper limb	3,443	3,609	2,203	1,261	1,447	304	123	69	12,459
K29	Gastritis and duodenitis	3,419	4,885	1,934	1,534	259	99	81	211	12,422
D12	Benign neoplasm of colon, rectum, anus and anal canal	4,355	4,055	1,622	1,786	29	301	98	73	12,319
S01	Open wound of head	2,788	3,759	2,809	1,443	592	68	130	355	11,944
	Other	298,906	371,976	221,744	122,040	86,129	23,145	18,002	14,516	1,156,458
<b>Total (all principal diagnoses)</b>		<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Table S8.5: Same-day acute separations, for the top 20 principal diagnoses, private hospitals, states and territories, 2010–11**

<b>Principal diagnosis</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
Z51	Other medical care	40,054	54,074	64,979	27,181	18,982	n.p.	n.p.	n.p.	210,736
Z49	Care involving dialysis	26,894	35,453	58,220	68,888	20,242	n.p.	n.p.	n.p.	209,717
H26	Other cataract	41,097	26,067	18,338	10,240	7,503	n.p.	n.p.	n.p.	108,785
K01	Embedded and impacted teeth	17,249	18,628	12,478	10,321	5,118	n.p.	n.p.	n.p.	66,239
C44	Other malignant neoplasms of skin	14,046	13,234	13,952	7,062	6,496	n.p.	n.p.	n.p.	56,668
Z31	Procreative management	16,486	15,228	11,180	4,917	3,754	n.p.	n.p.	n.p.	53,597
R10	Abdominal and pelvic pain	11,221	17,377	10,094	4,753	1,652	n.p.	n.p.	n.p.	46,225
Z45	Adjustment and management of implanted device	5,344	16,859	13,172	6,280	3,797	n.p.	n.p.	n.p.	46,178
K21	Gastro-oesophageal reflux disease	13,500	11,836	11,097	4,020	2,999	n.p.	n.p.	n.p.	44,866
D12	Benign neoplasm of colon, rectum, anus and anal canal	15,305	6,753	12,937	3,885	4,346	n.p.	n.p.	n.p.	44,536
Z12	Special screening examination for neoplasms	14,136	12,409	9,428	3,840	1,129	n.p.	n.p.	n.p.	42,423
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	12,721	12,882	9,323	3,281	2,462	n.p.	n.p.	n.p.	41,799
M23	Internal derangement of knee	11,478	9,491	7,748	4,471	4,327	n.p.	n.p.	n.p.	39,201
O04	Medical abortion	5,381	15,039	11,846	6,128	68	n.p.	n.p.	n.p.	38,526
R19	Other symptoms and signs involving the digestive system and abdomen	12,149	8,445	7,037	3,773	2,143	n.p.	n.p.	n.p.	35,280
H35	Other retinal disorders	13,076	7,605	6,847	3,357	1,011	n.p.	n.p.	n.p.	34,395
K92	Other diseases of digestive system	11,910	7,263	6,902	2,354	1,432	n.p.	n.p.	n.p.	30,938
I84	Haemorrhoids	7,931	10,669	5,344	2,790	2,133	n.p.	n.p.	n.p.	30,117
K63	Other diseases of intestine	9,979	9,884	5,523	1,552	1,515	n.p.	n.p.	n.p.	28,981
Z08	Follow-up examination after treatment for malignant neoplasms	9,264	6,543	6,191	2,746	1,993	n.p.	n.p.	n.p.	27,887
Other		309,603	257,624	253,931	105,321	79,293	n.p.	n.p.	n.p.	1,045,749
<b>Total (all principal diagnoses)</b>		<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,282,843</b>

(a) A new standard for coding of obstetric episodes was introduced on 1 July 2010.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S8.6: Same-day acute separations, by broad categories of service<sup>(a)</sup>, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	2,520	1,053	2,018	604	485	139	295	172	7,286
Specialist mental health	4,037	478	4,670	432	786	7	131	31	10,572
Emergency									
Surgical	7,387	5,907	2,480	2,224	1,246	434	842	164	20,684
Medical	126,476	171,818	113,368	53,343	32,425	3,520	8,410	8,200	517,560
Other	1,585	677	528	588	245	125	124	13	3,885
Non-emergency									
Surgical	99,799	109,628	54,469	37,523	35,393	7,389	4,477	3,890	352,568
Medical	385,768	469,511	268,449	157,562	94,714	30,182	31,439	51,977	1,489,602
Other	70,232	90,726	36,289	39,841	8,500	7,810	3,586	1,499	258,483
<i>Total</i>	<i>697,804</i>	<i>849,798</i>	<i>482,271</i>	<i>292,117</i>	<i>173,794</i>	<i>49,606</i>	<i>49,304</i>	<i>65,946</i>	<i>2,660,640</i>
<b>Private hospitals</b>									
Childbirth	42	26	27	12	10	n.p.	n.p.	n.p.	145
Specialist mental health	38,997	19,093	27,749	4,775	458	n.p.	n.p.	n.p.	93,764
Emergency									
Surgical	425	390	513	499	2,045	n.p.	n.p.	n.p.	3,893
Medical	1,335	1,859	3,022	1,774	1,796	n.p.	n.p.	n.p.	9,825
Other	190	193	260	138	1,951	n.p.	n.p.	n.p.	2,739
Non-emergency									
Surgical	243,216	183,829	164,701	78,330	56,452	n.p.	n.p.	n.p.	757,915
Medical	129,978	171,563	208,553	132,785	64,707	n.p.	n.p.	n.p.	724,211
Other	204,641	196,410	151,742	68,847	44,976	n.p.	n.p.	n.p.	690,351
<i>Total</i>	<i>618,824</i>	<i>573,363</i>	<i>556,567</i>	<i>287,160</i>	<i>172,395</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,282,843</i>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S8.7: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0, public hospitals, states and territories, 2010–11**

<b>Major Diagnostic Category</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	66	65	31	71	59	2	0	0	294
01	Diseases and disorders of the nervous system	23,445	34,565	19,139	10,244	6,561	1,960	1,856	796	98,566
02	Diseases and disorders of the eye	24,537	24,481	11,107	12,208	8,010	1,044	1,501	806	83,694
03	Diseases and disorders of the ear, nose, mouth and throat	19,935	27,730	20,601	8,495	7,367	1,764	1,217	1,280	88,389
04	Diseases and disorders of the respiratory system	12,883	15,622	10,844	4,177	2,870	927	660	696	48,679
05	Diseases and disorders of the circulatory system	32,117	43,043	25,474	14,579	10,948	1,685	2,678	994	131,518
06	Diseases and disorders of the digestive system	71,614	83,851	41,157	34,309	7,252	5,928	3,605	2,050	249,766
07	Diseases and disorders of the hepatobiliary system and pancreas	5,061	6,436	3,193	2,068	778	482	354	212	18,584
08	Diseases and disorders of the musculoskeletal system and connective tissue	37,220	40,644	25,610	14,397	10,546	2,967	3,194	1,477	136,055
09	Diseases and disorders of the skin, subcutaneous tissue and breast	22,666	27,550	20,430	10,452	9,920	2,705	706	1,223	95,652
10	Endocrine, nutritional and metabolic diseases and disorders <sup>(a)</sup>	4,833	7,485	3,688	3,154	1,352	477	379	298	21,666
11	Diseases and disorders of the kidney and urinary tract	316,802	299,014	172,351	100,677	70,142	16,533	26,037	48,257	1,049,813
12	Diseases and disorders of the male reproductive system	6,419	7,832	3,788	3,973	2,259	547	358	232	25,408
13	Diseases and disorders of the female reproductive system	18,801	24,881	13,404	5,351	6,363	1,602	923	745	72,070
14	Pregnancy, childbirth and puerperium	23,158	19,788	18,801	5,308	8,283	1,159	877	3,071	80,445
15	Newborns and other neonates	968	716	859	262	173	86	56	54	3,174
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	14,003	24,912	9,456	8,512	4,557	1,668	1,063	386	64,557
17	Neoplastic disorders (haematological and solid neoplasms)	8,288	93,322	34,654	29,788	3,774	2,126	1,058	683	173,693
18	Infectious and parasitic diseases	2,774	4,368	2,997	1,119	608	174	124	193	12,357
19	Mental diseases and disorders	11,879	10,520	6,401	2,295	2,338	990	228	426	35,077
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,137	2,799	2,535	1,622	833	40	97	263	10,326
21	Injuries, poisoning and toxic effects of drugs	14,963	18,469	12,724	6,409	3,621	653	876	1,078	58,793
22	Burns	989	699	930	237	219	41	24	59	3,198
23	Factors influencing health status and other contacts with health services	21,442	30,609	22,009	12,251	4,895	4,026	1,429	657	97,318
ED	Error DRGs <sup>(a)</sup>	804	397	88	159	66	20	4	10	1,548
<b>Total</b>		<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

**Table S8.8: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0, private hospitals, states and territories, 2010–11**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	40	26	52	24	7	n.p.	n.p.	n.p.	158
01	Diseases and disorders of the nervous system	8,730	8,369	10,331	4,668	2,491	n.p.	n.p.	n.p.	35,818
02	Diseases and disorders of the eye	72,306	44,520	46,238	18,867	13,147	n.p.	n.p.	n.p.	205,529
03	Diseases and disorders of the ear, nose, mouth and throat	44,931	40,733	29,981	21,594	13,577	n.p.	n.p.	n.p.	156,580
04	Diseases and disorders of the respiratory system	1,451	1,890	2,761	931	896	n.p.	n.p.	n.p.	8,151
05	Diseases and disorders of the circulatory system	15,802	9,350	8,050	6,207	4,112	n.p.	n.p.	n.p.	45,908
06	Diseases and disorders of the digestive system	142,143	131,453	106,634	37,873	28,868	n.p.	n.p.	n.p.	461,438
07	Diseases and disorders of the hepatobiliary system and pancreas	1,094	1,248	1,625	335	341	n.p.	n.p.	n.p.	4,842
08	Diseases and disorders of the musculoskeletal system and connective tissue	41,681	36,548	29,223	18,871	16,971	n.p.	n.p.	n.p.	149,897
09	Diseases and disorders of the skin, subcutaneous tissue and breast	36,117	32,729	32,846	17,424	15,173	n.p.	n.p.	n.p.	138,791
10	Endocrine, nutritional and metabolic diseases and disorders	3,311	3,632	3,553	2,462	1,103	n.p.	n.p.	n.p.	14,597
11	Diseases and disorders of the kidney and urinary tract	46,986	47,775	70,374	75,170	24,756	n.p.	n.p.	n.p.	267,977
12	Diseases and disorders of the male reproductive system	13,351	10,466	8,304	6,161	3,489	n.p.	n.p.	n.p.	43,314
13	Diseases and disorders of the female reproductive system	39,672	33,652	26,576	11,611	7,865	n.p.	n.p.	n.p.	123,992
14	Pregnancy, childbirth and puerperium	10,637	19,255	15,489	7,822	945	n.p.	n.p.	n.p.	55,173
15	Newborns and other neonates	419	389	282	164	279	n.p.	n.p.	n.p.	1,574
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	7,529	9,300	12,242	2,268	2,635	n.p.	n.p.	n.p.	35,249
17	Neoplastic disorders (haematological and solid neoplasms)	41,950	57,895	73,676	27,964	20,011	n.p.	n.p.	n.p.	227,678
18	Infectious and parasitic diseases	291	204	702	108	640	n.p.	n.p.	n.p.	1,980
19	Mental diseases and disorders	30,694	16,088	26,998	4,347	503	n.p.	n.p.	n.p.	83,549
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	9,602	5,672	4,258	1,690	6	n.p.	n.p.	n.p.	21,562
21	Injuries, poisoning and toxic effects of drugs	2,076	2,234	1,954	1,158	1,434	n.p.	n.p.	n.p.	9,172
22	Burns	19	29	24	20	16	n.p.	n.p.	n.p.	117
23	Factors influencing health status and other contacts with health	47,463	56,828	44,185	19,295	13,008	n.p.	n.p.	n.p.	185,703
ED	Error DRGs <sup>(a)</sup>	529	3,078	209	126	122	n.p.	n.p.	n.p.	4,094
<b>Total</b>		<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,282,843</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S8.9: Same-day acute separations, for the top 20 AR-DRGs version 6.0, public hospitals, states and territories, 2010–11**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
L61Z	Haemodialysis	293,792	272,043	156,106	91,945	64,481	14,858	24,773	47,384	965,382
R63Z	Chemotherapy	3,282	79,847	29,907	27,171	92	1,683	950	560	143,492
G48C	Colonoscopy, sameday	18,100	20,211	8,876	11,993	136	2,280	674	402	62,672
C16Z	Lens procedures	18,880	16,658	6,110	9,146	5,936	709	1,069	435	58,943
F74Z	Chest pain	10,260	15,722	10,473	5,940	3,444	392	1,000	455	47,686
Z64B	Other factors influencing health status, sameday	7,002	12,008	13,750	5,546	2,872	2,917	857	408	45,360
Q61B	Red blood cell disorders W/O catastrophic or severe CC	8,292	17,149	4,843	5,314	3,234	1,283	368	298	40,781
Z40Z	Endoscopy with diagnoses of other contacts with health services, sameday	11,016	14,231	6,665	5,993	1,413	914	414	128	40,774
G47C	Other gastroscopy, sameday	10,640	14,439	5,699	7,413	414	1,089	440	237	40,371
O66Z	Antenatal and other obstetric admission	12,181	8,975	12,089	2,186	2,079	523	245	1,531	39,809
J11Z	Other skin, subcutaneous tissue and breast procedures	7,228	11,998	7,656	4,134	3,219	953	182	313	35,683
G70B	Other digestive system diagnoses W/O catastrophic or severe CC	7,135	9,769	6,825	2,524	1,989	555	344	414	29,555
G46C	Complex gastroscopy, sameday	11,541	8,768	2,992	4,666	68	654	312	164	29,165
X60B	Injuries W/O catastrophic or severe CC	7,465	8,699	6,406	2,352	1,273	190	346	626	27,357
G66Z	Abdominal pain or mesenteric adenitis	6,133	9,687	5,237	2,184	1,328	150	376	334	25,429
L41Z	Cystourethroscopy, sameday	5,487	8,422	3,606	3,408	2,049	576	392	103	24,043
D40Z	Dental extractions and restorations	4,924	7,974	4,400	2,211	2,114	714	307	371	23,015
U60Z	Mental health treatment, sameday, W/O ECT	10,721	4,332	3,497	1,600	1,551	156	113	420	22,390
O05Z	Abortion with OR procedure	4,689	6,522	2,030	1,756	4,918	347	200	997	21,459
R61C	Lymphoma and non-Acute leukaemia, sameday	3,160	9,411	3,440	2,100	2,870	299	58	97	21,435
Other		235,876	292,933	181,664	92,535	68,314	18,364	15,884	10,269	915,839
<b>Total</b>		<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

**Table S8.10: Same-day acute separations, for the top 20 AR-DRGs version 6.0, private hospitals, states and territories, 2010–11**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
L61Z	Haemodialysis	26,858	35,420	58,196	68,319	20,217	n.p.	n.p.	n.p.	209,010
R63Z	Chemotherapy	39,813	53,799	63,777	27,131	18,928	n.p.	n.p.	n.p.	208,904
G48C	Colonoscopy, sameday	53,718	56,129	45,639	18,006	12,985	n.p.	n.p.	n.p.	193,535
C16Z	Lens procedures	46,805	29,466	30,621	11,921	9,110	n.p.	n.p.	n.p.	133,952
G46C	Complex gastroscopy, sameday	43,088	27,017	24,291	9,483	6,469	n.p.	n.p.	n.p.	112,663
G47C	Other gastroscopy, sameday	28,170	38,378	26,540	7,364	7,121	n.p.	n.p.	n.p.	110,751
Z40Z	Endoscopy with diagnoses of other contacts with health services, sameday	33,141	31,967	22,442	8,674	6,337	n.p.	n.p.	n.p.	105,829
D40Z	Dental extractions and restorations	24,874	26,750	18,158	14,769	7,899	n.p.	n.p.	n.p.	95,922
U60Z	Mental health treatment, sameday, W/O ECT	29,844	15,166	24,769	3,906	47	n.p.	n.p.	n.p.	78,314
Z64B	Other factors influencing health status, sameday	10,489	22,357	19,331	9,178	6,007	n.p.	n.p.	n.p.	68,640
J11Z	Other skin, subcutaneous tissue and breast procedures	14,430	14,611	11,820	9,249	6,591	n.p.	n.p.	n.p.	58,821
I18Z	Other knee procedures	15,539	14,594	10,640	6,193	7,563	n.p.	n.p.	n.p.	57,374
N07Z	Other uterine and adnexa procedures for non-malignancy	16,323	13,489	10,352	5,486	3,233	n.p.	n.p.	n.p.	50,598
O05Z	Abortion with OR procedure	8,165	17,235	13,918	7,009	691	n.p.	n.p.	n.p.	47,406
C03Z	Retinal procedures	13,852	8,389	8,073	3,805	1,129	n.p.	n.p.	n.p.	38,170
L41Z	Cystourethroscopy, sameday	8,326	7,301	5,438	4,459	2,882	n.p.	n.p.	n.p.	30,142
J08B	Other skin graft and/or debridement procedures W/O CC	7,206	6,466	6,564	2,811	3,187	n.p.	n.p.	n.p.	26,933
N11Z	Other female reproductive system OR procedures	10,367	7,366	4,833	989	1,501	n.p.	n.p.	n.p.	26,151
G11Z	Anal and stomal procedures	11,253	4,540	4,393	1,254	1,168	n.p.	n.p.	n.p.	23,796
I68C	Non-surgical spinal disorders, sameday	4,410	6,231	4,678	4,762	2,349	n.p.	n.p.	n.p.	23,274
	Other	172,153	136,692	142,094	62,392	46,981	n.p.	n.p.	n.p.	582,658
<b>Total</b>		<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,282,843</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S8.11: Same-day acute separations, by procedure in ACHI chapters, public hospitals, states and territories, 2010–11**

Procedure chapters <sup>(a)</sup>		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	6,560	8,629	4,503	3,419	3,531	500	258	136	27,536
110–129	Procedures on endocrine system	66	101	55	20	3	5	1	3	254
160–256	Procedures on eye and adnexa	22,597	22,041	9,741	11,375	7,623	956	1,391	664	76,388
300–333	Procedures on ear and mastoid process	3,014	4,946	4,814	1,701	1,793	240	195	206	16,909
370–422	Procedures on nose, mouth and pharynx	4,314	5,667	6,493	1,740	1,333	204	191	124	20,066
450–490	Dental services	5,338	8,454	4,835	2,470	2,288	757	352	388	24,882
520–570	Procedures on respiratory system	5,225	5,986	3,453	1,794	682	511	227	173	18,051
600–777	Procedures on cardiovascular system	11,092	16,372	6,492	5,497	4,076	1,539	1,130	260	46,458
800–817	Procedures on blood and blood-forming organs	2,230	5,594	1,942	1,338	1,514	154	31	75	12,878
850–1011	Procedures on digestive system	69,964	75,276	30,058	37,223	3,263	6,524	2,614	1,381	226,303
1040–1129	Procedures on urinary system	313,397	292,729	167,388	99,515	69,871	16,274	25,852	48,031	1,033,057
1160–1203	Procedures on male genital organs	5,608	7,190	3,099	3,459	2,116	510	280	175	22,437
1240–1299	Gynaecological procedures	21,535	29,211	13,945	6,590	10,906	1,732	992	1,568	86,479
1330–1347	Obstetric procedures	2,090	1,821	1,228	828	959	156	211	158	7,451
1360–1579	Procedures on musculoskeletal system	22,234	24,145	12,525	7,986	5,991	1,631	1,477	691	76,680
1600–1718	Dermatological and plastic procedures	20,581	28,585	18,043	9,968	8,700	2,034	842	1,015	89,768
1740–1759	Procedures on breast	2,415	2,008	1,045	1,564	419	165	52	34	7,702
1786–1799	Radiation oncology procedures	337	516	410	192	34	3	0	0	1,492
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	235,511	353,923	163,433	131,918	61,620	25,808	15,426	7,667	995,306
1940–2016	Imaging services <sup>(b)</sup>	6,057	6,029	2,651	3,046	1,655	470	318	83	20,309
	<i>Procedures reported</i>	760,165	899,223	456,153	331,643	188,377	60,173	51,840	62,832	2,810,406
	No procedure or not reported	143,878	164,219	121,385	42,387	33,507	5,050	7,022	9,162	526,610
<b>Total separations</b>		<b>697,804</b>	<b>849,798</b>	<b>482,271</b>	<b>292,117</b>	<b>173,794</b>	<b>49,606</b>	<b>49,304</b>	<b>65,946</b>	<b>2,660,640</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

**Table S8.12: Same-day acute separations, by procedure in ACHI chapters, private hospitals, states and territories, 2010–11**

Procedure chapters <sup>(a)</sup>		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	12,147	13,313	10,559	7,948	4,397	n.p.	n.p.	n.p.	50,394
110–129	Procedures on endocrine system	61	30	26	4	11	n.p.	n.p.	n.p.	142
160–256	Procedures on eye and adnexa	69,727	43,271	44,715	18,101	12,585	n.p.	n.p.	n.p.	198,546
300–333	Procedures on ear and mastoid process	7,801	5,808	4,374	3,001	2,694	n.p.	n.p.	n.p.	24,754
370–422	Procedures on nose, mouth and pharynx	11,475	6,621	6,259	3,880	2,452	n.p.	n.p.	n.p.	31,751
450–490	Dental services	27,886	28,656	19,914	16,033	8,747	n.p.	n.p.	n.p.	104,996
520–570	Procedures on respiratory system	1,537	1,802	2,251	744	674	n.p.	n.p.	n.p.	7,260
600–777	Procedures on cardiovascular system	14,759	9,833	8,484	4,623	2,923	n.p.	n.p.	n.p.	43,250
800–817	Procedures on blood and blood-forming organs	1,094	1,682	2,650	482	458	n.p.	n.p.	n.p.	6,731
850–1011	Procedures on digestive system	185,358	172,592	136,806	51,053	37,391	n.p.	n.p.	n.p.	602,025
1040–1129	Procedures on urinary system	54,746	53,067	75,140	78,197	26,278	n.p.	n.p.	n.p.	291,459
1160–1203	Procedures on male genital organs	14,346	10,902	7,995	5,449	3,718	n.p.	n.p.	n.p.	44,006
1240–1299	Gynaecological procedures	47,635	50,692	39,203	18,395	8,261	n.p.	n.p.	n.p.	169,147
1330–1347	Obstetric procedures	309	291	634	123	58	n.p.	n.p.	n.p.	1,467
1360–1579	Procedures on musculoskeletal system	40,487	32,773	25,125	14,239	14,075	n.p.	n.p.	n.p.	132,757
1600–1718	Dermatological and plastic procedures	38,419	34,343	31,611	18,948	18,205	n.p.	n.p.	n.p.	146,498
1740–1759	Procedures on breast	4,661	2,813	4,792	1,490	1,055	n.p.	n.p.	n.p.	15,250
1786–1799	Radiation oncology procedures	195	189	44	37	161	n.p.	n.p.	n.p.	640
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	526,982	443,071	439,234	170,463	127,132	n.p.	n.p.	n.p.	1,765,190
1940–2016	Imaging services <sup>(b)</sup>	8,185	4,377	4,606	1,710	1,109	n.p.	n.p.	n.p.	20,463
	<i>Procedures reported</i>	1,067,810	916,126	864,422	414,920	272,384	n.p.	n.p.	n.p.	3,656,732
	No procedure or not reported	5,934	23,391	19,339	8,196	2,167	n.p.	n.p.	n.p.	65,106
<b>Total separations</b>		<b>618,824</b>	<b>573,363</b>	<b>556,567</b>	<b>287,160</b>	<b>172,395</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,282,843</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S8.13: Procedure statistics for the top 20 ACHI procedure blocks for same-day acute separations, public hospitals, states and territories, 2010–11**

Procedure block <sup>(a)</sup>		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1060	Haemodialysis	295,512	272,181	156,205	92,093	64,620	14,869	24,783	47,685	967,948
1910	Cerebral anaesthesia	188,007	199,362	87,588	75,929	42,243	14,908	8,842	5,151	622,030
1920	Administration of pharmacotherapy	15,794	104,834	40,815	35,990	4,240	4,736	3,829	822	211,060
1893	Administration of blood and blood products	17,347	29,796	12,516	8,119	5,569	1,227	1,076	202	75,852
905	Fibreoptic colonoscopy	24,065	22,683	8,069	11,282	326	2,174	703	419	69,721
1008	Panendoscopy with excision	21,956	22,614	7,889	12,126	358	1,684	862	347	67,836
911	Fibreoptic colonoscopy with excision	20,294	19,980	8,487	12,530	188	1,956	772	349	64,556
1909	Conduction anaesthesia	18,994	21,785	6,417	4,315	6,161	346	1,178	731	59,927
197	Extracapsular crystalline lens extraction by phacoemulsification	18,294	16,394	6,068	9,179	6,014	707	1,089	433	58,178
1265	Curettage and evacuation of uterus	14,318	17,938	6,877	4,113	7,264	863	646	1,239	53,258
1620	Excision of lesion(s) of skin and subcutaneous tissue	10,911	15,038	9,810	5,126	4,876	1,251	259	393	47,664
1916	Generalised allied health interventions	6,666	8,963	8,862	7,649	3,089	438	708	527	36,902
1089	Examination procedures on bladder	7,404	11,851	5,635	5,085	3,249	741	492	138	34,595
1259	Examination procedures on uterus	7,603	9,234	4,479	1,972	2,518	511	402	241	26,960
1005	Panendoscopy	5,596	6,999	2,744	3,459	99	447	41	121	19,506
668	Coronary angiography	4,270	5,061	1,828	1,863	1,875	410	755	1	16,063
1260	Insertion or removal of intrauterine device	2,830	4,801	2,788	1,161	2,564	284	175	168	14,771
1922	Other procedures related to pharmacotherapy	225	3,456	7,730	1,236	37	957	408	55	14,104
1907	Electroconvulsive therapy	1,158	6,188	2,917	695	787	834	115	6	12,700
607	Examination procedures on ventricle	2,904	4,239	1,222	1,512	1,364	338	681	1	12,261
Other		76,017	95,826	67,207	36,209	30,936	10,492	4,024	3,803	324,514
Separations with no procedure reported		143,878	164,219	121,385	42,387	33,507	5,050	7,022	9,162	526,610
<b>Total</b>		<b>760,165</b>	<b>899,223</b>	<b>456,153</b>	<b>331,643</b>	<b>188,377</b>	<b>60,173</b>	<b>51,840</b>	<b>62,832</b>	<b>2,810,406</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

**Table S8.14: Procedure statistics for the top 20 ACHI procedure blocks for same-day acute separations, private hospitals, states and territories, 2010–11**

Procedure block <sup>(a)</sup>		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1910	Cerebral anaesthesia	426,387	345,822	309,310	124,369	95,709	n.p.	n.p.	n.p.	1,351,707
1920	Administration of pharmacotherapy	45,977	62,517	73,130	35,101	23,330	n.p.	n.p.	n.p.	246,136
911	Fibreoptic colonoscopy with excision	70,371	56,597	51,426	23,656	13,222	n.p.	n.p.	n.p.	221,695
905	Fibreoptic colonoscopy	72,594	64,444	45,706	15,203	13,877	n.p.	n.p.	n.p.	219,254
1008	Panendoscopy with excision	72,371	53,860	52,121	18,575	11,933	n.p.	n.p.	n.p.	214,327
1060	Haemodialysis	29,545	35,419	58,191	68,216	20,218	n.p.	n.p.	n.p.	211,589
197	Extracapsular crystalline lens extraction by phacoemulsification	45,774	27,225	29,522	11,520	9,117	n.p.	n.p.	n.p.	129,272
1909	Conduction anaesthesia	44,500	21,430	23,132	6,300	9,735	n.p.	n.p.	n.p.	109,593
1620	Excision of lesion(s) of skin and subcutaneous tissue	24,430	23,564	23,178	11,216	10,441	n.p.	n.p.	n.p.	96,359
1265	Curettage and evacuation of uterus	19,691	29,530	21,846	10,686	2,795	n.p.	n.p.	n.p.	86,518
458	Surgical removal of tooth	23,736	24,067	16,360	12,690	6,503	n.p.	n.p.	n.p.	86,303
1297	Procedures for reproductive medicine	20,192	15,386	10,921	4,729	3,616	n.p.	n.p.	n.p.	56,854
1005	Panendoscopy	13,438	24,427	7,903	2,600	4,484	n.p.	n.p.	n.p.	53,928
1089	Examination procedures on bladder	11,985	11,481	10,558	7,257	4,213	n.p.	n.p.	n.p.	47,835
1893	Administration of blood and blood products	6,505	8,196	23,273	2,205	2,274	n.p.	n.p.	n.p.	43,539
1922	Other procedures related to pharmacotherapy	3,767	15,138	10,184	5,524	3,212	n.p.	n.p.	n.p.	38,237
1873	Psychological/psychosocial therapies	23,106	3,597	9,051	160	1	n.p.	n.p.	n.p.	36,110
1517	Arthroscopic meniscectomy of knee with repair	9,012	8,463	7,285	4,056	4,933	n.p.	n.p.	n.p.	35,550
209	Application, insertion or removal procedures on retina, choroid or posterior chamber	13,095	5,223	6,596	3,775	865	n.p.	n.p.	n.p.	32,112
1259	Examination procedures on uterus	8,813	9,382	7,258	3,135	2,211	n.p.	n.p.	n.p.	32,104
Other		82,521	70,358	67,471	43,947	29,695	n.p.	n.p.	n.p.	307,710
	Separations with no procedure reported	7,459	6,922	7,489	2,485	2,661	n.p.	n.p.	n.p.	27,963
<b>Total</b>		<b>1,067,810</b>	<b>916,126</b>	<b>864,422</b>	<b>414,920</b>	<b>272,384</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,656,732</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 8.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

# 9 Overnight acute admitted patient care

This chapter presents information on overnight acute admitted patient care provided by public and private hospitals in Australia. An overnight separation occurs when the patient is admitted and separated on different dates. Acute admitted patient care includes separations for which the care type was reported as *Acute, Newborn* (with qualified days) or was not reported. Separations for other care types were excluded. The data are sourced from the AIHW's National Hospital Morbidity Database (NHMD). For definitions of terms and classifications, and more information on data limitations and methods, see Chapter 7 (boxes 7.1, 7.2 and 7.3).

Of all overnight separations, 95% were reported as *Acute* in public and private hospitals combined.

## How has activity changed over time?

Between 2006–07 and 2010–11, the number of overnight acute separations (in both public and private sectors combined) increased by an average of 2.4% per year, with an average annual increase of 2.6% in public hospitals and 2.2% in private hospitals (Table 9.1).

Between 2009–10 and 2010–11, the rate of growth in separations was greater for public hospitals (3.6%) than for private hospitals (1.4%).

**Table 9.1: Overnight acute separations, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent) <sup>(a)</sup>	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Public acute hospitals <sup>(b)</sup>	2,204,943	2,254,140	2,299,960	2,358,333	2,445,577	2.6	3.7
Public psychiatric hospitals <sup>(b)</sup>	11,686	11,405	9,197	9,159	8,156	-8.6	-11.0
<i>Total</i>	<i>2,216,629</i>	<i>2,265,545</i>	<i>2,309,157</i>	<i>2,367,492</i>	<i>2,453,733</i>	<i>2.6</i>	<i>3.6</i>
<b>Private hospitals<sup>(b)</sup></b>							
Private free-standing day	2,423	2,341	1,247	1,259	1,363	-13.4	8.3
Other private hospitals	984,954	1,014,107	1,021,094	1,058,861	1,073,760	2.2	1.4
<i>Total</i>	<i>987,377</i>	<i>1,016,448</i>	<i>1,022,341</i>	<i>1,060,120</i>	<i>1,075,123</i>	<i>2.2</i>	<i>1.4</i>
<b>All hospitals</b>	<b>3,204,006</b>	<b>3,281,993</b>	<b>3,331,498</b>	<b>3,427,612</b>	<b>3,528,856</b>	<b>2.4</b>	<b>3.0</b>

(a) Annual average change, not adjusted for changes in coverage and re-categorisation of hospitals as public or private.

(b) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Box 7.2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Between 2006–07 and 2010–11, the number of overnight acute public hospital separations increased at a greater rate than the national average in the Australian Capital Territory, Western Australia, Queensland, the Northern Territory and Victoria.

Over the same period, above average increases in the number of overnight acute private hospital separations were recorded in Western Australia, New South Wales and Queensland.

Large single-year increases in the number of overnight acute hospital separations between 2009–10 and 2010–11 were recorded for Western Australia (both public and private hospitals)

and public hospitals in the Australian Capital Territory, Victoria, the Northern Territory and Queensland (Table 9.2).

**Table 9.2: Overnight acute separations, public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(a)</sup></b>							
Public hospitals	787,526	791,647	806,544	812,097	828,898	1.3	2.1
Private hospitals	243,815	253,448	260,688	268,024	270,018	2.6	0.7
All hospitals	1,031,341	1,045,095	1,067,232	1,080,121	1,098,916	1.6	1.7
<b>Victoria<sup>(a)</sup></b>							
Public hospitals	543,360	551,855	557,718	580,354	608,894	2.9	4.9
Private hospitals	258,320	265,846	258,873	280,390	278,660	1.9	-0.6
All hospitals	801,680	817,701	816,591	860,744	887,554	2.6	3.1
<b>Queensland</b>							
Public hospitals	381,136	405,463	418,960	431,204	447,294	4.1	3.7
Private hospitals	243,603	248,963	254,922	261,394	267,591	2.4	2.4
All hospitals	624,739	654,426	673,882	692,598	714,885	3.4	3.2
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	202,641	209,765	214,047	223,900	242,507	4.6	8.3
Private hospitals	107,986	111,946	115,178	115,779	124,923	3.7	7.9
All hospitals	310,627	321,711	329,225	339,679	367,430	4.3	8.2
<b>South Australia</b>							
Public hospitals	191,529	196,743	198,181	200,360	202,226	1.4	0.9
Private hospitals	89,078	88,422	88,856	89,104	88,376	-0.2	-0.8
All hospitals	280,607	285,165	287,037	289,464	290,602	0.9	0.4
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	46,409	43,793	43,409	48,278	47,803	0.7	-1.0
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	31,008	32,947	35,664	35,526	38,795	5.8	9.2
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	33,020	33,332	34,634	35,773	37,316	3.1	4.3
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Total</b>							
<b>Public hospitals</b>	<b>2,216,629</b>	<b>2,265,545</b>	<b>2,309,157</b>	<b>2,367,492</b>	<b>2,453,733</b>	<b>2.6</b>	<b>3.6</b>
<b>Private hospitals</b>	<b>987,377</b>	<b>1,016,448</b>	<b>1,022,341</b>	<b>1,060,120</b>	<b>1,075,123</b>	<b>2.2</b>	<b>1.4</b>
<b>All hospitals</b>	<b>3,204,006</b>	<b>3,281,993</b>	<b>3,331,498</b>	<b>3,427,612</b>	<b>3,528,856</b>	<b>2.4</b>	<b>3.0</b>

(a) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Box 7.2 for more information.

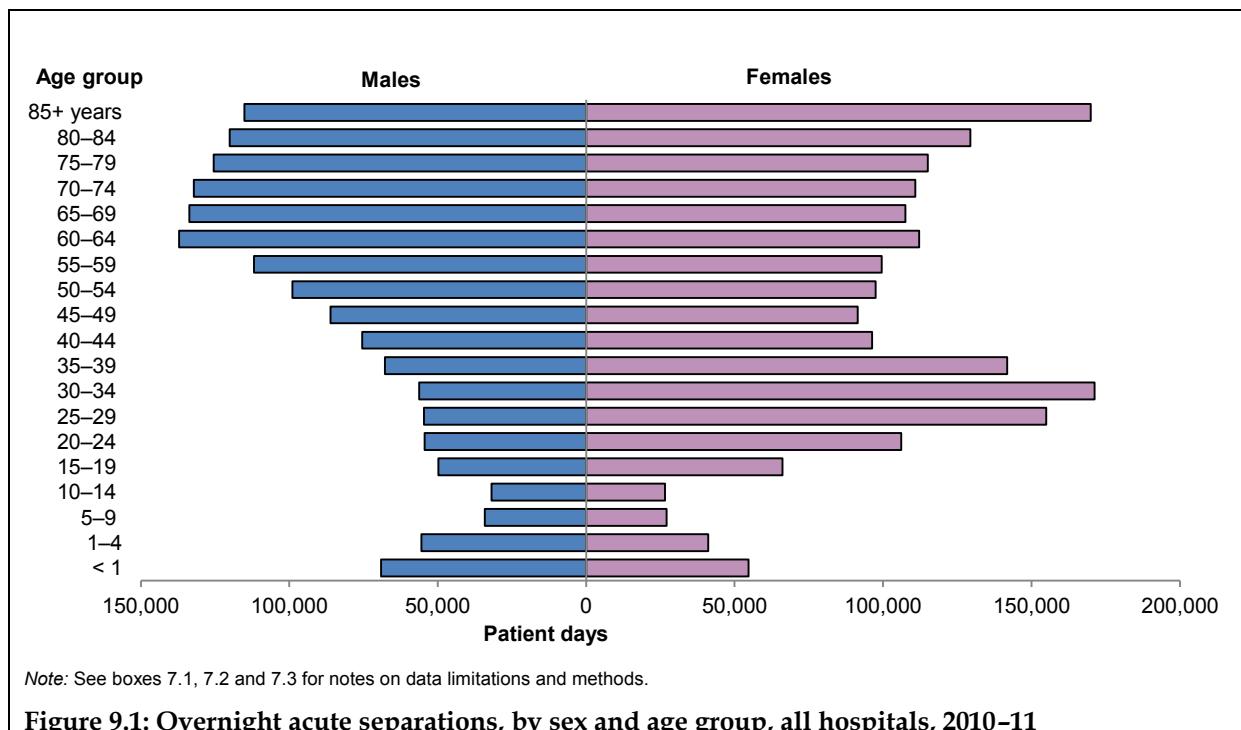
*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

*Abbreviation:* n.p.—not published.

## Who used these services?

### Sex and age group

Males accounted for less than half (46%) of overnight acute separations (Figure 9.1). There were, however, more overnight separations for males than females in the age groups 0 to 14 and 50 to 79. People aged 55 and over accounted for nearly half of all overnight acute separations.



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Figure 9.1: Overnight acute separations, by sex and age group, all hospitals, 2010–11

### Aboriginal and Torres Strait Islander people

#### Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2010–11 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix 1 for more information on the quality of Indigenous data in the NHMD.

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. It should also be noted that data presented for the six jurisdictions with data of acceptable quality for analysis purposes are not necessarily representative of the jurisdictions excluded.

Nationally, 3.6% of overnight acute separations were for Aboriginal or Torres Strait Islander people in 2010–11. The overnight acute separation rate for Indigenous Australians was almost twice the rate for other Australians. Western Australia had the highest rate of overnight acute separations for Indigenous Australians and New South Wales recorded the lowest rate (Table 9.3).

The overall separation rates presented in Table 9.3 differ from those presented in Table S9.2 due to differences in the population age groups used for calculating the age-standardised rates.

**Table 9.3: Overnight acute separations per 1,000 population, by Indigenous status, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
Indigenous	243.7	246.9	267.9	382.8	357.1	101.0	279.5	368.8	293.0
Other Australians	143.7	153.3	153.2	153.0	160.7	89.0	110.5	112.7	150.3
<b>Total<sup>(c)</sup></b>	<b>145.6</b>	<b>153.9</b>	<b>156.3</b>	<b>159.6</b>	<b>163.7</b>	<b>89.2</b>	<b>112.0</b>	<b>176.6</b>	<b>153.3</b>

(a) For Tasmania, the Australian Capital Territory and the Northern Territory, separation rates by Indigenous status are calculated for public hospitals only.

(b) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

(c) The separation rate presented in this table differs from the separation rate presented in Table 3.11 because all care types (that is, including sub- and non-acute care) are included in Table 3.11.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Remoteness area

In 2010–11, people living in *Very remote* areas of Australia had 264 overnight acute separations per 1,000 population, compared with 152 per 1,000 nationwide (Table 9.4). The separation rate ratio (SRR) of 1.73 for this area indicates that the separation rate was 73% higher than the national separation rate.

**Table 9.4: Overnight acute separation statistics, by remoteness area of residence, all hospitals, 2010–11**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
Separations	2,264,669	758,324	370,851	67,918	43,127	3,528,856
Separation rate	143.5	160.7	170.6	215.0	263.9	152.2
Standardised separation rate ratio	0.94	1.06	1.12	1.41	1.73	

(a) The total includes separations for which the remoteness area was not able to be categorised.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Socioeconomic status

Socioeconomic status (SES) groups in this report are based on the Index of Relative Socio-Economic Disadvantage (ABS 2006) for the area of usual residence (SLA) of the patient. See Appendix 2 for details.

Each SES group accounted for between 17% and 22% of total overnight acute separations. Separation rates varied from 130 per 1,000 population for patients living in areas classified as being the highest SES group to 169 per 1,000 for the lowest (Table 9.5).

**Table 9.5: Selected overnight acute separation statistics, by socioeconomic status group, all hospitals, 2010–11**

	Socioeconomic status group					Total <sup>(a)</sup>
	1—Lowest	2	3	4	5—Highest	
Separations	789,589	766,514	709,734	639,460	598,856	3,528,856
Separation rate	169.2	160.0	154.5	142.4	129.9	152.3
Standardised separation rate ratio	1.11	1.05	1.01	0.94	0.85	

(a) The total includes separations for which the socioeconomic status group was not able to be categorised.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## How did people access these services?

The **mode of admission** records the mechanism by which a patient begins an episode of care.

In both public and private hospitals, most overnight acute separations had a mode of admission of *Other* (93% overall), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 9.6). Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals (7% and 5%, respectively) (Table 9.6).

**Table 9.6: Overnight acute separations, by mode of admission, public and private hospitals, 2010–11**

Mode of admission	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	166,002	53,507	219,509
Statistical admission: type change	9,860	1,734	11,594
Other	2,274,694	1,012,706	3,287,400
Not reported	3,177	7,176	10,353
<b>Total</b>	<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Why did people receive the care?

The reason that a patient receives admitted patient care can be described in terms of the principal diagnosis. The **principal diagnosis** is the diagnosis established after study to be chiefly responsible for occasioning the episode of admitted patient care.

### Principal diagnosis

Overall, half of all overnight acute separations in 2010–11 had a principal diagnosis from one of five ICD-10-AM chapters:

- *Diseases of the digestive system*
- *Diseases of the respiratory system*
- *Diseases of the circulatory system*
- *Pregnancy, childbirth and the puerperium*
- *Injury and poisoning.*

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For *Certain infectious and parasitic diseases*, 87% of overnight separations were in public hospitals. For *Diseases of the musculoskeletal system and connective tissue*, the majority of separations were in private hospitals (61%) (Table 9.7).

**Table 9.7: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2010–11**

Principal diagnosis chapter		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	78,975	11,423	90,398
C00–D48	Neoplasms	128,590	103,718	232,308
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	28,005	8,719	36,724
E00–E90 <sup>(a)</sup>	Endocrine, nutritional and metabolic diseases	50,632	24,028	74,660
F00–F99	Mental and behavioural disorders	133,825	34,748	168,573
G00–G99	Diseases of the nervous system	65,308	61,062	126,370
H00–H59	Diseases of the eye and adnexa	12,715	10,408	23,123
H60–H95	Diseases of the ear and mastoid process	13,237	6,309	19,546
I00–I99	Diseases of the circulatory system	253,806	108,745	362,551
J00–J99	Diseases of the respiratory system	245,468	72,734	318,202
K00–K93	Diseases of the digestive system	232,483	102,535	335,018
L00–L99	Diseases of the skin and subcutaneous tissue	67,424	14,181	81,605
M00–M99	Diseases of the musculoskeletal system and connective tissue	108,396	166,686	275,082
N00–N99	Diseases of the genitourinary system	130,118	75,142	205,260
O00–O99	Pregnancy, childbirth and the puerperium	260,860	91,342	352,202
P00–P96	Certain conditions originating in the perinatal period	41,212	11,273	52,485
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	12,032	4,039	16,071
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	224,227	57,504	281,731
S00–T98	Injury, poisoning and certain other consequences of external causes	315,543	74,133	389,676
Z00–Z99	Factors influencing health status and contact with health services	50,653	35,851	86,504
	Not reported	224	543	767
<b>Total</b>		<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

(a) A new standard for diabetes coding was introduced on 1 July 2010 that resulted in a decrease in the reporting of diabetes diagnoses and consequently a decrease for the ICD-10-AM chapter *Endocrine, nutritional and metabolic diseases and disorders*. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.2 and S9.3 at the end of this chapter.

The most common principal diagnosis (at the 3-character level) reported for overnight separations was *Single spontaneous delivery*, which accounted for 4.7% of overnight acute separations in public hospitals and 2.0% in private hospitals. The 20 most common principal diagnoses included several childbirth-related and heart-related conditions, as well as respiratory conditions (Table 9.8). See Appendix 2 for information about recent changes in principal diagnosis coding standards for obstetrics.

Comparing Table 9.8 with Table 8.8, it can be seen that the top 20 principal diagnoses for overnight acute separations and same-day acute separations are different, suggesting that there are differences in the types of conditions that are most commonly treated on an overnight basis compared with those that are not.

**Table 9.8: Overnight acute separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
O80	Single spontaneous delivery <sup>(a)</sup>	115,909	21,228	137,137
O82	Single delivery by caesarean section <sup>(a)</sup>	53,258	25,893	79,151
R07	Pain in throat and chest	60,975	13,627	74,602
G47	Sleep disorders	15,191	48,051	63,242
J18	Pneumonia, organism unspecified	50,968	9,976	60,944
K80	Cholelithiasis	36,130	18,851	54,981
J44	Other chronic obstructive pulmonary disease	46,622	6,916	53,538
I21	Acute myocardial infarction	39,200	8,456	47,656
I20	Angina pectoris	31,412	14,110	45,522
M17	Gonarthrosis [arthrosis of knee]	15,077	29,424	44,501
R10	Abdominal and pelvic pain	36,538	7,854	44,392
I50	Heart failure	34,540	9,655	44,195
N39	Other disorders of urinary system	33,759	9,396	43,155
L03	Cellulitis	33,959	6,304	40,263
I48	Atrial fibrillation and flutter	25,428	12,139	37,567
K40	Inguinal hernia	15,548	20,576	36,124
J35	Chronic diseases of tonsils and adenoids	13,704	19,619	33,323
O81	Single delivery by forceps and vacuum extractor <sup>(a)</sup>	21,711	9,133	30,844
T81	Complications of procedures, not elsewhere classified	21,168	9,424	30,592
K35	Acute appendicitis	23,678	4,517	28,195
	Other	1,728,958	769,974	2,498,932
<b>Total</b>		<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

(a) A new standard for coding of obstetric episodes was introduced on 1 July 2010. Public hospitals implemented the standard on 1 July 2010. The standard was progressively implemented in private hospitals over the 2010–11 reporting period. This resulted in increased reporting of O80 to O84 as principal diagnoses, and a decrease in the reporting of other obstetric principal diagnoses, such as O70 *Perineal laceration during delivery*. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.4 and S9.5 at the end of this chapter.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours) or *Elective* (required at some stage beyond 24 hours). *Emergency/elective* status is not assigned for some admissions (for example, obstetric care and planned care, such as dialysis). This section classifies separations as *Emergency* or *Non-emergency* (includes elective and other planned care).

Table 9.9 presents information on the urgency of admission by overnight status and the broad category of admitted patient service (*Childbirth, Specialist mental health, Surgical, Medical and Other*). See the section *What care was provided?* for more information on these broad categories of service.

In 2010–11, about half of all overnight acute separations were *Emergency* admissions, with about 90% of these occurring in public hospitals. Just over 39% of overnight acute

separations were *Non-emergency* admissions, and over half of these occurred in private hospitals (Table 9.9).

**Table 9.9: Overnight acute separations by broad category of service, public and private hospitals, states and territories, 2010–11**

	Public hospitals		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	206,086	8.4	79,858	7.4	285,944	8.1
Specialist mental health	86,434	3.5	29,110	2.7	115,544	3.3
Emergency						
Surgical	223,087	9.1	32,663	3.0	255,750	7.2
Medical	1,282,534	52.3	132,729	12.3	1,415,263	40.1
Other	53,546	2.2	11,209	1.0	64,755	1.8
Non-emergency						
Surgical	333,360	13.6	532,902	49.6	866,262	24.5
Medical	245,941	10.0	217,282	20.2	463,223	13.1
Other	22,745	0.9	39,370	3.7	62,115	1.8
<b>Total</b>	<b>2,453,733</b>	<b>100.0</b>	<b>1,075,123</b>	<b>100.0</b>	<b>3,528,856</b>	<b>100.0</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in Table S9.6 at the end of this chapter.

## What care was provided?

The care that a patient received can be described in a variety of ways. This section presents information on overnight acute separations describing care by:

- the broad category of service – *Childbirth*, *Specialist mental health*, *Medical* (not involving a procedure), *Surgical* (involving an operating room procedure) or *Other* (involving a non-operating room procedure, such as endoscopy), see Chapter 7 for more information
- Major Diagnostic Categories (MDCs) and Australian Refined Diagnosis Related Groups (AR-DRGs) – based on the AR-DRG classification of acute care separations
- the type of surgical or other procedure undertaken.

### Broad categories of service

In 2010–11, over half (53%) of overnight acute separations were reported as *Medical*, almost a third (32%) were *Surgical* and about 4% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 9.9). The majority of *Medical* care occurred in public hospitals (81%), and just under 50% of *Surgical* care. *Childbirth* admissions accounted for 8.1% of overnight acute separations and *Specialist mental health* accounted for 3.3%.

### Major Diagnostic Categories

Table 9.10 presents overnight acute separations by Major Diagnostic Categories (MDCs) for public and private hospitals.

*Diseases and disorders of the musculoskeletal system and connective tissue* accounted for 13% of total overnight acute separations for the combined public and private sectors, with just over half of this activity occurring in public hospitals. For *Injuries, poisoning and toxic effects of drugs* over 87% of the overnight acute separations were in public hospitals. For *Diseases and*

*disorders of the male reproductive system* just over half (55%) of the overnight acute separations were in private hospitals.

**Table 9.10: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 6.0, public and private hospitals, 2010–11**

Major Diagnostic Category		Public hospitals	Private hospitals	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	13,025	2,786	15,811
01	Diseases and disorders of the nervous system	155,985	31,837	187,822
02	Diseases and disorders of the eye	17,329	10,969	28,298
03	Diseases and disorders of the ear, nose, mouth and throat	99,662	63,050	162,712
04	Diseases and disorders of the respiratory system	244,139	89,566	333,705
05	Diseases and disorders of the circulatory system	302,638	121,719	424,357
06	Diseases and disorders of the digestive system	272,433	110,782	383,215
07	Diseases and disorders of the hepatobiliary system and pancreas	77,694	30,622	108,316
08	Diseases and disorders of the musculoskeletal system and connective tissue	246,419	213,818	460,237
09	Diseases and disorders of the skin, subcutaneous tissue and breast	102,454	55,244	157,698
10	Endocrine, nutritional and metabolic diseases and disorders	51,166	27,032	78,198
11	Diseases and disorders of the kidney and urinary tract	110,397	42,584	152,981
12	Diseases and disorders of the male reproductive system	20,848	25,284	46,132
13	Diseases and disorders of the female reproductive system	44,313	41,313	85,626
14	Pregnancy, childbirth and puerperium	267,470	92,972	360,442
15	Newborns and other neonates	56,968	17,748	74,716
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	30,804	9,362	40,166
17	Neoplastic disorders (haematological and solid neoplasms)	19,363	10,970	30,333
18	Infectious and parasitic diseases	50,140	11,092	61,232
19	Mental diseases and disorders	100,574	27,294	127,868
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	25,910	7,038	32,948
21	Injuries, poisoning and toxic effects of drugs	98,793	15,276	114,069
22	Burns	5,360	196	5,556
23	Factors influencing health status and other contacts with health services	35,894	13,512	49,406
ED	Error DRGs <sup>(a)</sup>	3,955	3,057	7,012
	<i>Surgical</i>	622,435	601,222	1,223,657
	<i>Medical</i>	1,754,844	423,319	2,178,163
	<i>Other</i>	76,454	50,582	127,036
	<b>Total</b>	<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

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

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.7 and S9.8 at the end of this chapter.

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

## Most common AR-DRGs

In 2010–11, the 20 most common AR-DRGs accounted for over one quarter of overnight acute separations. Childbirth-related AR-DRGs were the top two most common overnight acute separations, and the top 20 included several heart- and respiratory-related AR-DRGs (Table 9.11).

Public hospitals provided the majority of separations for childbirth and *Chest pain*. Private hospitals provided the majority of separations for AR-DRGs such as *Sleep apnoea*, *Other shoulder procedures* and *Knee replacement without catastrophic or severe complications or comorbidities*.

**Table 9.11: Separations for the top 20 AR-DRGs version 6.0 with the highest number of overnight acute separations, public and private hospitals, 2010–11**

AR-DRG		Public hospitals	Private hospitals	Total
O60Z	Vaginal delivery	140,359	44,208	184,567
O01B	Caesarean delivery W/O cat or sev CC	44,663	28,354	73,017
F74Z	Chest pain	57,754	8,858	66,612
E63Z	Sleep apnoea	6,647	42,363	49,010
G10B	Hernia procedures W/O CC	20,405	27,508	47,913
G70B	Other digestive system diagnoses W/O cat or sev CC	38,240	7,849	46,089
J64B	Cellulitis W/O cat or sev CC	39,532	5,768	45,300
E65B	Chronic obstructive airways disease W/O catastrophic CC	37,868	6,462	44,330
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O cat or sev CC	21,357	17,598	38,955
O66Z	Antenatal and other obstetric admission	31,228	6,924	38,152
G66Z	Abdominal pain or mesenteric adenitis	33,056	4,859	37,915
I16Z	Other shoulder procedures	6,490	30,782	37,272
G67B	Oesophagitis and gastroenteritis W/O cat or sev CC	32,664	4,332	36,996
D11Z	Tonsillectomy and/or adenoidectomy	15,271	19,859	35,130
U63Z	Major affective disorders	20,982	14,079	35,061
L63B	Kidney and urinary tract infections W/O cat or sev CC	29,087	5,357	34,444
F42B	Circulatory disorders W/O AMI with invasive cardiac inves proc W/O cat or sev CC	12,497	21,287	33,784
E62C	Respiratory infections/inflammations W/O CC	27,928	5,110	33,038
F76B	Arrhythmia, cardiac arrest and conduction disorders W/O cat or sev CC	25,295	7,630	32,925
I04B	Knee replacement W/O cat or sev CC	10,375	21,668	32,043
	Other	1,802,035	744,268	2,546,303
<b>Total</b>		<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.9 and S9.10 at the end of this chapter.

*Abbreviations:* AMI—Acute myocardial infarction; CC—complications and comorbidities; CDE—common duct exploration; inves—investigative; proc—procedure; W/O—without; W/O cat or sev CC—without catastrophic or severe complications or comorbidities.

## Procedures

A **procedure** is defined as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in an acute care setting (HDSC 2008).

Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays and chemotherapy. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

In 2010–11, over 6.6 million procedures were reported for overnight acute separations, around 3.9 million in the public sector and 2.8 million in the private sector. Public hospitals accounted for 63% of the overnight acute separations for which a procedure was reported, although they accounted for 70% of the separations overall (Table 9.12). In public hospitals, 65% of overnight acute separations involved a procedure (1.6 million). In contrast, 87% of overnight acute separations in private hospitals involved a procedure (0.9 million).

**Table 9.12: Overnight acute separations, by procedure in ACHI chapters, public and private hospitals, 2010–11**

Procedure chapters		Public hospitals	Private hospitals	Total
1–86	Procedures on nervous system	47,207	44,937	92,144
110–129	Procedures on endocrine system	7,305	7,903	15,208
160–256	Procedures on eye and adnexa	12,619	10,218	22,837
300–333	Procedures on ear and mastoid process	9,717	9,051	18,768
370–422	Procedures on nose, mouth and pharynx	41,905	50,747	92,652
450–490	Dental services	5,630	3,458	9,088
520–570	Procedures on respiratory system	85,410	27,588	112,998
600–777	Procedures on cardiovascular system	104,941	87,019	191,960
800–817	Procedures on blood and blood-forming organs	22,003	16,517	38,520
850–1011	Procedures on digestive system	210,910	146,584	357,494
1040–1129	Procedures on urinary system	71,403	49,729	121,132
1160–1203	Procedures on male genital organs	18,439	27,881	46,320
1240–1299	Gynaecological procedures	47,637	41,968	89,605
1330–1347	Obstetric procedures	184,180	78,110	262,290
1360–1579	Procedures on musculoskeletal system	183,569	188,036	371,605
1600–1718	Dermatological and plastic procedures	103,361	52,135	155,496
1740–1759	Procedures on breast	11,768	21,854	33,622
1786–1799	Radiation oncology procedures	7,883	2,637	10,520
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	1,441,965	871,662	2,313,627
1940–2016	Imaging services <sup>(a)</sup>	30,875	22,104	52,979
	<i>Procedures reported<sup>(b)</sup></i>	3,877,894	2,762,209	6,640,103
	No procedure or not reported	847,977	138,905	986,882
<b>Total overnight acute separations</b>		<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

(a) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked decrease in the reporting of *Imaging services* compared to previous years. See Appendix 2 for more information.

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

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.11 and S9.12 at the end of this chapter.

*Abbreviation:* n.e.c.—not elsewhere classified.

In 2010–11, General allied health interventions, which includes physiotherapy and other rehabilitation procedures or interventions was the most common procedure block reported for overnight acute separations. Cerebral anaesthesia (general anaesthesia) was the next most frequently reported procedure block, reflecting the fact that it is a companion procedure for many other procedures (Table 9.13).

**Table 9.13: Overnight acute separations for the top 20 ACHI procedure blocks, public and private hospitals, 2010–11**

Procedure block <sup>(a)</sup>	Public hospitals	Private hospitals	Total
1916 Generalised allied health interventions	950,255	362,240	1,312,495
1910 Cerebral anaesthesia	654,048	617,925	1,271,973
1909 Conduction anaesthesia	119,660	126,185	245,845
1893 Administration of blood and blood products	135,997	58,210	194,207
1340 Caesarean section	59,500	34,459	93,959
1344 Postpartum suture	66,763	23,403	90,166
1920 Administration of pharmacotherapy	61,355	27,060	88,415
668 Coronary angiography	43,341	39,395	82,736
1333 Analgesia and anaesthesia during labour and delivery	48,044	27,510	75,554
1334 Medical or surgical induction of labour	51,279	22,694	73,973
1335 Medical or surgical augmentation of labour	45,656	15,291	60,947
1912 Postprocedural analgesia	24,699	31,073	55,772
607 Examination procedures on ventricle	24,145	29,416	53,561
1828 Sleep study	7,295	45,701	52,996
965 Cholecystectomy	29,180	21,260	50,440
986 Division of abdominal adhesions	25,989	22,939	48,928
412 Tonsillectomy or adenoidectomy	20,509	26,567	47,076
570 Noninvasive ventilatory support	30,017	13,245	43,262
1566 Excision procedures on other musculoskeletal sites	24,825	15,806	40,631
957 Examination of gallbladder or biliary tract	22,163	17,649	39,812
Other	1,433,174	1,184,181	2,617,355
<i>Procedures reported<sup>(b)</sup></i>	3,877,894	2,762,209	6,640,103
No procedure or not reported	847,977	138,905	986,882
<b>Total overnight acute separations</b>	<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

(a) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked decrease in the reporting of *Imaging services*, such as *Computerised tomography of the brain* or *Computerised tomography of the abdomen*, which previously were among the most commonly reported procedures. See Appendix 2 for more information.

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

*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables S9.13 and S9.14 at the end of this chapter.

## How long did patients stay?

The lengths of stay for overnight acute separations varied by the type of care received and between public and private hospitals. *Non-emergency* separations had longer lengths of stay in public hospitals than in private hospitals. *Childbirth, Specialist mental health care* and *Emergency* separations for *Medical* care had longer lengths of stay in private hospitals than in public hospitals (Table 9.14).

**Table 9.14: Patient days and average length of stay, for overnight acute separations, by broad category of service, public and private hospitals, 2010–11**

Broad category of service	Public hospitals		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Childbirth	664,161	3.2	374,857	4.7	1,039,018	3.6
Specialist mental health	1,507,239	17.4	558,050	19.2	2,065,289	17.9
Emergency						
Surgical	1,855,773	8.3	269,086	8.2	2,124,859	8.3
Medical	5,348,231	4.2	769,786	5.8	6,118,017	4.3
Other	361,838	6.8	64,817	5.8	426,655	6.6
Non-emergency						
Surgical	1,408,864	4.2	1,783,584	3.3	3,192,448	3.7
Medical	1,433,661	5.8	1,078,946	5.0	2,512,607	5.4
Other	83,645	3.7	103,824	2.6	187,469	3.0
<b>Total</b>	<b>12,663,412</b>	<b>5.2</b>	<b>5,002,950</b>	<b>4.7</b>	<b>17,666,362</b>	<b>5.0</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Who paid for the care?

Over 83% of overnight acute separations from public hospitals were for *Public patients* (Medicare eligible persons who elected to be treated as public patient) and about 83% of overnight acute separations from private hospitals were funded by *Private health insurance* (Table 9.15). The *Department of Veterans' Affairs* funded 2.6% of overnight acute separations in public hospitals and 7.1% in private hospitals.

**Table 9.15: Overnight acute separations, by principal source of funds, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	2,047,495	4,831	2,052,326
Private health insurance	264,051	897,489	1,161,540
Self-funded <sup>(b)</sup>	30,506	51,398	81,904
Workers compensation	12,900	27,755	40,655
Motor vehicle third party personal claim	17,872	2,300	20,172
Department of Veterans' Affairs	62,576	76,463	139,039
Other <sup>(c)</sup>	18,333	14,887	33,220
<b>Total</b>	<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefits Scheme.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## How was the care completed?

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

Around 88% of overnight acute separations had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 9.16). This was particularly the case in private hospitals, where 93% of separations reported a mode of separation of *Other*, compared with 85% in public hospitals.

**Table 9.16: Overnight acute separations, by mode of separation, public and private hospitals, 2010–11**

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	181,482	38,495	219,977
Discharge/transfer to residential aged care service	34,802	5,406	40,208
Discharge/transfer to an (other) psychiatric hospital	4,292	148	4,440
Discharge/transfer to other health care accommodation	8,719	3,346	12,065
Statistical discharge: type change	64,952	14,802	79,754
Left against medical advice/discharge at own risk	28,019	1,352	29,371
Statistical discharge from leave	4,470	54	4,524
Died	37,075	9,693	46,768
Other	2,089,847	1,001,817	3,091,664
Not reported	75	10	85
<b>Total</b>	<b>2,453,733</b>	<b>1,075,123</b>	<b>3,528,856</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Supplementary tables

The following supplementary tables provide more information on diagnosis and procedures for overnight acute separations, by state and territory.

### Box 9.1: Notes for Chapter 9 supplementary tables

#### Table S9.6

- (a) This table presents information describing care by the following broad categories of service: *Childbirth, Specialist mental health, Surgical, Medical* and *Other*. See the section 'What care was provided?' for more information.

#### Tables S9.7 to S9.10

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

*Abbreviations:* AdmWt – admission weight; AMI – Acute Myocardial Infarct; CC – complications and comorbidities; CDE – common duct exploration; DRG – Diagnosis Related Group; ECMO – extracorporeal membrane oxygenation; Gastroent – gastroenterological; MDC – Major Diagnostic Category; Misc – miscellaneous; Sys – system; URI – Upper respiratory infection; W – with; W/O – without; OR – operating room; proc – procedure.

#### Tables S9.11 to S9.12

- (a) For tables with counts of separations by groups of procedures, a separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.
- (b) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures contained in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This has resulted in a marked overall decrease in the reporting of *Imaging services*, such as *Computerised tomography of the brain* and *Computerised tomography of the abdomen*.

*Abbreviation:* n.e.c. – not elsewhere classified.

#### Tables S9.13 to S9.14

- (c) For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation. These are counts of Australian Classification of Health Interventions (ACHI) procedure codes. It is possible that a single procedure code may represent multiple procedures or that a specific procedure may require the reporting of more than one code. Therefore the number of procedure codes reported does not necessarily equal the number of separate procedures performed.

**Table S9.1: Overnight acute separations, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute hospitals	824,005	608,414	447,292	241,094	201,065	47,596	38,795	37,316	2,445,577
Public psychiatric hospitals	4,893	480	2	1,413	1,161	207	..	..	8,156
<i>Total</i>	<b>828,898</b>	<b>608,894</b>	<b>447,294</b>	<b>242,507</b>	<b>202,226</b>	<b>47,803</b>	<b>38,795</b>	<b>37,316</b>	<b>2,453,733</b>
<i>Separation rate</i>	<b>109.0</b>	<b>105.4</b>	<b>98.2</b>	<b>105.6</b>	<b>113.9</b>	<b>89.1</b>	<b>112.4</b>	<b>181.8</b>	<b>106.3</b>
<b>Private hospitals</b>									
Private free-standing day hospital facilities	154	7	0	1,201	0	n.p.	n.p.	n.p.	1,363
Other private hospitals	269,864	278,653	267,591	123,722	88,376	n.p.	n.p.	n.p.	1,073,760
<i>Total</i>	<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,923</b>	<b>88,376</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1,075,123</b>
<i>Separation rate</i>	<b>35.4</b>	<b>47.2</b>	<b>58.2</b>	<b>54.0</b>	<b>47.8</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>45.9</b>
<b>All hospitals</b>	<b>1,098,916</b>	<b>887,554</b>	<b>714,885</b>	<b>367,430</b>	<b>290,602</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,528,856</b>
<b>Separation rate</b>	<b>144.4</b>	<b>152.6</b>	<b>156.4</b>	<b>159.6</b>	<b>161.7</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>152.2</b>

*Note:* See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

*Abbreviations:* ..—not applicable; n.p.—not published.

**Table S9.2: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2010–11**

<b>Principal diagnosis</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	29,114	18,641	13,453	8,007	5,897	1,102	1,104	1,657	78,975
C00–D48	Neoplasms	41,428	34,823	23,384	11,483	11,213	3,244	2,189	826	128,590
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	9,475	7,401	4,578	2,509	2,913	525	377	227	28,005
E00–E90	Endocrine, nutritional and metabolic diseases	16,136	12,716	9,616	4,997	4,276	1,023	675	1,193	50,632
F00–F99	Mental and behavioural disorders	46,717	30,787	21,979	15,885	12,796	2,660	1,798	1,203	133,825
G00–G99	Diseases of the nervous system	19,353	20,169	11,765	5,672	5,641	1,323	822	563	65,308
H00–H59	Diseases of the eye and adnexa	4,357	3,478	1,893	1,520	993	85	172	217	12,715
H60–H95	Diseases of the ear and mastoid process	4,289	3,232	2,287	1,610	1,082	213	176	348	13,237
I00–I99	Diseases of the circulatory system	86,419	63,323	47,583	22,104	21,877	5,499	4,361	2,640	253,806
J00–J99	Diseases of the respiratory system	84,350	60,086	43,435	23,017	21,385	4,535	3,689	4,971	245,468
K00–K93	Diseases of the digestive system	78,491	57,857	42,200	23,274	18,860	4,994	3,888	2,919	232,483
L00–L99	Diseases of the skin and subcutaneous tissue	21,364	14,331	14,644	7,368	5,006	1,170	973	2,568	67,424
M00–M99	Diseases of the musculoskeletal system and connective tissue	36,315	27,288	18,284	11,736	9,239	2,313	1,933	1,288	108,396
N00–N99	Diseases of the genitourinary system	43,538	32,749	24,189	12,689	10,862	2,164	2,170	1,757	130,118
O00–O99	Pregnancy, childbirth and the puerperium	88,386	62,409	51,600	26,429	17,878	4,966	4,888	4,304	260,860
P00–P96	Certain conditions originating in the perinatal period	13,291	10,948	8,237	4,353	1,720	718	1,172	773	41,212
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	3,716	3,395	2,210	1,275	931	196	206	103	12,032
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	80,233	57,180	38,627	19,846	19,757	3,514	2,387	2,683	224,227
S00–T98	Injury, poisoning and certain other consequences of external causes	104,410	75,139	58,013	34,579	22,937	5,990	5,340	6,037	312,445
Z00–Z99	Factors influencing health status and contact with health services	17,303	12,933	9,317	4,154	6,963	1,567	475	1,039	53,751
	Not reported	213	9	0	0	0	2	0	0	224
<b>Total</b>		<b>828,898</b>	<b>608,894</b>	<b>447,294</b>	<b>242,507</b>	<b>202,226</b>	<b>47,803</b>	<b>38,795</b>	<b>37,316</b>	<b>2,453,733</b>

Note: See boxes 7.1, 7.2, and 7.3 for notes on data limitations and methods.

**Table S9.3: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2010–11**

<b>Principal diagnosis</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	1,529	3,159	4,297	1,149	852	n.p.	n.p.	n.p.	11,423
C00–D48	Neoplasms	25,411	29,250	25,459	11,243	8,231	n.p.	n.p.	n.p.	103,718
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,473	2,571	2,440	1,071	870	n.p.	n.p.	n.p.	8,719
E00–E90	Endocrine, nutritional and metabolic diseases	5,796	5,417	5,691	3,667	2,145	n.p.	n.p.	n.p.	24,028
F00–F99	Mental and behavioural disorders	10,884	8,588	8,278	3,871	1,731	n.p.	n.p.	n.p.	34,748
G00–G99	Diseases of the nervous system	14,838	15,739	17,416	6,785	4,608	n.p.	n.p.	n.p.	61,062
H00–H59	Diseases of the eye and adnexa	3,025	2,054	1,409	2,379	1,153	n.p.	n.p.	n.p.	10,408
H60–H95	Diseases of the ear and mastoid process	1,974	1,276	1,395	718	694	n.p.	n.p.	n.p.	6,309
I00–I99	Diseases of the circulatory system	24,714	31,947	29,848	10,637	8,574	n.p.	n.p.	n.p.	108,745
J00–J99	Diseases of the respiratory system	18,527	18,533	19,310	7,110	6,262	n.p.	n.p.	n.p.	72,734
K00–K93	Diseases of the digestive system	25,133	25,639	27,490	10,585	8,788	n.p.	n.p.	n.p.	102,535
L00–L99	Diseases of the skin and subcutaneous tissue	3,050	3,784	4,317	1,384	1,058	n.p.	n.p.	n.p.	14,181
M00–M99	Diseases of the musculoskeletal system and connective tissue	43,818	42,448	35,234	22,958	14,500	n.p.	n.p.	n.p.	166,686
N00–N99	Diseases of the genitourinary system	19,918	18,195	17,872	8,291	7,248	n.p.	n.p.	n.p.	75,142
O00–O99	Pregnancy, childbirth and the puerperium	25,773	22,069	21,242	11,433	5,540	n.p.	n.p.	n.p.	91,342
P00–P96	Certain conditions originating in the perinatal period	2,491	3,116	2,393	2,149	644	n.p.	n.p.	n.p.	11,273
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,336	1,021	835	386	313	n.p.	n.p.	n.p.	4,039
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	8,824	17,941	16,554	6,197	5,991	n.p.	n.p.	n.p.	57,504
S00–T98	Injury, poisoning and certain other consequences of external causes	16,723	17,538	20,362	9,213	6,845	n.p.	n.p.	n.p.	73,733
Z00–Z99	Factors influencing health status and contact with health services	14,781	7,832	5,749	3,697	2,329	n.p.	n.p.	n.p.	36,251
	Not reported	0	543	0	0	0	n.p.	n.p.	n.p.	543
<b>Total</b>		<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,923</b>	<b>88,376</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,075,123</b>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S9.4: Overnight acute separations, for the top 20 principal diagnoses, public hospitals, states and territories, 2010–11**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O80	Single spontaneous delivery <sup>(a)</sup>	39,516	28,430	24,067	10,490	7,502	2,160	2,068	1,676	115,909
R07	Pain in throat and chest	20,523	14,194	12,804	5,429	6,153	637	523	712	60,975
O82	Single delivery by caesarean section <sup>(a)</sup>	17,323	13,492	10,381	5,455	3,936	967	942	762	53,258
J18	Pneumonia, organism unspecified	17,436	13,160	8,790	4,578	3,958	944	882	1,220	50,968
J44	Other chronic obstructive pulmonary disease	16,726	11,109	8,754	3,671	4,068	1,097	515	682	46,622
I21	Acute myocardial infarction	12,152	9,860	8,469	3,419	3,040	991	831	438	39,200
R10	Abdominal and pelvic pain	12,718	10,186	5,871	3,510	2,836	532	480	405	36,538
K80	Cholelithiasis	11,983	9,423	6,768	3,283	2,904	860	520	389	36,130
I50	Heart failure	12,345	8,987	5,656	3,019	2,853	742	449	489	34,540
L03	Cellulitis	11,306	7,593	7,555	3,390	2,339	598	459	719	33,959
N39	Other disorders of urinary system	12,847	7,505	6,251	3,075	2,792	476	463	350	33,759
I20	Angina pectoris	10,378	6,890	6,687	3,122	2,968	650	352	365	31,412
J45	Asthma	8,854	7,367	4,057	2,064	2,357	302	315	370	25,686
I48	Atrial fibrillation and flutter	9,804	5,806	4,384	2,059	2,422	407	330	216	25,428
A09	Other gastroenteritis and colitis of infectious and unspecified origin	8,971	6,157	3,743	2,337	2,071	289	205	336	24,109
K35	Acute appendicitis	7,687	5,799	4,681	2,549	1,542	575	529	316	23,678
S52	Fracture of forearm	7,941	5,741	3,522	2,218	1,527	468	618	464	22,499
S72	Fracture of femur	8,399	5,325	3,654	2,268	1,593	494	395	174	22,302
O81	Single delivery by forceps and vacuum extractor <sup>(a)</sup>	7,100	6,100	3,380	2,491	1,601	372	452	215	21,711
F20	Schizophrenia	6,873	5,553	4,139	2,099	1,847	485	252	266	21,514
	Other	568,016	420,217	303,681	171,981	141,917	33,757	27,215	26,752	1,693,536
<b>Total (all principal diagnoses)</b>		<b>828,898</b>	<b>608,894</b>	<b>447,294</b>	<b>242,507</b>	<b>202,226</b>	<b>47,803</b>	<b>38,795</b>	<b>37,316</b>	<b>2,453,733</b>

(a) A new standard for coding of obstetric episodes was introduced on 1 July 2010, which resulted in a marked increase in the reporting of O80 to O84 as principal diagnoses and a decrease in the reporting of other obstetric diagnoses, such as O70 *Perineal laceration during delivery*. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2, and 7.3 for notes on data limitations and methods.

**Table S9.5: Overnight acute separations, for the top 20 principal diagnoses, private hospitals, states and territories, 2010–11**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
G47	Sleep disorders	11,749	12,287	13,733	5,311	3,730	n.p.	n.p.	n.p.	48,051
M17	Gonarthrosis [arthrosis of knee]	8,847	6,331	6,395	3,548	2,787	n.p.	n.p.	n.p.	29,424
O82	Single delivery by caesarean section <sup>(a)</sup>	6,469	5,175	7,184	4,345	1,956	n.p.	n.p.	n.p.	25,893
M75	Shoulder lesions	5,094	5,860	4,740	4,070	2,069	n.p.	n.p.	n.p.	22,690
O80	Single spontaneous delivery <sup>(a)</sup>	5,462	4,406	4,482	3,481	2,220	n.p.	n.p.	n.p.	21,228
K40	Inguinal hernia	6,603	4,706	4,370	2,159	1,641	n.p.	n.p.	n.p.	20,576
J35	Chronic diseases of tonsils and adenoids	7,620	3,794	3,681	2,147	1,542	n.p.	n.p.	n.p.	19,619
K80	Cholelithiasis	5,351	4,407	4,613	1,942	1,574	n.p.	n.p.	n.p.	18,851
M16	Coxarthrosis [arthrosis of hip]	4,814	4,388	2,793	1,787	1,513	n.p.	n.p.	n.p.	16,317
I20	Angina pectoris	2,949	3,949	4,229	1,609	953	n.p.	n.p.	n.p.	14,110
R07	Pain in throat and chest	1,351	4,378	4,194	1,227	2,184	n.p.	n.p.	n.p.	13,627
I25	Chronic ischaemic heart disease	4,400	4,015	3,015	921	912	n.p.	n.p.	n.p.	13,565
I48	Atrial fibrillation and flutter	2,026	3,451	3,949	1,215	1,238	n.p.	n.p.	n.p.	12,139
M51	Other intervertebral disc disorders	3,157	2,440	3,005	1,598	777	n.p.	n.p.	n.p.	11,424
M23	Internal derangement of knee	2,395	2,771	2,402	1,559	1,236	n.p.	n.p.	n.p.	10,803
J34	Other disorders of nose and nasal sinuses	3,879	2,657	1,448	1,060	932	n.p.	n.p.	n.p.	10,630
C50	Malignant neoplasm of breast	2,620	3,329	2,234	1,028	907	n.p.	n.p.	n.p.	10,591
C61	Malignant neoplasm of prostate	3,223	2,856	2,374	1,010	575	n.p.	n.p.	n.p.	10,542
E66	Obesity	2,518	2,049	1,933	2,138	961	n.p.	n.p.	n.p.	10,301
N40	Hyperplasia of prostate	3,252	2,788	2,006	932	826	n.p.	n.p.	n.p.	10,238
Other		176,239	192,623	184,811	81,836	57,843	n.p.	n.p.	n.p.	724,504
<b>Total (All principal diagnoses)</b>		<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,923</b>	<b>88,376</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,075,123</b>

(a) A new standard for coding of obstetric episodes was introduced on 1 July 2010, which resulted in a marked increase in the reporting of O80 to O84 as principal diagnoses and a decrease in the reporting of other obstetric diagnoses, such as O70 *Perineal laceration during delivery*. The standard was progressively implemented in private hospitals over the 2010–11 reporting period. See Appendix 2 for more information.

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S9.6: Overnight acute separations, by broad category of service<sup>(a)</sup>, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	69,731	51,012	40,431	20,252	14,098	3,876	3,835	2,851	206,086
Specialist mental health	29,887	19,652	16,431	9,011	7,254	2,166	1,203	830	86,434
Emergency									
Surgical	72,471	54,090	37,334	25,801	18,285	5,336	5,535	4,235	223,087
Medical	450,898	297,893	234,825	128,304	109,416	20,705	18,467	22,026	1,282,534
Other	19,666	12,365	7,884	5,621	4,815	1,326	1,019	850	53,546
Non-emergency									
Surgical	100,378	93,825	62,053	32,376	29,122	7,099	5,921	2,586	333,360
Medical	79,331	73,445	43,168	19,679	17,173	6,831	2,629	3,685	245,941
Other	6,536	6,612	5,168	1,463	2,063	464	186	253	22,745
<i>Total</i>	<i>828,898</i>	<i>608,894</i>	<i>447,294</i>	<i>242,507</i>	<i>202,226</i>	<i>47,803</i>	<i>38,795</i>	<i>37,316</i>	<i>2,453,733</i>
<b>Private hospitals</b>									
Childbirth	22,622	19,822	17,982	10,037	4,922	n.p.	n.p.	n.p.	79,858
Specialist mental health	10,014	7,311	6,291	3,432	1,402	n.p.	n.p.	n.p.	29,110
Emergency									
Surgical	3,621	8,574	10,728	5,002	4,188	n.p.	n.p.	n.p.	32,663
Medical	13,634	33,701	52,923	14,717	15,452	n.p.	n.p.	n.p.	132,729
Other	856	3,440	3,945	1,454	1,299	n.p.	n.p.	n.p.	11,209
Non-emergency									
Surgical	155,102	129,572	111,986	66,793	44,513	n.p.	n.p.	n.p.	532,902
Medical	54,567	63,604	53,242	20,934	n.p.	n.p.	n.p.	1,461	217,282
Other	9,602	12,636	10,494	2,554	n.p.	n.p.	n.p.	156	39,370
<i>Total</i>	<i>270,018</i>	<i>278,660</i>	<i>267,591</i>	<i>124,923</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>4,919</i>	<i>1,075,123</i>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S9.7: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 6.0, public hospitals, states and territories, 2010–11**

<b>Major Diagnostic Category</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	4,353	3,491	2,399	1,138	1,016	234	220	174	13,025
01	Diseases and disorders of the nervous system	53,321	40,388	26,933	14,913	12,882	3,408	2,315	1,825	155,985
02	Diseases and disorders of the eye	5,983	4,536	2,722	2,077	1,303	143	237	328	17,329
03	Diseases and disorders of the ear, nose, mouth and throat	29,875	26,137	17,842	11,009	9,182	1,974	1,742	1,901	99,662
04	Diseases and disorders of the respiratory system	84,371	60,825	43,370	22,004	20,942	4,616	3,404	4,607	244,139
05	Diseases and disorders of the circulatory system	103,029	73,512	59,257	26,075	27,613	5,510	4,416	3,226	302,638
06	Diseases and disorders of the digestive system	94,034	69,304	47,629	26,720	22,387	5,365	4,193	2,801	272,433
07	Diseases and disorders of the hepatobiliary system and pancreas	26,449	19,950	13,857	7,216	6,062	1,773	1,214	1,173	77,694
08	Diseases and disorders of the musculoskeletal system and connective tissue	83,596	60,978	42,921	26,437	18,999	5,172	4,809	3,507	246,419
09	Diseases and disorders of the skin, subcutaneous tissue and breast	32,869	22,727	21,140	11,189	8,085	1,819	1,436	3,189	102,454
10	Endocrine, nutritional and metabolic diseases and disorders	16,967	12,901	9,334	5,042	4,332	1,021	753	816	51,166
11	Diseases and disorders of the kidney and urinary tract	37,316	27,956	20,300	10,451	9,024	1,656	1,856	1,838	110,397
12	Diseases and disorders of the male reproductive system	6,716	5,398	3,593	2,144	1,862	441	431	263	20,848
13	Diseases and disorders of the female reproductive system	13,905	11,889	8,397	4,012	3,818	985	649	658	44,313
14	Pregnancy, childbirth and puerperium	90,629	63,998	52,691	27,249	18,333	5,069	4,975	4,526	267,470
15	Newborns and other neonates	17,976	13,802	11,041	5,764	4,579	1,377	1,354	1,075	56,968
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	10,298	8,083	5,118	2,850	3,085	581	442	347	30,804
17	Neoplastic disorders (haematological and solid neoplasms)	6,474	5,460	2,982	1,769	1,686	546	335	111	19,363
18	Infectious and parasitic diseases	18,417	11,835	9,067	5,159	3,125	762	771	1,004	50,140
19	Mental diseases and disorders	31,756	25,559	17,660	11,421	10,122	2,002	1,197	857	100,574
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	10,598	4,156	4,348	3,671	1,918	422	505	292	25,910
21	Injuries, poisoning and toxic effects of drugs	32,954	24,057	18,228	10,948	7,419	1,896	1,313	1,978	98,793
22	Burns	1,316	1,084	1,095	767	646	132	30	290	5,360
23	Factors influencing health status and other contacts with health services	14,350	9,852	4,825	1,953	3,482	814	159	459	35,894
ED	Error DRGs	1,346	1,016	545	529	324	85	39	71	3,955
<b>Total</b>		<b>828,898</b>	<b>608,894</b>	<b>447,294</b>	<b>242,507</b>	<b>202,226</b>	<b>47,803</b>	<b>38,795</b>	<b>37,316</b>	<b>2,453,733</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.8: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 6.0, private hospitals, states and territories, 2010–11**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	587	776	805	254	277	n.p.	n.p.	n.p.	2,786
01	Diseases and disorders of the nervous system	7,505	8,736	9,194	3,227	2,220	n.p.	n.p.	n.p.	31,837
02	Diseases and disorders of the eye	3,138	2,183	1,550	2,494	1,208	n.p.	n.p.	n.p.	10,969
03	Diseases and disorders of the ear, nose, mouth and throat	19,966	14,007	12,698	7,413	6,037	n.p.	n.p.	n.p.	63,050
04	Diseases and disorders of the respiratory system	17,885	25,050	28,343	8,759	7,058	n.p.	n.p.	n.p.	89,566
05	Diseases and disorders of the circulatory system	25,854	36,492	33,816	11,459	10,984	n.p.	n.p.	n.p.	121,719
06	Diseases and disorders of the digestive system	24,289	28,957	31,155	11,910	9,424	n.p.	n.p.	n.p.	110,782
07	Diseases and disorders of the hepatobiliary system and pancreas	7,817	7,851	8,092	2,885	2,511	n.p.	n.p.	n.p.	30,622
08	Diseases and disorders of the musculoskeletal system and connective tissue	55,528	53,452	47,622	28,445	19,160	n.p.	n.p.	n.p.	213,818
09	Diseases and disorders of the skin, subcutaneous tissue and breast	13,588	14,996	13,174	6,679	4,268	n.p.	n.p.	n.p.	55,244
10	Endocrine, nutritional and metabolic diseases and disorders	6,994	6,028	6,127	4,052	2,383	n.p.	n.p.	n.p.	27,032
11	Diseases and disorders of the kidney and urinary tract	9,286	12,160	10,723	4,299	3,964	n.p.	n.p.	n.p.	42,584
12	Diseases and disorders of the male reproductive system	7,710	6,699	5,287	2,555	1,807	n.p.	n.p.	n.p.	25,284
13	Diseases and disorders of the female reproductive system	12,298	8,964	9,604	4,720	3,850	n.p.	n.p.	n.p.	41,313
14	Pregnancy, childbirth and puerperium	26,584	22,362	21,406	11,507	5,577	n.p.	n.p.	n.p.	92,972
15	Newborns and other neonates	7,553	3,559	2,690	2,471	725	n.p.	n.p.	n.p.	17,748
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	1,575	2,754	2,597	1,215	907	n.p.	n.p.	n.p.	9,362
17	Neoplastic disorders (haematological and solid neoplasms)	1,517	3,296	3,258	1,619	973	n.p.	n.p.	n.p.	10,970
18	Infectious and parasitic diseases	1,960	2,897	3,724	1,187	839	n.p.	n.p.	n.p.	11,092
19	Mental diseases and disorders	8,200	6,622	6,346	3,341	1,490	n.p.	n.p.	n.p.	27,294
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,440	1,934	1,658	649	248	n.p.	n.p.	n.p.	7,038
21	Injuries, poisoning and toxic effects of drugs	2,910	3,816	4,456	2,332	1,126	n.p.	n.p.	n.p.	15,276
22	Burns	24	57	55	33	18	n.p.	n.p.	n.p.	196
23	Factors influencing health status and other contacts with health services	4,296	3,811	2,369	1,209	1,080	n.p.	n.p.	n.p.	13,512
ED	Error DRGs	514	1,201	842	209	242	n.p.	n.p.	n.p.	3,057
<b>Total</b>		<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,923</b>	<b>88,376</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,075,123</b>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table. Abbreviation: n.p.—not published.

**Table S9.9: Overnight acute separations, for the top 20 AR-DRGs version 6.0, public hospitals, states and territories, 2010–11**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60Z	Vaginal delivery	48,091	34,644	27,600	13,645	9,267	2,658	2,576	1,878	140,359
F74Z	Chest pain	19,325	13,539	12,317	5,023	5,827	581	484	658	57,754
O01B	Caesarean delivery W/O catastrophic or severe CC	14,851	11,011	8,936	4,384	3,217	861	786	617	44,663
J64B	Cellulitis W/O catastrophic or severe CC	12,395	7,861	9,135	4,594	2,734	630	553	1,630	39,532
G70B	Other digestive system diagnoses W/O catastrophic or severe CC	13,043	9,131	7,064	4,370	3,047	675	481	429	38,240
E65B	Chronic obstructive airways disease W/O catastrophic CC	13,587	8,045	7,486	3,300	3,197	985	416	852	37,868
G66Z	Abdominal pain or mesenteric adenitis	11,702	8,964	5,302	3,242	2,557	438	469	382	33,056
G67B	Oesophagitis and gastroenteritis W/O cat/sev CC	12,831	6,776	5,733	3,256	2,905	448	338	377	32,664
O66Z	Antenatal and other obstetric admission	11,191	6,138	6,368	3,400	2,021	668	554	888	31,228
L63B	Kidney and urinary tract infections W/O catastrophic or severe CC	10,582	6,162	5,674	3,236	2,221	410	428	374	29,087
U61Z	Schizophrenia disorders	9,075	7,489	5,271	2,688	2,733	612	366	380	28,614
E62C	Respiratory infections/inflammations W/O CC	9,850	5,886	5,378	2,843	2,202	511	534	724	27,928
D63Z	Otitis media and URI	8,644	5,306	5,117	2,811	2,231	443	249	557	25,358
X60B	Injuries W/O catastrophic or severe CC	9,379	5,984	4,582	2,739	1,481	299	246	620	25,330
F76B	Arrhythmia, cardiac arrest and conduction disorders W/O cat or sev CC	9,912	5,602	4,780	1,905	2,070	463	344	219	25,295
E69B	Bronchitis and asthma W/O CC	9,332	6,489	3,998	2,126	2,361	310	297	285	25,198
F62B	Heart failure and shock W/O catastrophic CC	8,518	5,105	3,852	2,202	1,961	554	306	356	22,854
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O cat or sev CC	7,131	5,512	3,993	1,990	1,708	508	330	185	21,357
U63Z	Major affective disorders	6,756	4,798	3,521	2,222	2,750	426	357	152	20,982
U67Z	Personality disorders and acute reactions	6,971	4,297	3,505	3,275	1,990	502	203	154	20,897
Other		575,732	440,155	307,682	169,256	143,746	34,821	28,478	25,599	1,725,469
<b>Total</b>		<b>828,898</b>	<b>608,894</b>	<b>447,294</b>	<b>242,507</b>	<b>202,226</b>	<b>47,803</b>	<b>38,795</b>	<b>37,316</b>	<b>2,453,733</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.10: Overnight acute separations, for the top 20 AR-DRGs version 6.0, private hospitals, states and territories, 2010–11**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60Z	Vaginal delivery	12,815	11,563	9,122	5,266	2,769	n.p.	n.p.	n.p.	44,208
E63Z	Sleep apnoea	10,877	11,029	12,573	3,789	3,108	n.p.	n.p.	n.p.	42,363
I16Z	Other shoulder procedures	7,421	7,558	6,606	5,230	2,734	n.p.	n.p.	n.p.	30,782
O01B	Caesarean delivery W/O catastrophic or severe CC	7,910	6,468	7,045	3,853	1,656	n.p.	n.p.	n.p.	28,354
G10B	Hernia procedures W/O CC	8,596	6,285	5,907	3,055	2,226	n.p.	n.p.	n.p.	27,508
I04B	Knee replacement W/O catastrophic or severe CC	6,447	4,676	4,944	2,477	2,070	n.p.	n.p.	n.p.	21,668
F42B	Circulatory disorders W/O AMI with invasive cardiac inves proc W/O cat or sev CC	4,843	7,712	5,480	1,511	1,356	n.p.	n.p.	n.p.	21,287
D11Z	Tonsillectomy and/or adenoidectomy	7,520	4,082	3,808	2,017	1,659	n.p.	n.p.	n.p.	19,859
J06Z	Major procedures for breast conditions	5,000	4,139	3,337	2,781	1,575	n.p.	n.p.	n.p.	17,758
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O cat or sev CC	5,382	4,007	4,222	1,763	1,336	n.p.	n.p.	n.p.	17,598
I03B	Hip replacement W/O catastrophic CC	4,831	4,463	2,953	1,796	1,658	n.p.	n.p.	n.p.	16,709
U63Z	Major affective disorders	4,302	3,358	3,323	1,676	795	n.p.	n.p.	n.p.	14,079
I10B	Other back and neck procedures W/O catastrophic or severe CC	4,082	2,759	2,460	1,804	913	n.p.	n.p.	n.p.	12,385
N04B	Hysterectomy for non-malignancy W/O catastrophic or severe CC	3,686	2,482	2,976	1,574	924	n.p.	n.p.	n.p.	12,320
M02B	Transurethral prostatectomy W/O catastrophic or severe CC	3,629	3,204	2,306	1,080	940	n.p.	n.p.	n.p.	11,671
I20Z	Other foot procedures	3,024	3,230	1,737	1,631	1,011	n.p.	n.p.	n.p.	11,199
D10Z	Nasal procedures	3,746	2,724	1,535	1,620	763	n.p.	n.p.	n.p.	10,996
I18Z	Other knee procedures	2,103	2,677	2,172	1,791	1,494	n.p.	n.p.	n.p.	10,726
I13B	Humerus, tibia, fibula and ankle procedures W/O CC	2,429	2,673	2,180	1,365	1,236	n.p.	n.p.	n.p.	10,340
D06Z	Sinus and complex middle ear procedures	3,092	2,110	1,696	1,009	1,229	n.p.	n.p.	n.p.	9,778
	Other	133,837	161,604	161,321	65,990	49,615	n.p.	n.p.	n.p.	683,535
<b>Total</b>		<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,923</b>	<b>88,376</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,075,123</b>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S9.11: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public hospitals, states and territories, 2010–11**

<b>Procedure chapters</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
1–86	Procedures on nervous system	15,328	13,361	7,595	4,931	3,452	1,137	845	558	47,207
110–129	Procedures on endocrine system	2,635	1,949	1,211	704	517	137	112	40	7,305
160–256	Procedures on eye and adnexa	4,125	3,563	1,896	1,597	1,005	78	157	198	12,619
300–333	Procedures on ear and mastoid process	2,379	2,607	1,932	1,312	895	160	184	248	9,717
370–422	Procedures on nose, mouth and pharynx	10,631	13,183	6,946	4,891	4,059	817	963	415	41,905
450–490	Dental services	1,307	1,151	1,226	760	554	147	209	276	5,630
520–570	Procedures on respiratory system	27,605	23,789	15,283	7,988	6,252	1,738	1,601	1,154	85,410
600–777	Procedures on cardiovascular system	34,199	26,844	18,882	10,188	9,301	2,196	2,478	853	104,941
800–817	Procedures on blood and blood-forming organs	7,215	5,667	4,146	2,114	1,804	442	448	167	22,003
850–1011	Procedures on digestive system	68,921	55,227	37,595	20,759	17,672	4,973	3,726	2,037	210,910
1040–1129	Procedures on urinary system	21,797	18,482	12,711	7,294	6,485	1,265	1,366	2,003	71,403
1160–1203	Procedures on male genital organs	5,823	5,203	2,944	1,806	1,688	424	348	203	18,439
1240–1299	Gynaecological procedures	14,859	12,531	9,054	4,600	4,114	1,135	704	640	47,637
1330–1347	Obstetric procedures	61,668	44,891	34,743	20,688	12,985	3,342	3,449	2,414	184,180
1360–1579	Procedures on musculoskeletal system	59,091	45,646	32,637	20,451	14,098	4,459	4,050	3,137	183,569
1600–1718	Dermatological and plastic procedures	28,781	27,021	20,226	12,541	7,934	1,786	1,744	3,328	103,361
1740–1759	Procedures on breast	3,433	2,912	2,381	1,343	1,136	243	189	131	11,768
1786–1799	Radiation oncology procedures	2,712	1,920	1,557	641	633	177	211	32	7,883
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	473,734	370,024	253,671	146,862	122,354	31,211	24,928	19,181	1,441,965
1940–2016	Imaging services <sup>(b)</sup>	15,248	5,190	4,558	2,826	1,672	603	544	234	30,875
	Procedures reported	861,491	681,161	471,194	274,296	218,610	56,470	48,256	37,249	2,648,727
	No procedure or not reported	298,800	196,858	164,588	77,855	70,273	13,972	10,716	14,915	847,977
<b>Total</b>		<b>844,709</b>	<b>611,971</b>	<b>447,294</b>	<b>242,423</b>	<b>202,226</b>	<b>47,812</b>	<b>38,795</b>	<b>37,316</b>	<b>2,472,546</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.12: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, private hospitals, states and territories, 2010–11**

Procedure chapters		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	12,940	11,071	9,839	6,563	2,907	n.p.	n.p.	n.p.	44,937
110–129	Procedures on endocrine system	2,888	1,670	1,680	912	524	n.p.	n.p.	n.p.	7,903
160–256	Procedures on eye and adnexa	2,917	2,023	1,431	2,344	1,155	n.p.	n.p.	n.p.	10,218
300–333	Procedures on ear and mastoid process	3,144	1,636	1,816	1,283	838	n.p.	n.p.	n.p.	9,051
370–422	Procedures on nose, mouth and pharynx	16,846	10,947	9,149	6,708	4,629	n.p.	n.p.	n.p.	50,747
450–490	Dental services	1,086	861	569	382	407	n.p.	n.p.	n.p.	3,458
520–570	Procedures on respiratory system	5,340	6,835	10,258	2,169	2,637	n.p.	n.p.	n.p.	27,588
600–777	Procedures on cardiovascular system	22,024	26,746	21,620	8,605	6,052	n.p.	n.p.	n.p.	87,019
800–817	Procedures on blood and blood-forming organs	4,649	3,778	4,158	1,718	1,488	n.p.	n.p.	n.p.	16,517
850–1011	Procedures on digestive system	36,505	36,285	38,069	16,440	12,411	n.p.	n.p.	n.p.	146,584
1040–1129	Procedures on urinary system	13,286	12,323	11,891	5,045	4,709	n.p.	n.p.	n.p.	49,729
1160–1203	Procedures on male genital organs	8,744	7,249	5,580	2,849	1,984	n.p.	n.p.	n.p.	27,881
1240–1299	Gynaecological procedures	12,540	8,966	9,979	4,642	3,898	n.p.	n.p.	n.p.	41,968
1330–1347	Obstetric procedures	22,271	19,125	17,559	10,103	4,839	n.p.	n.p.	n.p.	78,110
1360–1579	Procedures on musculoskeletal system	48,811	46,567	41,054	25,599	17,315	n.p.	n.p.	n.p.	188,036
1600–1718	Dermatological and plastic procedures	13,426	13,968	10,947	7,211	4,204	n.p.	n.p.	n.p.	52,135
1740–1759	Procedures on breast	5,938	5,008	4,358	3,475	1,939	n.p.	n.p.	n.p.	21,854
1786–1799	Radiation oncology procedures	744	855	663	122	209	n.p.	n.p.	n.p.	2,637
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	225,905	223,976	210,384	103,504	72,405	n.p.	n.p.	n.p.	871,662
1940–2016	Imaging services <sup>(b)</sup>	6,467	5,707	7,191	1,338	1,185	n.p.	n.p.	n.p.	22,104
	<i>Procedures reported</i>	<i>466,471</i>	<i>445,596</i>	<i>418,195</i>	<i>211,012</i>	<i>145,735</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,760,138</i>
	No procedure or not reported	26,319	35,580	44,043	13,419	12,703	n.p.	n.p.	n.p.	138,905
<b>Total</b>		<b>270,018</b>	<b>278,660</b>	<b>267,591</b>	<b>124,883</b>	<b>88,376</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,075,164</b>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

**Table S9.13: Procedure statistics for the top 20 ACHI procedure blocks for overnight acute separations<sup>(b)</sup>, public hospitals, states and territories, 2010–11**

<b>Procedure block</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
1916	Generalised allied health interventions	308,433	246,293	164,350	98,242	84,722	20,685	15,679	11,851	950,255
1910	Cerebral anaesthesia	210,686	166,885	117,946	66,640	54,892	14,728	13,467	8,804	654,048
1893	Administration of blood and blood products	46,916	36,447	22,525	12,201	11,244	3,057	2,332	1,275	135,997
1909	Conduction anaesthesia	36,422	33,778	19,934	14,446	8,981	2,627	1,618	1,854	119,660
1344	Postpartum suture	25,205	15,817	11,933	5,991	4,361	1,084	1,577	795	66,763
1920	Administration of pharmacotherapy	18,579	18,296	11,376	6,119	3,702	1,218	1,217	848	61,355
1340	Caesarean section	19,548	14,882	11,610	6,034	4,353	1,125	1,091	857	59,500
1334	Medical or surgical induction of labour	16,596	12,523	9,292	5,737	4,654	925	851	701	51,279
1333	Analgesia and anaesthesia during labour and delivery procedure	14,898	10,663	8,918	6,948	4,303	913	948	453	48,044
1335	Medical or surgical augmentation of labour	14,846	10,706	9,971	4,730	2,932	938	902	631	45,656
668	Coronary angiography	14,718	10,525	7,530	4,260	3,960	1,058	849	441	43,341
569	Ventilatory support	10,329	8,780	5,992	2,957	2,481	683	622	510	32,354
570	Noninvasive ventilatory support	10,255	9,492	4,320	2,870	1,665	534	502	379	30,017
965	Cholecystectomy	9,574	7,881	5,273	2,602	2,414	685	479	272	29,180
926	Appendicectomy	9,293	7,153	5,542	3,335	1,872	693	651	396	28,935
986	Division of abdominal adhesions	7,963	7,524	4,980	2,131	2,192	504	542	153	25,989
1343	Other procedures associated with delivery	8,264	8,198	3,458	2,709	1,820	368	385	279	25,481
1566	Excision procedures on other musculoskeletal sites	7,923	6,974	4,076	2,208	1,746	831	318	749	24,825
1912	Postprocedural analgesia	7,366	4,252	4,733	5,968	1,401	521	303	155	24,699
1341	Fetal monitoring	6,964	7,321	6,075	726	2,437	277	289	248	24,337
	Other	449,412	361,282	247,047	151,086	113,430	29,984	25,661	18,277	1,396,179
	Separations with no procedure reported	298,800	196,858	164,588	77,855	70,273	13,972	10,716	14,915	847,977
<b>Total</b>		<b>1,254,190</b>	<b>1,005,672</b>	<b>686,881</b>	<b>407,940</b>	<b>319,562</b>	<b>83,438</b>	<b>70,283</b>	<b>49,928</b>	<b>3,877,894</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table.

**Table S9.14: Procedure statistics<sup>(a)</sup> for the top 20 ACHI procedure blocks for overnight acute separations<sup>(b)</sup>, private hospitals, states and territories, 2010–11**

<b>Procedure block</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
1910	Cerebral anaesthesia	169,787	152,555	138,813	75,827	53,369	n.p.	n.p.	n.p.	617,925
1916	Generalised allied health interventions	90,913	95,745	94,904	35,428	32,018	n.p.	n.p.	n.p.	362,240
1909	Conduction anaesthesia	36,151	34,419	21,967	17,617	11,185	n.p.	n.p.	n.p.	126,185
1893	Administration of blood and blood products	13,333	16,979	14,839	5,328	5,615	n.p.	n.p.	n.p.	58,210
1828	Sleep study	11,536	11,923	13,216	4,187	3,759	n.p.	n.p.	n.p.	45,701
668	Coronary angiography	9,270	13,317	10,284	3,146	2,547	n.p.	n.p.	n.p.	39,395
1340	Caesarean section	9,481	7,958	8,595	4,610	2,080	n.p.	n.p.	n.p.	34,459
1912	Postprocedural analgesia	11,170	4,006	10,428	3,913	1,238	n.p.	n.p.	n.p.	31,073
607	Examination procedures on ventricle	5,677	11,174	8,064	2,318	1,696	n.p.	n.p.	n.p.	29,416
1333	Analgesia and anaesthesia during labour and delivery procedure	8,595	6,030	5,275	4,650	2,048	n.p.	n.p.	n.p.	27,510
1920	Administration of pharmacotherapy	3,736	9,744	7,251	3,907	1,682	n.p.	n.p.	n.p.	27,060
412	Tonsillectomy or adenoidectomy	9,258	5,343	5,145	3,555	2,108	n.p.	n.p.	n.p.	26,567
1518	Arthroplasty of knee	8,133	5,072	5,768	2,934	2,069	n.p.	n.p.	n.p.	25,281
1344	Postpartum suture	7,191	5,924	4,856	2,636	1,518	n.p.	n.p.	n.p.	23,403
986	Division of abdominal adhesions	6,137	5,909	5,750	2,504	1,727	n.p.	n.p.	n.p.	22,939
1334	Medical or surgical induction of labour	6,307	5,315	4,835	3,127	1,718	n.p.	n.p.	n.p.	22,694
965	Cholecystectomy	6,338	4,911	5,210	2,121	1,625	n.p.	n.p.	n.p.	21,260
990	Repair of inguinal hernia	6,749	4,674	4,415	2,199	1,626	n.p.	n.p.	n.p.	20,756
49	Other incision procedures on spinal canal or spinal cord structures	6,150	4,629	4,268	2,730	1,100	n.p.	n.p.	n.p.	19,667
1489	Arthroplasty of hip	5,260	4,834	3,340	1,927	1,819	n.p.	n.p.	n.p.	18,275
	Other	322,260	289,809	261,186	144,272	97,571	n.p.	n.p.	n.p.	1,162,193
	Separations with no procedure reported	26,319	35,580	44,043	13,419	12,703	n.p.	n.p.	n.p.	138,905
<b>Total</b>		<b>753,432</b>	<b>700,270</b>	<b>638,409</b>	<b>328,936</b>	<b>230,118</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,762,209</b>

Note: See boxes 7.1, 7.2, 7.3 for notes on data limitations and methods. See Box 9.1 for footnotes specific to this table.

Abbreviation: n.p.—not published.

# 10 Surgery in Australian hospitals

This chapter presents information related to surgery in Australian hospitals.

The chapter first presents an overview of surgery in public and private hospitals, based on information for about 2.4 million acute surgical separations in 2010–11, sourced from the National Hospital Morbidity Database (NHMD). This section then presents more detailed information on surgery for separations with an *Emergency* or *Elective* Urgency of admission. It includes:

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

Separations were included for which the care type was reported as *Acute*, *Newborn* (with at least one qualified day) and records for which care type was not reported. This section excludes surgery provided for separations categorised as *Childbirth* or *Specialist mental health*. See Box 10.1 for more information about the definition of surgical separations as used in the NHMD.

The chapter then presents waiting times information on 'elective surgery' as defined in the *National health data dictionary version 14* (HDSC 2008), based on:

- data for about 620,000 patients admitted from public acute hospital elective surgery waiting lists. These data are sourced from the National Elective Surgery Waiting Times Data Collection (NESWTDC). The records include information on waiting times, surgical specialty of the scheduled doctor and indicator procedures
- linked public hospital elective surgery waiting times and admitted patient data for over 605,000 records (figures 10.11 to 10.20 and 10.23). The linkage allowed demographic and diagnosis information to be analysed in conjunction with information on waiting times, surgical specialty and indicator procedure from the NESWTDC.

Timely provision of the NESWTDC data by state and territory health authorities allowed the waiting times information to be reported in *Australian hospital statistics 2010–11: emergency department care and elective surgery waiting times* (AHS: EDES, AIHW 2011c) in November 2011. This report presents selected headline statistics from the earlier report, as well as additional information not provided in that report because the admitted patient data were not available.

## What data are reported?

### Admissions involving surgery

Information on admitted patient care for both *Emergency* and *Elective admissions involving surgery* is derived from the NHMD (see Chapter 7). The scope of the NHMD is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free-standing day hospital facilities, and alcohol and drug treatment centres. Terms relevant to admitted patient care data are summarised in Box 7.1.

The data reported are for patients admitted to both public and private hospitals between 1 July 2010 and 30 June 2011. See Appendix 1 for more information.

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

The definition used to classify admitted patient care as elective surgery differs from the definition of elective surgery for the purposes of the NESWTDC (see Box 10.1).

## **Elective surgery waiting times**

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

The data reported are for patients removed from elective surgery waiting lists in public hospitals between 1 July 2010 and 30 June 2011. It is estimated that the NESWTDC data covers about 91% of all elective surgery in public hospitals. Waiting times data are not available for private hospitals. See Appendix 1 for more information.

### **Box 10.1: Definitions**

#### **How are surgical separations defined in this chapter?**

For the NHMD surgical separations are defined as acute care separations with a 'surgical procedure' reported, based on the procedures used to define 'surgical' DRGs in Australian Refined Diagnosis Related Groups (AR-DRG), version 6.0 (DoHA 2008). Separations for *Specialist mental health care* and *Childbirth* were excluded (see Chapter 7 and Appendix 2).

The surgical separations are presented in this chapter as *Emergency* and *Elective admissions involving surgery*. *Emergency admissions* includes separations for which the Urgency of admission was reported as *Emergency* (about 280,000 records nationally). *Elective admissions* includes separations for which the Urgency of admission was reported as *Elective* (about 1.9 million records nationally). A relatively small number of surgical separations had an Urgency of admission that was *Not assigned* or *Not reported* (about 27,000 records nationally). These records are presented in Table 10.1 but are not included in subsequent tables in this chapter.

The use of the term **elective admissions involving surgery** using admitted patient care data from the NHMD is not necessarily the same as **elective surgery** as defined for the National Elective Surgery Waiting Times Data Collection (NESWTDC).

#### **Waiting times data for elective surgery**

For the NESWTDC, elective surgery comprises elective care (admission could be delayed by at least 24 hours), where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (HDSC 2008).

## **Linked admitted patient care and elective surgery waiting times data**

For 2010–11, most states and territories provided the elective surgery waiting times either pre-linked or linkable to the admitted patient data, so that the information on waiting times

could be linked to the information on the surgery that occurred at the end of the wait. Where necessary, the AIHW linked the data with permission of the relevant state or territory and the AIHW Ethics Committee.

The linked elective surgery and admitted patient data allowed analysis of public hospital waiting times for elective surgery for Indigenous and non-Indigenous Australians, by remoteness area of usual residence of the patient, and by socioeconomic status (SES) groups. Estimates of the separation rates for indicator procedures (see Box 10.2 and Appendix 2) and for cancer-related principal diagnoses are included.

#### **Box 10.2: What are the limitations of the data?**

##### **Limitations of admitted patient care data**

- Limitations of the data on admitted patient care are presented in Chapter 7 and Appendix 1.
- The quality of Indigenous status data in the NHMD is variable and these data should be used with caution. For more information on the quality of Indigenous status data see Appendix 1.
- In the Northern Territory, urgency of admission for private hospital separations was missing for all records. All surgical separations have been categorised as elective admissions involving surgery. Therefore, these counts may not agree with counts presented for non-emergency surgery in other chapters in this report.

##### **Limitations of the elective surgery waiting times data**

###### *Coverage*

- The data collection covered most public hospitals that undertake elective surgery (see Appendix 1). Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting list characteristics compared with reporting hospitals. Some smaller remote hospitals may have different patterns of service delivery compared with other hospitals because specialists providing elective surgery services visit these hospitals only periodically.
- For 2010–11, about 91% of public elective surgery admissions were performed by hospitals that also reported to the NESWTDC. This proportion varied by state and territory, ranging from 100% for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 71% in South Australia. The proportion also varied by hospital peer group, ranging from 100% for *Principal referral and specialist women's and children's hospitals* to 65% for *Medium hospitals*.
- The elective surgery waiting times data collection covers public hospitals only, however some patients treated in private hospitals under contract in Victoria and Tasmania were included.
- Methods to calculate waiting times have varied across states and territories and over time (see Appendix 2).
- From 2009–10, the data for the Albury Base Hospital has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria whereas they were formerly reported by and included in statistics for New South Wales.

*(continued)*

**Box 10.2 continued**

- In 2010–11 for patients who were admitted after being transferred from another hospital’s waiting list, New South Wales, South Australia and the Northern Territory reported the total time waited on all hospital waiting lists. This could have an effect of increasing the waiting times reported for overall removals for those jurisdictions relative to others.

**Limitations of the linked NHMD and NESWTDC data**

- The linked data accounted for about 97% of the records provided with waiting times. There was some variation in the linked data coverage between states and territories, ranging from 90% for the Northern Territory to 99% for Queensland and South Australia.
- Coverage of the linked data by remoteness area ranged from 59% in *Remote* areas to 100% in *Major cities*. Coverage by socioeconomic status (SES) group ranged from 88% for the most disadvantaged group (1—Lowest) to 100% for the least disadvantaged group (5—Highest). These variations in coverage should be considered when interpreting the waiting times and the age-standardised rates presented in this chapter.

**Box 10.3: What methods were used?****Analyses of the NHMD and linked NHMD and NESWTDC data**

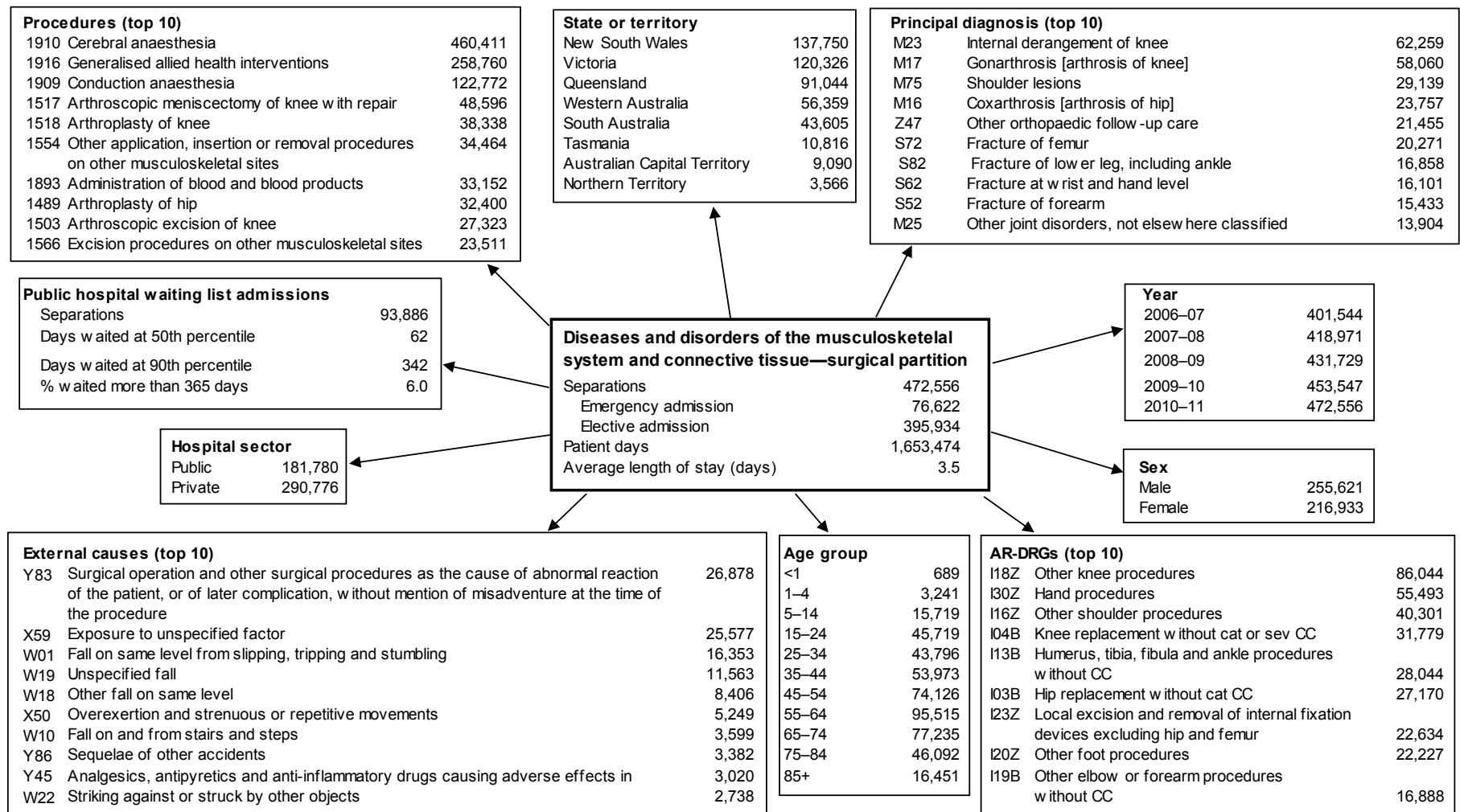
- Elective admissions involving surgery were defined as stated in Box 10.1.
- Includes separations for which the care type was reported as *Acute, Newborn* (with at least one qualified day) and records for which care type was not reported.
- Separation rates are age standardised to the estimated resident population 30 June 2001 (see Appendix 2).

## All surgery

### An example: Surgery for diseases and disorders of the musculoskeletal system

Figure 10.1 presents data on surgical separations for diseases and disorders of the musculoskeletal system. In 2010–11:

- there were 473,000 separations involving musculoskeletal surgery, with one-sixth of these being emergency admissions
- they accounted for over 1,653,000 patient days, with an average length of stay of 3.5 days
- the most common age group was 55 to 64 and there were more separations for males than females
- for patients admitted from public hospital waiting lists, 50% waited 62 or fewer days for their procedure
- about one-quarter of separations had a principal diagnosis reported of either *Internal derangement of knee* or *Gonarthrosis (arthrosis) of knee*
- separations involving surgery for musculoskeletal conditions increased by 18% between 2006–07 and 2010–11.



Abbreviations: ALOS—average length of stay; cat—catastrophic; CC—complications and comorbidities; sev—severe.

**Figure 10.1: Data reported for surgical separations, for the surgical partition of *Diseases and disorders of the musculoskeletal system and connective tissue* with other data elements, all hospitals, 2010–11**

# How has surgery activity changed over time?

## National

From 2009–10 to 2010–11, surgical separations rose 2.3% to almost 2.4 million. Between 2006–07 and 2010–11, the number of surgical separations rose by an average of 3.3% per year (Table 10.1).

The number of emergency admissions involving surgery increased by an average of 2.8% per year between 2006–07 and 2010–11. For public hospitals, the average annual rise in emergency admissions involving surgery was 3.8% each year, emergency admissions involving surgery for private hospitals decreased over the same period.

The number of elective admissions involving surgery increased by an average of 3.6% per year between 2006–07 and 2010–11. The average annual rise in separations was higher in private hospitals (4.6%) than in public hospitals (1.8%).

**Table 10.1: Surgical separations by urgency of admission, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Emergency admissions	210,254	217,594	225,901	229,707	243,771	3.8	6.1
Elective admissions	623,921	625,409	644,176	656,741	669,884	1.8	2.0
<i>Sub-total</i>	<i>834,175</i>	<i>843,003</i>	<i>870,077</i>	<i>886,448</i>	<i>913,655</i>	<i>2.3</i>	<i>3.1</i>
Childbirth-related surgery	60,179	60,703	62,552	64,347	65,993	2.3	2.6
Urgency Not assigned	12,572	15,156	14,730	15,849	15,760	5.8	-0.6
Urgency not reported	99	4	2	3,327	284	30.1	-91.5
<i>All surgery</i>	<i>907,025</i>	<i>918,866</i>	<i>947,361</i>	<i>969,971</i>	<i>995,692</i>	<i>2.4</i>	<i>2.7</i>
<b>Private hospitals</b>							
Emergency admissions	40,271	33,635	30,283	33,069	36,556	-2.4	10.5
Elective admissions	1,068,127	1,140,109	1,172,134	1,245,704	1,279,501	4.6	2.7
<i>Sub-total</i>	<i>1,108,398</i>	<i>1,173,744</i>	<i>1,202,417</i>	<i>1,278,773</i>	<i>1,316,057</i>	<i>4.4</i>	<i>2.9</i>
Childbirth-related surgery	34,549	34,985	35,482	37,097	35,698	0.8	-3.8
Urgency Not assigned	18,936	23,054	34,261	18,745	9,206	-16.5	-50.9
Urgency not reported	0	0	0	330	2,110	..	539.4
<i>All surgery</i>	<i>1,161,883</i>	<i>1,231,783</i>	<i>1,272,160</i>	<i>1,334,945</i>	<i>1,363,071</i>	<i>4.1</i>	<i>2.1</i>
<b>All hospitals</b>							
Emergency admissions	250,525	251,229	256,184	262,776	280,327	2.8	6.7
Elective admissions	1,692,048	1,765,518	1,816,310	1,902,445	1,949,385	3.6	2.5
<i>Sub-total</i>	<i>1,942,573</i>	<i>2,016,747</i>	<i>2,072,494</i>	<i>2,165,221</i>	<i>2,229,712</i>	<i>3.5</i>	<i>3.0</i>
Childbirth-related surgery	94,728	95,688	98,034	101,444	101,691	1.8	0.2
Urgency Not assigned	31,508	38,210	48,991	34,594	24,966	-5.7	-27.8
Urgency not reported	99	4	2	3,657	2,394	121.8	-34.5
<i>All surgery</i>	<i>2,068,908</i>	<i>2,150,649</i>	<i>2,219,521</i>	<i>2,304,916</i>	<i>2,358,763</i>	<i>3.3</i>	<i>2.3</i>

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Abbreviation:* ..—not applicable.

## **States and territories**

### **Emergency admissions**

Between 2006–07 and 2010–11, the number of emergency admissions involving surgery increased for public hospitals in most states and territories (Table 10.2).

Emergency admissions involving surgery in private hospitals also increased in most states and territories. Western Australia had the highest average annual increase in emergency admissions involving surgery (13.4%) in private hospitals between 2006–07 and 2010–11.

### **Elective admissions**

Between 2006–07 and 2010–11, the number of elective admissions involving surgery increased for public hospitals in all states and territories (Table 10.3).

For South Australia, the numbers of elective admissions involving surgery in private hospitals decreased between 2009–10 and 2010–11. Western Australia had the highest average annual increase in elective admissions involving surgery (7.8%) in private hospitals between 2006–07 and 2010–11.

## **How much activity was there in 2010–11?**

In 2010–11, there were about 280,000 emergency admissions involving surgery and more than 1.9 million elective admissions involving surgery (Table 10.4). Nationally, there were about 97 surgical separations per 1,000 population, with emergency admissions accounting for about 12 per 1,000 population. There was some variation among states and territories in the proportion of surgical separations that were emergency admissions, ranging from 11% in New South Wales and Queensland to 20% in the Northern Territory.

**Table 10.2: Emergency admissions involving surgery (separations), public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales</b>							
Public hospitals	72,280	72,801	76,986	77,905	79,858	2.5	2.5
Private hospitals	10,302	4,044	4,235	4,204	4,046	-20.8	-3.8
<i>All hospitals</i>	<i>82,582</i>	<i>76,845</i>	<i>81,221</i>	<i>82,109</i>	<i>83,904</i>	<i>0.4</i>	<i>2.2</i>
<b>Victoria</b>							
Public hospitals	51,798	54,376	54,613	57,817	59,997	3.7	3.8
Private hospitals	6,266	6,554	6,907	7,874	8,964	9.4	13.8
<i>All hospitals</i>	<i>58,064</i>	<i>60,930</i>	<i>61,520</i>	<i>65,691</i>	<i>68,961</i>	<i>4.4</i>	<i>5.0</i>
<b>Queensland</b>							
Public hospitals	31,632	34,150	35,673	36,979	39,814	5.9	7.7
Private hospitals	10,266	9,435	9,582	10,533	11,241	2.3	6.7
<i>All hospitals</i>	<i>41,898</i>	<i>43,585</i>	<i>45,255</i>	<i>47,512</i>	<i>51,055</i>	<i>5.1</i>	<i>7.5</i>
<b>Western Australia</b>							
Public hospitals	23,141	24,456	25,078	26,076	28,025	4.9	7.5
Private hospitals	3,327	3,309	3,635	4,842	5,501	13.4	13.6
<i>All hospitals</i>	<i>26,468</i>	<i>27,765</i>	<i>28,713</i>	<i>30,918</i>	<i>33,526</i>	<i>6.1</i>	<i>8.4</i>
<b>South Australia</b>							
Public hospitals	17,642	18,028	18,889	18,720	19,531	2.6	4.3
Private hospitals	7,000	6,668	5,180	5,013	6,233	-2.9	24.3
<i>All hospitals</i>	<i>24,642</i>	<i>24,696</i>	<i>24,069</i>	<i>23,733</i>	<i>25,764</i>	<i>1.1</i>	<i>8.6</i>
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	5,779	5,414	5,668	2,500	5,770	0.0	130.8
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	4,504	4,751	5,227	5,788	6,377	9.1	10.2
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	3,478	3,618	3,767	3,922	4,399	6.0	12.2
Private hospitals <sup>(b)</sup>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>210,254</b>	<b>217,594</b>	<b>225,901</b>	<b>229,707</b>	<b>243,771</b>	<b>3.8</b>	<b>6.1</b>
<b>Private hospitals</b>	<b>40,271</b>	<b>33,635</b>	<b>30,283</b>	<b>33,069</b>	<b>36,556</b>	<b>-2.4</b>	<b>10.5</b>
<b>All hospitals</b>	<b>250,525</b>	<b>251,229</b>	<b>256,184</b>	<b>262,776</b>	<b>280,327</b>	<b>2.8</b>	<b>6.7</b>

(a) For Tasmania in 2009–10, there was a very high proportion of records for which Urgency of admission was not reported.

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

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Abbreviations: n.p.—not published.

**Table 10.3: Elective admissions involving surgery (separations), public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales</b>							
Public hospitals	185,880	185,131	183,521	184,325	189,681	0.5	2.9
Private hospitals	318,998	344,903	363,203	382,465	391,822	5.3	2.4
<i>All hospitals</i>	<b>504,878</b>	<b>530,034</b>	<b>546,724</b>	<b>566,790</b>	<b>581,503</b>	<b>3.6</b>	<b>2.6</b>
<b>Victoria</b>							
Public hospitals	187,692	186,764	196,885	201,661	202,715	1.9	0.5
Private hospitals	260,633	277,605	284,610	306,155	313,182	4.7	2.3
<i>All hospitals</i>	<b>448,325</b>	<b>464,369</b>	<b>481,495</b>	<b>507,816</b>	<b>515,897</b>	<b>3.6</b>	<b>1.6</b>
<b>Queensland</b>							
Public hospitals	104,224	105,232	108,289	112,458	114,288	2.3	1.6
Private hospitals	245,949	254,987	254,323	270,111	275,223	2.9	1.9
<i>All hospitals</i>	<b>350,173</b>	<b>360,219</b>	<b>362,612</b>	<b>382,569</b>	<b>389,511</b>	<b>2.7</b>	<b>1.8</b>
<b>Western Australia</b>							
Public hospitals	60,623	60,984	65,056	65,452	69,188	3.4	5.7
Private hospitals	107,398	118,314	127,674	132,185	145,057	7.8	9.7
<i>All hospitals</i>	<b>168,021</b>	<b>179,298</b>	<b>192,730</b>	<b>197,637</b>	<b>214,245</b>	<b>6.3</b>	<b>8.4</b>
<b>South Australia</b>							
Public hospitals	58,924	61,372	62,976	63,060	64,087	2.1	1.6
Private hospitals	88,882	93,916	98,037	101,183	100,106	3.0	-1.1
<i>All hospitals</i>	<b>147,806</b>	<b>155,288</b>	<b>161,013</b>	<b>164,243</b>	<b>164,193</b>	<b>2.7</b>	<b>-0.0</b>
<b>Tasmania</b>							
Public hospitals	11,846	10,801	11,701	14,349	13,832	4.0	-3.6
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	9,509	9,771	10,019	9,522	10,149	1.6	6.6
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	5,223	5,354	5,729	5,914	5,944	3.3	0.5
Private hospitals <sup>(a)</sup>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>All hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>623,921</b>	<b>625,409</b>	<b>644,176</b>	<b>656,741</b>	<b>669,884</b>	<b>1.8</b>	<b>2.0</b>
<b>Private hospitals</b>	<b>1,068,127</b>	<b>1,140,109</b>	<b>1,172,134</b>	<b>1,245,704</b>	<b>1,279,501</b>	<b>4.6</b>	<b>2.7</b>
<b>All hospitals</b>	<b>1,692,048</b>	<b>1,765,518</b>	<b>1,816,310</b>	<b>1,902,445</b>	<b>1,949,385</b>	<b>3.6</b>	<b>2.5</b>

(a) In the Northern Territory, as urgency of admission for private hospital separations was missing for all records, all surgical separations have been categorised as elective admissions involving surgery. These separations are included in the total for private hospitals.

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Abbreviations: n.p.—not published.

**Table 10.4: Surgical separations per 1,000 population, by urgency of admission, states and territories, all hospitals, 2010–11**

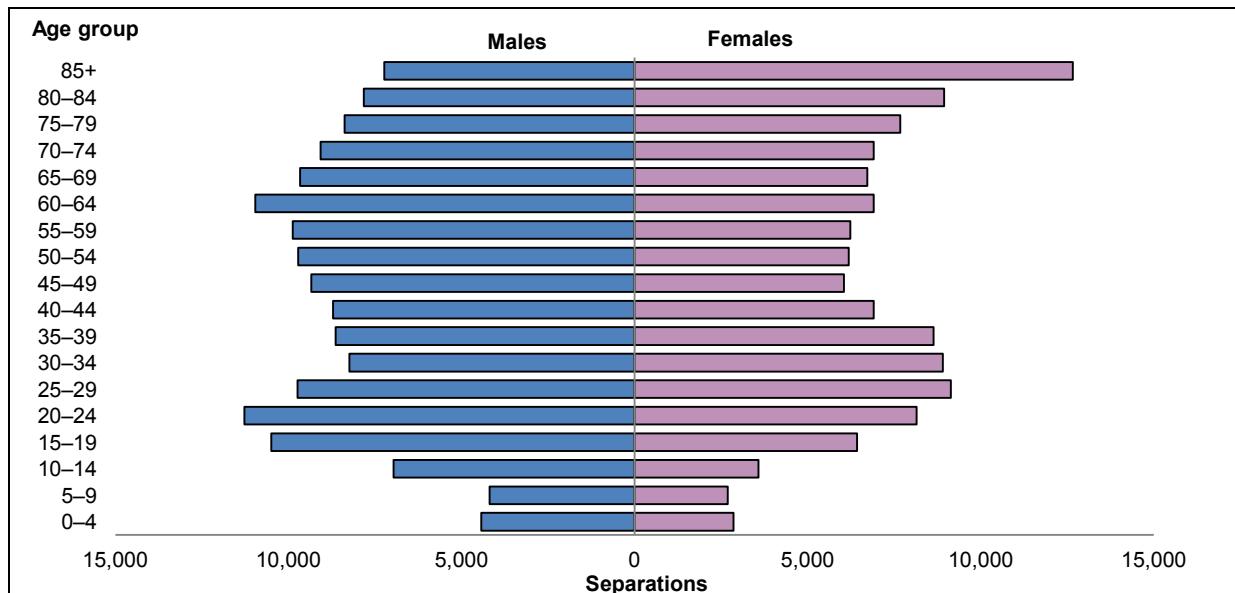
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Emergency admissions</b>									
Separations	83,904	68,961	51,055	33,526	25,764	6,328	6,390	4,399	280,327
Separations per 1,000 population	11.1	12.0	11.2	14.6	14.4	12.0	18.3	20.3	12.2
<b>Elective admissions</b>									
Separations	581,503	515,897	389,511	214,245	164,193	44,905	27,461	11,670	1,949,385
Separations per 1,000 population	76.7	89.6	85.4	93.1	92.4	81.0	80.2	58.5	84.4
<b>Total</b>									
<b>Separations</b>	<b>665,407</b>	<b>584,858</b>	<b>440,566</b>	<b>247,771</b>	<b>189,957</b>	<b>51,233</b>	<b>33,851</b>	<b>16,069</b>	<b>2,229,712</b>
<b>Separations per 1,000 population</b>	<b>87.9</b>	<b>101.6</b>	<b>96.6</b>	<b>107.7</b>	<b>106.8</b>	<b>93.1</b>	<b>98.5</b>	<b>78.8</b>	<b>96.6</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## Who used these services?

### Sex and age group

Males accounted for more than half (55.2%) of emergency admissions involving surgery (Figure 10.2). There were more emergency admissions involving surgery for males than females in almost all age groups except 30 to 39 and those aged 80 and over. Persons aged 15 to 29 accounted for about 20% of all emergency admissions involving surgery.

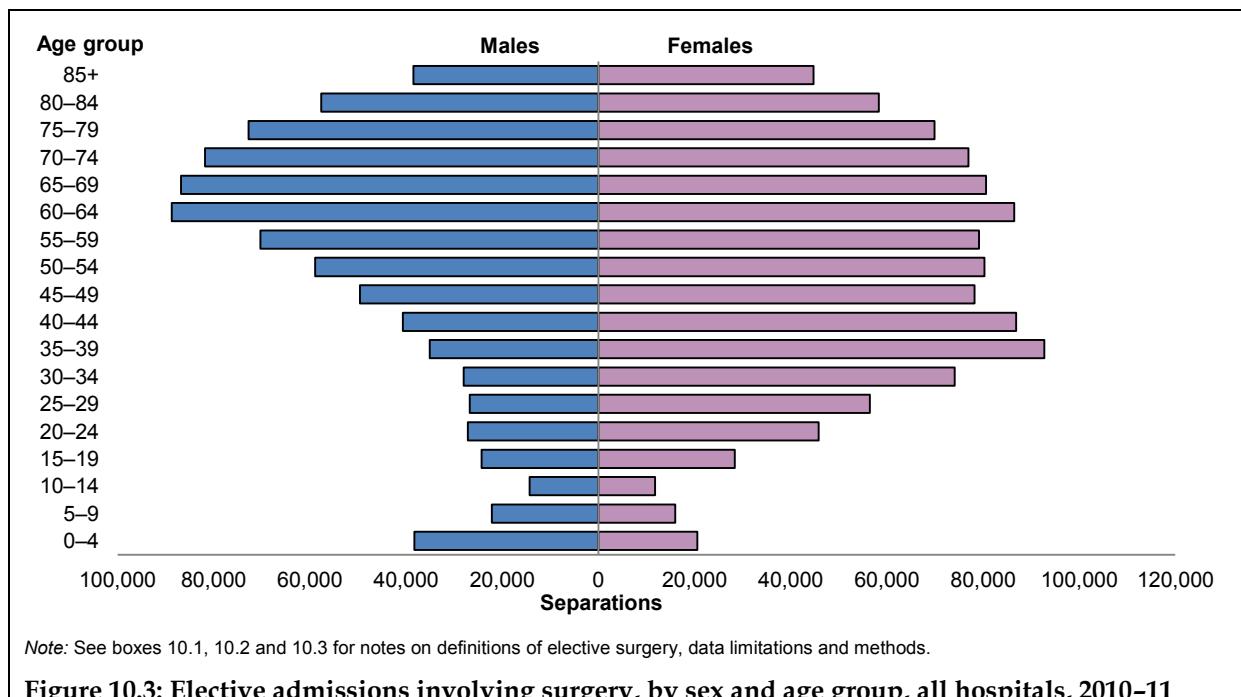


Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

**Figure 10.2: Emergency admissions involving surgery, by sex and age group, all hospitals, 2010–11**

Females accounted for more than half (55.8%) of elective admissions involving surgery (Figure 10.3). There were more elective admissions involving surgery for females than males in the age groups from 15 to 59 and those aged 85 and over. In particular, for the age groups from 30 to 39, there were over two and half times as many elective admissions involving

surgery for females as for males. For children aged 0 to 4, there were about twice as many elective admissions for males as for females.



Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

**Figure 10.3: Elective admissions involving surgery, by sex and age group, all hospitals, 2010-11**

## Aboriginal and Torres Strait Islander people

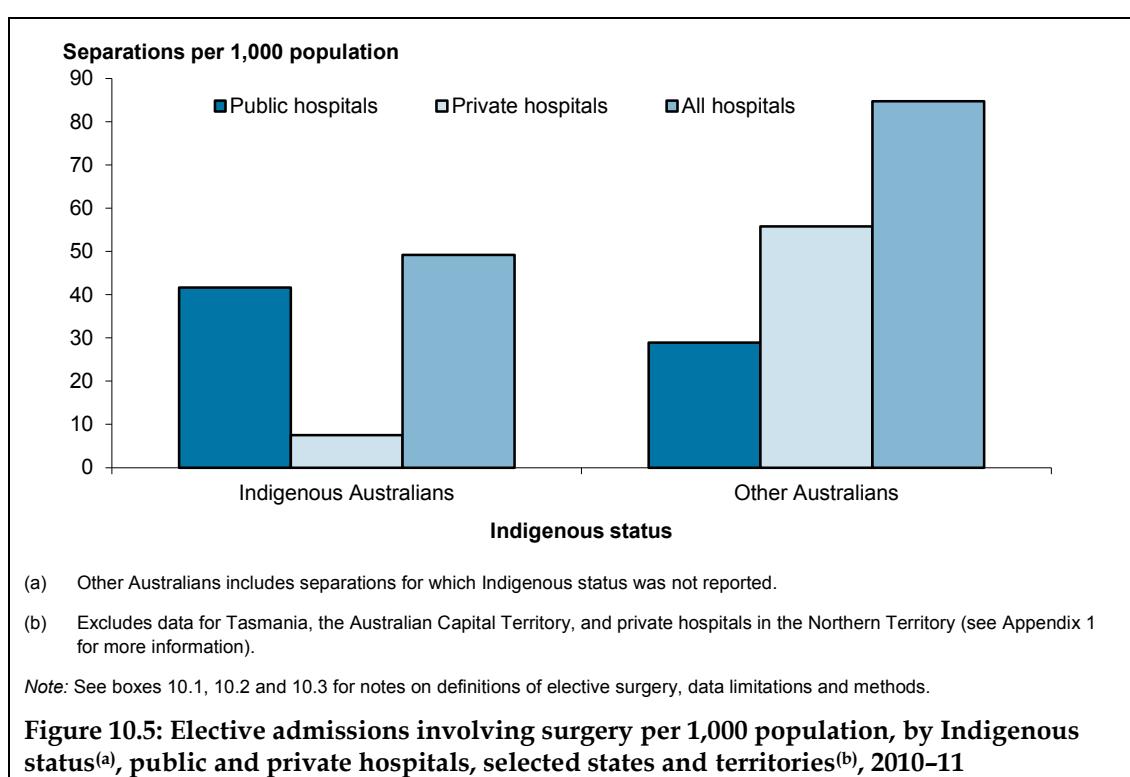
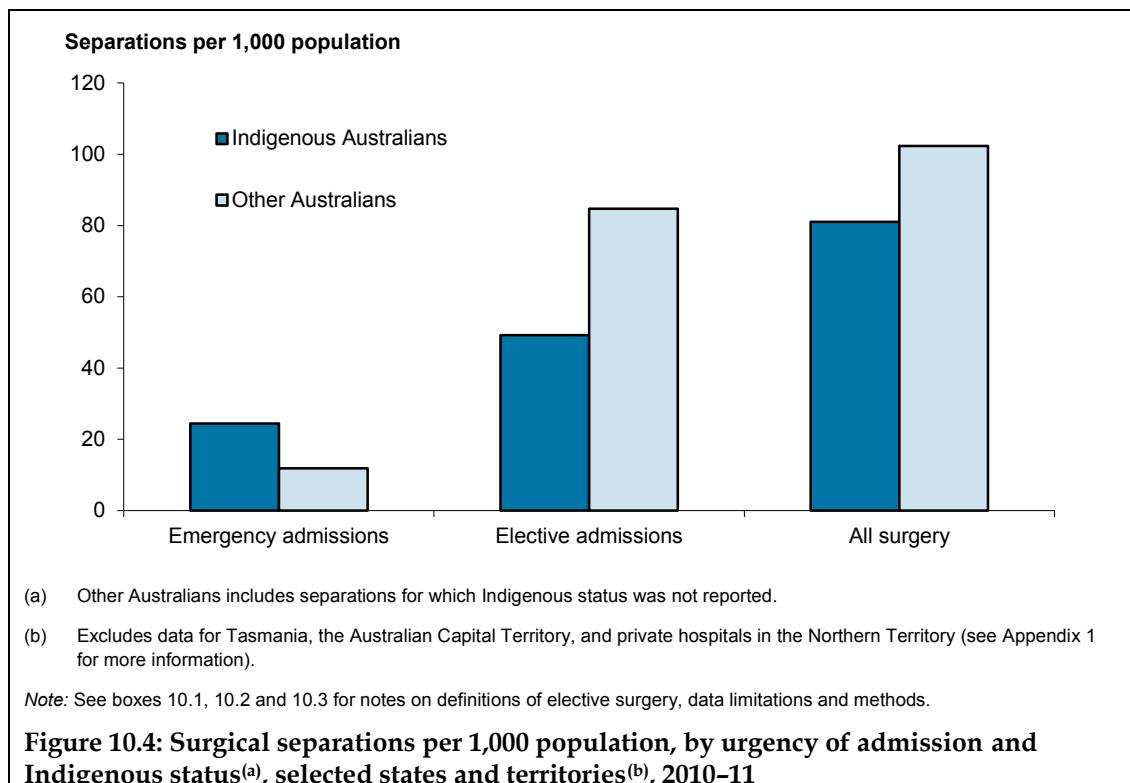
### Box 10.4: Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2010-11 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix 1 for more information on the quality of Indigenous data in the NHMD.

Excluding data for Tasmania, the Australian Capital Territory, and private hospitals in the Northern Territory, there were over 30,000 surgical separations for Indigenous Australians in 2010-11 (Figure 10.4), a rate of 81 per 1,000 population for Indigenous Australians, about 79% of the rate for other Australians (102 per 1,000).

Over a third of surgical separations for Indigenous Australians were emergency admissions (37%), and the rate of separations for emergency admissions for Indigenous Australians was 24 per 1,000 population, twice the rate for other Australians (12 per 1,000).

The separation rate for elective admissions involving surgery for Indigenous Australians (49 per 1,000 population) was about 72% of the rate for other Australians (85 per 1,000).

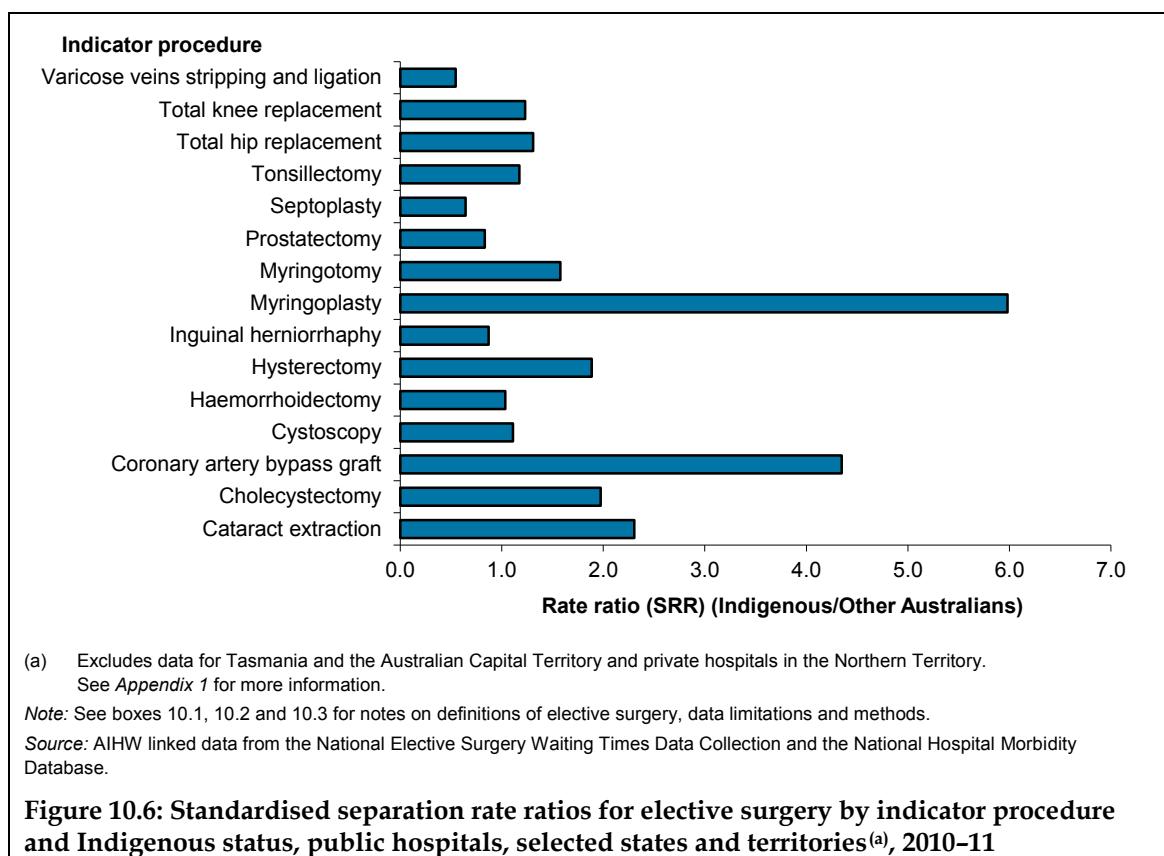


Analysis of the linked NHMD and ESWTDC data provides an opportunity to understand how elective surgery activity for people admitted from waiting lists varied across population groups. The data in this section are presented by indicator procedure.

The standardised separation rates (SRRs) presented in Figure 10.6 compare the separation rates for Indigenous Australians to the rates for other Australians. An SRR greater than 1.0 indicates that Indigenous Australians had a higher separation rate for the indicator procedure than other Australians admitted for elective surgery from elective surgery waiting lists.

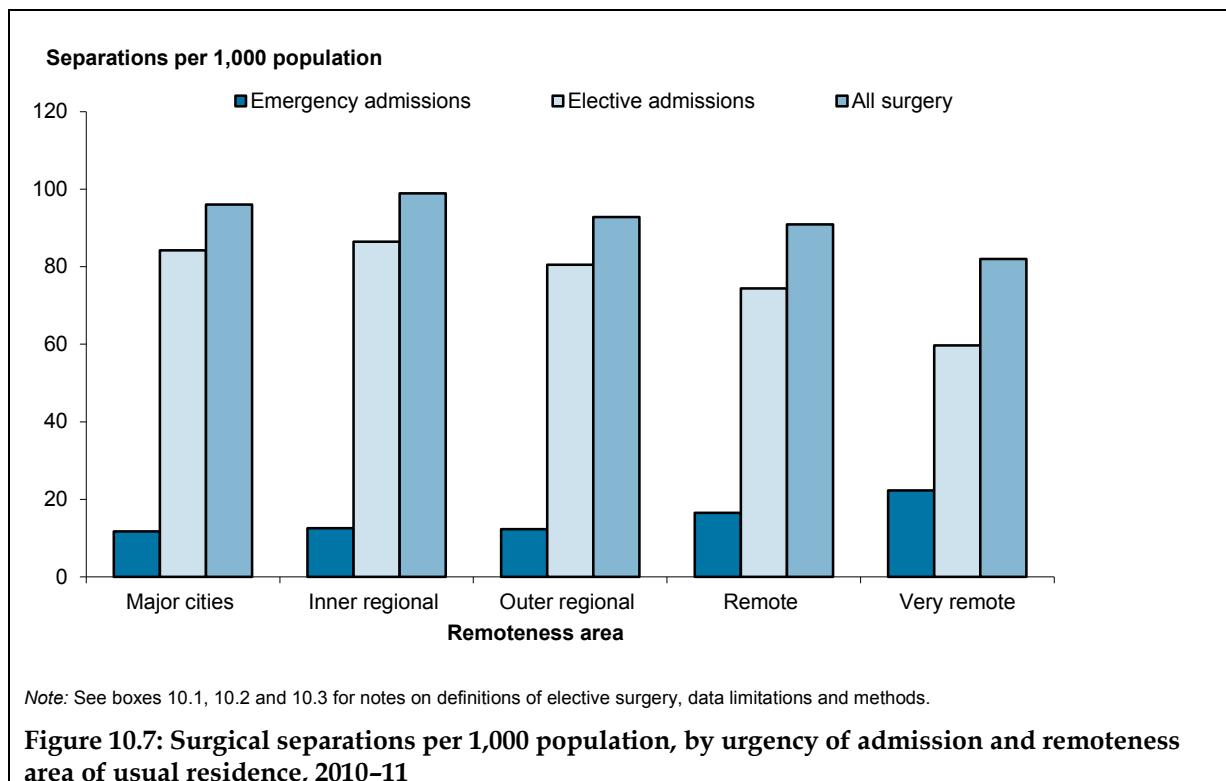
For 10 of the 15 indicator procedures, the data suggest that the separation rates for Indigenous Australians were markedly different from the rates for other Australians. The rates were not notably different for *Cystoscopy*, *Haemorrhoidectomy*, *Inguinal herniorrhaphy*, *Prostatectomy* and *Tonsillectomy*.

The highest SRRs were reported for *Myringoplasty* (6.0) and *Coronary artery bypass graft* (4.3). Indigenous Australians had lower SRRs for *Septoplasty* and *Varicose veins stripping and ligation*.



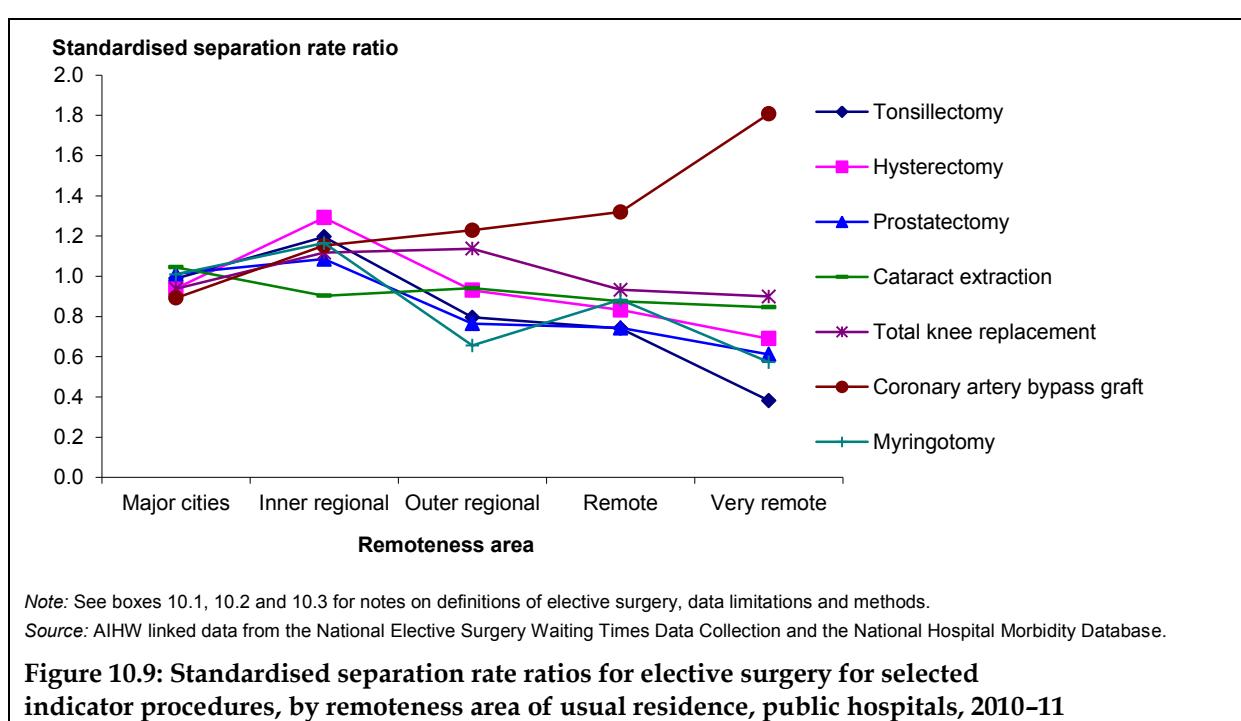
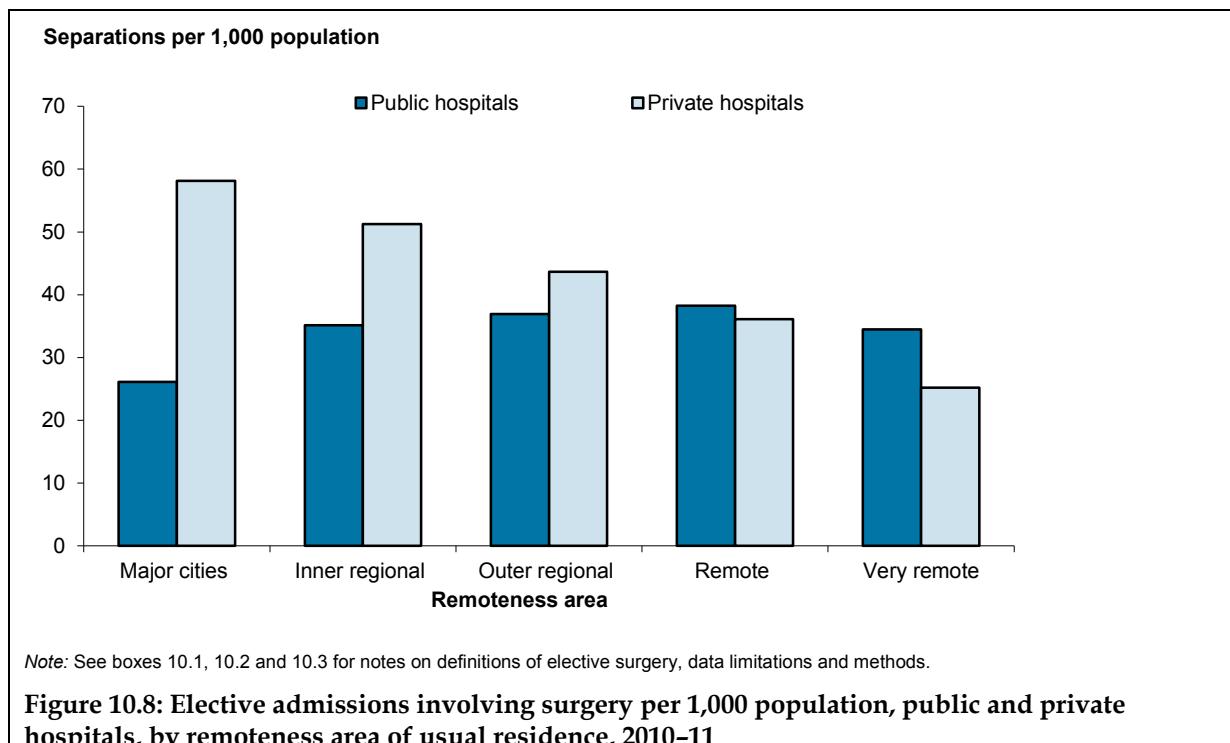
## Remoteness area

The overall surgical separation rate was highest for those living in *Inner regional* areas (99 per 1,000 population) (Figure 10.7). The rate of elective admissions involving surgery was lowest for those living in *Very remote* areas (60 per 1,000) and highest for those living in *Inner regional* areas (86 per 1,000). The separation rate for emergency admissions involving surgery was highest for those living in *Very remote* areas (22 per 1,000 population) and decreased with decreasing remoteness.



For elective admissions involving surgery in public hospitals, the separation rate was lowest for those living in *Major cities* (26 per 1,000) and highest for those living in *Remote areas* (38 per 1,000) (Figure 10.8). In private hospitals, the rate was highest for those living in *Major cities* (58 per 1,000 population) and decreased with increasing remoteness to 25 per 1,000 for *Very remote* areas. This may reflect variations in the availability of private hospital services in the more remote areas of Australia.

Using the linked NHMD and ESWTDC data , Figure 10.9 presents standardised separation rate ratios by indicator procedure and remoteness area. The SRR for *Coronary artery bypass graft* for people living in *Very remote* areas was almost twice the national rate.

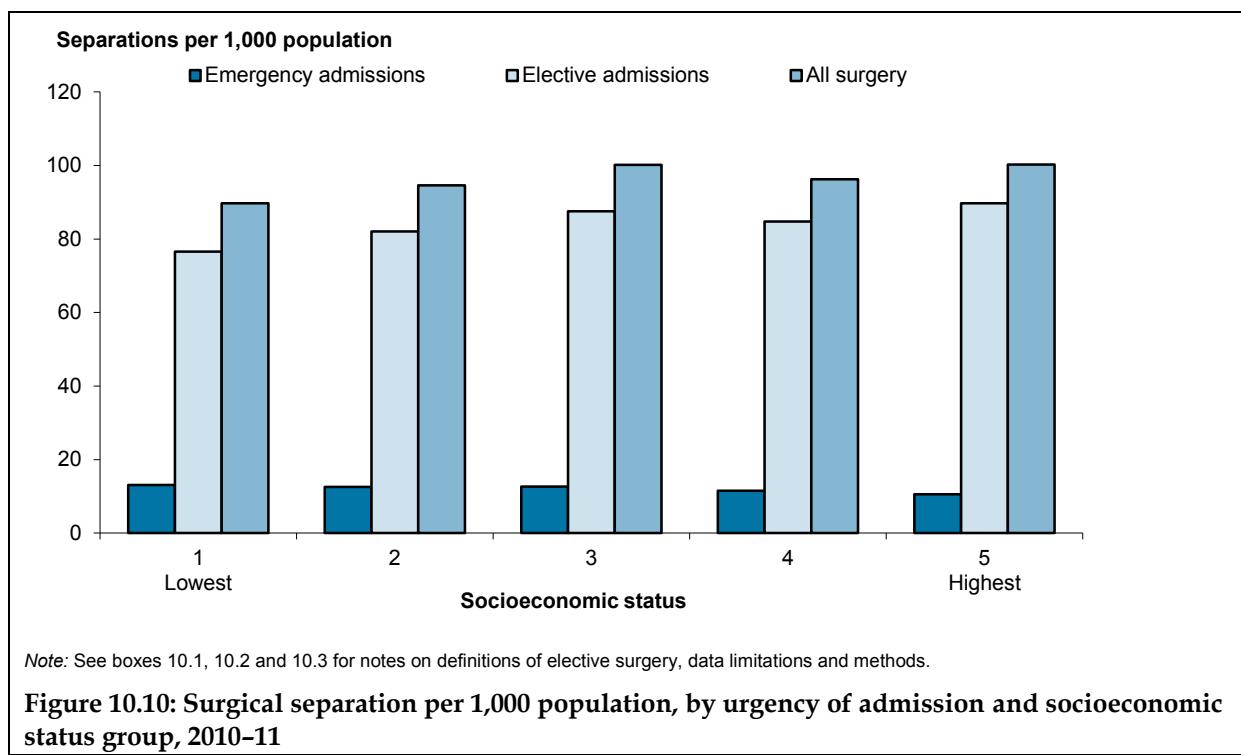


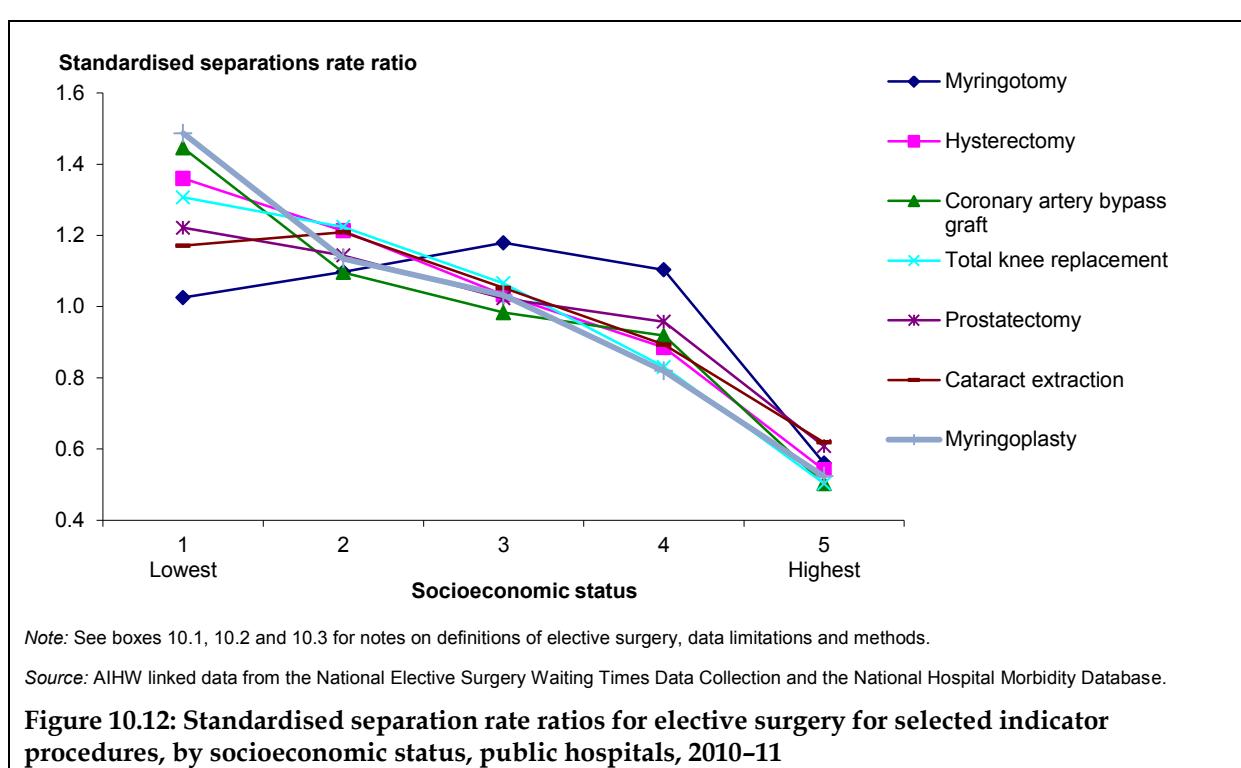
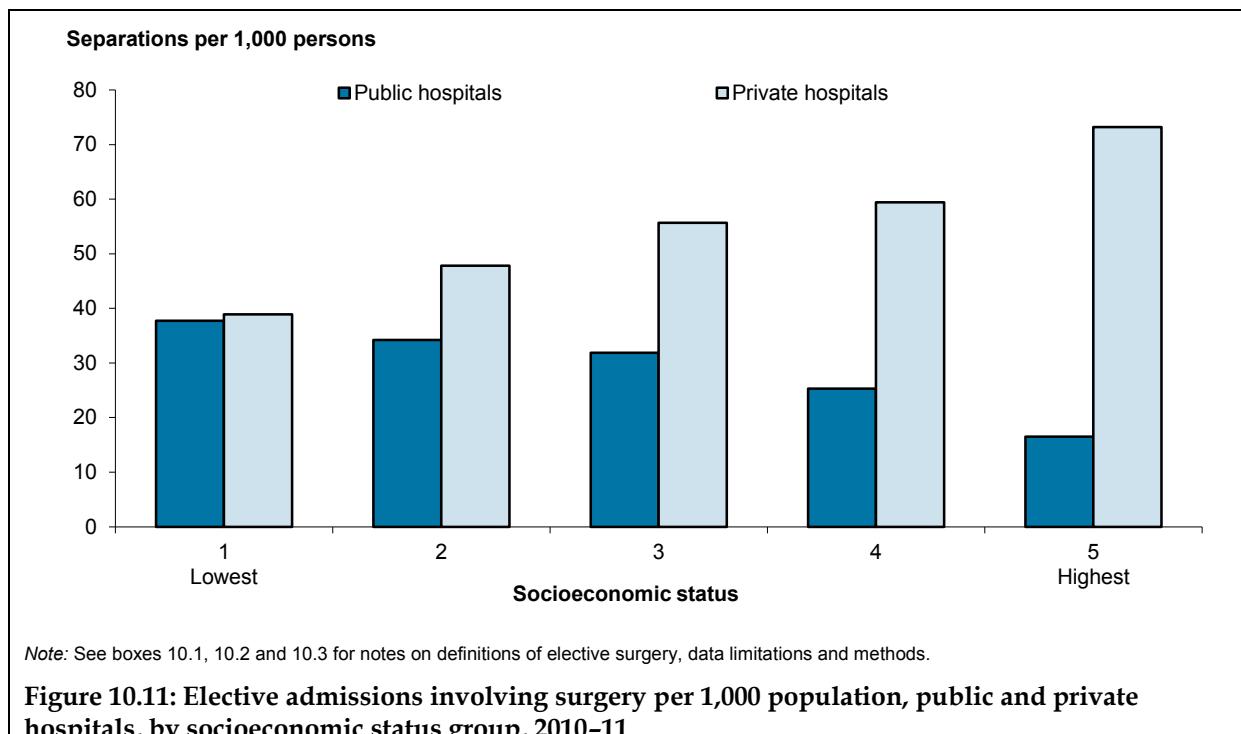
## Socioeconomic status

Figure 10.10 presents surgical separation rates per 1,000 population by socioeconomic (SES) group (see Appendix 1). There was little variation in the rate of emergency admissions involving surgery between socioeconomic areas. For elective admissions involving surgery, separation rates ranged from 77 per 1,000 population for those living in areas classified as being in the lowest SES group to 90 per 1,000 population for those living in areas classified as being in the highest SES group.

In 2010–11, the separation rate for elective admissions involving surgery in public hospitals was highest for people living in areas classified as being in the lowest SES group (38 per 1,000 population) and tended to decrease with increasing advantage to 17 per 1,000 for people living in areas classified in the highest SES group (Figure 10.11). In contrast, the rate in private hospitals was highest for people living in areas classified as being in the highest SES group (73 per 1,000) and lowest for people living in areas classified in the lowest SES group (39 per 1,000).

The greatest variation in SRRs by socioeconomic status were for *Myringoplasty*, with the SRRs ranging from 1.5 for people living in areas classified as being in the lowest SES group (about 50% higher than the overall rate) to 0.5 for the highest SES group (about 50% lower than the overall rate). The SRRs for *Cataract extraction* were more evenly distributed among SES groups, with people living in areas classified as being in the lowest SES group having separation rates about 47% higher than the overall rate, and those in the highest SES group having separation rates about 40% lower than the overall rate (Figure 10.12).





## How did people access these services?

Most surgical separations had a mode of admission of *Other* (97% overall), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 10.5). However, about 11% of emergency admissions involving surgery were admitted from another hospital.

**Table 10.5: Surgical separations by urgency of admission and mode of admission, all hospitals, 2010–11**

Admission mode	Emergency admissions	Elective admissions	Total
Admitted patient transferred from another hospital	31,361	22,166	53,527
Other	248,785	1,918,648	2,167,433
Not reported	181	8,571	8,752
<b>Total</b>	<b>280,327</b>	<b>1,949,385</b>	<b>2,229,712</b>

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## Why did people receive the care?

The reason that a patient receives surgical care can be described in terms of the principal diagnosis. The principal diagnosis is the diagnosis established after study to be chiefly responsible for occasioning the episode of surgery.

### Principal diagnosis

In 2010–11, over 14% of surgical separations had a principal diagnosis in the *Diseases of the musculoskeletal system and connective tissue* chapter and 14% had a principal diagnosis in the *Neoplasms* chapter (Table 10.6).

The relative distributions of surgical separations by diagnosis chapter varied by urgency of admission. For example, over 97% of surgical separations for *Diseases of the musculoskeletal system and connective tissue*, *Diseases of the nervous system*, *Diseases of the eye and adnexa* and *Diseases of the ear and mastoid process* were elective admissions and over half of surgical separations for *Injury, poisoning and certain other consequences of external causes* were emergency admissions.

**Table 10.6: Surgical separations, by principal diagnosis in ICD-10-AM chapters and urgency of admission, all hospitals, 2010–11**

<b>Principal diagnosis chapter</b>		<b>Emergency admissions</b>	<b>Elective admissions</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	1,984	3,424	5,408
C00–D48	Neoplasms	11,893	294,660	306,553
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	506	1,330	1,836
E00–E90	Endocrine, nutritional and metabolic diseases	3,290	27,884	31,174
F00–F99	Mental and behavioural disorders	69	32	101
G00–G99	Diseases of the nervous system	1,391	49,389	50,780
H00–H59	Diseases of the eye and adnexa	4,007	285,276	289,283
H60–H95	Diseases of the ear and mastoid process	482	41,614	42,096
I00–I99	Diseases of the circulatory system	33,014	100,658	133,672
J00–J99	Diseases of the respiratory system	5,331	81,299	86,630
K00–K93	Diseases of the digestive system	59,300	163,806	223,106
L00–L99	Diseases of the skin and subcutaneous tissue	6,415	42,199	48,614
M00–M99	Diseases of the musculoskeletal system and connective tissue	8,680	312,270	320,950
N00–N99	Diseases of the genitourinary system	12,507	211,601	224,108
O00–O99	Pregnancy, childbirth and the puerperium	12,806	65,732	78,538
P00–P96	Certain conditions originating in the perinatal period	315	202	517
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,300	19,977	21,277
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	4,327	19,815	24,142
S00–T98	Injury, poisoning and certain other consequences of external causes	111,872	93,409	205,281
Z00–Z99	Factors influencing health status and contact with health services	838	134,808	135,646
<b>Total</b>		<b>280,327</b>	<b>1,949,385</b>	<b>2,229,712</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

### Top 20 principal diagnoses

The top 20 principal diagnoses accounted for half of the principal diagnoses reported for emergency admissions involving surgery (Table 10.7). The most common principal diagnosis at the 3-character level for emergency admissions was *Acute appendicitis*, with 88% of those separations in public hospitals. *Angina pectoris* was the principal diagnosis with the highest proportion of emergency admissions in private hospitals (32%).

**Table 10.7: Separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings for emergency admissions involving surgery, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
K35	Acute appendicitis	21,888	3,001	24,889
S72	Fracture of femur	16,715	2,449	19,164
I21	Acute myocardial infarction	11,472	1,903	13,375
S82	Fracture of lower leg, including ankle	11,346	1,257	12,603
S52	Fracture of forearm	8,957	989	9,946
K80	Cholelithiasis	6,452	1,384	7,836
S62	Fracture at wrist and hand level	6,498	603	7,101
S61	Open wound of wrist and hand	6,085	541	6,626
T81	Complications of procedures, not elsewhere classified	4,218	850	5,068
K61	Abscess of anal and rectal regions	4,256	481	4,737
S42	Fracture of shoulder and upper arm	4,215	499	4,714
O03	Spontaneous abortion	4,337	295	4,632
S66	Injury of muscle and tendon at wrist and hand level	4,111	297	4,408
K56	Paralytic ileus and intestinal obstruction without hernia	3,161	627	3,788
O02	Other abnormal products of conception	3,378	191	3,569
I20	Angina pectoris	2,405	1,118	3,523
S01	Open wound of head	2,770	198	2,968
L02	Cutaneous abscess, furuncle and carbuncle	2,684	177	2,861
O00	Ectopic pregnancy	2,635	182	2,817
S02	Fracture of skull and facial bones	2,719	78	2,797
Other		113,469	19,436	132,905
<b>Total</b>		<b>243,771</b>	<b>36,556</b>	<b>280,327</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

The top 20 principal diagnoses accounted for about 38% of the principal diagnoses reported for elective admissions involving surgery (Table 10.8). The most common principal diagnosis at the 3-character level for elective admissions was *Other cataract*, with 67% of those separations coming from private hospitals. Over 90% of elective admissions involving surgery with a principal diagnosis of *Procreative management* were from private hospitals.

**Table 10.8: Separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings for elective admissions involving surgery, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
H26	Other cataract	55,257	111,077	166,334
C44	Other malignant neoplasms of skin	26,942	64,528	91,470
M23	Internal derangement of knee	12,770	49,177	61,947
Z31	Procreative management	5,722	53,042	58,764
M17	Gonarthrosis [arthrosis of knee]	17,533	40,261	57,794
O04	Medical abortion	9,017	37,895	46,912
K40	Inguinal hernia	17,782	24,593	42,375
J35	Chronic diseases of tonsils and adenoids	15,349	23,821	39,170
H35	Other retinal disorders	2,195	34,748	36,943
K80	Cholelithiasis	17,760	15,494	33,254
G56	Mononeuropathies of upper limb	12,819	19,950	32,769
H25	Senile cataract	6,609	23,938	30,547
M75	Shoulder lesions	4,923	24,088	29,011
N92	Excessive, frequent and irregular menstruation	13,692	13,905	27,597
M16	Coxarthrosis [arthrosis of hip]	7,632	15,947	23,579
J34	Other disorders of nose and nasal sinuses	7,109	15,627	22,736
I84	Haemorrhoids	8,101	13,667	21,768
Z47	Other orthopaedic follow-up care	10,543	10,540	21,083
H65	Nonsuppurative otitis media	7,223	13,503	20,726
C50	Malignant neoplasm of breast	7,914	10,163	18,077
Other		402,992	663,537	1,066,529
<b>Total</b>		<b>669,884</b>	<b>1,279,501</b>	<b>1,949,385</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## What care was provided?

This section presents information on surgical separations describing care using:

- Major Diagnostic Categories (MDCs) and Australian Refined Diagnosis Related Groups (AR-DRGs) – based on the AR-DRG classification of acute care separations
- the type of surgical procedure undertaken.

## Major Diagnostic Categories

Table 10.9 presents surgical separations by MDCs and urgency of admission. Over 27% of emergency admissions and 20% of elective admissions involving surgery were for *Diseases and disorders of the musculoskeletal system and connective tissue*, with 84% of these being elective admissions. *Injuries, poisoning and toxic effects of drugs* was the MDC with the highest proportion of surgical separations that were emergency admissions (61%).

**Table 10.9: Surgical separations, by Major Diagnostic Category<sup>(a)</sup>, AR-DRG version 6.0 and urgency of admission, all hospitals, 2010–11**

<b>Major diagnostic category</b>		<b>Emergency admissions</b>	<b>Elective admissions</b>	<b>Total</b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	8,937	6,379	15,316
01	Diseases and disorders of the nervous system	9,840	51,277	61,117
02	Diseases and disorders of the eye	5,587	292,160	297,747
03	Diseases and disorders of the ear, nose, mouth and throat	6,608	154,601	161,209
04	Diseases and disorders of the respiratory system	2,760	17,277	20,037
05	Diseases and disorders of the circulatory system	29,943	87,750	117,693
06	Diseases and disorders of the digestive system	52,989	153,709	206,698
07	Diseases and disorders of the hepatobiliary system and pancreas	11,484	43,764	55,248
08	Diseases and disorders of the musculoskeletal system and connective tissue	76,622	395,934	472,556
09	Diseases and disorders of the skin, subcutaneous tissue and breast	8,182	243,708	251,890
10	Endocrine, nutritional and metabolic diseases and disorders	2,860	30,326	33,186
11	Diseases and disorders of the kidney and urinary tract	5,856	57,954	63,810
12	Diseases and disorders of the male reproductive system	3,133	56,139	59,272
13	Diseases and disorders of the female reproductive system	6,377	244,579	250,956
14	Pregnancy, childbirth and puerperium	12,786	65,743	78,529
15	Newborns and other neonates	754	334	1,088
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	849	3,201	4,050
17	Neoplastic disorders (haematological and solid neoplasms)	1,391	8,483	9,874
18	Infectious and parasitic diseases	3,534	2,691	6,225
21	Injuries, poisoning and toxic effects of drugs	24,927	15,835	40,762
22	Burns	1,597	1,460	3,057
23	Factors influencing health status and other contacts with health services	223	10,840	11,063
ED	Error DRGs	3,088	5,241	8,329
<b>Total</b>		<b>280,327</b>	<b>1,949,385</b>	<b>2,229,712</b>

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

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

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

## Most common AR-DRGs

The top 20 AR-DRGs accounted for half of the AR-DRGs reported for emergency admissions involving surgery (Table 10.10). In 2010–11, about 7% of emergency admissions involving surgery had an AR-DRG of *Appendectomy without malignancy or peritonitis without catastrophic or severe complications or comorbidities*.

**Table 10.10: Surgical separations for the top 20 AR-DRGs version 6.0 with the highest number of emergency admissions, public and private hospitals, 2010–11**

Diagnosis related group		Public hospitals	Private hospitals	Total
G07B	Appendectomy W/O malignancy or peritonitis W/O cat or sev CC	17,807	2,608	20,415
I13B	Humerus, tibia, fibula and ankle procedures W/O CC	10,795	1,250	12,045
I30Z	Hand procedures	10,861	1,067	11,928
F10B	Interventional coronary procedures with AMI W/O catastrophic CC	7,814	1,353	9,167
I08B	Other hip and femur procedures W/O catastrophic CC	7,900	1,210	9,110
O05Z	Abortion with OR procedure	8,436	538	8,974
I19B	Other elbow or forearm procedures W/O CC	7,500	878	8,378
X06B	Other procedures for other injuries W/O cat or sev CC	6,692	616	7,308
G07A	Appendectomy with malignancy or peritonitis or with catastrophic or severe CC	5,621	639	6,260
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O cat or sev CC	4,829	1,274	6,103
G11Z	Anal and stomal procedures	5,250	830	6,080
X05B	Other procedures for Injuries to hand W/O CC	5,400	504	5,904
A06B	Tracheostomy with vent >95 hours W/O catastrophic CC or tracheostomy/vent >95 hours with catastrophic CC	5,275	262	5,537
I08A	Other hip and femur procedures with catastrophic CC	4,211	424	4,635
G02A	Major small and large bowel procedures with catastrophic CC	3,308	531	3,839
I03B	Hip replacement W/O catastrophic CC	3,009	710	3,719
I27B	Soft tissue procedures W/O CC	3,052	299	3,351
F12B	Implantation or replacement of pacemaker, total system W/O catastrophic CC	2,298	992	3,290
G02B	Major small and large bowel procedures W/O catastrophic CC	2,368	475	2,843
G10B	Hernia procedures W/O CC	2,329	493	2,822
	Other	119,016	19,603	138,619
<b>Total</b>		<b>243,771</b>	<b>36,556</b>	<b>280,327</b>

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Abbreviations:* AMI—acute myocardial infarction; CC—complications and comorbidities; CDE—common duct exploration; OR—Operating room; vent—ventilation; W/O—without; W/O cat or sev CC—without catastrophic or severe complications or comorbidities

The top 20 AR-DRGs accounted for more than half (57%) of the AR-DRGs reported for elective admissions involving surgery. The most common AR-DRG for elective admissions was for Lens procedures, which accounted for around 10% of elective admissions involving surgery (Table 10.11).

**Table 10.11: Surgical separations for the top 20 AR-DRGs version 6.0 with the highest number of elective admissions, public and private hospitals, 2010–11**

Diagnosis related group		Public hospitals	Private hospitals	Total
C16Z	Lens procedures	61,187	136,805	197,992
J11Z	Other skin, subcutaneous tissue and breast procedures	37,863	61,839	99,702
I18Z	Other knee procedures	17,320	67,009	84,329
N07Z	Other uterine and adnexa procedures for non-malignancy	18,766	56,179	74,945
O05Z	Abortion with OR procedure	16,380	47,398	63,778
G10B	Hernia procedures W/O CC	26,222	34,576	60,798
G11Z	Anal and stomal procedures	18,596	31,276	49,872
D11Z	Tonsillectomy and/or adenoidectomy	18,263	27,701	45,964
C03Z	Retinal procedures	6,008	39,372	45,380
I30Z	Hand procedures	16,034	27,531	43,565
J08B	Other skin graft and/or debridement procedures W/O CC	9,055	32,792	41,847
I16Z	Other shoulder procedures	6,786	33,223	40,009
N10Z	Diagnostic curettage or diagnostic hysteroscopy	18,150	19,323	37,473
J10Z	Skin, subcutaneous tissue and breast plastic or procedures	8,951	27,965	36,916
J06Z	Major procedures for breast conditions	9,114	25,202	34,316
H08B	Laparoscopic cholecystectomy w/o closed CDE W/O cat or sev CC	16,999	16,474	33,473
I04B	Knee replacement W/O catastrophic or severe CC	10,147	21,467	31,614
N11Z	Other female reproductive system or procedures	3,123	26,293	29,416
N09Z	Conisation, vagina, cervix and vulva procedures	16,246	12,913	29,159
B05Z	Carpal tunnel release	11,746	17,165	28,911
	Other	322,928	516,998	839,926
<b>Total</b>		<b>669,884</b>	<b>1,279,501</b>	<b>1,949,385</b>

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Abbreviations:* CC—complications and comorbidities; CDE—common duct exploration; OR—Operating room; Vent—ventilation; W—with; W/O—without; W/O Cat or Sev CC—without catastrophic or severe complications or comorbidities.

## Procedures

A **procedure** is defined as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in an acute care setting (HDSC 2008).

Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays and chemotherapy. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

In 2010–11, 2.7 million procedures were reported for surgical separations, with over 2.3 million reported for elective admissions. Emergency admissions accounted for around 13% of the procedures reported for surgical separations (Table 10.12). See Box 7.1 and Appendix 2 for information on the classification of procedures. Almost 23% of all surgical procedures reported were for *Procedures on musculoskeletal system*, with 81% of these occurring in private hospitals.

**Table 10.12: Counts of procedures<sup>(a)(b)</sup> in ACHI chapters, for surgical separations by urgency of admission, all hospitals, 2010–11**

Procedure chapters		Emergency admissions	Elective admissions	Total
1–86	Procedures on nervous system	14,781	87,515	102,296
110–129	Procedures on endocrine system	248	14,514	14,762
160–256	Procedures on eye and adnexa	7,182	307,640	314,822
300–333	Procedures on ear and mastoid process	504	36,366	36,870
370–422	Procedures on nose, mouth and pharynx	3,507	136,899	140,406
450–490	Dental services	50	2,445	2,495
520–570	Procedures on respiratory system	13,988	15,774	29,762
600–777	Procedures on cardiovascular system	45,444	128,847	174,291
800–817	Procedures on blood and blood-forming organs	2,074	29,892	31,966
850–1011	Procedures on digestive system	75,882	251,301	327,183
1040–1129	Procedures on urinary system	7,031	78,827	85,858
1160–1203	Procedures on male genital organs	4,187	59,924	64,111
1240–1299	Gynaecological procedures	18,646	342,473	361,119
1330–1347	Obstetric procedures	733	816	1,549
1360–1579	Procedures on musculoskeletal system	116,605	496,901	613,506
1600–1718	Dermatological and plastic procedures	31,766	286,829	318,595
1740–1759	Procedures on breast	298	49,971	50,269
1786–1799	Radiation oncology procedures	31	2,038	2,069
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	3,729	1,336	5,065
1940–2016	Imaging services	5	5	10
<b>Total</b>		<b>346,691</b>	<b>2,330,313</b>	<b>2,677,004</b>

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

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

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Abbreviation:* n.e.c.—not elsewhere classified.

## Most common procedures

In 2010–11, *Appendicectomy* was the most common surgical procedure for emergency admissions involving surgery (Table 10.13). Around 88% of emergency admissions for *Appendicectomy* procedures were performed in public hospitals. *Insertion of cardiac pacemaker generator* was the surgical procedure with the highest proportion of emergency admissions in private hospitals (28%).

**Table 10.13: Surgical separations for the top 20 ACHI procedure<sup>(a)</sup> blocks with the highest number of emergency admissions, public and private hospitals, 2010–11**

Procedure block		Public hospitals	Private hospitals	Total
926	Appendicectomy	24,016	3,292	27,308
671	Transluminal coronary angioplasty with stenting	11,120	2,652	13,772
1566	Excision procedures on other musculoskeletal sites	11,044	1,503	12,547
1479	Fixation of fracture of pelvis or femur	9,414	1,283	10,697
1628	Other debridement of skin and subcutaneous tissue	9,330	382	9,712
965	Cholecystectomy	7,861	1,828	9,689
1265	Curettage and evacuation of uterus	8,668	578	9,246
1539	Open reduction of fracture of ankle or toe	6,461	785	7,246
569	Ventilatory support	6,815	309	7,124
1489	Arthroplasty of hip	5,490	1,061	6,551
1429	Open reduction of fracture of radius	5,155	657	5,812
930	Incision procedures on rectum or anus	4,471	514	4,985
986	Division of abdominal adhesions	3,942	794	4,736
1466	Repair of tendon of hand	4,165	312	4,477
650	Insertion of cardiac pacemaker generator	2,914	1,129	4,043
1636	Repair of nail	3,556	169	3,725
1559	Incision procedures on other musculoskeletal sites	2,722	280	3,002
1256	Procedures for management of ectopic pregnancy	2,639	183	2,822
83	Repair of nerve or nerve trunk	2,633	158	2,791
1486	Reduction of fracture of pelvis or femur	2,520	252	2,772
	Other	108,835	18,435	127,270
<b>Total</b>		<b>243,771</b>	<b>36,556</b>	<b>280,327</b>

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

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

In 2010–11, *Extracapsular crystalline lens extraction by phacoemulsification* was the most common surgical procedure for elective admissions, accounting for almost 10% of elective admissions (Table 10.14).

**Table 10.14: Surgical separations for the top 20 ACHI procedure<sup>(a)</sup> blocks with the highest number of elective admissions, public and private hospitals, 2010–11**

Procedure block		Public hospitals	Private hospitals	Total
197	Extracapsular crystalline lens extraction by phacoemulsification	59,018	129,809	188,827
1620	Excision of lesion(s) of skin and subcutaneous tissue	33,738	55,573	89,311
1265	Curettage and evacuation of uterus	27,122	56,416	83,538
1297	Procedures for reproductive medicine	5,542	56,825	62,367
412	Tonsillectomy or adenoidectomy	23,110	32,357	55,467
1517	Arthroscopic meniscectomy of knee with repair	6,900	39,344	46,244
990	Repair of inguinal hernia	17,692	23,742	41,434
965	Cholecystectomy	19,637	18,295	37,932
1518	Arthroplasty of knee	12,728	24,980	37,708
941	Procedures for haemorrhoids	12,567	22,847	35,414
209	Application, insertion or removal procedures on retina, choroid or posterior chamber	1,812	29,282	31,094
1651	Local skin flap, simple and small, single stage	6,514	24,337	30,851
76	Release of carpal and tarsal tunnel	11,851	17,457	29,308
1489	Arthroplasty of hip	8,555	16,951	25,506
309	Myringotomy	7,915	15,246	23,161
1554	Other application, insertion or removal procedures on other musculoskeletal sites	12,146	10,820	22,966
1503	Arthroscopic excision of knee	6,644	14,740	21,384
1165	Transurethral prostatectomy	7,680	12,366	20,046
1266	Excision of lesion of uterus	7,005	11,916	18,921
671	Transluminal coronary angioplasty with stenting	6,181	12,315	18,496
	Other	375,527	653,883	1,029,410
<b>Total</b>		<b>669,884</b>	<b>1,279,501</b>	<b>1,949,385</b>

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

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## How long did patients stay?

The length of stay for surgical separations varied by urgency of admission and to a lesser extent between public and private hospitals. Overall the length of stay for emergency admissions involving surgery was more than three times as long as for elective admissions involving surgery (Table 10.15).

**Table 10.15: Patient days and average length of stay for surgical separations, by urgency of admission, public and private hospitals, 2010–11**

	Public hospitals		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
<b>Same-day</b>						
Emergency admissions	20,684	1.0	3,893	1.0	24,577	1.0
Elective admissions	348,696	1.0	752,350	1.0	1,101,046	1.0
<i>All same-day surgery</i>	<i>369,380</i>	<i>1.0</i>	<i>756,243</i>	<i>1.0</i>	<i>1,125,623</i>	<i>1.0</i>
<b>Overnight</b>						
Emergency admissions	1,855,773	8.3	269,086	8.2	2,124,859	8.3
Elective admissions	1,249,181	3.9	1,751,562	3.3	3,000,743	3.5
<i>All overnight surgery</i>	<i>3,104,954</i>	<i>5.0</i>	<i>2,020,648</i>	<i>3.4</i>	<i>5,125,602</i>	<i>4.2</i>
<b>Total</b>						
<b>Emergency admissions</b>	<b>1,876,457</b>	<b>7.7</b>	<b>272,979</b>	<b>7.5</b>	<b>2,149,436</b>	<b>7.7</b>
<b>Elective admissions</b>	<b>1,597,877</b>	<b>2.4</b>	<b>2,503,912</b>	<b>2.0</b>	<b>4,101,789</b>	<b>2.1</b>
<b>All surgery</b>	<b>3,474,334</b>	<b>3.5</b>	<b>2,776,891</b>	<b>2.0</b>	<b>6,251,225</b>	<b>2.7</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## Who paid for the care?

Almost eight in ten emergency admissions involving surgery in public hospitals were for *Public patients* (Medicare eligible persons who elected to be treated as a public patient) and over 83% of emergency admissions involving surgery in private hospitals were funded by *Private health insurance* (Table 10.16).

For elective admissions involving surgery in public hospitals less than 7% of separations were funded by *Private health insurance*. In private hospitals around 12% of elective admissions involving surgery were *Self-funded* and 79% were funded by *Private health insurance*.

## How was the care completed?

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

Around 96% of surgical separations had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 10.17). This was particularly the case in private hospitals, where 97% of separations reported a mode of separation of *Other*, compared with 93% in public hospitals.

**Table 10.16: Surgical separations, by principal source of funds and urgency of admission, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
<b>Emergency admissions</b>			
Public patients <sup>(a)</sup>	189,442	72	189,514
Private health insurance	31,572	30,580	62,152
Self-funded	3,244	992	4,236
Workers compensation	6,720	1,531	8,251
Motor vehicle third party personal claim	5,271	71	5,342
Department of Veterans' Affairs	4,535	3,107	7,642
Other <sup>(b)</sup>	2,987	203	3,190
<i>Total</i>	<i>243,771</i>	<i>36,556</i>	<i>280,327</i>
<b>Elective admissions</b>			
Public patients <sup>(a)</sup>	588,769	9,223	597,992
Private health insurance	45,395	1,006,680	1,052,075
Self-funded	25,039	150,554	175,593
Workers compensation	2,740	39,439	42,179
Motor vehicle third party personal claim	1,652	3,764	5,416
Department of Veterans' Affairs	4,233	51,414	55,647
Other <sup>(b)</sup>	2,056	18,427	20,483
<i>Total</i>	<i>669,884</i>	<i>1,279,501</i>	<i>1,949,385</i>

- (a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefits Scheme.
- (b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 10.1, 10.2 and 10.3 for notes on data limitations and methods.

**Table 10.17: Surgical separations, by mode of separation, public and private hospitals, 2010–11**

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	31,978	23,000	54,978
Discharge/transfer to residential aged care service <sup>(a)</sup>	3,791	1,064	4,855
Discharge/transfer to an (other) psychiatric hospital	117	14	131
Discharge/transfer to other health care accommodation <sup>(b)</sup>	1,776	3,346	5,122
Statistical discharge: type change	14,045	8,929	22,974
Left against medical advice/discharge at own risk	3,698	376	4,074
Statistical discharge from leave	237	39	276
Died	5,846	1,411	7,257
Other <sup>(c)</sup>	852,139	1,277,865	2,130,004
Not reported	28	13	41
<i>Total</i>	<i>913,655</i>	<i>1,316,057</i>	<i>2,229,712</i>

- (a) Unless this is the usual place of residence.
- (b) Includes mothercraft hospitals, except in jurisdictions where mothercraft facilities are considered acute.
- (c) Includes *Discharge to usual residence/own accommodation/welfare institution* (including prisons, hostels and group homes providing primarily welfare services).

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## **Waiting times for elective surgery**

This section includes information on waiting times for elective surgery in public hospitals. It uses public hospital information sourced from the NESWTDC and the linked data sourced from the NHMD.

The waiting times data presented in this section are for patients who completed their wait and were admitted to their surgery on an elective basis. The data are generally used as the main summary measure of elective surgery waiting times. However, some patients are removed from waiting lists for other reasons including: that the patient was admitted as an emergency patient for the awaited procedure; was transferred to another hospital's waiting list; had been treated elsewhere; was not contactable; had died or had declined surgery. Information on time spent on waiting lists is also presented for those reasons for removal.

### **How has activity changed over time?**

Between 2006–07 and 2010–11, the number of admissions for elective surgery from waiting lists increased by an annual average of 2.8% (Tables 10.18 and 10.19). However, there was also a slight rise in the coverage of the NESWTDC over that period, from 88% to 92%, which should be taken into account in interpreting the change.

Over the same period, the proportion of admissions for hospitals in the *Principal referral and specialist women's and children's hospitals* peer group increased from 71% to 74% of admissions from elective surgery waiting lists.

### **States and territories**

Between 2006–07 and 2010–11, Western Australia (7.2%) had the highest annual average increase in admissions for elective surgery from waiting lists, while New South Wales had the lowest increase in admissions (0.4%) (Table 10.19).

Between 2009–10 and 2010–11, Australian Capital Territory had the highest proportional increase (16%), and for Tasmania there was a slight decrease in the number of admissions (0.7%).

### **How did waiting times for care change over time?**

Overall, the median waiting times for elective surgery increased from 32 days in 2006–07 to 36 days in 2010–11 (Table 10.19).

The days waited at the 90th percentile increased from 226 days to 252 days during the same period. In contrast, the proportion of patients who waited greater than 365 days to be admitted decreased from 3.1% in 2006–07 to 2.9% in 2010–11. Waiting time statistics for patients admitted from waiting lists, by public hospital peer group, 2006–07 to 2010–11, are published in tables 3.1 and 3.2 of *AHS: EDES* (AIHW 2011c).

**Table 10.18: Waiting list statistics for admissions<sup>(a)</sup> from waiting lists for elective surgery, by public hospital peer group, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Principal referral and specialist women's and children's hospitals</b>							
Number of hospitals <sup>(b)</sup>	82	83	84	85	87	1.5	2.4
Estimated proportion of peer group elective surgery (%) <sup>(c)</sup>	100	100	100	100	100	0.0	0.0
Number of admissions <sup>(a)</sup>	394,831	401,469	431,675	442,727	457,251	3.7	3.3
<b>Large hospitals</b>							
Number of hospitals <sup>(b)</sup>	30	35	33	36	33	2.4	-8.3
Estimated proportion of peer group elective surgery (%) <sup>(c)</sup>	81	84	88	87	89	2.2	1.8
Number of admissions <sup>(a)</sup>	88,433	96,362	91,766	98,015	93,908	1.5	-4.2
<b>Medium hospitals</b>							
Number of hospitals <sup>(b)</sup>	51	51	51	47	50	-0.5	6.4
Estimated proportion of peer group elective surgery (%) <sup>(c)</sup>	64	63	62	61	65	0.1	5.6
Number of admissions <sup>(a)</sup>	63,658	59,083	62,815	56,936	61,820	-0.7	8.6
<b>Total<sup>(d)</sup></b>							
<b>Number of hospitals<sup>(b)</sup></b>	<b>191</b>	<b>192</b>	<b>193</b>	<b>193</b>	<b>195</b>	<b>0.5</b>	<b>1.0</b>
<b>Estimated proportion (%)<sup>(c)</sup></b>	<b>88</b>	<b>89</b>	<b>90</b>	<b>91</b>	<b>92</b>	<b>1.0</b>	<b>1.1</b>
<b>Number of admissions<sup>(a)</sup></b>	<b>556,770</b>	<b>565,346</b>	<b>595,009</b>	<b>606,305</b>	<b>620,899</b>	<b>2.8</b>	<b>2.4</b>
<b>Admissions per 1,000 population<sup>(e)</sup></b>	<b>26.7</b>	<b>26.6</b>	<b>27.5</b>	<b>27.4</b>	<b>27.6</b>	<b>0.9</b>	<b>0.9</b>

- (a) Records with a reason for removal of *Admitted as an elective patient for the awaited procedure in this hospital or another hospital*.
- (b) Number of hospitals included in the National Elective Surgery Waiting Times Data Collection. Caution should be used in interpreting the numbers of hospitals by peer group over time as a hospital may be categorised to different peer groups in different years, based on changes in admitted patient activity.
- (c) The number of separations with an urgency of admission reported as *Elective* and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with an urgency of admission reported as *Elective* and a surgical procedure for all public hospitals.
- (d) Includes hospitals not included in the specified hospital peer groups.
- (e) Crude rate based on the Australian estimated resident population as at 31 December for that year.

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Source: National Elective Surgery Waiting Times Data Collection.

**Table 10.19: Waiting list statistics for admissions<sup>(a)</sup> from waiting lists for elective surgery, public hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>New South Wales<sup>(b)</sup></b>							
Number of hospitals	98	97	97	96	96		
Number of admissions <sup>(a)</sup>	201,630	199,578	199,384	198,503	204,820	0.4	3.2
Admissions per 1,000 population <sup>(c)</sup>	29.4	28.7	28.3	27.6	28.2		
Days waited at 50th percentile	35	39	39	44	47		
<b>Victoria<sup>(b)</sup></b>							
Number of hospitals	32	31	31	32	34		
Number of admissions <sup>(a)</sup>	131,669	130,306	147,690	155,761	157,073	4.5	0.8
Admissions per 1,000 population <sup>(c)</sup>	25.5	24.8	27.5	28.3	28.1		
Days waited at 50th percentile	30	33	31	36	36		
<b>Queensland</b>							
Number of hospitals	31	31	32	32	32		
Number of admissions <sup>(a)</sup>	107,893	107,623	109,940	113,884	113,876	1.4	0.0
Admissions per 1,000 population <sup>(c)</sup>	26.1	25.4	25.3	25.5	25.0		
Days waited at 50th percentile	25	27	27	27	29		
<b>Western Australia</b>							
Number of hospitals	13	14	14	14	14		
Number of admissions <sup>(a)</sup>	48,986	57,122	60,398	61,298	64,785	7.2	5.7
Admissions per 1,000 population <sup>(c)</sup>	23.5	26.7	27.4	27.0	28.0		
Days waited at 50th percentile	29	30	31	32	29		
<b>South Australia</b>							
Number of hospitals	7	8	8	8	8		
Number of admissions <sup>(a)</sup>	37,194	41,046	44,152	44,227	46,081	5.5	4.2
Admissions per 1,000 population <sup>(c)</sup>	23.6	25.8	27.4	27.1	27.9		
Days waited at 50th percentile	40	42	36	36	38		
<b>Tasmania</b>							
Number of hospitals	3	4	4	4	4		
Number of admissions <sup>(a)</sup>	14,181	13,994	16,931	16,610	16,497	3.9	-0.7
Admissions per 1,000 population <sup>(c)</sup>	28.8	28.2	33.8	32.9	32.4		
Days waited at 50th percentile	38	36	44	36	38		
<b>Australian Capital Territory</b>							
Number of hospitals	2	2	2	2	2		
Number of admissions <sup>(a)</sup>	9,306	9,577	10,104	9,778	11,338	5.1	16.0
Admissions per 1,000 population <sup>(c)</sup>	27.6	28.0	29.0	27.5	31.3		
Days waited at 50th percentile	63	72	75	73	76		
<b>Northern Territory</b>							
Number of hospitals	5	5	5	5	5		
Number of admissions <sup>(a)</sup>	5,911	6,100	6,410	6,244	6,429	2.1	3.0
Admissions per 1,000 population <sup>(c)</sup>	27.8	28.1	28.9	27.4	28.0		
Days waited at 50th percentile	35	43	40	44	33		
<b>Total</b>							
Number of hospitals	191	192	193	193	195		
Number of admissions <sup>(a)</sup>	556,770	565,346	595,009	606,305	620,899	2.8	2.4
Admissions per 1,000 population <sup>(c)</sup>	26.7	26.6	27.5	27.4	27.6		
Days waited at 50th percentile	32	34	34	35	36		

(a) Records with a Reason for removal of *Admitted as an elective patient for the awaited procedure in this hospital or another hospital*.

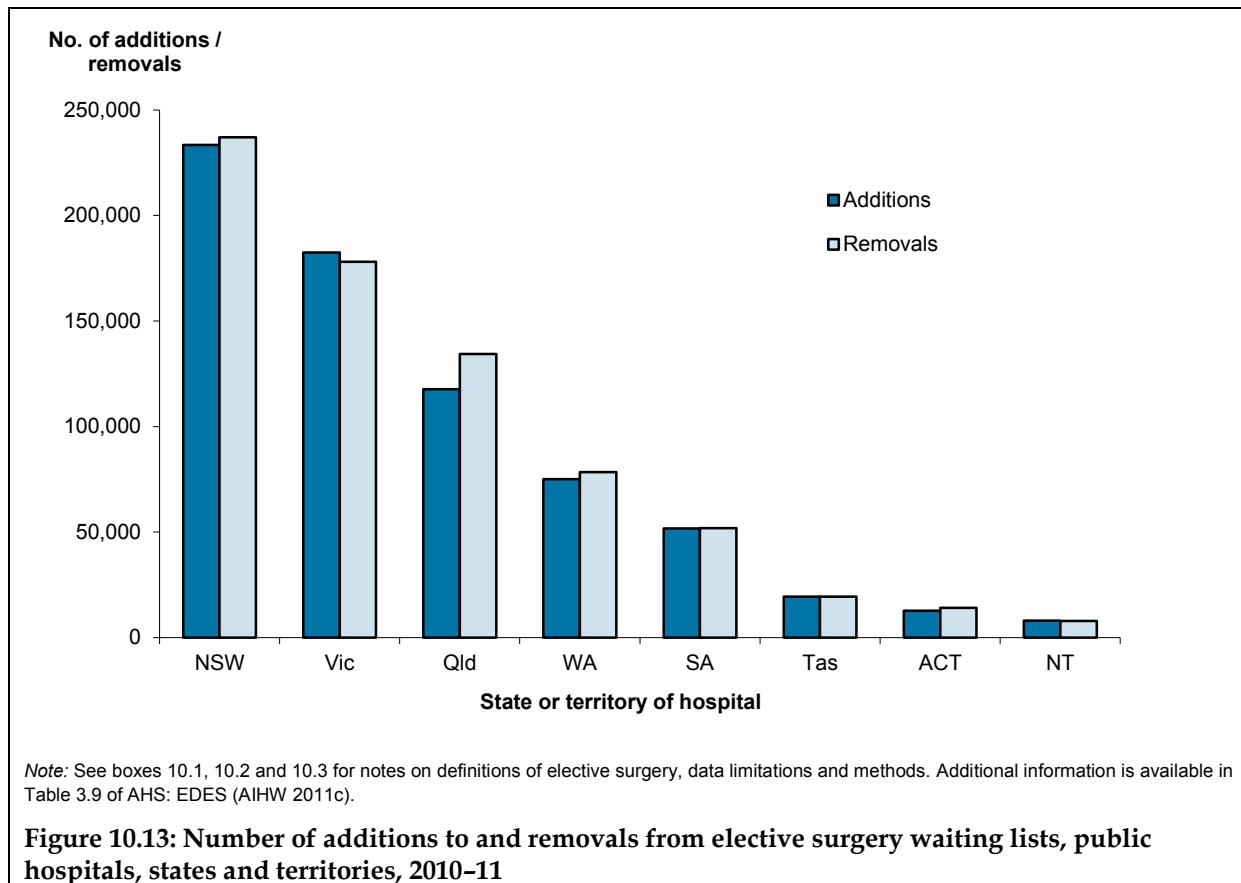
(b) From 2009–10, the data for Albury Base Hospital was reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. For 2010–11, the data for Albury Base Hospital was not available.

(c) Crude rate based on the estimated resident population as at 31 December for that year.

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

## How much activity was there in 2010–11?

In 2010–11, there were almost 701,000 additions to elective surgery waiting lists and 721,000 removals from public hospital elective surgery waiting lists (Figure 10.13). Removals included patients who were admitted for the procedure they were waiting for, and those who were removed for other reasons. For more information, see Table 3.9 in *AHS: EDES* (AIHW 2011c).



## How long did people wait for care?

Table 3.2 of *AHS: EDES* (AIHW 2011c) presents information on:

- the number of days waited at the 50th and 90th percentiles by patients admitted from waiting lists for elective surgery
- the proportion of patients who waited greater than 365 days
- the number of patients admitted by public hospital peer group.

Information is also included by the specialty of the surgeon who performed the elective surgery and by indicator procedure (tables 3.10 and 3.11, *AHS: EDES* (AIHW 2011c)).

## How did waiting times vary by reason for removal from waiting lists?

Waiting time statistics for patients removed from waiting lists for elective surgery by reason for removal are published in Table 3.9 of *AHS: EDES* (AIHW 2011c).

In 2010–11, the reason for removal *Emergency admission* had the shortest median waiting time and the shortest waiting time by which 90% of patients were removed (1 day and 69 days)

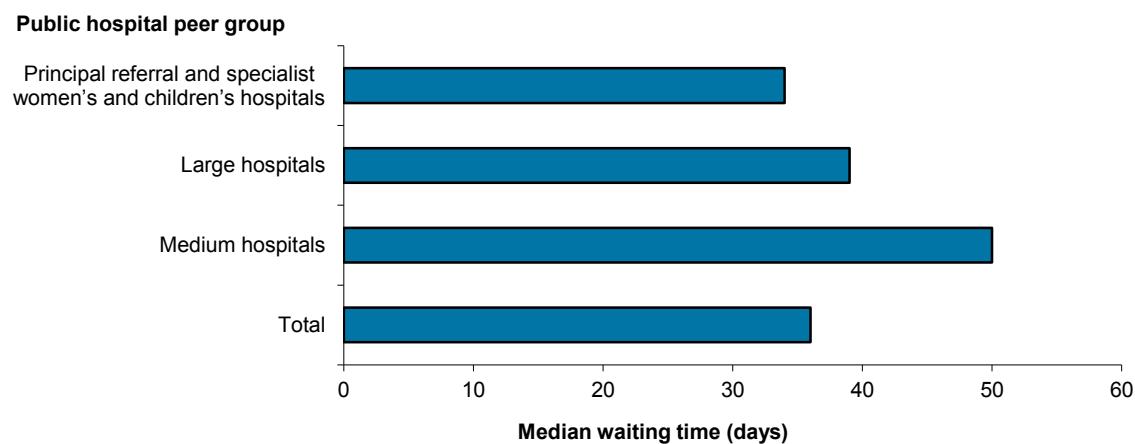
respectively). *Emergency admission* also had the lowest proportion of patients who waited more than 365 days before removal (0.7%).

The reason for removal *Not contactable/ died* had the longest median waiting time and the longest waiting time by which 90% of patients were removed (140 days and 391 days respectively). *Not contactable/ died* also had the lowest proportion of patients who waited more than 365 days before removal (13.2%).

The length of time by which 90% of patients were removed from waiting lists varied substantially between states and territories in most categories.

### How did waiting times vary across public hospital peer groups?

Overall, the median waiting time for patients who were admitted from waiting lists was 36 days in 2010–11. The median waiting time for patients admitted from waiting lists for hospitals in the *Principal referral and specialist women's and children's hospitals* peer group (34 days) was shorter than for the *Large hospitals* (39 days) and *Medium hospitals* peer group (50 days) (Figure 10.14).



Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods. Additional information by state and territory is available in Table 3.4 of *AHS: EDES* (AIHW 2011c).

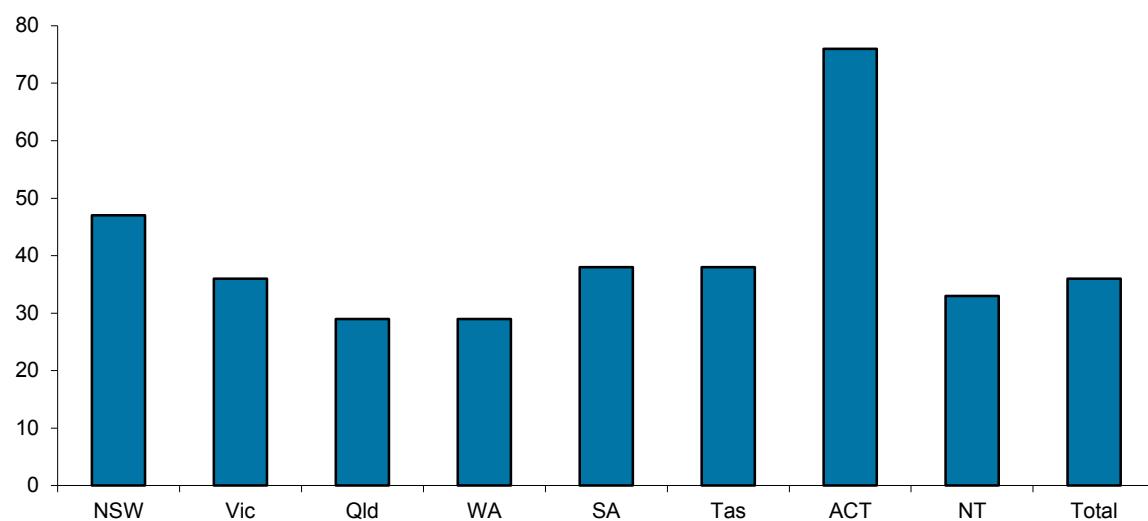
Figure 10.14: Median waiting time for elective surgery by public hospital peer group, 2010–11

### How did waiting times vary across states and territories?

In 2010–11, the median waiting time ranged from 29 days in Queensland and Western Australia to 76 days in the Australian Capital Territory (Figure 10.15). More information on elective surgery waiting times by peer group for states and territories is published in Table 3.2 of *AHS: EDES* (AIHW 2011c).

The proportion of patients who waited more than 365 days differed substantially among states and territories in 2010–11. Overall, it ranged from 1.3% in Queensland to 10.8% in the Australian Capital Territory (Figure 10.16).

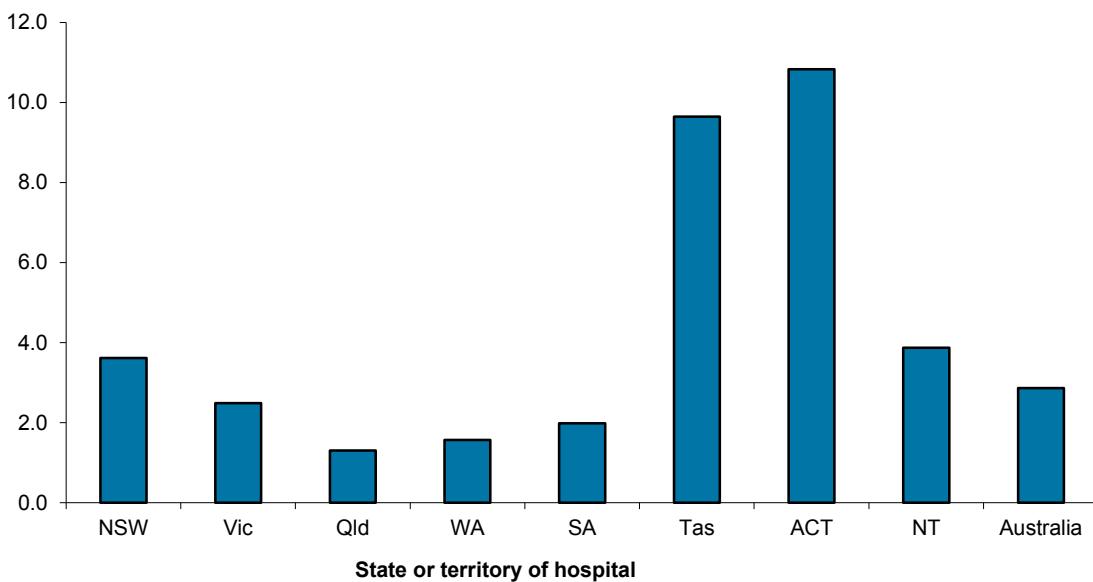
**Median waiting time (days)**



Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods. Additional information by state and territory is available in Table 3.4 of *AHS: EDES* (AIHW 2011c).

**Figure 10.15: Median waiting time for elective surgery, states and territories, public hospitals, 2010–11**

**Per cent waited more than 365 days**



Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods. Additional information by state and territory is available in Table 3.4 of *AHS: EDES* (AIHW 2011c).

**Figure 10.16: Proportion of patients waited more than 365 days, states and territories, public hospitals, 2010–11**

## How did waiting times vary by specialty of surgeon?

The **specialty of the surgeon** describes the area of clinical expertise held by the doctor who was to perform the elective surgery.

*Ophthalmology, Ear, nose and throat surgery* and *Orthopaedic surgery* were the surgical specialties with the longest median waiting times in 2010–11 (71 days, 64 days and 64 days respectively). *Cardio-thoracic surgery* had the shortest median waiting time (16 days) (Table 10.20).

*Orthopaedic surgery* and *Ear, nose and throat surgery* were the specialties with the highest proportion of patients who waited more than 365 days to be admitted (6.2% and 5.6% respectively). *Cardio-thoracic surgery* had the lowest proportion of patients who waited more than 365 days (0.2%).

There was marked variation among the states and territories in the proportion of patients who waited more than 365 days to be admitted for some surgical specialties. For more information, see *AHS: EDES* Table 3.11 (AIHW 2011c).

**Table 10.20: Waiting time statistics for patients admitted from waiting lists for elective surgery, by specialty of surgeon, public hospitals, 2010–11**

Surgical specialty	Admissions	Days waited at 50th percentile	Days waited at 90th percentile	Per cent waited more than 365 days
Cardio-thoracic surgery	11,858	16	77	0.2
Ear, nose & throat surgery	54,137	64	340	5.6
General surgery	146,089	32	164	1.8
Gynaecology	79,744	30	133	0.8
Neurosurgery	10,551	34	220	3.3
Ophthalmology	73,254	71	335	3.6
Orthopaedic surgery	93,381	64	345	6.2
Plastic surgery	45,168	24	156	2.1
Urology	73,294	28	122	1.6
Vascular surgery	14,326	21	149	2.6
Other	19,097	23	98	0.6
<b>Total</b>	<b>620,899</b>	<b>36</b>	<b>252</b>	<b>2.9</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods. Additional information by state and territory is available in Table 3.9 of *AHS: EDES* (AIHW 2010c).

## How did waiting times vary by Indicator procedure?

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

Overall, almost 34% of patients admitted for elective surgery had been waiting for one of the 15 indicator procedures (Table 10.21). There was some variation among the states and territories – Australian Capital Territory and New South Wales had the highest proportion of admissions for the indicator procedures (40% and 36% respectively) and the Northern

Territory had the lowest proportion (25%). *Cataract extraction* was the highest volume indicator procedure in all jurisdictions.

Nationally, the indicator procedure with the lowest median waiting time in 2010–11 was *Coronary artery bypass graft* (17 days) and the one with the highest median waiting time was *Total knee replacement* (173 days) (Table 10.21).

The length of time by which 90% of patients had been admitted also varied by indicator procedure, from 75 days for *Coronary artery bypass graft* to 382 days for *Septoplasty*. The proportions of admissions for which patients waited more than 365 days also varied by indicator procedure.

Median waiting times varied markedly across the states and territories. For more information on the variation between states and territories, see *AHS: EDES* Table 3.10 (AIHW 2011c).

**Table 10.21: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure, public hospitals, 2010–11**

Indicator procedure	Admissions	Days waited at 50th percentile	Days waited at 90th percentile	Per cent waited more than 365 days
Cataract extraction	53,573	90	343	4.1
Cholecystectomy	18,085	54	171	1.8
Coronary artery bypass graft	3,738	17	75	0.2
Cystoscopy	41,792	25	115	1.3
Haemorrhoidectomy	3,647	60	255	3.4
Hysterectomy	9,939	49	201	1.7
Inguinal herniorrhaphy	14,792	57	259	2.6
Myringoplasty	1,713	108	369	10.7
Myringotomy	6,358	47	139	0.9
Prostatectomy	8,183	47	170	2.5
Septoplasty	4,482	159	382	13.7
Tonsillectomy	17,350	94	351	6.5
Total hip replacement	8,554	108	357	7.6
Total knee replacement	12,943	173	376	12.6
Varicose veins stripping and ligation	4,251	100	368	10.2
Not applicable/not stated	411,499	28	184	2.2
<b>Total</b>	<b>620,899</b>	<b>36</b>	<b>252</b>	<b>2.9</b>

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods. Additional information by state and territory is available in Table 3.10 of *AHS: EDES* (AIHW 2011c).

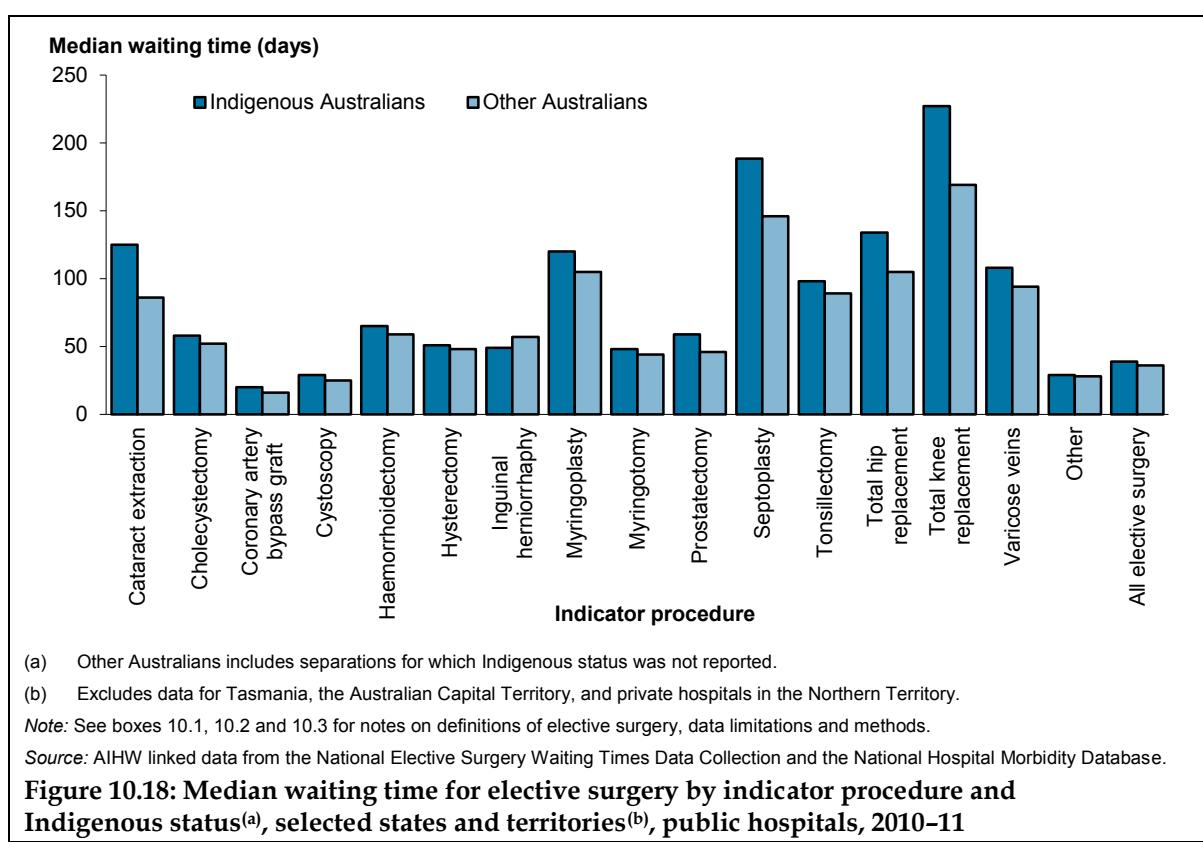
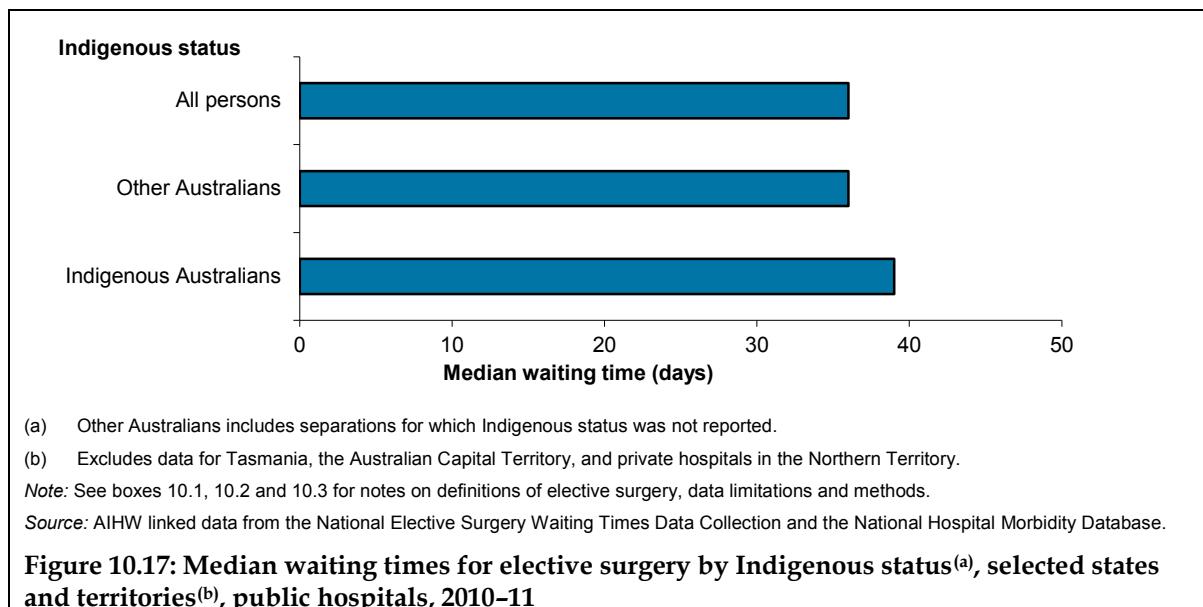
## How did waiting times differ for Indigenous and non-Indigenous Australians?

For 2010–11, there were over 14,500 admissions from public hospital waiting lists for elective surgery for patients identified as Aboriginal and/or Torres Strait Islander people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory.

Overall, the median waiting time for Indigenous Australians was greater than the median waiting time for other Australians (39 days and 36 days respectively, Figure 10.17).

## Indicator procedures

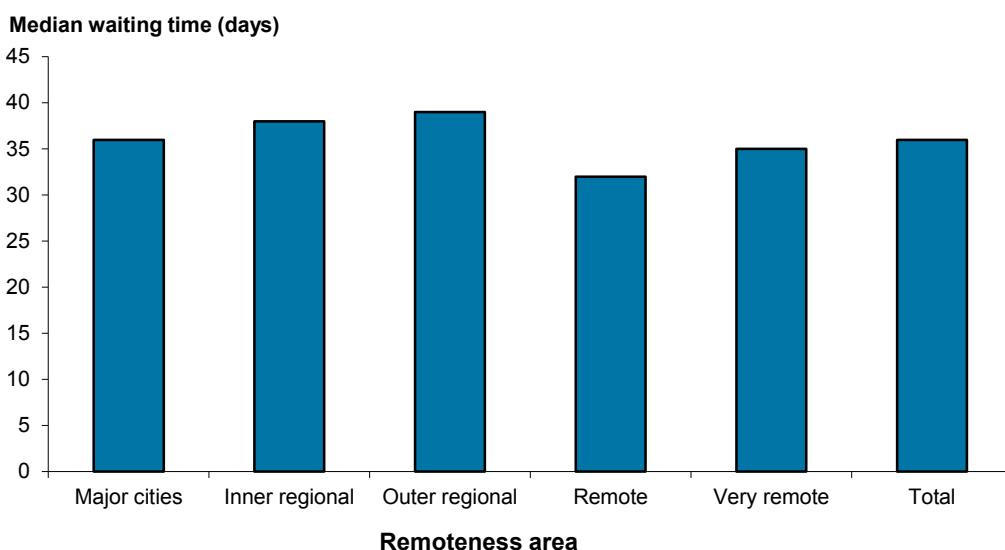
Indigenous Australians had higher median waiting times for 10 of the 11 indicator procedures for which there were at least 100 separations for Indigenous Australians. The greatest difference in median waiting times was for *Total knee replacement* (227 days for Indigenous Australians and 169 days for other Australians). *Hysterectomy*, *Myringotomy*, *Coronary artery bypass graft* and *Cystoscopy* had the smallest differences in median waiting times by Indigenous status (Figure 10.18).



## How did waiting times vary by remoteness area?

Overall, about 67% of admissions from waiting lists for elective surgery were for patients residing in *Major cities*, 22% were in *Inner regional* areas and 9% in *Outer regional* areas.

The median waiting time varied somewhat by remoteness, ranging from 32 days for people living in *Remote* areas to 39 days for people living in *Outer regional* areas (Figure 10.19).



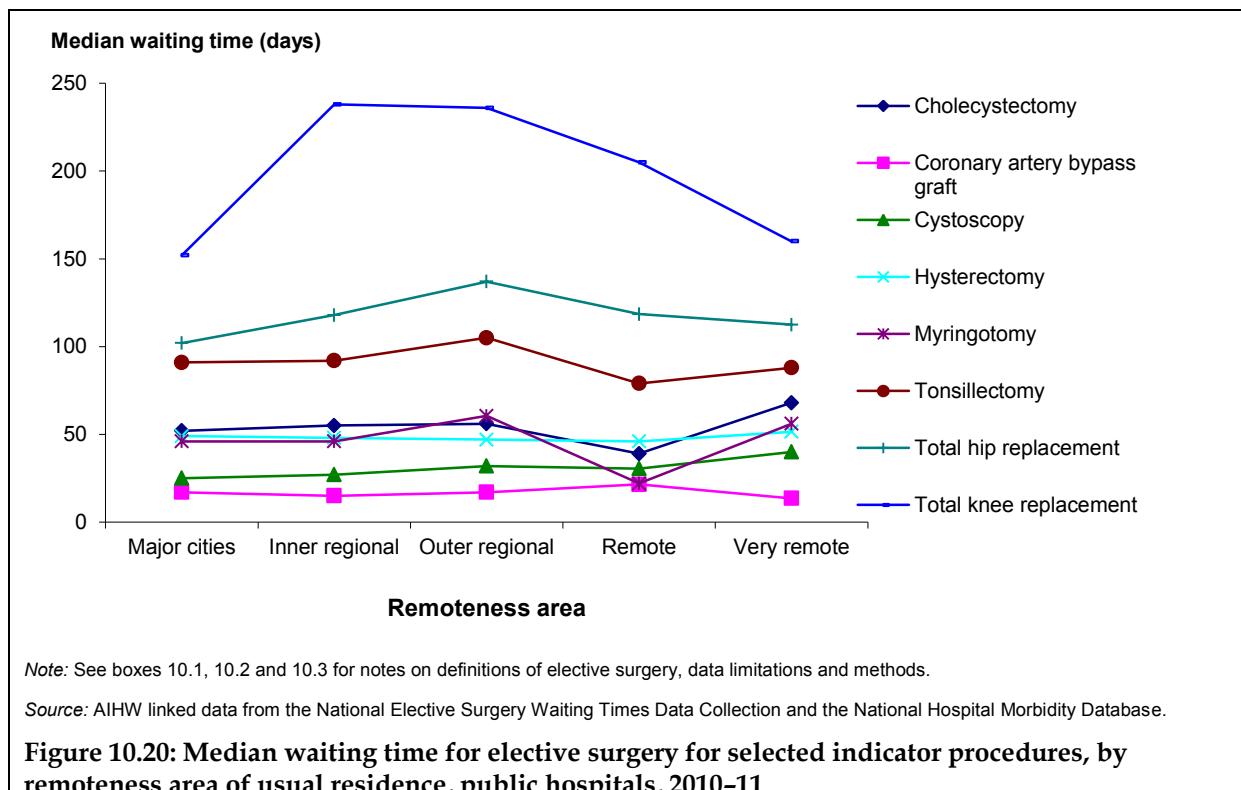
*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Source:* AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

**Figure 10.19: Median waiting time for elective surgery by remoteness area of usual residence, public hospitals, 2010–11**

### Indicator procedures

There was some variation in the median waiting time for remoteness areas by indicator procedure. For indicator procedures with at least 50 admissions in *Remote* and *Very remote* areas, *Total knee replacement* had the greatest variation in waiting times by remoteness area. People from *Inner regional* areas had the highest median waiting time of 238 days, and people from *Major cities* had the lowest (152 days), followed by those from *Very remote* areas (160 days) (Figure 10.20). *Coronary artery bypass graft* had the least variation by remoteness area.



## How did waiting vary by socioeconomic status?

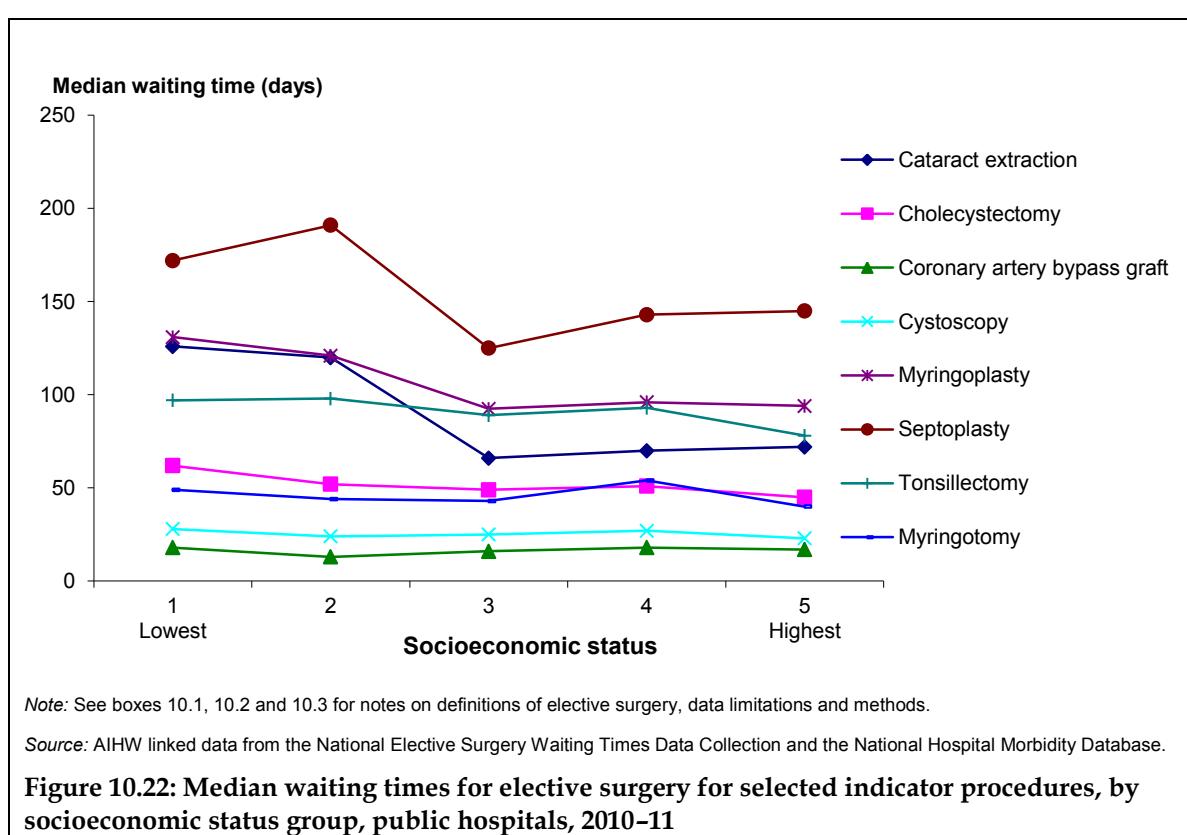
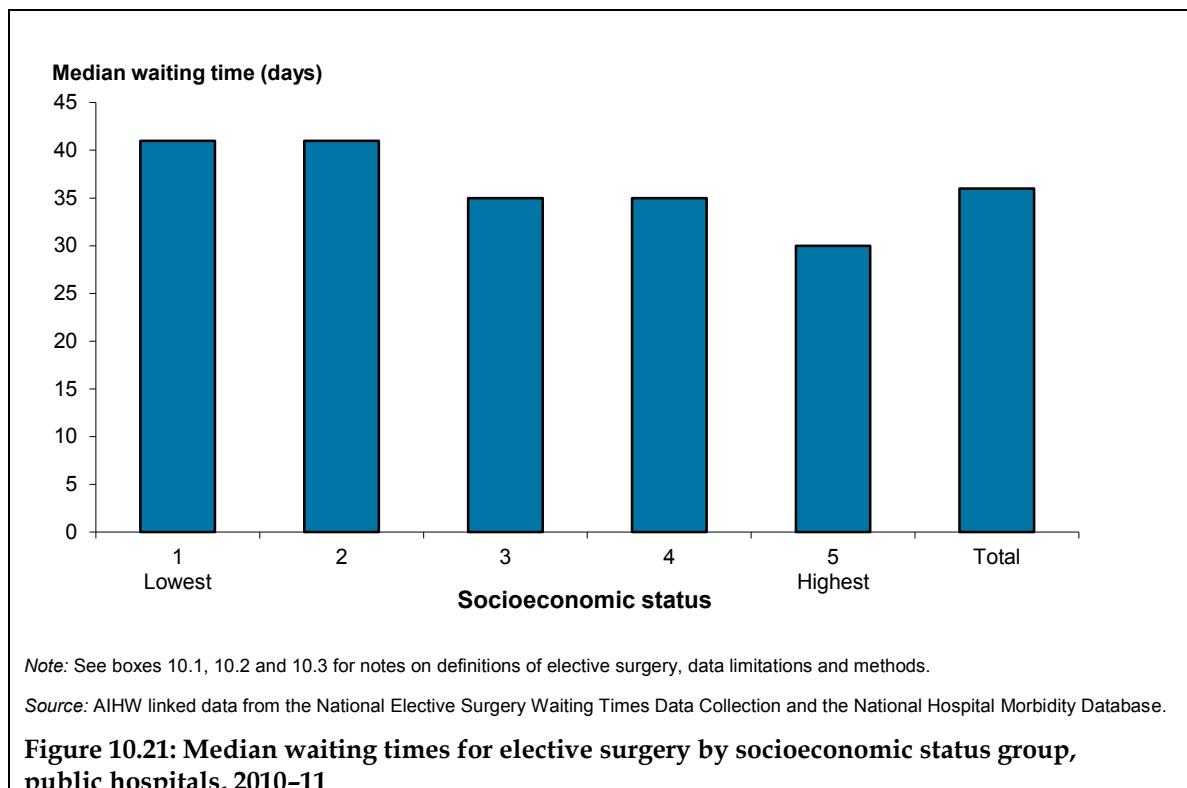
Overall, about 25% of admissions from waiting lists were for people living in areas classified as being in the lowest SES group, decreasing to about 13% for people living in areas classified as being in the highest SES group.

Median waiting times varied by socioeconomic status, ranging from 30 days for people living in areas classified as the highest SES group to 41 days for the lowest and second lowest SES groups (Figure 10.21).

### Indicator procedures

*Septoplasty* was the indicator procedure with the greatest variation in waiting times by socioeconomic status, ranging from 191 days for people living in areas classified as being in the second lowest SES group to 125 days for people in the middle SES group.

*Cholecystectomy*, *Coronary artery bypass graft* and *Cystoscopy* had the least variation by socioeconomic status group (Figure 10.22).

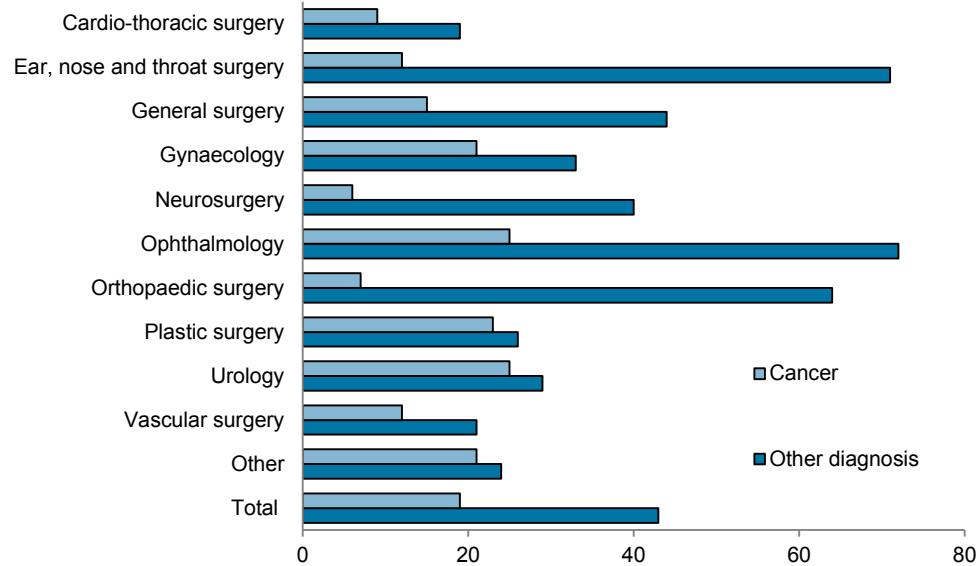


## How did waiting times vary by diagnosis?

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

Figure 10.23 shows that there were shorter overall waiting times for admissions with a principal diagnosis of a cancer (median of 19 days) compared with other admissions (43 days), and for most surgical specialties. Cancer principal diagnoses were defined by the ICD-10-AM diagnosis codes C00-C99, D00-D09, D45, D46, D47.1 and D47.3.

The largest variation in median waiting times by surgical specialty was for *Orthopaedic surgery* for which patients with a cancer-related principal diagnosis had a median waiting time of 7 days, compared with 64 days overall. The surgical specialty which had the least variation in median waiting times for separations with a cancer-related principal diagnosis compared with other diagnoses was *Plastic surgery* (23 days for cancer, compared to 26 days).



Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

**Figure 10.23: Median waiting times for patients admitted from waiting lists for elective surgery with a cancer-related principal diagnosis (or other principal diagnosis), by specialty of surgeon, public hospitals, 2010–11**

Median waiting times varied according to the type of cancer. The selected 'cancer types' presented in Table 10.22 were defined as separations with a principal diagnosis of:

- Bladder cancer (C67, D09.0)
- Bowel cancer (C18–20, D01.0–D01.2)
- Breast cancer (C50, D05)
- Gynaecological cancer (C51–58, D069, D07.0–D07.3)
- Kidney cancer (C64)
- Lung cancer (C33–34, D02.1–D02.2)
- Melanoma (C43, D03)
- Prostate cancer (C61, D07.5).

In 2010–11, patients admitted with a principal diagnosis for lung cancer had a median waiting time of 11 days and 90% of patients had been admitted for surgery within 28 days (Table 10.22). Patients with a principal diagnosis of prostate cancer had a median waiting time of 33 days and 90% of patients had been admitted for surgery within 98 days.

**Table 10.22: Waiting time statistics for admissions from waiting lists for elective surgery, for selected principal diagnoses for cancer, 2010–11**

Cancer type	Separations	Days waited at 50th percentile	Days waited at 90th percentile
Bladder cancer	6,839	22	77
Bowel cancer	5,021	15	35
Breast cancer	9,029	13	29
Gynaecological cancer	6,743	22	66
Kidney cancer	1,137	24	65
Lung cancer	1,133	11	28
Melanoma	3,774	14	35
Prostate cancer	6,290	33	98
Other principal diagnoses	565,317	40	263
<b>Total</b>	<b>605,283</b>	<b>36</b>	<b>250</b>

*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Source:* AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

## Additional information

Further detailed information by reason for removal, indicator procedure and specialty of surgeon is provided in tables 3.9 to 3.11 of *AHS: EDES* (AIHW 2011c) and in the tables accompanying this report online.

# 11 Sub- and non-acute admitted patient care

This chapter presents information on sub- and non-acute admitted patient care provided by public and private hospitals in Australia, sourced from the AIHW's National Hospital Morbidity Database (NHMD).

## What data are reported?

Sub- and non-acute admitted patient care includes the following categories:

- *Rehabilitation*—care in which the clinical intent or treatment goal is to improve the functional status of a patient with an impairment, disability or handicap. It is usually evidenced by a multi-disciplinary rehabilitation plan comprising negotiated goals and indicative time frames which are evaluated by a periodic assessment using a recognised functional assessment measure.
- *Palliative*—care in which the clinical intent or treatment goal is primarily quality of life for a patient with an active, progressive disease with little or no prospect of cure. It is usually evidenced by an interdisciplinary assessment and/or management of the physical, psychological, emotional and spiritual needs of the patient and a grief and bereavement support service for the patient and their carers/family.
- *Geriatric evaluation and management*—care in which the clinical intent or treatment goal is to maximise health status and/or optimise the living arrangements for a patient with multi-dimensional medical conditions associated with disabilities and psychosocial problems, who is usually (but not always) an older patient.
- *Psychogeriatric*—care in which the clinical intent or treatment goal is improvement in health, modification of symptoms and enhancement in function, behaviour and/or quality of life for a patient with an age-related organic brain impairment with significant behavioural or late onset psychiatric disturbance or a physical condition accompanied by severe psychiatric or behavioural disturbance.
- *Maintenance*—care in which the clinical intent or treatment goal is prevention of deterioration in the functional and current health status of a patient with a disability or severe level of functional impairment.

### Box 11.1: What are the limitations of the data?

As these data are sourced from the NHMD, the data limitations presented in Chapter 7 and Appendix 1 should be taken into consideration when interpreting the data.

Some sub- and non-acute activity may occur during an acute episode of admitted patient care, or may be delivered as a non-admitted patient service. Therefore, the information presented in this chapter is likely to underestimate this activity.

There is some apparent variation among jurisdictions in the use of statistical discharges and associated assignment of care types which may affect the comparability of the data.

**Box 11.2: What methods were used?**

- (a) In this chapter, separations are reported for the care types: *Rehabilitation*, *Palliative*, *Geriatric evaluation and management*, *Psychogeriatric* or *Maintenance* care.
- (b) In some tables in this chapter, the category *Other sub- and non-acute care* has been used. It includes the care types: *Geriatric evaluation and management*, *Psychogeriatric* and *Maintenance* care.

For details of other methods used in this chapter, see Chapter 7.

## How has activity changed over time?

Between 2006–07 and 2010–11, the number of separations for sub- and non-acute care increased from about 243,000 to almost 380,000, an average increase of 11.9% per year. Over this period, the average rate of increase was higher in private hospitals (17.9%) than in public hospitals (5.8%). In particular, *Rehabilitation* care in private hospitals doubled, increasing by an average of 20.1% per year between 2006–07 and 2010–11 (Table 11.1).

**Table 11.1: Sub- and non-acute separations<sup>(a)</sup> by care type, public and private hospitals, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
<b>Public hospitals</b>							
Rehabilitation	70,822	75,446	77,875	82,675	86,426	5.1	4.5
Palliative care	21,785	21,598	24,262	26,633	28,255	6.7	6.1
Geriatric evaluation and management	14,670	14,813	18,307	21,310	26,484	15.9	24.3
Psychogeriatric care	4,695	4,494	2,393	2,336	2,445	-15.1	4.7
Maintenance care	19,093	19,211	19,763	19,624	20,889	2.3	6.4
<i>Total</i>	<i>131,065</i>	<i>135,562</i>	<i>142,600</i>	<i>152,578</i>	<i>164,499</i>	<i>5.8</i>	<i>7.8</i>
<b>Private hospitals</b>							
Rehabilitation	96,401	115,659	137,946	168,972	200,808	20.1	18.8
Palliative care	6,488	5,766	5,281	5,016	5,507	-4.0	9.8
Geriatric evaluation and management	780	87	113	88	77	-43.9	-12.5
Psychogeriatric care	6,138	6,857	6,579	8,102	6,336	0.8	-21.8
Maintenance care	1,636	1,699	2,004	2,283	2,665	13.0	16.7
<i>Total</i>	<i>111,443</i>	<i>130,068</i>	<i>151,923</i>	<i>184,461</i>	<i>215,393</i>	<i>17.9</i>	<i>16.8</i>
<b>Total</b>	<b>242,508</b>	<b>265,630</b>	<b>294,523</b>	<b>337,039</b>	<b>379,892</b>	<b>11.9</b>	<b>12.7</b>

(a) Annual average change, not adjusted for changes in coverage and re-categorisation of hospitals as public or private.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## States and territories

Between 2006–07 and 2010–11, the average rate of increase for sub- and non-acute care separations in private hospitals varied among jurisdictions. It was highest for South Australia (43.8% on average per year) and New South Wales (20.8%) (Table 11.2).

Over the same period, the average rate of increase for sub- and non-acute care in public hospitals was highest in the Australian Capital Territory (10.6%). For Tasmania, the number of sub- and non-acute care separations in public hospitals decreased by 3% between 2006–07 and 2010–11.

**Table 11.2: Sub- and non-acute separations, public and private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent) <sup>(a)</sup>	
						Average since 2006–07	Since 2009–10
<b>New South Wales</b>							
Public hospitals	41,864	43,105	45,153	50,960	56,102	7.6	10.1
Private hospitals	57,719	68,585	82,567	100,130	123,045	20.8	22.9
<b>Victoria</b>							
Public hospitals	33,901	32,431	32,651	35,065	37,349	2.5	6.5
Private hospitals	19,886	21,069	20,538	24,022	23,447	4.2	-2.4
<b>Queensland</b>							
Public hospitals	25,594	27,604	30,439	32,104	34,615	7.8	7.8
Private hospitals	23,249	28,743	28,805	33,487	34,990	10.8	4.5
<b>Western Australia</b>							
Public hospitals	12,226	13,372	13,487	12,601	13,648	2.8	8.3
Private hospitals	3,793	3,579	4,043	4,867	5,678	10.6	16.7
<b>South Australia</b>							
Public hospitals	10,472	11,073	11,614	12,518	14,134	7.8	12.9
Private hospitals	5,269	6,755	12,763	18,052	22,510	43.8	24.7
<b>Tasmania</b>							
Public hospitals	2,168	2,051	2,145	2,230	1,910	-3.1	-14.3
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	3,770	4,665	5,956	5,749	5,645	10.6	-1.8
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	1,070	1,261	1,155	1,351	1,096	0.6	-18.9
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>All hospitals</b>	<b>242,508</b>	<b>265,630</b>	<b>294,523</b>	<b>337,039</b>	<b>379,892</b>	<b>11.9</b>	<b>12.7</b>

(a) Annual average change, not adjusted for changes in coverage and re-categorisation of hospitals as public or private.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods. Similar information by hospital type is available online at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)>.

Abbreviations: n.p. —not published.

## How much activity was there in 2010–11?

Overall, 4.5% of separations in 2010–11 were sub- and non-acute separations (Table 11.3). The proportion of separations that were for sub- and non-acute care varied, ranging from 2.6% of all separations in Victoria to 7.2% in New South Wales.

**Table 11.3: Sub- and non-acute separations, by care type, all hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Rehabilitation	30,832	14,776	19,385	9,496	7,664	1,114	2,718	441	86,426
Palliative care	10,919	6,659	6,599	1,234	1,678	217	629	320	28,255
Geriatric evaluation and management	5,624	15,293	2,172	804	1,701	141	707	42	26,484
Psychogeriatric care	808	0	596	730	288	1	21	1	2,445
Maintenance care	7,919	621	5,863	1,384	2,803	437	1,570	292	20,889
<i>Public hospital total</i>	<b>56,102</b>	<b>37,349</b>	<b>34,615</b>	<b>13,648</b>	<b>14,134</b>	<b>1,910</b>	<b>5,645</b>	<b>1,096</b>	<b>164,499</b>
<b>Private hospitals</b>									
Rehabilitation	122,431	17,453	30,929	2,241	22,185	n.p.	n.p.	n.p.	200,808
Palliative care	475	617	1,715	2,317	264	n.p.	n.p.	n.p.	5,507
Geriatric evaluation and management	0	0	22	2	49	n.p.	n.p.	n.p.	77
Psychogeriatric care	0	5,339	3	992	0	n.p.	n.p.	n.p.	6,336
Maintenance care	139	38	2,321	126	12	n.p.	n.p.	n.p.	2,665
<i>Private hospital total</i>	<b>123,045</b>	<b>23,447</b>	<b>34,990</b>	<b>5,678</b>	<b>22,510</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>215,393</b>
<b>Total separations</b>	<b>179,147</b>	<b>60,796</b>	<b>69,605</b>	<b>19,326</b>	<b>36,644</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>379,892</b>
<b>Proportion of all separations</b>	<b>7.2</b>	<b>2.6</b>	<b>3.9</b>	<b>2.2</b>	<b>5.6</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>4.5</b>

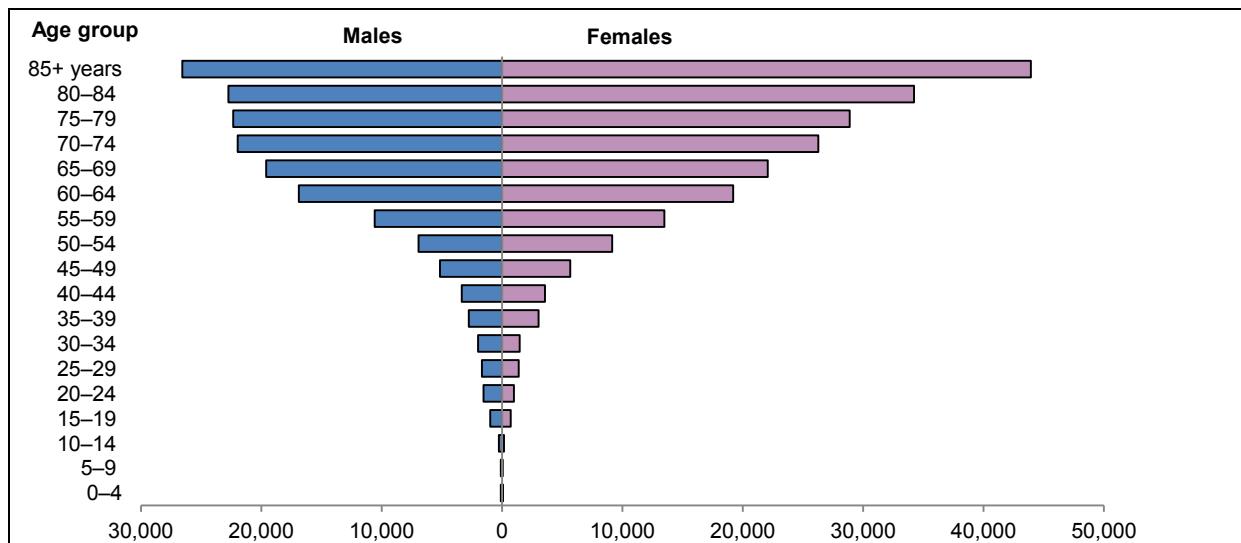
Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

## Who used these services?

### Sex and age group

Females accounted for more than half (56.4%) of sub- and non-acute separations (Figure 11.1) and there were more separations for females than for males in the age groups 35 and over. Persons aged 60 and over accounted for more than 80% of all sub- and non-acute separations.



Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Figure 11.1: Sub- and non-acute separations by sex and age group, all hospitals, 2010–11**

## Performance indicator: People aged 65 years or over receiving sub-acute services

This National Healthcare Agreement indicator is related to the outcome area of aged care. It is denoted as an interim indicator, as the available data do not completely match the intent of the indicator. This indicator is intended to report the number of people aged 65 years or over receiving sub-acute services. However, the data are based on the number of separations for sub-acute services, and a person may have more than one episode of care in hospital during the year. Therefore the data presented here are not an estimate the number of persons aged 65 years or over receiving sub-acute services. These data include separations for *Rehabilitation, Palliative care, Geriatric evaluation and management and Psychogeriatric care*.

For public hospitals, the separation rate for sub-acute separations for persons aged 65 years or over ranged from 13 per 1,000 population in Tasmania to 72 per 1,000 in the Australian Capital Territory (Table 11.4). For private hospitals, the separation rate varied from 16 per 1,000 population in Western Australia to 79 per 1,000 in New South Wales.

Comparison of rates for states and territories should take into consideration cross-border flows, particularly in the Australian Capital Territory. There may also be differences between states and territories in the delivery of sub-acute care which should be considered when interpreting these data.

**Table 11.4: Separations for persons<sup>(a)</sup> aged 65 years or over receiving sub-acute<sup>(b)</sup> services, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Separations	37,095	29,669	17,942	9,451	7,633	1,034	2,678	299	105,801
Separations per 1,000 population	35.0	37.2	31.9	33.8	28.2	13.0	71.9	26.7	34.2
<b>Private hospitals</b>									
Separations	81,576	19,621	20,279	4,598	14,180	n.p	n.p	n.p	143,952
Separations per 1,000 population	79.2	25.0	36.0	16.3	54.8	n.p	n.p	n.p	47.3
<b>Total</b>									
<b>Separations</b>	<b>118,671</b>	<b>49,290</b>	<b>38,221</b>	<b>14,049</b>	<b>21,813</b>	n.p	n.p	n.p	249,753
<b>Separations per 1,000 population</b>	<b>114.1</b>	<b>62.2</b>	<b>67.9</b>	<b>50.0</b>	<b>83.0</b>	n.p	n.p	n.p	81.4

(a) Data are based on separations, not persons, therefore these rates are likely to overestimate the number of people receiving sub-acute care.

(b) Separations for *Maintenance* care are excluded.

*Note:* See boxes 11.1 and 11.2 for notes on data limitations and methods.

*Abbreviation:* n.p.—not published.

Additional information on the number of separations for persons aged 65 years or over receiving sub-acute services by Indigenous status, remoteness area of residence and socioeconomic status is included in additional tables accompanying this report online at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)>.

## Aboriginal and Torres Strait Islander people

### Box 11.3: Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2010–11 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix 2 for more information on the quality of Indigenous data in the NHMD.

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. It should also be noted that data presented for the six jurisdictions with data of acceptable quality for analysis purposes are not necessarily representative of the jurisdictions excluded.

Nationally, 0.9% of all sub- and non-acute separations reported an Indigenous status of *Aboriginal and/or Torres Strait Islander*. The proportion of separations that were for Indigenous Australians varied across the states and territories (Table 11.5).

In 2010–11, there were 12 sub- and non-acute separations per 1,000 population for Indigenous Australians, about 76% of the rate for other Australians (16 per 1,000).

Indigenous Australians had lower separation rates for *Rehabilitation* care than other Australians (6 per 1,000 and 12 per 1,000, respectively). Indigenous Australians had higher separation rates for *Palliative* care and *Maintenance* care than other Australians.

**Table 11.5: Sub- and non-acute separations, by Indigenous status, all hospitals, states and territories<sup>(a)</sup>, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(a)</sup>	Separations per 1,000 population
<b>Indigenous Australians</b>										
Rehabilitation	508	126	569	290	103	34	41	153	1,749	6.1
Palliative care	158	24	136	84	27	3	5	61	490	2.1
Geriatric evaluation and management	38	36	27	4	2	2	9	23	130	0.7
Psychogeriatric care	8	3	2	6	0	0	0	0	19	0.1
Maintenance care	119	7	277	141	37	0	41	170	751	3.0
<i>Total Indigenous Australians</i>	<i>831</i>	<i>196</i>	<i>1,011</i>	<i>525</i>	<i>169</i>	<i>39</i>	<i>96</i>	<i>407</i>	<i>3,139</i>	<i>12.0</i>
<b>Other Australians<sup>(b)</sup></b>										
Rehabilitation	152,755	32,103	49,745	11,447	29,746	1,080	2,677	288	276,084	12.0
Palliative care	11,236	7,252	8,178	3,467	1,915	214	624	259	32,307	1.4
Geriatric evaluation and management	5,586	15,257	2,167	802	1,748	139	698	19	25,579	1.1
Psychogeriatric care	800	5,336	597	1,716	288	1	21	1	8,738	0.4
Maintenance care	7,939	652	7,907	1,369	2,778	437	1,529	122	20,767	0.9
<i>Total other Australians</i>	<i>178,316</i>	<i>60,600</i>	<i>68,594</i>	<i>18,801</i>	<i>36,475</i>	<i>1,871</i>	<i>5,549</i>	<i>689</i>	<i>363,475</i>	<i>15.8</i>
<b>Total</b>	<b>179,147</b>	<b>60,796</b>	<b>69,605</b>	<b>19,326</b>	<b>36,644</b>	<b>1,910</b>	<b>5,645</b>	<b>1,096</b>	<b>366,614</b>	<b>15.8</b>

(a) Data for Tasmania, the Australian Capital Territory and the Northern Territory are presented for public hospitals only. The total excludes data for Tasmania and the Australian Capital Territory.

(b) Other Australians includes separations for which Indigenous status was not reported.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

## Remoteness area

There was marked variation in the separation rates for sub- and non-acute admitted patient care by remoteness area of usual residence. Overall, people usually resident in *Major cities* had much higher rates for *Rehabilitation* care than other areas (15 separations per 1,000 population, compared with 12 per 1,000 nationwide) (Tables 11.6 and 11.7). The separation rate ratios (SRR) indicate notable differences in the separation rates for *Rehabilitation* care across remoteness areas for both public and private hospitals.

For public hospitals, the rate of *Rehabilitation* care varied from 2.4 per 1,000 population for people residing in *Outer regional* areas to 4.0 per 1,000 for people residing in *Major cities* (Table 11.6). There were more marked variations for private hospitals, with the rate of *Rehabilitation* care ranging from 1.2 per 1,000 in *Very remote* areas to 10.7 per 1,000 in *Major cities* (Table 11.7).

**Table 11.6: Selected sub- and non-acute separation statistics, by remoteness area of usual residence, public hospitals, 2010–11**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
<b>Rehabilitation</b>						
Separations	64,108	15,100	5,661	758	361	86,426
Separations per 1,000 population	4.0	2.9	2.4	2.6	2.7	3.6
SRR	1.11	0.80	0.68	0.74	0.74	
<b>Palliative care</b>						
Separations	18,273	6,417	3,080	320	127	28,255
Separations per 1,000 population	1.1	1.2	1.3	1.1	1.0	1.2
SRR	0.98	1.01	1.11	0.97	0.89	
<b>Geriatric evaluation and management</b>						
Separations	20,978	4,420	962	52	27	26,484
Separations per 1,000 population	1.2	0.8	0.4	0.2	0.2	1.0
SRR	1.18	0.75	0.39	0.18	0.21	
<b>Psychogeriatric care</b>						
Separations	1,968	358	87	12	4	2,445
Separations per 1,000 population	0.1	0.1	<0.1	<0.1	<0.1	0.1
SRR	1.23	0.64	0.37	0.46	0.48	
<b>Maintenance care</b>						
Separations	11,585	5,022	3,319	520	362	20,889
Separations per 1,000 population	0.7	0.9	1.4	2.0	3.3	0.8
SRR	0.82	1.10	1.71	2.42	3.99	
<b>Total</b>						
<b>Separations</b>	<b>116,912</b>	<b>31,317</b>	<b>13,109</b>	<b>1,662</b>	<b>881</b>	<b>164,499</b>
<b>Separations per 1,000 population</b>	<b>7.1</b>	<b>5.8</b>	<b>5.6</b>	<b>6.0</b>	<b>7.3</b>	<b>6.7</b>
<b>SRR</b>	<b>1.07</b>	<b>0.87</b>	<b>0.83</b>	<b>0.89</b>	<b>1.09</b>	

(a) The total includes separations for which the remoteness area was not able to be categorised.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: SRR—Separation rate ratio.

**Table 11.7: Selected sub- and non-acute separation statistics, by remoteness area of usual residence, private hospitals, 2010–11**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
<b>Rehabilitation</b>						
Separations	172,461	23,799	3,818	332	110	200,808
Separations per 1,000 population	10.7	4.4	1.7	1.5	1.2	8.3
SRR	1.30	0.53	0.20	0.18	0.15	
<b>Palliative care</b>						
Separations	3,599	1,555	315	31	6	5,507
Separations per 1,000 population	0.2	0.3	0.1	0.1	0.1	0.2
SRR	0.98	1.29	0.59	0.49	0.35	
<b>Other sub- and non-acute care<sup>(b)</sup></b>						
Separations	7,574	1,334	142	18	7	9,078
Separations per 1,000 population	0.5	0.3	0.1	0.1	0.1	0.4
SRR	1.26	0.73	0.18	0.19	0.18	
<b>Total</b>						
<b>Separations</b>	<b>183,634</b>	<b>26,688</b>	<b>4,275</b>	<b>381</b>	<b>123</b>	<b>215,393</b>
<b>Separations per 1,000 population</b>	<b>11.4</b>	<b>5.0</b>	<b>1.9</b>	<b>1.7</b>	<b>1.3</b>	<b>8.9</b>
<b>SRR</b>	<b>1.29</b>	<b>0.56</b>	<b>0.21</b>	<b>0.19</b>	<b>0.15</b>	

(a) The total includes separations for which the remoteness area was not able to be categorised.

(b) Separations with a care type of *Geriatric evaluation and management, Psychogeriatric care and Maintenance care*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: SRR—separation rate ratio.

## Socioeconomic status

Socioeconomic status (SES) groups in this report are based on the Index of Relative Socio-Economic Disadvantage (from SEIFA 2006) for the area of usual residence (SLA) of the patient. See Appendix 2 for details.

Each SES group accounted for between 16% and 29% of total sub- and non-acute separations. The separation rates varied from 23 per 1,000 population for patients living in areas classified as being the highest SES group to 12 per 1,000 for the lowest SES group (Table 11.8). The separation rate ratios (SRR) indicate notable differences in the separation rates across SES groups for some categories.

**Table 11.8: Selected sub- and non-acute separation statistics, by socioeconomic status, all hospitals, 2010–11**

	Socioeconomic status group					Total <sup>(a)</sup>
	1— Lowest	2	3	4	5— Highest	
<b>Rehabilitation</b>						
Separations	38,985	50,951	48,659	55,461	92,441	287,234
Separations per 1,000 population	7.8	9.7	10.3	12.4	19.5	11.8
SRR	0.66	0.82	0.88	1.05	1.65	
<b>Palliative care</b>						
Separations	7,877	6,799	7,365	5,769	5,911	33,762
Separations per 1,000 population	1.5	1.3	1.6	1.3	1.2	1.4
SRR	1.12	0.92	1.13	0.94	0.89	
<b>Geriatric evaluation and management</b>						
Separations	5,061	5,743	5,625	4,753	5,334	26,561
Separations per 1,000 population	0.9	1.0	1.1	1.0	1.0	1.0
SRR	0.91	0.98	1.10	1.00	1.01	
<b>Psychogeriatric care</b>						
Separations	815	871	1,143	2,377	3,559	8,781
Separations per 1,000 population	0.2	0.2	0.2	0.6	0.8	0.4
SRR	0.44	0.44	0.67	1.52	2.13	
<b>Maintenance care</b>						
Separations	6,110	5,589	4,257	3,818	3,695	23,554
Separations per 1,000 population	1.2	1.0	0.9	0.8	0.7	0.9
SRR	1.26	1.09	0.94	0.89	0.78	
<b>Total sub- and non-acute care</b>						
<b>Separations</b>	<b>58,848</b>	<b>69,953</b>	<b>67,049</b>	<b>72,178</b>	<b>110,940</b>	<b>379,892</b>
<b>Separations per 1,000 population</b>	<b>11.6</b>	<b>13.2</b>	<b>14.2</b>	<b>16.1</b>	<b>23.2</b>	<b>15.5</b>
<b>SRR</b>	<b>0.75</b>	<b>0.85</b>	<b>0.91</b>	<b>1.04</b>	<b>1.50</b>	

(a) The total includes separations for which the socioeconomic status group was not able to be categorised.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: SRR—separation rate ratio.

## How did people access these services?

The **mode of admission** records the mechanism by which an admitted patient begins an episode of care.

Over half of all sub- and non-acute separations had a mode of admission of *Other*, the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 11.9). *Statistical admission: care type change* was the most common admission mode for sub- and non-acute separations in public hospitals. This indicates that the clinical intent of the patient's care had changed (for example, from *Acute* care to *Rehabilitation* care) within the one hospital. Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals.

**Table 11.9: Sub- and non-acute separations, by mode of admission, public and private hospitals, 2010–11**

	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	49,726	39,032	88,758
Statistical admission: care type change	72,126	13,906	86,032
Other	42,497	162,002	204,499
Not reported	150	453	603
<b>Total</b>	<b>164,499</b>	<b>215,393</b>	<b>379,892</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Why did people receive the care?

The reason that a patient received admitted patient care can be described in terms of the principal diagnosis. The **principal diagnosis** is the diagnosis established after study to be chiefly responsible for occasioning the episode of admitted patient care.

### Principal diagnosis

Overall, four out of five sub- and non-acute separations had a principal diagnosis from the ICD-10-AM chapter *factors influencing health status and contact with health services*. A principal diagnosis within this chapter was reported for 94% of sub- and non-acute separations in private hospitals and 67% in public hospitals (Table 11.10).

*Care involving use of rehabilitation procedures* accounted for 76% of principal diagnoses reported for sub- and non-acute separations (at the 3-character level). This diagnosis is required to be reported as the principal diagnosis for *Rehabilitation* care and lies within the chapter *factors influencing health status and contact with health services*.

The second most common principal diagnosis chapter reported for sub- and non-acute separations was *Neoplasms*, which includes both benign and malignant tumours, and was particularly associated with separations for *Palliative* care.

For *Palliative* care, 9 of the top 10 principal diagnoses were for malignant neoplasms, and these accounted for 47% of principal diagnoses for *Palliative* care separations. The top 5 neoplasm-related principal diagnoses are presented in Table 11.11, as are the top 5 non-neoplasm related principal diagnoses for *Palliative* care.

For *Geriatric evaluation and management*, the top 10 principal diagnoses made up 39% of all separations within this care type. They included *Care involving use of rehabilitation procedures*, acute conditions (such as pneumonia and fractures of the hip and spine) and chronic conditions (such as heart failure and chronic obstructive pulmonary disease) (Table 11.12).

For *Psychogeriatric care*, the top 10 principal diagnoses made up 79% of all separations within this care type. They included depressive disorders, *Alzheimer's disease* and dementia (Table 11.13).

For *Maintenance care*, the top 10 principal diagnoses made up almost 91% of all separations within this care type, with *Problems related to medical facilities and other health care* being the most common principal diagnosis (Table 11.14).

**Table 11.10: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2010–11**

<b>Principal diagnosis chapter</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	1,020	75	1,095
C00–D48	Neoplasms	19,990	4,284	24,274
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	491	45	536
E00–E90	Endocrine, nutritional and metabolic diseases	899	76	975
F00–F99	Mental and behavioural disorders	4,792	5,432	10,224
G00–G99	Diseases of the nervous system	2,733	944	3,677
H00–H59	Diseases of the eye and adnexa	24	6	30
H60–H95	Diseases of the ear and mastoid process	55	1	56
I00–I99	Diseases of the circulatory system	5,627	626	6,253
J00–J99	Diseases of the respiratory system	4,154	519	4,673
K00–K93	Diseases of the digestive system	1,927	173	2,100
L00–L99	Diseases of the skin and subcutaneous tissue	654	33	687
M00–M99	Diseases of the musculoskeletal system and connective tissue	1,983	197	2,180
N00–N99	Diseases of the genitourinary system	1,865	134	1,999
O00–O99	Pregnancy, childbirth and the puerperium	52	1	53
P00–P96	Certain conditions originating in the perinatal period	7	1	8
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	35	0	35
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	2,816	246	3,062
S00–T98	Injury, poisoning and certain other consequences of external causes	5,776	196	5,972
Z00–Z99	Factors influencing health status and contact with health services	109,516	202,305	311,821
	Not reported	83	99	182
<b>Total sub- and non-acute separations</b>		<b>164,499</b>	<b>215,393</b>	<b>379,892</b>

*Note:* See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.11: Separations for the top 5 neoplasm-related and top 5 other principal diagnoses in 3-character ICD-10-AM groupings for *Palliative care* separations, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
<b>Neoplasm-related</b>				
C34	Malignant neoplasm of bronchus and lung	3,322	643	3,965
C79	Secondary malignant neoplasm of other and unspecified sites	2,237	606	2,843
C78	Secondary malignant neoplasm of respiratory and digestive organs	1,630	511	2,141
C61	Malignant neoplasm of prostate	1,019	192	1,211
C25	Malignant neoplasm of pancreas	1,001	205	1,206
<b>Other</b>				
I50	Heart failure	691	145	836
J44	Other chronic obstructive pulmonary disease	595	95	690
J18	Pneumonia, organism unspecified	477	76	553
G12	Spinal muscular atrophy and related syndromes	343	81	424
I63	Cerebral infarction	394	19	413
Other (includes neoplasm-related not listed above)		16,546	2,934	19,480
<b>Total <i>Palliative care</i> separations</b>		<b>28,255</b>	<b>5,507</b>	<b>33,762</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.12: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for *Geriatric evaluation and management* separations, public and private hospitals, 2010–11**

Principal diagnosis		Public hospitals	Private hospitals	Total
Z50	Care involving use of rehabilitation procedures	3,147	0	3,147
S72	Fracture of femur	1,414	1	1,415
I50	Heart failure	901	1	902
F05	Delirium, not induced by alcohol and other psychoactive substances	796	1	797
J18	Pneumonia, organism unspecified	758	4	762
N39	Other disorders of urinary system	732	0	732
S32	Fracture of lumbar spine and pelvis	726	0	726
J44	Other chronic obstructive pulmonary disease	702	0	702
Z75	Problems related to medical facilities and other health care	631	0	631
I63	Cerebral infarction	557	0	557
Other		16,120	77	16,190
<b>Total <i>Geriatric evaluation and management</i> separations</b>		<b>26,484</b>	<b>77</b>	<b>26,561</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.13: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for *Psychogeriatric* care separations, public and private hospitals, 2010–11**

<b>Principal diagnosis</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
F33	Recurrent depressive disorder	243	1,754	1,997
F32	Depressive episode	461	877	1,338
G30	Alzheimer's disease	324	775	1,099
F41	Other anxiety disorders	54	502	556
F31	Bipolar affective disorder	195	357	552
F10	Mental and behavioural disorders due to use of alcohol	39	434	473
F20	Schizophrenia	170	130	300
F01	Vascular dementia	123	92	215
F03	Unspecified dementia	178	12	190
F43	Reaction to severe stress, and adjustment disorders	48	129	177
Other		610	1,274	1,884
<b>Total <i>Psychogeriatric</i> care separations</b>		<b>2,445</b>	<b>6,336</b>	<b>8,781</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.14: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for *Maintenance* care separations, public and private hospitals, 2010–11**

<b>Principal diagnosis</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
Z75	Problems related to medical facilities and other health care	16,232	992	17,224
Z54	Convalescence	919	539	1,458
Z74	Problems related to care-provider dependency	1,342	3	1,345
F33	Recurrent depressive disorder	5	842	847
F20	Schizophrenia	166	0	166
J44	Other chronic obstructive pulmonary disease	77	4	81
F03	Unspecified dementia	70	3	73
Z48	Other surgical follow-up care	67	6	73
Z59	Problems related to housing and economic circumstances	69	0	69
Z76	Persons encountering health services in other circumstances	31	26	57
Other		1,911	250	2,161
<b>Total <i>Maintenance</i> care separations</b>		<b>20,889</b>	<b>2,665</b>	<b>23,554</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Additional diagnoses

For *Rehabilitation* care, the principal diagnosis is required to be reported as *Care involving use of rehabilitation procedures*, and the first additional diagnosis is usually the reason for that care.

The 10 most common first additional diagnoses reported for *Rehabilitation* care separations included 7 musculoskeletal conditions and injuries (Table 11.15). Over half of rehabilitation separations in private hospitals and about one-quarter of rehabilitation separations in public hospitals reported these 10 first additional diagnoses.

**Table 11.15: Separations for the top 10 first additional diagnoses in 3-character ICD-10-AM groupings for *Rehabilitation* care separations, public and private hospitals, 2010–11**

First additional diagnosis		Public hospitals	Private hospitals	Total
M17	Gonarthrosis [arthrosis of knee]	3,915	44,461	48,376
M16	Coxarthrosis [arthrosis of hip]	2,078	18,362	20,440
S72	Fracture of femur	8,037	8,168	16,205
I63	Cerebral infarction	5,806	4,218	10,024
M54	Dorsalgia	1,111	7,531	8,642
M25	Other joint disorders, not elsewhere classified	1,554	4,900	6,454
Z96	Presence of other functional implants	393	6,054	6,447
S32	Fracture of lumbar spine and pelvis	2,256	4,048	6,304
M48	Other spondylopathies	678	5,234	5,912
T84	Complications of internal orthopaedic prosthetic devices, implants and grafts	897	3,979	4,876
	Other	59,701	93,853	153,554
<b>Total Rehabilitation separations</b>		<b>86,426</b>	<b>200,808</b>	<b>287,234</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## How urgent was the care?

Admissions to hospital can be categorised as *Emergency* (required within 24 hours) or *Elective* (required at some stage beyond 24 hours). Emergency/elective status is not assigned for some admissions (for example, obstetric care and planned care, such as dialysis).

In 2010–11, almost 66% of sub- and non-acute admitted patients were reported as *Elective* admissions (treatment could be delayed by at least 24 hours). The proportion of *Elective* admissions varied between public and private hospitals, accounting for almost 90% of sub- and non-acute separations in private hospitals and 35% in public hospitals. Just over 30% of sub- and non-acute separations had a *Not assigned* urgency of admission (Table 11.16).

**Table 11.16: Sub- and non-acute separations, by urgency of admission and care type, public and private hospitals, 2010–11**

	Rehabilitation	Palliative	Geriatric evaluation and management	Psycho-geriatric	Maintenance	Total
<b>Public hospitals</b>						
Emergency	4,089	5,986	1,504	687	947	13,213
Elective	35,284	9,490	9,634	515	1,830	56,753
Not assigned	47,045	12,766	15,346	1,243	18,102	94,502
<i>Total<sup>(a)</sup></i>	86,426	28,255	26,484	2,445	20,889	164,499
<b>Private hospitals</b>						
Emergency	589	749	3	724	34	2,099
Elective	181,451	3,962	48	5,592	1,943	192,996
Not assigned	18,399	795	26	20	688	19,928
<i>Total<sup>(a)</sup></i>	200,808	5,507	77	6,336	2,665	215,393
<b>Total<sup>(a)</sup></b>	<b>287,234</b>	<b>33,762</b>	<b>26,561</b>	<b>8,781</b>	<b>23,554</b>	<b>379,892</b>

(a) The totals include separations for which the urgency of admission was *Not reported*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## What care was provided?

The care that a patient received can be described in a variety of ways. This section presents information on sub- and non-acute separations describing care by the type of surgical or other procedure undertaken.

The type of care is also described by the care type that is used throughout this chapter to categorise the sub- and non-acute separations.

### Palliative care

Although over 33,000 separations were recorded with a care type of *Palliative care*, there were over 54,000 separations identified as providing some form of palliative care regardless of the care type specified (Table 11.17). These separations are identified by either the assignment of the ICD-10-AM code Z51.5 *Palliative care* as an additional diagnosis, or by the assignment of the *Palliative care* type. The exact nature of the care provided for the separations that were not assigned the palliative care type, but were assigned an additional diagnosis code of Z51.5, is unknown.

**Table 11.17: Palliative care separations as identified by care type and/or additional diagnosis of Z51.5, all hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Care type	11,394	7,276	8,314	3,551	1,942	331	633	321	33,762
Diagnosis	15,921	17,709	8,314	3,551	3,882	1,860	752	735	52,724
Care type and/or diagnosis	16,929	17,780	8,314	3,551	4,444	1,897	780	771	54,466

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Procedures and other interventions

A **procedure** is defined as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training, and/or requires special facilities or equipment available only in an acute care setting (HDSC 2008).

Procedures encompass surgical procedures and non-surgical investigative and therapeutic procedures such as X-rays and chemotherapy. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

In public hospitals, about 18% of sub- and non-acute separations did not report a procedure, while in private hospitals about 5% did not report a procedure.

Over 99% of sub- and non-acute separations (for which at least one procedure was reported), reported a procedure classified to the ACHI procedure chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* (Table 11.18). This chapter includes anaesthesia, allied health interventions (which includes physiotherapy and other rehabilitation-related procedures), dialysis and chemotherapy.

The 10 most frequently reported procedures for each of the sub- and non-acute care types are presented in tables 11.19 to 11.23.

In 2010–11, allied health interventions (which lie within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified*) were the most frequently reported procedures for *Rehabilitation* care separations (Table 11.19). Allied health interventions reported included physiotherapy, occupational therapy, social work and other rehabilitation procedures or interventions. Some procedures were predominantly performed in private hospitals, such as hydrotherapy and exercise therapy.

For *Palliative* care, 8 of the top 10 reported procedures were allied health interventions and included social work, physiotherapy and pastoral care (Table 11.20). About 17% of *Palliative* care separations had no procedures reported.

For *Geriatric evaluation and management*, the top 10 reported procedures were all allied health interventions and included physiotherapy, occupational therapy and social work (Table 11.21).

**Table 11.18: Sub- and non-acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public and private hospitals, 2010–11**

Procedure chapter		Public hospitals	Private hospitals	Total
1–86	Procedures on nervous system	296	225	521
110–129	Procedures on endocrine system	19	3	22
160–256	Procedures on eye and adnexa	56	14	70
300–333	Procedures on ear and mastoid process	102	15	117
370–422	Procedures on nose, mouth and pharynx	68	9	77
450–490	Dental services	153	3	156
520–570	Procedures on respiratory system	752	143	895
600–777	Procedures on cardiovascular system	197	113	310
800–817	Procedures on blood and blood-forming organs	68	14	82
850–1011	Procedures on digestive system	1,149	347	1,496
1040–1129	Procedures on urinary system	1,574	263	1,837
1160–1203	Procedures on male genital organs	27	13	40
1240–1299	Gynaecological procedures	22	10	32
1330–1347	Obstetric procedures	14	1	15
1360–1579	Procedures on musculoskeletal system	846	337	1,183
1600–1718	Dermatological and plastic procedures	1,573	287	1,860
1740–1759	Procedures on breast	16	3	19
1786–1799	Radiation oncology procedures	547	29	576
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	135,145	204,452	339,597
1940–2016	Imaging services <sup>(b)</sup>	612	257	869
	<i>Procedures reported</i>	143,236	206,538	349,774
	No procedure or not reported	28,807	10,831	39,638
<b>Total sub- and non-acute separations</b>		<b>164,499</b>	<b>215,393</b>	<b>379,892</b>

- (a) A separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals may not equal the sum of counts in the rows.
- (b) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked decrease in the reporting of *Imaging services*. See Appendix 2 for more information.

*Note:* See boxes 11.1 and 11.2 for notes on data limitations and methods.

*Abbreviation:* n.e.c.—not elsewhere classified.

For *Psychogeriatric* care, about 30% of separations had no procedures reported. The top 10 reported procedures included social work, occupational therapy, general anaesthesia and electroconvulsive therapy (Table 11.22).

For *Maintenance* care, about 20% of separations had no procedures reported. The top 10 reported procedures included physiotherapy, social work, occupational therapy and ageing assessment (Table 11.23).

**Table 11.19: Separations for the top 10 ACHI procedures<sup>(a)</sup> for Rehabilitation care, public and private hospitals, 2010–11**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
95550-03	Allied health intervention, physiotherapy	69,075	179,766	248,841
95550-02	Allied health intervention, occupational therapy	53,811	78,870	132,681
96153-00	Hydrotherapy	795	69,439	70,234
95550-01	Allied health intervention, social work	36,141	15,697	51,838
95550-00	Allied health intervention, dietetics	23,483	10,804	34,287
95550-05	Allied health intervention, speech pathology	16,941	10,281	27,222
96129-00	Exercise therapy, total body	11	23,981	23,992
95550-11	Allied health intervention, other	2,874	19,575	22,449
95550-09	Allied health intervention, pharmacy	0	5,048	11,276
96130-00	Skills training in activities related to body position/mobility/movement	279	8,614	8,893
	No procedure or not reported	10,641	4,022	14,663
<b>Total procedures</b>		<b>238,179</b>	<b>452,599</b>	<b>690,778</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.20: Separations for the top 10 ACHI procedures<sup>(a)</sup> for Palliative care, public and private hospitals, 2010–11**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
95550-01	Allied health intervention, social work	10,799	1,017	11,816
95550-03	Allied health intervention, physiotherapy	10,096	1,270	11,366
95550-02	Allied health intervention, occupational therapy	6,344	333	6,677
95550-12	Allied health intervention, pastoral care	5,531	1,113	6,644
95550-00	Allied health intervention, dietetics	5,132	556	5,688
95550-05	Allied health intervention, speech pathology	3,588	204	3,792
13706-02	Administration of packed cells	1,274	310	1,584
95550-11	Allied health intervention, other	1,356	62	1,418
95550-09	Allied health intervention, pharmacy	991	82	1,073
96104-00	Music therapy	530	241	771
	No procedure or not reported	8,094	2,249	10,343
<b>Total procedures</b>		<b>52,116</b>	<b>7,188</b>	<b>59,304</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.21: Separations for the top 10 ACHI procedures<sup>(a)</sup> for *Geriatric evaluation and management*, public and private hospitals, 2010–11**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
95550-03	Allied health intervention, physiotherapy	21,433	43	21,476
95550-02	Allied health intervention, occupational therapy	18,320	40	18,360
95550-01	Allied health intervention, social work	16,610	3	16,613
95550-00	Allied health intervention, dietetics	11,516	8	11,524
95550-05	Allied health intervention, speech pathology	6,091	5	6,096
95550-09	Allied health intervention, pharmacy	4,320	1	4,321
95550-04	Allied health intervention, podiatry	2,804	0	2,804
95550-12	Allied health intervention, pastoral care	1,116	0	1,116
95550-10	Allied health intervention, psychology	948	3	951
95550-14	Allied health intervention, diabetes education	789	1	790
	No procedure or not reported	2,815	5	2,820
<b>Total procedures</b>		<b>89,587</b>	<b>188</b>	<b>89,775</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.22: Separations for the top 10 ACHI procedures for *Psychogeriatric care*, public and private hospitals, 2010–11**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
92514-99	General anaesthesia, ASA 99	617	1,261	1,878
95550-01	Allied health intervention, social work	1,209	521	1,730
95550-02	Allied health intervention, occupational therapy	923	721	1,644
95550-03	Allied health intervention, physiotherapy	907	710	1,617
95550-09	Allied health intervention, pharmacy	498	153	651
95550-00	Allied health intervention, dietetics	513	137	650
93341-01	Electroconvulsive therapy [ECT], 1 treatment	127	387	514
92514-39	General anaesthesia, ASA 39	145	360	505
95550-05	Allied health intervention, speech pathology	362	123	485
95550-10	Allied health intervention, psychology	293	173	466
	No procedure or not reported	417	3,818	4,235
<b>Total procedures</b>		<b>6,648</b>	<b>7,262</b>	<b>13,910</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.23: Separations for the top 10 ACHI procedures<sup>(a)</sup> for *Maintenance* care, public and private hospitals, 2010–11**

Procedure code and description		Public hospitals	Private hospitals	Total
95550-03	Allied health intervention, physiotherapy	8,652	718	9,370
95550-01	Allied health intervention, social work	8,480	443	8,923
95550-02	Allied health intervention, occupational therapy	4,533	106	4,639
95550-00	Allied health intervention, dietetics	4,086	129	4,215
95550-05	Allied health intervention, speech pathology	2,610	89	2,699
95550-09	Allied health intervention, pharmacy	938	39	977
96001-00	Psychological skills training	1	828	829
95550-11	Allied health intervention, other	705	19	724
95550-04	Allied health intervention, podiatry	453	79	532
96023-00	Ageing assessment	500	4	504
	Separations with no procedure reported	6,844	737	7,581
<b>Total procedures</b>		<b>34,202</b>	<b>2,976</b>	<b>37,178</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## How long did patients stay?

Sub- and non-acute separations may involve same-day or overnight episodes. Overall, the average length of stay for sub- and non-acute care was much higher than the average length of stay for acute care, and was higher in public hospitals than in private hospitals (Table 11.24). For example, the average length of stay for *Rehabilitation* care was 17.4 days in public hospitals, compared to 4.8 days in private hospitals.

**Table 11.24: Patient days and average length of stay for sub- and non-acute separations, by care type, public and private hospitals, 2010–11**

Care type	Public hospitals		Private hospitals		Average length of stay
	Patient days	Average length of stay	Patient days	Average length of stay	
Rehabilitation care	1,501,869	17.4	964,215	4.8	2,466,084
Palliative care	319,659	11.3	67,142	12.2	386,801
Geriatric evaluation and management	507,556	19.2	575	7.5	508,131
Psychogeriatric care	120,869	49.4	43,758	6.9	164,627
Maintenance care	711,297	34.1	46,101	17.3	757,398
<b>Total</b>	<b>3,161,250</b>	<b>19.2</b>	<b>1,121,791</b>	<b>5.2</b>	<b>4,283,041</b>
					<b>11.3</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Who paid for the care?

Just over 76% of sub- and non-acute separations from public hospitals were for *Public patients*, with almost 79% of sub- and non-acute separations from private hospitals funded by *Private health insurance* (Table 11.25). The *Department of Veterans' Affairs* funded over 6% of sub- and non-acute separations in public hospitals and just under 12% in private hospitals.

For private hospitals, about 38% of *Palliative* care and 15% of *Maintenance* care were *Public patients*.

**Table 11.25: Sub- and non-acute separations, by principal source of funds and type of sub- and non-acute care, public and private hospitals, 2010–11**

Funding source	Rehabilitation	Palliative	Geriatric evaluation and management	Psycho-geriatric	Maintenance	Total
<b>Public hospitals</b>						
Public patients <sup>(a)</sup>	66,005	21,458	19,664	2,147	16,350	125,624
Private health insurance	13,658	4,700	4,136	128	2,403	25,025
Self-funded	484	376	153	32	122	1,167
Workers compensation	520	39	12	0	22	593
Motor vehicle third party personal claim	1,375	4	80	1	65	1,525
Department of Veterans' Affairs	4,060	1,641	2,280	134	1,881	9,996
Other <sup>(b)</sup>	324	37	159	3	46	569
<i>Total</i>	<b>86,426</b>	<b>28,255</b>	<b>26,484</b>	<b>2,445</b>	<b>20,889</b>	<b>164,499</b>
<b>Private hospitals</b>						
Public patients <sup>(a)</sup>	1,348	2,116	0	61	394	3,919
Private health insurance	160,837	2,556	68	4,993	1,406	169,860
Self-funded	6,112	29	2	30	13	6,186
Workers compensation	6,579	3	1	25	28	6,636
Motor vehicle third party personal claim	1,208	78	0	10	0	1,296
Department of Veterans' Affairs	22,979	504	4	1,208	806	25,501
Other <sup>(b)</sup>	1,745	221	2	9	18	1,995
<i>Total</i>	<b>200,808</b>	<b>5,507</b>	<b>77</b>	<b>6,336</b>	<b>2,665</b>	<b>215,393</b>
<b>Total</b>	<b>287,234</b>	<b>33,762</b>	<b>26,561</b>	<b>8,781</b>	<b>23,554</b>	<b>379,892</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefits Schedule.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## How was the care completed?

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

In 2010–11, the most common mode of separation for sub- and non-acute separations was *Other* (78%), which includes discharge to usual residence/own accommodation/welfare institution (Table 11.26). Almost 5% of separations ended with *Discharged or transferred to a residential aged care service* and a further 5% were transferred to another hospital.

**Table 11.26: Sub- and non-acute separations, by mode of separation, public and private hospitals, 2010–11**

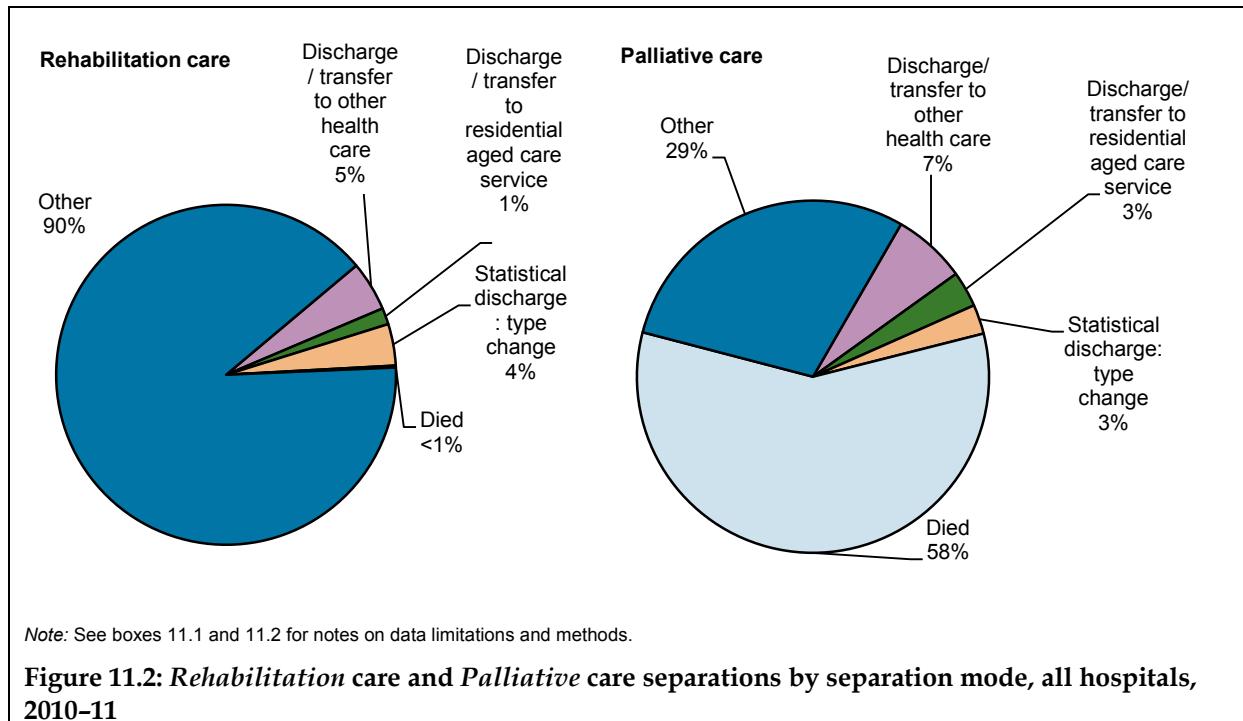
Separation mode	Public hospitals	Private hospitals	Total
Discharge/transfer to an(other) acute hospital	15,591	3,310	18,901
Discharge/transfer to residential aged care service <sup>(a)</sup>	16,260	1,763	18,023
Discharge/transfer to an(other) psychiatric hospital	178	5	183
Discharge/transfer to other health-care accommodation	3,485	1,448	4,933
Statistical discharge: type change	16,662	2,290	18,952
Left against medical advice/discharge at own risk	1,114	178	1,292
Statistical discharge from leave	1,113	20	1,133
Died	18,400	3,527	21,927
Other <sup>(b)</sup>	91,692	202,852	294,544
Not reported	4	0	4
<b>Total</b>	<b>164,499</b>	<b>215,393</b>	<b>379,892</b>

(a) The separation mode *Discharge/transfer to residential aged care service* excludes where this was the usual place of residence.

(b) The separation mode *Other* includes *Discharge to usual residence/own accommodation/welfare institution (including prisons, hostels and group homes providing primarily welfare services)*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

There was some variation in the mode of separation by type of sub- and non-acute care. For example, for *Rehabilitation* care, 90% of separations reported a mode of separation of *Other*, compared with 29% of separations for *Palliative* care. About 58% of *Palliative* care separations had a mode of separation of *Died* (Figure 11.2).



## **Supplementary tables**

The following supplementary tables provide more information on principal diagnoses and procedures, by state and territory.

### **Box 11.4: Notes – Chapter 11 supplementary tables**

#### **Tables S11.3 to S11.4**

- (a) For tables with counts of separations by groups of procedures, a separation is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows. For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation. These are counts of Australian Classification of Health Interventions (ACHI) procedure codes. It is possible that a single procedure code may represent multiple procedures or that a specific procedure may require the reporting of more than one code. Therefore, the number of procedure codes reported does not necessarily equal the number of separate procedures performed.
- (b) The coding standard for *Procedures not normally coded* was revised on 1 July 2010 to exclude coding most procedures in the *Imaging services* chapter, if they were considered 'standard treatment' for the particular diagnosis or procedure performed. This resulted in a marked decrease in the reporting of *Imaging services*. See Appendix 2 for more information.

**Table S11.1: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2010–11**

<b>Principal diagnosis chapter</b>		<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	356	347	158	47	49	4	52	7	1,020
C00–D48	Neoplasms	7,945	4,948	4,470	692	1,117	173	456	189	19,990
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	135	131	113	20	75	6	4	7	491
E00–E90	Endocrine, nutritional and metabolic diseases	276	330	134	39	56	3	54	7	899
F00–F99	Mental and behavioural disorders	1,873	978	881	598	382	15	60	5	4,792
G00–G99	Diseases of the nervous system	676	1,088	458	219	192	16	66	18	2,733
H00–H59	Diseases of the eye and adnexa	12	8	2	0	2	0	0	0	24
H60–H95	Diseases of the ear and mastoid process	11	24	2	6	10	2	0	0	55
I00–I99	Diseases of the circulatory system	1,573	2,323	958	338	196	29	190	20	5,627
J00–J99	Diseases of the respiratory system	1,235	1,672	670	189	214	13	135	26	4,154
K00–K93	Diseases of the digestive system	531	710	362	105	99	8	86	26	1,927
L00–L99	Diseases of the skin and subcutaneous tissue	199	268	92	19	43	3	28	2	654
M00–M99	Diseases of the musculoskeletal system and connective tissue	475	932	155	73	274	7	57	10	1,983
N00–N99	Diseases of the genitourinary system	575	777	246	77	109	6	65	10	1,865
O00–O99	Pregnancy, childbirth and the puerperium	30	1	0	1	0	0	20	0	52
P00–P96	Certain conditions originating in the perinatal period	0	0	1	5	0	0	1	0	7
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	2	9	13	3	0	0	8	0	35
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	655	1,232	349	102	373	10	81	14	2,816
S00–T98	Injury, poisoning and certain other consequences of external causes	1,683	2,905	518	230	201	20	204	15	5,776
Z00–Z99	Factors influencing health status and contact with health services	37,781	18,663	25,033	10,885	10,742	1,594	4,078	740	109,516
	Not reported	79	3	0	0	0	1	0	0	83
<b>Total sub- and non-acute separations</b>		<b>56,102</b>	<b>37,349</b>	<b>34,615</b>	<b>13,648</b>	<b>14,134</b>	<b>1,910</b>	<b>5,645</b>	<b>1,096</b>	<b>164,499</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table S11.2: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2010–11**

Principal diagnosis chapter		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	5	7	20	37	4	n.p.	n.p.	n.p.	75
C00–D48	Neoplasms	340	495	1,373	1,793	210	n.p.	n.p.	n.p.	4,284
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	12	0	11	13	6	n.p.	n.p.	n.p.	45
E00–E90	Endocrine, nutritional and metabolic diseases	6	1	17	49	3	n.p.	n.p.	n.p.	76
F00–F99	Mental and behavioural disorders	0	4,486	881	54	6	n.p.	n.p.	n.p.	5,432
G00–G99	Diseases of the nervous system	13	775	32	89	15	n.p.	n.p.	n.p.	944
H00–H59	Diseases of the eye and adnexa	0	0	0	0	2	n.p.	n.p.	n.p.	6
H60–H95	Diseases of the ear and mastoid process	0	0	0	0	1	n.p.	n.p.	n.p.	1
I00–I99	Diseases of the circulatory system	29	38	91	442	16	n.p.	n.p.	n.p.	626
J00–J99	Diseases of the respiratory system	21	21	69	380	11	n.p.	n.p.	n.p.	519
K00–K93	Diseases of the digestive system	22	18	58	62	9	n.p.	n.p.	n.p.	173
L00–L99	Diseases of the skin and subcutaneous tissue	2	2	5	23	0	n.p.	n.p.	n.p.	33
M00–M99	Diseases of the musculoskeletal system and connective tissue	13	9	32	126	14	n.p.	n.p.	n.p.	197
N00–N99	Diseases of the genitourinary system	12	12	50	48	9	n.p.	n.p.	n.p.	134
O00–O99	Pregnancy, childbirth and the puerperium	0	0	0	0	1	n.p.	n.p.	n.p.	1
P00–P96	Certain conditions originating in the perinatal period	0	0	0	0	0	n.p.	n.p.	n.p.	0
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	0	0	0	0	0	n.p.	n.p.	n.p.	0
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	1	0	0	0	0	n.p.	n.p.	n.p.	1
S00–T98	Injury, poisoning and certain other consequences of external causes	53	106	24	46	14	n.p.	n.p.	n.p.	246
Z00–Z99	Factors influencing health status and contact with health services	122,516	17,378	32,327	2,516	22,189	n.p.	n.p.	n.p.	202,501
	Not reported	0	99	0	0	0	n.p.	n.p.	n.p.	99
<b>Total sub- and non-acute separations</b>		<b>123,045</b>	<b>23,447</b>	<b>34,990</b>	<b>5,678</b>	<b>22,510</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>215,393</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S11.3: Sub- and non-acute separations, by procedure in ACHI chapters<sup>(a)</sup>, public hospitals, states and territories, 2010–11**

Procedure chapter		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	103	42	33	38	47	3	27	3	296
110–129	Procedures on endocrine system	6	3	2	6	2	0	0	0	19
160–256	Procedures on eye and adnexa	35	6	3	5	2	1	1	3	56
300–333	Procedures on ear and mastoid process	18	25	31	13	10	2	2	1	102
370–422	Procedures on nose, mouth and pharynx	21	11	15	11	7	0	3	0	68
450–490	Dental services	40	9	82	8	12	1	0	1	153
520–570	Procedures on respiratory system	223	132	173	103	49	8	56	8	752
600–777	Procedures on cardiovascular system	94	20	27	29	14	3	6	4	197
800–817	Procedures on blood and blood-forming organs	24	8	9	7	5	2	12	1	68
850–1011	Procedures on digestive system	365	201	226	108	161	16	50	22	1,149
1040–1129	Procedures on urinary system	651	286	223	196	101	26	47	44	1,574
1160–1203	Procedures on male genital organs	17	2	3	2	2	0	0	1	27
1240–1299	Gynaecological procedures	8	4	4	3	0	1	2	0	22
1330–1347	Obstetric procedures	12	0	0	1	0	0	1	0	14
1360–1579	Procedures on musculoskeletal system	251	233	93	150	58	28	19	14	846
1600–1718	Dermatological and plastic procedures	282	800	256	97	81	16	29	12	1,573
1740–1759	Procedures on breast	5	6	2	1	2	0	0	0	16
1786–1799	Radiation oncology procedures	237	116	88	13	9	3	63	18	547
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	49,336	31,346	23,546	12,016	11,745	1,551	4,860	745	135,145
1940–2016	Imaging services <sup>(b)</sup>	443	41	51	35	10	2	28	2	612
	Separations with procedures	49,593	31,403	23,670	12,046	11,778	1,553	4,883	766	135,692
	No procedure or not reported	6,509	5,946	10,945	1,602	2,356	357	762	330	28,807
<b>Total sub- and non-acute separations</b>		<b>56,102</b>	<b>37,349</b>	<b>34,615</b>	<b>13,648</b>	<b>14,134</b>	<b>1,910</b>	<b>5,645</b>	<b>1,096</b>	<b>164,499</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods. See Box 11.4 for footnotes specific to this table.

Abbreviation: n.e.c.—not elsewhere classified.

**Table S11.4: Sub- and non-acute separations, by procedure in ACHI chapters<sup>(a)</sup>, private hospitals, states and territories, 2010–11**

Procedure chapter		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	78	22	57	53	14	n.p.	n.p.	n.p.	225
110–129	Procedures on endocrine system	0	1	0	2	0	n.p.	n.p.	n.p.	3
160–256	Procedures on eye and adnexa	6	0	1	0	3	n.p.	n.p.	n.p.	14
300–333	Procedures on ear and mastoid process	7	0	6	1	1	n.p.	n.p.	n.p.	15
370–422	Procedures on nose, mouth and pharynx	0	0	2	7	0	n.p.	n.p.	n.p.	9
450–490	Dental services	1	1	0	0	1	n.p.	n.p.	n.p.	3
520–570	Procedures on respiratory system	23	22	38	50	5	n.p.	n.p.	n.p.	143
600–777	Procedures on cardiovascular system	17	6	20	51	12	n.p.	n.p.	n.p.	113
800–817	Procedures on blood and blood-forming organs	0	1	7	5	1	n.p.	n.p.	n.p.	14
850–1011	Procedures on digestive system	52	38	84	128	24	n.p.	n.p.	n.p.	347
1040–1129	Procedures on urinary system	72	29	80	46	20	n.p.	n.p.	n.p.	263
1160–1203	Procedures on male genital organs	1	0	3	8	1	n.p.	n.p.	n.p.	13
1240–1299	Gynaecological procedures	0	0	3	5	2	n.p.	n.p.	n.p.	10
1330–1347	Obstetric procedures	0	0	0	0	1	n.p.	n.p.	n.p.	1
1360–1579	Procedures on musculoskeletal system	98	35	71	106	17	n.p.	n.p.	n.p.	337
1600–1718	Dermatological and plastic procedures	114	17	35	91	16	n.p.	n.p.	n.p.	287
1740–1759	Procedures on breast	0	0	1	1	1	n.p.	n.p.	n.p.	3
1786–1799	Radiation oncology procedures	10	4	15	0	0	n.p.	n.p.	n.p.	29
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	120,128	19,431	32,421	4,475	22,409	n.p.	n.p.	n.p.	204,452
1940–2016	Imaging services <sup>(b)</sup>	60	5	121	33	31	n.p.	n.p.	n.p.	257
	Total procedures	120,667	19,612	32,965	5,062	22,559	n.p.	n.p.	n.p.	206,538
	Separations with no procedure reported	2,903	4,014	2,545	1,148	91	n.p.	n.p.	n.p.	10,831
<b>Total sub- and non-acute separations</b>		<b>123,045</b>	<b>23,447</b>	<b>34,990</b>	<b>5,678</b>	<b>22,510</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>215,393</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods. See Box 11.4 for footnotes specific to this table.

Abbreviation: n.e.c.—not elsewhere classified; n.p.—not published.

# Appendix 1: Database quality summaries

This appendix includes data quality summaries and additional detailed information relevant to interpretation of the:

- National Hospital Morbidity Database (NHMD)
- National Public Hospital Establishments Database (NPHED)
- National Elective Surgery Waiting Times Data Collection (NESWTDC)
- National Non-admitted Patient Emergency Department Care Database (NNAPEDCD)
- National Outpatient Care Database (NOCD)
- National *Staphylococcus aureus* bacteraemia Data Collection (NSABDC).

This appendix also contains information on variation in the categorisation of public and private hospitals, and other changes in hospital reporting that may affect interpretation of the data presented in this report.

Complet data quality statements for these databases are available online at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

## Public and private hospitals

There is some variation between jurisdictions as to whether hospitals that predominantly provide public hospital services, but are privately owned and/or operated, are reported as public or private hospitals. A selection of such hospitals is listed in Table A1.1 with information on how they are reported. The categorisations listed are those used for this report; reports produced by other agencies may categorise these hospitals differently.

For example, Peel and Joondalup hospitals are private hospitals that predominantly treat public patients under contract to the Western Australian Department of Health. From 2006–07, two new reporting units (public hospitals) were created to cover the public health services of these two hospitals, whereas in previous years all activity was reported for the private hospitals. Another example is the Hawkesbury District Health Service, which was categorised as a private hospital until 2002–03 and has been categorised as a public hospital in AIHW reports since 2003–04.

Other changes in hospital ownership or management arrangements can also affect whether hospital activity is reported as public or private. For example, between 2003–04 and 2004–05, two private hospitals in Western Australia were purchased by the Western Australian Department of Health and were amalgamated with two existing public hospitals. Hence, the activity associated with the former private hospitals is now included in the activity reporting of the two public hospitals.

**Table A1.1: Selected hospitals included in this report that predominantly provide public hospital services that were privately owned and/or operated, 2010–11**

Hospital	How reported
Hawkesbury District Health Service, NSW	Public hospital
Mildura Base Hospital, Victoria	Public hospital
Mater Adult Hospital, Qld	Public hospital
Mater Children's Hospital, Qld	Public hospital
Mater Mother's Hospital	Public hospital
Joondalup Health Campus, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Peel Health Campus, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Southern Districts War Memorial Private Hospital, SA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
May Shaw District Nursing Centre, Tas	Public hospital
Toosey Hospital, Tas	Public hospital
Mersey Community Hospital	Public hospital

## **Mersey Community Hospital**

The Mersey Community Hospital in Tasmania was a public hospital from 2004–05 until the end of October 2007. It was taken over by the Australian Government in November 2007, predominantly providing public hospital services between November 2007 and June 2011. Mersey Community Hospital was reported as a private hospital in this report for the period from November 2007 to June 2009, and as a public hospital from July 2009 to June 2011; however, data for elective surgery waiting times, emergency department, outpatient care and other non-admitted patient services are included with data for Tasmanian public hospitals for all periods. This reflects the fact that the Mersey Community Hospital maintained elective surgery waiting lists for its patients and provided emergency department, outpatient care and other non-admitted patient services, as public hospitals do.

## **Albury Base Hospital**

From 2009–10, the data for the Albury Base Hospital (located in New South Wales) has been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. The Albury Wodonga Health Service was formed by the integration of Wodonga Regional Health Service in Victoria and acute services at the Albury Base Hospital in New South Wales. Data for Albury Base Hospital are therefore now included in statistics for Victoria whereas they were formerly reported by and included in statistics for New South Wales.

# National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals.

The data supplied are based on the National Minimum Data Set (NMDS) for Admitted patient care and include demographic, administrative and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free-standing day hospital facilities and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not in scope but some are included.

The reference period for this data set is 2010–11. The data set includes records for admitted patient separations between 1 July 2010 and 30 June 2011.

## Summary of key issues

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the NHMD.
- For 2010–11, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private day hospital facilities in the ACT, the single private free-standing day hospital facility in the NT, and a small private hospital in Victoria.
- Hospitals may be re-categorised as public or private between or within years (see above).
- There is apparent variation between states and territories in the use of statistical discharges and associated assignment of care types.
- There was variation between states and territories in the reporting of separations for *Newborns* (without qualified days):
  - For 2010–11, private hospitals in Victoria did not report most *Newborn* episodes without qualified days, therefore the count of newborn episodes will be underestimated.
  - South Australian private hospitals are not required to provide records for *Newborn* episodes without qualified days.
  - For Tasmania, where a newborn's qualification status was considered qualified at any point during the episode of care, the entire episode was reported as qualified days. As a consequence, the average length of stay for *Newborn* episodes with qualified days only in Tasmanian public hospitals is not directly comparable with that in other states.
- Data on state of hospitalisation should be interpreted with caution because of cross-border flows of patients. This is particularly the case for the Australian Capital Territory.

In 2010–11, about 23% of separations for Australian Capital Territory hospitals were for patients who resided in New South Wales.

- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.
- Caution should be used in comparing these data to earlier years as changes in the ICD-10-AM/ACHI classifications and the associated Australian Coding Standards may affect the comparability of the data over time. In particular, there is notable variation over time in the reporting of diagnoses for diabetes complications. Between 2009–10 and 2010–11, there were also notable changes for obstetric conditions and for imaging services.
- The Indigenous status data are of sufficient quality for statistical reporting purposes for the following jurisdictions: New South Wales, Victoria, Queensland, South Australia, Western Australia and the Northern Territory (public hospitals only). National totals include these six jurisdictions only. Indigenous status data reported for Tasmania and the Australian Capital Territory should be interpreted with caution until further assessment of Indigenous identification is completed.

The list of public hospitals that contributed to the NHMD in 2010–11 is in Table A1.2, which accompanies this report online.

## Quality of Indigenous status data

### Indigenous identification in hospital separations data—quality report

The 2010 AIHW report *Indigenous identification in hospital separations data—quality report*, (AIHW 2010f) presented the latest findings on the quality of Indigenous identification in hospital separations data in Australia, based on studies of Indigenous identification in public hospitals conducted during 2007 and 2008.

The results of the studies indicated that, overall, the quality of Indigenous identification in hospital separations data had improved since last assessed. However, the quality of Indigenous identification still varied substantially between jurisdictions. The results supported expanding national reporting to include data for New South Wales, Victoria, Queensland, South Australia, Western Australia, and the Northern Territory (public hospitals only). Levels of Indigenous identification were estimated to be 80% or higher for those jurisdictions.

An estimated 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08. In other words, 11% of Indigenous patients were not identified, and the ‘true’ number of hospital admissions for Indigenous persons was about 12% higher than reported.

### Quality in 2010–11

Overall, the quality of the Indigenous status data provided for admitted patients in 2010–11 is considered to be in need of some improvement, being considered acceptable for analysis purposes only for New South Wales, Victoria, Queensland, Western Australia, South Australia and public hospitals in the Northern Territory.

The data presented on Indigenous status in chapters 3, 7, 8, 9, 10 and 11 should therefore be used with caution.

The following information has been provided by the states and territories to provide some insight into the quality of Indigenous status data in the NHMD.

### **New South Wales**

In 2010, the New South Wales Ministry of Health repeated the survey conducted in 2007, and the result showed an improvement on the 2007 survey of admitted patient data. The 2010 results indicate that Aboriginal identification was 83.5% complete in metropolitan (2007: 80%), 92% in inner regional (2007: 90.4%), 94.2% in outer regional (2007: 95.4%) and 100% complete in rural hospitals (2007: 100%).

### **Victoria**

The Victorian Department of Health reports that, despite data quality improvement in recent years, Indigenous status admitted patient data for 2010–11 should still be considered to under-count the number of Aboriginal and Torres Strait Islander patients. The quality of Indigenous status data in elective surgery data is improving but is less accurate than that of admitted patients in public hospitals.

### **Queensland**

Queensland Health noted that for 2010-11, Indigenous status was reported as 'not stated' for 4.3% of admitted patient separations (1.4% of public hospital separations and 7.6% of private hospital separations). The level of non-reporting of Indigenous status had decreased for both public and private hospitals compared to the previous financial years.

Queensland Health also noted that the available evidence continued to suggest that the number of Indigenous separations is understated in the Queensland hospital morbidity data due to non-reporting as well as misreporting of Indigenous status.

Queensland Health advised that efforts continue to be made to address these data quality issues and that improving the completeness and coverage of Indigenous status reporting has been a key performance indicator for Queensland Health Service Districts for the past two years. Furthermore, Queensland Health noted that an extra performance indicator was introduced in 2010-11 "Indigenous status marked as Not Stated" as a proxy measure of the completeness of recording Indigenous status.

### **Western Australia**

The quality of Indigenous Status data for the admitted activity collection is considered to be of a high standard but as with any collection, there is still necessity for greater consistency and precision in data capture. Efforts to improve the overall Indigenous status collection have been integrated into routine data processing and have had a good effect on data quality. Specific edit checks are applied to indigenous information requiring health units to validate certain indigenous status and country of birth combinations and update or confirm 'unknown/not stated' responses.

### **South Australia**

South Australia considers the quality of Indigenous status data to be acceptable for reporting and analysis purposes.

The department contracted the Australian Bureau of Statistics to develop a training package for the collection of the Indigenous identifier aimed at frontline staff in hospitals and other health-care units. The package is based on the best practice guidelines developed by the AIHW. Training sessions have been conducted in metropolitan and country locations

throughout the state. More than 430 staff received training. This is expected to lead to improvements in data quality.

### Tasmania

The Tasmanian Department of Health and Human Services reports that the quality and the level of Indigenous status identification, across public hospital information collections, is of a high standard. However, as with all data collections, there is constant and continued work on maintaining and improving, where needed, the collection of this data element.

### Australian Capital Territory

The Australian Capital Territory Government Health Directorate is continuing to undertake a number of initiatives aligned with local and national developments to improve the quality of collection and reporting of Aboriginal and Torres Strait Islander data.

### Northern Territory

The Northern Territory Department of Health participated in the national review of the quality of demographic data, coordinated by AIHW, in 2011. Indigenous status was found to be accurately recorded in 98% of admitted patients, consistent with findings from previous surveys in 1997 and 2008. The department retains historical reporting of Indigenous status. All management and statistical reporting, however, is based on a person's most recently reported Indigenous status.

## National Public Hospital Establishments Database

The National Public Hospital Establishments Database (NPHED) is based on the National Minimum Data Set (NMDS) for Public hospital establishments. It holds establishment-level data for each public hospital in Australia, including public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all states and territories. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by correctional authorities for example, and hospitals located in offshore territories) are not included. The collection does not include data for private hospitals.

The purpose of the NMDS for Public hospital establishments is to collect information on the characteristics of public hospitals and summary information on non-admitted services provided by them. Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure (including depreciation), non-appropriation revenue and services to non-admitted patients.

The reference period for this data set is 2010–11.

### Summary of key issues

- Essentially all public hospitals were included for 2010–11.
- Differences in counting and classification practices across jurisdictions may affect the comparability of these data. There was variation between states and territories in the reporting of expenditure, depreciation, available beds, staffing categories and outpatient occasions of service.
- The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses.

- Comparability of bed numbers can be affected by the range and types of patients treated by a hospital (casemix), with, for example, different proportions of beds being available for special and more general purposes.

The list of public hospitals that contributed to the NPHED is available in Table A1.2, which accompanies this report online.

## National Outpatient Care Database

The National Outpatient Care Database (NOCD) is based on the National Minimum Data Set for Outpatient care (OPC NMDS). It contains aggregate data on services provided to non-admitted, non-emergency patients registered for care in outpatient clinics of public hospitals including data on the type of outpatient clinic and counts of individual and group occasions of service.

The scope of the NOCD covers public hospitals that are classified as either peer group A or B (*Principal referral and specialist women's and children's hospitals* or *Large hospitals*) in the *Australian hospital statistics* publication from the preceding financial year.

The reference period for this data set is 2010–11. The data set includes records for outpatient care occasions of service provided between 1 July 2010 and 30 June 2011.

### Summary of key issues

- While the scope of the NOCD covers public hospitals in public hospital peer groups A (*Principal referral and specialist women's and children's hospitals*) and B (*Large hospitals*), data were also provided by some states and territories for hospitals in peer groups other than A and B:
  - New South Wales provided data for 2 *Medium* hospitals
  - Victoria provided data for 1 *Medium* hospital
  - Western Australia provided data for 5 *Medium* hospitals, 2 *Small remote acute* hospitals, 1 *Small non-acute* hospital and 1 *Rehabilitation* hospital
  - South Australia provided data for 1 *Medium* hospital
  - Tasmania provided data for 1 *Medium* hospital.
- For 2010–11, the proportion of outpatient occasions of service reported to the NOCD was estimated as 96% for public hospitals in peer groups A and B and 78% for all public hospitals.
- The data in the NOCD are not necessarily representative of the hospitals not included in the NOCD. Hospitals not included do not necessarily have outpatient clinics that are equivalent to those in hospitals in peer groups A and B.
- The data collection does not include care provided to non-admitted patients in emergency departments.
- Although the NOCD is a valuable source of information on services provided to non-admitted, non-emergency patients, the data have limitations. For example, there is variation in admission practices between states and territories and there is variation in the types of services provided for non-admitted patients in a hospital setting.

The list of public hospitals that contributed to the NOCD in 2010–11 is in Table A1.2, which accompanies this report online.

# National Non-Admitted Patient Emergency Department Care Database

The NNAPECD is a compilation of episode-level data for emergency department presentations in public hospitals. The database is based on the National Minimum Data Set (NMDS) for Non-admitted patient emergency department care (NAPEDC).

The scope of this NMDS is non-admitted patients registered for care in emergency departments in selected public hospitals that are classified as either peer group A or B (*Principal referral and specialist women's and children's hospitals* or *Large hospitals*) in the *Australian hospital statistics* publication from the preceding financial year.

## Summary of key issues

- Some states and territories also provided data for public hospitals that were classified to peer groups other than A or B. Data were also provided for:
  - 15 *Medium hospitals*, 18 *Small hospitals* and 6 *Unpeered/Other* hospitals in New South Wales
  - 7 *Medium hospitals* in Victoria
  - 4 *Medium hospitals* in Queensland
  - 3 *Medium hospitals* and 2 *Small remote acute hospitals* in Western Australia
  - 1 *Medium hospital* in South Australia
  - 1 *Medium hospital* in Tasmania
  - 3 *Small remote acute hospitals* in the Northern Territory.
- For 2010–11, the proportion of occasions of service in emergency departments reported to the NNAPECD was estimated to account for 81% of all emergency occasions of service in public hospitals.
- The data collection does not include care provided to admitted patients in emergency departments.
- Although there are national standards for data on non-admitted patient emergency department services there are some variations in how those services are defined and counted across states and territories and over time. For example, there is variation in the point at which the emergency department presentation is reported as completed for those patients subsequently admitted within the emergency department and/or elsewhere in the hospital.
- The quality of the data reported for Indigenous status has not been formally assessed; therefore, caution should be exercised when interpreting these data.

The list of public hospitals that contributed to the NNAPECD in 2010–11 is in Table A1.2, which accompanies this report online.

## Variation in reporting

### Triage category

The proportion of presentations by triage category varied by state or territory. New South Wales had the highest proportion of presentations that were *Non-urgent* (15.3%) and South Australia had the highest proportions of presentations that were *Resuscitation* or *Emergency*.

(1.2% and 12.5%, respectively) (Table A1.3). This may reflect different triage categorisation, differing mixes of patients or both.

**Table A1.3: Proportion of *Emergency presentations* by triage category, public hospital emergency departments, states and territories, 2010–11**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	0.6	0.5	0.9	0.8	1.2	0.4	0.4	0.6	0.7
Emergency	8.5	9.2	10.8	11.2	12.5	7.4	9.9	6.3	9.6
Urgent	30.4	32.2	41.1	32.0	36.8	34.8	30.7	26.5	33.5
Semi-urgent	45.1	47.2	40.9	49.4	42.5	48.4	45.8	56.3	45.4
Non-urgent	15.3	10.9	6.3	6.6	7.1	8.7	13.1	10.3	10.8
<b>Total<sup>(a)</sup></b>	<b>100</b>								

(a) Includes emergency presentations for which the triage category was not reported.

Note: Refer to boxes 2.1, 2.2 and 2.3 for more information on terminology, data limitations and methods of analysis. For information on *Emergency presentations* by triage category and peer group for states and territories, see Table S2.1.

## Quality of Indigenous status data

Monitoring of aspects of the health of Aboriginal and Torres Strait Islanders is dependent on the quality of Indigenous identification data in national health data sources, including the hospitals data collections. However, there are inaccuracies in the information on Indigenous status in the data collections.

The quality of the Indigenous status data provided for 2010–11 for emergency department presentations varied by jurisdiction. Most states and territories advised that the Indigenous status data collected in an emergency department setting could be less accurate than the data collected for admitted patients. Therefore, the information for Indigenous status presented in Chapter 5 should be used with caution.

The following information has been provided by the states and territories to provide some insight into the quality of Indigenous status data in the NNAAPEDCD.

### New South Wales

Indigenous status is a mandatory data item collected at all facilities that provide data for the New South Wales Health Emergency Department Data Collection. In 2010–11, about 10% of emergency department records were missing Indigenous status data, despite the information being recorded on the patient administration system. New South Wales considers that Indigenous status identification in its emergency department data is acceptable.

### Victoria

The Victorian Department of Health reports that, despite data quality improvement in recent years, the Indigenous status admitted patient data for 2010–11 should still be considered to undercount the number of Aboriginal and Torres Strait Islander patients. The quality of Indigenous status data in emergency department data is improving but is less accurate than that of admitted patients in public hospitals.

### Queensland

Queensland Health noted that, for 2010–11 emergency department data, Indigenous status was not reported in 1.6% of cases. This is a slight increase from the 1.5% reported for

2009–10. Efforts will continue to be made to ensure that reporting of Indigenous status is as complete and accurate as possible.

### **Western Australia**

The Western Australian Department of Health regards its Indigenous status for non-admitted patient emergency department data as being of good quality, with 99.5% of data identified by Indigenous status in 2010–11.

### **South Australia**

South Australia Health considers the quality of Indigenous status data to be better in admitted patient care than in the emergency department data collection. The number of *Not stated* responses fell in 2010–11 compared with the previous year but the numbers are still considered to be too high.

The department contracted the Australian Bureau of Statistics to develop a training package for the collection of the Indigenous identifier aimed at frontline staff in hospitals and other health care units. The package is based on the best practice guidelines developed by the AIHW. Training sessions have been conducted in metropolitan and country locations throughout the state. More than 430 staff received training. This is expected to lead to improvements in data quality.

### **Tasmania**

The Tasmanian Department of Health and Human Services reports that the quality and the level of Indigenous status identification, across public hospital information collections, are of a high standard. However, as with all data collections, there is constant and continued work on maintaining and improving, where needed, the collection of this data element.

### **Australian Capital Territory**

The Australian Capital Territory Government Health Directorate is continuing to undertake a number of initiatives aligned with local and national developments to improve the quality of collection and reporting of Aboriginal and Torres Strait Islander data.

### **Northern Territory**

The Northern Territory Department of Health reported that the quality of its 2010–11 Indigenous status data for emergency department patients is considered to be acceptable. The department retains historical reporting of Indigenous status. All management and statistical reporting, however, is based on a person's most recently reported Indigenous status.

## **National Elective Surgery Waiting Times Data Collection**

The NESWTDC is based on the Elective surgery waiting times (removals data) National Minimum Data Set. It contains records for patients added to and/or removed from waiting lists for elective surgery that are managed by public acute hospitals. This may include public patients treated in private hospitals and other patients treated in public hospitals.

For 2010–11, the data collection covered most public hospitals that undertook elective surgery. Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting lists compared to other hospitals.

For 2010–11, the proportion of public hospital elective surgery covered by the NESWTDC was estimated to be 93%.

## **Summary of key issues**

- For 2010–11, Victoria’s data does not include the Albury Base Hospital as the data were not available.
- Although there are national standards for data on elective surgery waiting times, methods to calculate waiting times have varied between states and territories and over time. For example, some states and territories vary in how they report on patients transferred from a waiting list managed by one hospital to that managed by another.
- The quality of the data reported for Indigenous status for the NESWTDC has not been formally assessed; therefore, caution should be exercised when interpreting these data.
- There is an apparent lack of comparability of clinical urgency categories among jurisdictions that may result in statistics that are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics.
- There is apparent variation in recording practices for waiting times for elective surgery for patients awaiting ‘staged’ procedures (such as follow-up care, cystoscopy or the removal of pins or plates), that may result in statistics that are not meaningful or comparable between or within jurisdictions.

The list of public hospitals that contributed to the NESWTDC in 2010–11 is in Table A1.2, which accompanies this report online.

## **Variation in reporting**

### **Clinical urgency categorisation**

Data in this report are not presented by clinical urgency category. The apparent lack of comparability of clinical urgency categories among jurisdictions may result in statistics that are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics.

In 2010–11, the proportion of patients admitted from elective surgery waiting lists who were assigned a clinical urgency category of *Category 1* was 26% for New South Wales and 43% for the Northern Territory. The proportion of patients admitted that were *Category 3* was 16% in Queensland and 43% in New South Wales (Table A1.4).

### **Apparent variation in recording elective surgery waiting times for staged procedures**

Currently all states and territories provide elective surgery waiting times data to the AIHW based on the NMDS for Elective Surgery Waiting Times. The NMDS includes metadata which describes ‘staged’ patients as those “whose medical condition will not require or be amenable to surgery until some future date; for example, a patient who has had internal

fixation of a fractured bone and who will require removal of the fixation device after a suitable time".

The AIHW has noted some apparently atypical recording practices for waiting times for elective surgery for staged patients in some public hospitals, mostly in New South Wales. For those hospitals, there was a relatively large number of records with a clinical urgency category of 3 and admitted within 5 days for 2010–11. Patients assigned a clinical urgency category of 3 typically have longer waits than patients assigned clinical urgency categories of 1 (admission within 30 days desirable) or 2 (admission within 90 days desirable).

**Table A1.4: Number of admissions<sup>(a)</sup> from waiting lists for elective surgery, by clinical urgency category, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Number admitted</b>									
<b>Category 1<sup>(b)</sup></b>	52,280	44,389	42,333	16,894	15,413	6,728	3,294	2,743	184,074
<b>Category 2<sup>(c)</sup></b>	63,928	74,764	53,121	22,810	15,773	7,012	5,505	2,458	245,371
<b>Category 3<sup>(d)</sup></b>	88,612	37,920	18,306	25,081	14,895	2,757	2,539	1,228	191,338
<b>Total</b>	<b>204,820</b>	<b>157,073</b>	<b>113,760</b>	<b>64,785</b>	<b>46,081</b>	<b>16,497</b>	<b>11,338</b>	<b>6,429</b>	<b>620,783</b>
<b>Per cent</b>									
<b>Category 1<sup>(b)</sup></b>	26	28	37	26	33	41	29	43	30
<b>Category 2<sup>(c)</sup></b>	31	48	47	35	34	43	49	38	40
<b>Category 3<sup>(d)</sup></b>	43	24	16	39	32	17	22	19	31
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

(a) Records with a reason for removal of *Admitted as an elective patient for the awaited procedure in this hospital or another hospital*.

(b) Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency.

(c) Admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency.

(d) Admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency.

The apparent atypical reporting practices could reflect differing waiting list practices for patients awaiting staged procedures. For most staged patients, it appears that they are put on the waiting list (or reassigned to 'ready for care') when they are clinically ready for care, and they then wait for a date to be assigned for their surgery. However, for others, the data appear to reflect patients (once becoming clinically ready for care) only being put on the waiting list at the time that a date is assigned for their surgery.

More detailed information on this apparent variation was presented in *Australian hospital statistics 2010–11: emergency department care and elective surgery waiting times* (AIHW 2011c).

## Quality of Indigenous status data

The quality of Indigenous status information in the data provided for the NESWTDC has not been formally assessed. Therefore, the information presented for Indigenous status for elective surgery waiting times in Chapter 10 should be used with caution. The following information has been provided by the states and territories to provide some insight into the quality of Indigenous status data in the NESWTDC.

## **New South Wales**

New South Wales Health advised that Indigenous status was collected for elective surgery waiting times data from 2010–11.

## **Victoria**

The Victorian Department of Health reports that, despite data quality improvement in recent years, Indigenous status in the admitted patient data for 2010–11 should still be considered to undercount the number of Aboriginal and Torres Strait Islander patients. The quality of Indigenous status data in elective surgery data is improving but is less accurate than that of admitted patients in public hospitals.

## **Queensland**

Queensland Health noted that for 2010–11, Indigenous status was reported as ‘not stated’ for 4.3% of admitted patient separations (1.4% of public hospital separations and 7.6% of private hospital separations). The level of non-reporting of Indigenous status had decreased for both public and private hospitals compared to the previous financial years.

## **Western Australia**

The Western Australian Department of Health regards its Indigenous status data for elective surgery waiting times as being of good quality. Quality improvement activities, including cross-referencing between metropolitan and country hospitals, continue to enhance the accuracy of this data element.

## **South Australia**

South Australia Health considers the quality of Indigenous status data to be better in admitted patient care than in elective surgery data collections.

## **Tasmania**

The Tasmanian Department of Health and Human Services reports that the quality and the level of Indigenous status identification, across public hospital information collections, is of a high standard. However, as with all data collections, there is constant and continued work on maintaining and improving, where needed, the collection of this data element.

## **Australian Capital Territory**

The Australian Capital Territory Government Health Directorate is continuing to undertake a number of initiatives aligned with local and national developments to improve the quality of collection and reporting of Aboriginal and Torres Strait Islander data.

## **Northern Territory**

The Northern Territory Department of Health reported that the quality of its 2010–11 Indigenous status data for elective surgery waiting times admitted patients is considered to be acceptable. The department retains historical reporting of Indigenous status. All management and statistical reporting, however, is based on a person’s most recently reported Indigenous status.

# **National *Staphylococcus aureus* bacteraemia Data Collection (NSABDC)**

The NSABDC includes counts of cases of SAB for each public hospital covered by SAB surveillance arrangements, and for private hospitals that choose to provide data. Data are included separately for methicillin-resistant *Staphylococcus aureus* (MRSA) and methicillin-sensitive *Staphylococcus aureus* (MSSA) for public hospitals.

Data from the NSABDC are used for the National Healthcare Agreement performance benchmark and performance indicator about safety and quality in hospital and related care.

Almost all cases of SAB will be diagnosed when the patient is an admitted patient. However, the intention is that cases are reported whether they were determined to be associated with admitted patient care or non-admitted patient care in public hospitals.

The data include the counts of patient days under surveillance. The count of patient days reflects the amount of admitted patient activity, but does not reflect the amount of non-admitted patient activity. The amount of hospital activity that patient days reflect varies among jurisdictions and over time because of variation in admission practices.

## **Summary of key issues**

- Cases of SAB have been reported by all states and territories using the nationally agreed case definition.
- There may be imprecise exclusion of private hospital and non-hospital cases due to the inherent difficulties in determining the origins of SAB cases.
- For some states and territories there is less than 100 per cent coverage of public hospitals. It is possible that there will be a lower risk of SAB in hospitals not included in the SAB surveillance arrangements, especially if they undertake fewer invasive procedures than hospitals which are included.
- The data for 2010–11 are comparable with those from 2009–10, except for New South Wales and the Northern Territory. The 2010–11 data are not comparable with the data for 2008–09, for all states and territories except Tasmania, because of changes in the definition used for a case of SAB and changes in the public hospitals included.
- The patient day and coverage data may be preliminary for some hospitals/jurisdictions.

# Appendix 2: Technical appendix

This appendix covers:

- definitions and classifications used
- the presentation of data in this report
- information on the quality of the data, for specific analyses (where this may affect interpretation)
- analysis methods.

## Definitions

If not otherwise indicated, data elements were defined according to the definitions in the *National health data dictionary, version 14* (HDSC 2008) (summarised in the Glossary).

## Data presentation

For the majority of tables in this report, data are presented by the state or territory of the hospital, not by the state or territory of usual residence of the patient. The exceptions are for tables presenting information on potentially preventable hospitalisations and selected procedures, which are based on data on the state or territory of usual residence. In addition, the state or territory of usual residence of the patient is reported against the state or territory of hospitalisation in Chapter 7.

Except as noted below, the totals in tables include data only for those states and territories for which data were available, as indicated in the tables. For example, for some tables and figures dealing with Indigenous status, data have been presented only for selected states and territories, and the totals in these tables do not include the data for the other states and territories (chapters 3, 7, 8, 9, 10 and 11).

Throughout the publication, percentages may not add up to 100.0 because of rounding. Percentages and population rates printed as 0.0 or 0 may denote less than 0.05 or 0.5, respectively.

## Suppression of data

Other exceptions relate to tables in which data were not published for confidentiality reasons (for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory), or because only one public hospital was represented in the cell, or because a proportion related to a small number of events and was therefore not very meaningful.

Private hospital data are suppressed for a particular diagnosis, procedure or AR-DRG where:

- there are fewer than three reporting units
- there are three or more reporting units and one contributed more than 85% of the total separations, or
- there are three or more reporting units and two contributed more than 90% of the total separations.

Data on the length of stay have been suppressed if there were fewer than 10 separations in the category being presented (50 separations for the average length of stay by selected

AR-DRG analysis in Chapter 3). Data on elective surgery waiting times were suppressed if there were fewer than 10 elective surgery admissions in the category being presented. The abbreviation 'n.p.' has been used in these tables to denote these suppressions. For these tables, the totals include the suppressed information.

## **State or territory of usual residence**

For tables presented by the state or territory of usual residence of the patient, the totals include unknown residence area (within a known state), overseas residents and unknown state of residence.

## **Population rates**

### **Standardised separation rate**

Unless noted otherwise (see below), population rates (separation rates) presented in this report are age-standardised, calculated using the direct standardisation method and 5-year age groups. The total Australian population for 30 June 2001 was used as the standard population against which expected rates were calculated. The Australian Bureau of Statistics' population estimates for 30 June 2010 and for 31 December 2010 (see tables A2.1, A2.2 and A2.3 accompanying this report online) were used for the observed rates as detailed below:

- Separation rates (by hospital state and by residence state) were directly age standardised, using the estimated resident populations as at 30 June 2010. The estimated resident populations use a highest age group of 85 and over.
- Separation rates by Indigenous status were directly age-standardised, using the projected Indigenous population (low series) as at 30 June 2010 and the estimated resident populations as at 30 June 2010. As the projected estimates use a highest age group of 65 and over and population data for June 2010, standardised rates calculated for analyses by Indigenous status are not directly comparable to the rates presented elsewhere.
- Separation rates by remoteness areas and by quintiles of socioeconomic advantage/disadvantage (see SEIFA below) were directly age-standardised, using the estimated resident populations as at 30 June 2010. The estimated resident populations use a highest age group of 85 and over.
- The crude population rates presented in some tables (for example, average available beds per 1,000 population) were calculated using the population estimates for 31 December 2010.

### **Standardised separation rate ratios**

For some tables reporting comparative separation rates, standardised separation rate ratios (SRRs) are presented. The ratios are calculated by dividing the age-standardised separation rate for a population of interest (an observed rate) by the age-standardised separation rate for a comparison population (the expected rate). The calculation is as follows:

Standardised separation rate ratio (SRR) = observed rate/expected rate

A standardised separation ratio of 1.0 indicates that the population of interest (for example, Indigenous Australians) had a separation rate similar to that of the comparison group (for example, other Australians). An SRR of 1.2 indicates that the population of interest had a rate

that was 20% greater than that of the comparison population and an SRR of 0.8 indicates a rate 20% smaller.

The populations used for the observed and expected rates vary in this report, for example:

- For Indigenous status, the rate ratio is equal to the separation rate for Indigenous Australians divided by the separation rate for other Australians (other Australians includes Indigenous status not reported).
- For analyses by residence state or territory, remoteness areas and socioeconomic status, the rate ratio is equal to the separation rate for the residence state or territory, remoteness area or socioeconomic status group divided by the separation rate for Australia.

## Counting public hospitals

Two different counts of hospitals are used in this report, depending on the type of information being presented and the way in which the hospitals were reported to the National Hospital Morbidity Database (NHMD) and the National Public Hospital Establishments Database (NPHED) (Table A2.4):

- In the cost per casemix-adjusted separation analysis (Chapter 3), entities for which there was expenditure information were reported as hospitals. A small number of hospitals in the NPHED with incomplete expenditure information were omitted. In some jurisdictions, hospitals exist in networks, and expenditure data were available only for these networks, so the networks are the entities counted as hospitals for these tables.
- In Chapter 4, hospitals are generally counted as they were reported to the NPHED. These entities are usually 'physical hospitals' (buildings or campuses) but may encompass some outpost locations such as dialysis units. Conversely hospitals on the one 'campus' can be reported as separate entities to this database if, for example, they are managed separately and have separate purposes, such as specialist women's services and specialist children's services. Although most of the hospitals counted in this way report separations to the NHMD, some small hospitals do not have separations every year.

**Table A2.4: Numbers of public hospitals reported in this report, states and territories, 2010–11**

Hospitals	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(a)</sup>	NT	Total
Chapter 3 (expenditure data)	227	105	170	94	80	24	3	5	708
Chapter 4	226	151	170	94	80	23	3	5	752

(a) The count of hospitals for the Australian Capital Territory includes a small mothercraft hospital for which admitted patient data were not reported. The expenditure for this hospital is included in the total reported for the Australian Capital Territory in Chapter 3, but is not included in the cost per casemix-adjusted separation analysis presented in Chapter 4.

Data on numbers of hospitals should therefore be interpreted taking these notes into consideration. Changes in the numbers of hospitals over time can be due to changes in administrative or reporting arrangements rather than changes in the number of hospital campuses or buildings.

Counts of private hospitals can also vary, depending on the source of the information. Therefore, there may be discrepancies between counts of private hospitals from the ABS Private Health Establishments Collection presented in Chapter 3 and the lists of private hospitals contributing to the NHMD (which are the basis of the numbers presented in

Chapter 4). The states and territories provided the latter information, which may not correspond with the way in which private hospitals report to the Private Health Establishments Collection.

## Non-admitted patient emergency department care data analyses

The proportion of emergency services with episode-level data for 2010–11 is calculated as the number of presentations reported to the Non-admitted Patient Emergency Department Care Database (NNAPECD) divided by the number of emergency occasions of service reported to the National Public Hospital Establishments Database (NPHED), as a percentage. This may underestimate the NNAPECD proportion because some emergency occasions of service are for other than emergency presentations. As emergency occasions of service may have been under-enumerated for some jurisdictions, the proportion may also be overestimated. The proportion has been adjusted to 100% for jurisdictions where the number of presentations reported to the NNAPECD exceeded the number of emergency occasions of service reported to the NPHED.

Patients who present to the emergency department with a type of visit of *Return visit*, *Planned*, *Pre-arranged admission* or *Patient in transit* do not necessarily undergo the same processes as *Emergency presentations*, and their waiting times may rely on factors outside the control of the emergency department. Therefore, waiting time statistics (including the proportion ending in admission) and emergency department presentation length statistics are not presented in this report for patients with a type of visit other than *Emergency presentation*.

These waiting time statistics include:

- The median and 90th percentile waiting time – determined from the time elapsed between presentation in the emergency department to commencement of service. Presentations were excluded if the waiting time was missing or invalid, or the patient *Did not wait to be attended by a health care professional* or was *Dead on arrival*.
- The median or 50th percentile (the median or the middle value in a group of data arranged from lowest to highest value for minutes waited) represents the number of minutes within which 50% of patients were treated by a medical officer or nurse; half the waiting times will have been shorter, and half the waiting times longer, than the median. The 90th percentile data represent the number of minutes within which 90% of patients were treated.
- The proportion of presentations seen on time – determined as the proportion of presentations in each triage category with a waiting time less than or equal to the maximum waiting time stated in the National Triage Scale definition. Presentations were excluded if the waiting time was missing or invalid, the patient *Did not wait to be attended by a health care professional* or was *Dead on arrival* or if the triage category was not reported.
- The proportion of presentations ending in admission – determined as the proportion of all emergency presentations with an episode end status of *Admitted to this hospital*.
- The calculations of median duration of service event, median duration of non-admitted patient episode and median time in emergency department. The calculations exclude presentations with an episode end status of *Did not wait*, *Left at own risk* or *Dead on arrival* and only include those presentations for which the emergency department service

commencement time, emergency department episode end time and emergency department physical departure time were all valid and occurred in sequence.

## Admitted patient care data analyses

Records for 2010–11 are for hospital separations (discharges, transfers, deaths or changes in care type) in the period 1 July 2010 to 30 June 2011. Data on patients who were admitted on any date before 1 July 2010 are included, provided that they also separated between 1 July 2010 and 30 June 2011. A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the National Hospital Morbidity Database (NHMD).

Patient day statistics can be used to provide information on hospital activity that, unlike separation statistics, account for differences in length of stay. As the database contains records for patients separating from hospital during the reporting period (1 July 2010 to 30 June 2011), this means that not all patient days reported will have occurred in that year. It is expected, however, that patient days for patients who separated in 2010–11, but who were admitted before 1 July 2010, will be counterbalanced overall by the patient days for patients in hospital on 30 June 2011 who will separate in future reporting periods.

The numbers of separations and patient days can be a less accurate measure of the activity for establishments such as public psychiatric hospitals, and for patients receiving care other than acute care, for which more variable lengths of stay are reported. Information on some aspects of the quality and comparability of the data are presented below.

The notes above and those in Box 7.1 should be used to guide interpretation of the data.

### Newborn episodes of care

*Newborn* care episodes can include ‘qualified days’ which are considered to be the equivalent of acute care days. In this report, *Newborn* episodes with at least one qualified day have been included in all tables reporting separations. Records for *Newborn* episodes with no qualified days do not meet admission criteria for all purposes, so they have been excluded from this report, except as specified in Chapter 7.

The number of patient days reported in this publication for *Newborn* episodes is equal to the number of qualified days, so for newborns with a mixture of qualified and unqualified days the number of patient days reported is less than the actual length of stay for the episode.

Information on reporting practices for *Newborn* episodes before 2010–11 is available in previous *Australian hospital statistics* reports.

### Counts of separations by groups of diagnoses, procedures and external causes

For tables with counts of separations by groups of diagnoses, procedures or external causes, a separation is counted once for the group if it has at least one diagnosis/procedure/external cause reported within the group. As more than one diagnosis, procedure or external cause can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.

### Counts of procedures

For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation.

## **Broad categories of service**

Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG recorded for the separation:

- *Childbirth*: separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health*: separations for which specialised psychiatric care days were reported.
- *Surgical*: separations for which the AR-DRG belonged to the *Surgical* partition (involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Medical*: separations for which the AR-DRG belonged to the *Medical* partition (not involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Other*: separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions (involving a non-operating room procedure, such as endoscopy), excluding separations for *Childbirth* and *Specialist mental health*.

For Chapter 7, broad categories of service are presented for *standard admitted patient care data analyses*. For chapters 8, 9, and 10, broad categories of service are presented for *acute admitted patient care data analyses*.

### **Standard admitted patient care data analyses**

For chapters 7 and 2, the counts of separations do not include separations for *Newborns* (without qualified days) and records for *Hospital boarders* or *Posthumous organ procurement*, and the patient days are also not included for those records. In addition, patient days for *Newborns* that were not qualified days are excluded from the counts of patient days. For more information on these exclusions, see below.

### **Acute admitted patient care data analyses**

For chapters 8, 9 and 10, and for tables in the report that include cost weight information, separations are included only for *Acute care*, *Newborns* (with qualified days) or where care type was not reported. Patient days for *Newborns* that were not qualified days are excluded from the counts of patient days.

#### **Same-day acute admitted patient care data analyses**

For Chapter 8, records are included if the patient had a care type of *Acute*, *Newborn* (with qualified days), or the care type was not reported, and the patient was admitted and separated on the same day.

As a separation may be generated by a transfer between hospitals, or a change in the type of care provided, these data may include records for patients whose stay in hospital was longer than one day but involved more than one separation.

#### **Overnight acute admitted patient care data analyses**

For Chapter 9, records are included if the patient had a care type of *Acute*, *Newborn* (with qualified days), or the care type was not reported, and the patient was admitted and separated on different dates.

## **Surgical separations**

For Chapter 10, surgical separations are defined as acute separations with a 'surgical procedure' reported, based on the procedures used to define 'surgical' DRGs in Australian Refined Diagnosis Related Groups (AR-DRG), version 6.0 (DoHA 2008). Separations for *Specialist mental health care* and *Childbirth* were excluded (see Chapter 10).

Surgical separations are further disaggregated in Chapter 10 based on the reported urgency of admission as:

- *Emergency admissions involving surgery* – includes separations for which the urgency of admission was reported as *Emergency* (about 280,000 records nationally).
- *Elective admissions involving surgery* – includes separations for which the urgency of admission was reported as *Elective* (about 1.9 million records nationally).

Surgical separations for which the urgency of admission was *Not assigned* or not reported are only included in the first table of Chapter 10 (about 27,000 records nationally).

## **Sub- and non-acute admitted patient care data analyses**

For Chapter 11, records are included if the patient had a care type of *Rehabilitation care*, *Palliative care*, *Geriatric evaluation and management*, *Psychogeriatric care* or *Maintenance care*. Both same-day and overnight separations for sub- and non-acute care are included.

## **Public patient analyses**

For *Australian hospital statistics* from 2002–03 to 2007–08, 'Patient election status' and 'Funding source' were used in combination to categorise separations as *Public patients* and *Private patients* as described in Appendix 1 of *Australian hospital statistics 2007–08* (AIHW 2009).

From 2008–09 to 2010–11, the funding source for the separation is presented alone. Throughout this report, the category *Public patients* includes separations for which the funding source was reported as:

- Medicare eligible public patients, not charged (see below)
- *Reciprocal health care agreements*
- *No charge raised* in public hospitals
- *Other hospital or public authority* with a patient election status of *Public* (regardless of hospital sector).

It should be noted that although the funding source *Australian Health Care Agreements* was a value in the NHDD definition for 'Principal source of funds' for 2010–11, the Australian Health Care Agreements expired on 30 June 2009. This value is interpreted as the patient being Medicare eligible, elected to be treated as a public patient and was not charged.

In tables presenting information by funding source, the category *Other* includes separations for which the funding source was reported as:

- *Other compensation*
- *Department of Defence*
- *Correctional facility*
- *Other hospital or public authority* with a patient election status of *Private* (or not reported)
- *No charge raised* (in private hospitals)
- *Other*

## **ICD-10-AM codes used for selected analyses**

A number of tables in this report use ICD-10-AM/ACHI codes to define diagnoses and procedures. The codes are presented in Table A2.5 (accompanying this report online) and relate to:

- statistics on unplanned/unexpected readmissions (Chapter 3)
- statistics on selected procedures (Chapter 3)
- statistics on selected AR-DRGs (Chapter 3)
- statistics on selected potentially preventable hospitalisations (Chapter 7)
- statistics on kidney failure hospitalisations (online only).

## **National elective surgery waiting times data analyses**

### **Elective surgery care and elective surgical separations**

The definition of elective surgery care for the purposes of the National Elective Surgery Waiting Times Data Collection (NESWTDC), and the definition of separations described as *elective admissions involving surgery* in the National Hospital Morbidity Database (NHMD) differ. In particular, the procedures defined as surgical differ between those used to define the scope of the NESWTDC and those used to define surgical separations in the NHMD.

For the NESWTDC, elective surgery comprises elective care where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (HDSC 2008).

### **Median and 90th percentile waiting times**

The 50th percentile (the median or the middle value in a group of data arranged from lowest to highest value for days waited) represents the number of days within which 50% of patients were admitted for the awaited procedure; half the waiting times will have been shorter, and half the waiting times longer, than the median.

The 90th percentile data represent the number of days within which 90% of patients were admitted. The 50th and 90th percentiles have been rounded to the nearest whole number of days.

## **Public hospital establishments data analyses**

### **Public hospital peer groups**

The AIHW worked with the National Health Ministers' Benchmarking Working Group (NHMBWG) and the National Health Performance Committee (NHPC) to develop a national public hospital peer group classification for use in presenting data on costs per casemix-adjusted separation. The aim was to allow more meaningful comparison of the data than comparison at the jurisdiction level would allow. This classification is currently under review.

The peer groups were designed to explain variability in the average cost per casemix-adjusted separation. They also group hospitals into broadly similar groups in terms of their range of admitted patient activity and geographical location. Selected characteristics of the

hospitals assigned to each peer group for 2010–11 are presented in chapters 3 and 4. The peer group names are broadly descriptive of the types of hospitals included in each category.

The peer group classification is summarised in Table A2.6. Details of the derivation of the peer groups are in Appendix 11 of *Australian hospital statistics 1998–99* (AIHW 2000).

**Table A2.6: Public hospital peer group classification**

Peer group	Subgroup	Code	Definition
Principal referral and specialist women's and children's hospitals	Principal referral	A1	Major city hospitals with >20,000 acute casemix-adjusted separations, and Regional hospitals with >16,000 acute casemix-adjusted separations per annum.
	Specialist women's and children's	A2	Specialised acute women's and children's hospitals with >10,000 acute casemix-adjusted separations per annum.
Large hospitals	Major city	B1	Major city acute hospitals treating more than 10,000 acute casemix-adjusted separations per annum.
	Regional and Remote	B2	Regional acute hospitals treating >8,000 acute casemix-adjusted separations per annum, and Remote hospitals with >5,000 casemix-adjusted separations.
Medium hospitals	Group 1	C1	Medium acute hospitals in Regional and Major city areas treating between 5,000 and 10,000 acute casemix-adjusted separations per annum.
	Group 2	C2	Medium acute hospitals in Regional and Major city areas treating between 2,000 and 5,000 acute casemix-adjusted separations per annum, and acute hospitals treating <2,000 casemix-adjusted separations per annum but with >2,000 separations per annum.
Small acute hospitals	Regional	D1	Small Regional acute hospitals (mainly small country town hospitals), acute hospitals treating <2,000 separations per annum, and with less than 40% non-acute and outlier patient days of total patient days.
	Remote	D3	Small Remote hospitals (<5,000 acute casemix-adjusted separations but not 'multi-purpose services' and not 'small non-acute'). Most are <2,000 separations.
Sub-acute and non-acute hospitals	Small non-acute	D2	Small non-acute hospitals, treating <2,000 separations per annum, and with more than 40% non-acute and outlier patient days of total patient days.
	Multi-purpose services	E2	
	Hospices	E3	
	Rehabilitation	E4	
	Mothercraft	E5	
	Other non-acute	E9	For example, geriatric treatment centres combining rehabilitation and palliative care, with a small number of acute patients.
Unpeered and other hospitals	G		Prison medical services, dental hospitals, special circumstance hospitals, Major city hospitals with <2,000 acute casemix-adjusted separations, hospitals with <200 separations etc.
Psychiatric hospitals	F		

*Note:* Only the peer groups above the dashed line are included in the cost per casemix-adjusted separation analyses presented in Chapter 3.

A flow chart can be found in *Australian hospital statistics 2002–03* (Figure A4.1 in that report) (AIHW 2004) to illustrate the assignment of peer groups for almost all hospitals. However,

on the advice of jurisdictions, hospitals may be assigned a different peer group due to special circumstances, such as the opening or closing of a hospital during the year.

Although not specifically designed for purposes other than the cost per casemix-adjusted separation analysis, the peer group classification is recognised as a useful way to categorise hospitals for other purposes, including the presentation of other data. For example, the classification has been used to present emergency department presentations data in Chapter 5 and elective surgery waiting times data in Chapter 10. They have also been used to specify the scopes for national minimum data sets (NMDSS), for example, as noted in Appendix 1 for the NMDSS for Non-admitted patient emergency department care and Outpatient care.

The peer group to which each public hospital was assigned for 2010–11 is included in Table A1.2 (accompanying this report online). In some cases, the establishments defined as hospitals for the cost per casemix-adjusted separation analysis differ from those defined as hospitals for the elective surgery waiting times data or those defined for counts of hospitals presented in chapters 3 and 4. In these cases, their peer groups may also differ, and these differences are indicated in Table A1.2.

## **Data on geographical location**

Data on geographical location are collected on hospitals in the NPHED and on the area of usual residence of patients in the NHMD and the NAPEDCD. These data have been provided as state or territory and Statistical Local Area (SLA), a small area unit within the Australian Bureau of Statistics (ABS) Australian Standard Geographical Classification (ASGC) and/or postcode, and have been aggregated to remoteness areas.

### **Geographical location of hospital**

The remoteness area of each public hospital was determined on the basis of its SLA. For 2010–11, the geographical location aligns with the ABS's ASGC Remoteness Structure 2006. Data on the remoteness area of hospitals are presented in *Chapter 4*.

### **Geographical location of usual residence of the patient**

Information on the area of usual residence of the patient is supplied by the states and territories for the NHMD and the NAPEDCD. The *National health data dictionary* specifies that these data should be provided as the state or territory and the SLA of usual residence. Not all states and territories were able to provide information on the area of usual residence in the form of an SLA code. New South Wales, Victoria, Western Australia, the Australian Capital Territory and the Northern Territory were able to provide SLA codes both for patients usually resident in the jurisdiction and for patients not usually resident in the jurisdiction. Queensland, South Australia and Tasmania provided SLA codes for patients usually resident in the jurisdiction and postcodes for patients not usually resident in the jurisdiction.

Where necessary, the AIHW mapped the supplied area of residence data for each separation or emergency department presentation to 2010 SLA codes and to remoteness area categories based on the ABS's ASGC Remoteness Structure 2006. This was undertaken on a probabilistic basis as necessary, using ABS concordance information describing the distribution of the population by postcode, remoteness areas and SLAs (for 2009 and previous years).

Because of the probabilistic nature of this mapping, the SLA and remoteness area data for individual records may not be accurate; however, the overall distribution of records by geographical areas is considered useful.

For the NHMD, most separations included data on the area of usual residence. The mapping process identified some missing or invalid codes, but about 99.5% of records were assigned 2010 SLA codes. For the remaining 0.5% of records, about 47% were for overseas residents, 10% were of no fixed abode, and the remainder not reported.

For the NNAPECD, most presentations included data on the area of usual residence with about 98.7% of records assigned 2010 SLA codes. For the remaining 1% of records, about 60% were for overseas residents, 2% were of no fixed abode, and the remainder not reported.

### **Remoteness area of usual residence**

Data based on the area of usual residence for admitted patients are presented by remoteness area in chapters 3, 4, 7, 8, 9, 10 and 11.

Between 2006–07 and 2010–11, the patients' area of residence data was mapped to the ABS's ASGC Remoteness Structure 2006 which categorises geographical areas in Australia into remoteness areas, described in detail on the ABS website <[www.abs.gov.au](http://www.abs.gov.au)>. The classification is as follows:

- *Major cities*
- *Inner regional*
- *Outer regional*
- *Remote*
- *Very remote*.

The data presented in this report by remoteness areas using the ABS's ASGC Remoteness Structure 2006 are not comparable to the data presented by remoteness areas using the ABS's ASGC Remoteness Structure 2001 in *Australian hospital statistics* reports for 2001–02 to 2005–06 because of differences in the underlying calculation of the Accessibility/Remoteness Index of Australia (ARIA) scores used to determine remoteness areas. Therefore, caution should be used when making comparisons over time as the remoteness areas categories presented are not directly comparable.

### **Socioeconomic status**

The Socio-Economic Indexes For Areas 2006 (known as SEIFA 2006 (ABS 2008)) are generated by the ABS using a combination of 2006 Census data such as income, education, health problems/disability, access to Internet, occupation/unemployment, wealth and living conditions, dwellings without motor vehicles, rent paid, mortgage repayments, and dwelling size. Composite scores are averaged across all people living in areas and defined for areas based on the Census collection districts. However, they are also compiled for higher levels of aggregation including SLA. The SEIFAs are described in detail on the ABS website <[www.abs.gov.au](http://www.abs.gov.au)>.

The SEIFA Index of Relative Socio-Economic Disadvantage is one of the ABS's SEIFA indexes. The relative disadvantage scores indicate the collective socioeconomic status of the people living in an area, with reference to the situation and standards applying in the wider community at a given point in time. A relatively disadvantaged area is likely to have a high proportion of relatively disadvantaged people. However, such an area is also likely to contain people who are not disadvantaged, as well as people who are relatively advantaged.

Separation rates by socioeconomic status were generated by the AIHW using the ABS Index of Relative Socio-Economic Disadvantage (IRSD) scores for the SLA of usual residence of the patient reported for each separation. The 1 – *Lowest* SES group represents the areas containing the 20% of the population with the most disadvantage, and the 5 – *Highest* SES group represents the areas containing the 20% of the population with the least disadvantage.

The following labels for each socioeconomic group have been used throughout the report:

<b>Label</b>	<b>Socioeconomic status group</b>
1—Lowest	Most disadvantaged
2	Second most disadvantaged
3	Middle
4	Second least disadvantaged
5—Highest	Least disadvantaged

## **ICD-10-AM/ACHI**

Diagnosis, procedure and external cause data for 2010–11 were reported to the NHMD by all states and territories using the 7th edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2010), incorporating the *Australian classification of health interventions* (ACHI).

The tables and figures presented in chapters 7, 8, 9, 10 and 11 use the codes and abbreviated descriptions of the ICD-10-AM/ACHI classification. Full descriptions of the categories are available in the ICD-10-AM publication (NCCH 2010).

## **Diagnoses**

The ICD-10-AM disease classification is hierarchical, with a small number of summary disease chapters that are divided into a large number of more specific disease groupings (represented by 3-character codes). Most of the 3-character disease groupings can be divided into an even larger number of very specific disease categories represented by 4- character and 5-character codes.

Most of the information about principal diagnoses in chapters 7, 8, 9, 10 and 11 is presented using two methods of grouping records based on the ICD-10-AM disease classification:

- ICD-10-AM disease chapters – these 20 groups provide information aggregated at the ICD-10-AM chapter level
- 3-character ICD-10-AM groupings – 1,674 categories describe the diseases at a specific level. Detailed information is presented for the 20 groupings with the highest number of separations. Summary information is provided for all the groups (for which separations were reported) online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## **External causes**

The external cause classification (Chapter 20 of ICD-10-AM) is hierarchical, consisting of 377 three-character categories. The information in Chapter 7 is presented by categorising the ICD-10-AM external cause codes into 16 groups to provide an overview of the reported external causes. Additional information on external causes of injury and poisoning, place of occurrence and activity when injured is available online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## **Procedures**

One or more procedures can be reported for each separation, but procedures are not undertaken for all hospital admissions, so only some of the separation records include procedure data.

The procedure classification is divided into chapters by anatomical site and within each chapter by a 'superior' to 'inferior' (head to toe) approach. These subchapters are further divided into more specific procedure blocks, beginning with the least invasive procedure through to the most invasive. The blocks, which are numbered sequentially, group the very specific procedure codes.

The procedure information is presented using three methods of grouping procedures based on the ACHI procedure classification:

- ACHI procedure chapters – these 20 groups provide information aggregated at the ACHI chapter level
- ACHI procedure blocks – these 1,601 categories describe procedures at a specific level. Detailed information is presented for the 10 groups with the highest number of separations and summary information is provided for all the groups (for which separations were reported) online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>
- ACHI procedures – there are over 6,300 individual procedures. Chapter 11 presents information for the 10 procedures with the highest number of non-acute care separations by care type.

## **Changes affecting ICD-10-AM/ACHI classifications**

The 7th edition of ICD-10-AM was implemented in Australian hospitals from 1 July 2010. Three major changes to the following Australian Coding Standards (ACS) occurred between the 6th and 7th editions of this classification:

1. Deletion of ACS 1505 *Single spontaneous vaginal delivery*.
2. Addition of all procedure codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* (except trans oesophageal echocardiogram (TOE) (block [1942])) to ACS 0042 *Procedures not normally coded*.
3. Expansion of the instructional notes in ACS 0401 *Diabetes mellitus and Impaired glucose regulation* to emphasize that the assignment and sequencing of code(s) for diabetes mellitus or impaired glucose regulation should be determined by firstly following the criteria in ACS 0001 *Principal diagnosis* and ACS 0002 *Additional diagnoses*.

### **Deletion of ACS 1505 *Single spontaneous vaginal delivery***

ACS 1505 instructed coders that the diagnosis code O80 *Single spontaneous delivery* was intended for single spontaneous vaginal deliveries without abnormality/complication classifiable elsewhere in Chapter 15 *Pregnancy, childbirth and the puerperium* and without manipulation or instrumentation (NCCH 2008).

The deletion of ACS 1505 as a specialty standard caused obstetric cases to be coded according to ACS 0001 *Principal Diagnosis* with the specific instruction for obstetrics that:

"Where the patient is admitted for delivery such as 'in labour', 'for induction', 'for caesarean', and the outcome is delivery, assign a code from category O80–O84 *Delivery* as the principal diagnosis, followed by the reason for any intervention and then any other

conditions and/or complications that meet the criteria for assignment as per ACS 0002 *Additional diagnoses.*"

These changes in the standards resulted in changes in principal diagnosis assignment for obstetric episodes of care associated with vaginal delivery. In particular, there was a marked increase in the reporting of the following as principal diagnoses:

- O80 *Single spontaneous delivery* (a 341% increase between 2009–10 and 2010–11 for public and private hospitals combined, Table A2.7)
- O81 *Single delivery by forceps and vacuum extractor*
- O82 *Single delivery by caesarean section*
- O83 *Other assisted single delivery*
- O84 *Multiple delivery*

There was also a corresponding decrease in the reporting of other obstetric diagnoses as principal diagnoses, such as *Perineal laceration during delivery* (O70), *Maternal care for known or suspected abnormality of pelvic organs* (O34) and *Premature rupture of membranes* (O42) which decreased by 88%, 91% and 84% respectively between 2009–10 and 2010–11 (Table A2.8).

For hospitals reporting with AR-DRG versions older than version 5.2, episodes with a principal diagnosis of O80 Single spontaneous delivery or O83 Other assisted delivery would result in either an error DRG (for versions 4.1/4.2) or a less specific DRG in version 5.1, which affected private hospital funding arrangements.

Private hospitals in most states and territories delayed the implementation of reporting obstetrics according to the ICD-10-AM 7th edition coding standards until a solution was able to be implemented in the grouping of these records.

### **Effect on reporting**

Between 2009–10 and 2010–11, the reporting of obstetric principal diagnoses O80 to O84 by the public sector increased by about 280% (Table A2.7), and was reasonably consistent across the 2010–11 reporting period for all jurisdictions, indicating that, for public hospitals, the standard was implemented at the start of the reporting period.

For private hospitals, the reporting of obstetric principal diagnoses O80 to O84 was twice as high during the first half of 2010–11 compared to the same period in 2009–10, and doubled again in the second half of 2010–11 (Table A2.7). This suggested that some private hospitals were coding obstetric cases according to ICD-10-AM 7th edition standards from the beginning of the 2010–11 reporting period, and others commenced in the second half of the year (January to June 2011).

**Table A2.7: Obstetric<sup>(a)</sup> principal diagnoses O80–O84, public and private hospitals 2009–10 to 2010–11**

	2009–10			2010–11		
	Jul-Dec 2009	Jan-Jun 2010	Total	Jul-Dec 2010	Jan-Jun 2011	Total
<b>Public hospitals</b>						
O80 Single spontaneous delivery	9,464	9,661	19,125	60,497	62,080	122,577
O81 Single delivery by forceps and vacuum extractor	8,799	8,827	17,626	10,615	11,236	21,851
O82 Single delivery by caesarean section	8,376	8,353	16,729	25,767	27,622	53,389
O83 Other assisted single delivery	0	0	0	1,010	1,224	2,234
O84 Multiple delivery	0	0	0	1,283	1,354	2,637
<i>Total public hospitals (O80–O84)</i>	<b>26,639</b>	<b>26,841</b>	<b>53,480</b>	<b>99,172</b>	<b>103,516</b>	<b>202,688</b>
<b>Private hospitals</b>						
O80 Single spontaneous delivery	2,802	2,898	5,700	5,716	15,548	21,264
O81 Single delivery by forceps and vacuum extractor	35	67	102	3,360	5,765	9,125
O82 Single delivery by caesarean section	858	849	1,707	10,201	15,655	25,856
O83 Other assisted single delivery	0	0	0	51	194	245
O84 Multiple delivery	0	0	0	370	581	951
<i>Total private hospitals (O80–O84)</i>	<b>3,695</b>	<b>3,814</b>	<b>7,509</b>	<b>19,698</b>	<b>37,743</b>	<b>57,441</b>
<b>Total (O80–O84)</b>	<b>30,334</b>	<b>30,655</b>	<b>60,989</b>	<b>118,870</b>	<b>141,259</b>	<b>260,129</b>

(a) For separations with an AR-DRG of O01A *Caesarean delivery with catastrophic or severe complications or comorbidities*, O01B *Caesarean delivery without catastrophic or severe complications or comorbidities*, O02A *Vaginal delivery with operating room procedure with catastrophic or severe complications or comorbidities*, O02B *Vaginal delivery with operating room procedure without catastrophic or severe complications or comorbidities* or O60Z *Vaginal delivery*.

The staged introduction of the ICD-10-AM 7th edition standard for coding obstetric separations had the following effects on reporting:

- Between 2009–10 and 2010–11, there was a very large increase in the volume of separations reported with principal diagnoses of O80 to O84.
- Due to the large increase in reporting of O80–O84 as principal diagnoses, the following obstetric principal diagnoses now appear among the '20 most common principal diagnoses' in Chapter 9 of this report.
  - O80 *Single spontaneous delivery* (144,000 separations)
  - O82 *Single delivery by caesarean section* (79,000 separations)
  - O81 *Single delivery by forceps and vacuum extractor* (31,000 separations)
- Due to the instruction to code O80–O84 as principal diagnoses, and for other conditions or complications to be reported as additional diagnoses, there has been a decrease in the reporting of obstetric complications as principal diagnoses, and a corresponding increase but the reporting of obstetric complications as additional diagnoses.

**Table A2.8: Variation in reporting of diagnoses for obstetrics cases, all hospitals, 2009–10 to 2010–11**

		2009–10	2010–11	Change (per cent)
<b>Top 5 principal diagnoses for childbirth-related separations, 2009–10</b>				
O70	Perineal laceration during delivery	45,899	5,384	–88.3
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	34,047	6,839	–79.9
O34	Maternal care for known or suspected abnormality of pelvic organs	33,109	2,984	–91.0
O80	Single spontaneous delivery	32,669	143,963	340.7
O42	Premature rupture of membranes	22,363	3,563	–84.1
<b>Top 5 principal diagnoses for childbirth-related separations, 2010–11</b>				
O80	Single spontaneous delivery	32,669	143,963	340.7
O82	Single delivery by caesarean section	2,538	79,342	3,026.2
O81	Single delivery by forceps and vacuum extractor	0	31,004	..
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	34,047	6,839	–79.9
O70	Perineal laceration during delivery	45,899	5,384	–88.3

Source: National Hospital Morbidity Database.

The distribution and volume of separations reported as Childbirth-related (Obstetric) AR-DRGs in 2010–11 is consistent with previous years' data and there is no noticeable effect on the time series data reported for:

- the *Childbirth* broad category of service (separations with an AR-DRG of O01A/B, O02A/B or O60Z) in both *Australian hospital statistics* and the *MyHospitals* website and
- Obstetric related AR-DRGs in *Australian hospital statistics*.

Appropriate caveat information has been added to all tables containing information on principal diagnoses, including those presenting information at the ICD-10-AM chapter-level and those presenting the 20 most common principal diagnoses.

### Effect on future reporting

In the absence of further changes to the coding standards for obstetrics cases, it is expected that:

- for public hospitals, reporting for the 2011–12 reference period will be largely consistent with that reported for 2010–11.
- for private hospitals, there will be a notable increase in the volume of separations reporting principal diagnoses of O80 to O84 in 2011–12, and that future years' reporting will be largely consistent with the 2011–12 numbers.

### Addition of procedure codes to ACS 0042 Procedures not normally coded

ACS 0042 Procedures not normally coded lists procedures that are routine in nature, performed for most patients and/or can occur multiple times during an episode. These procedures are usually part of the standard treatment of care and are unnecessary to code, unless required by another ACS or they are the principal reason for admission in a same-day episode of care. For ICD-10-AM 7th edition (reported from 1 July 2010), the addition of imaging services to this list meant common procedures such as ultrasounds and computerised tomography should no longer be routinely coded.

## Effect on reporting

Between 2006–07 and 2009–10, the numbers of procedures reported for *Imaging services* was relatively stable. Numbers of *Imaging services* procedures reported decreased by over 88% overall between 2009–10 and 2010–11 (Table A2.9). Decreases were relatively lower for *Ultrasound scans* (Blocks 1940 to 1950, which includes *Trans-oesophageal echocardiogram* Block 1942), and for *Angiography* (Blocks 1989 to 1991) and *Digital subtraction angiography* (Blocks 1992 to 1998).

Some *Imaging services* procedures blocks were previously reported in the '20 most common' procedures for both same-day and overnight acute separations (see Tables S8.12, S8.13, S9.12, S9.13). For example, reporting of the procedure *Computerised tomography of the brain* decreased from almost 215,000 procedures in 2009–10 to less than 5,000 procedures in 2010–11.

**Table A2.9: Change in reporting of imaging services procedures by ACHI chapter , sub-chapter and procedure block, all hospitals, 2009–10 to 2010–11**

	2009–10	2010–11	Change (per cent)
Ultrasound scan (1940–1950)	85,172	44,794	–47.4
Computerised tomography scan (1952–1966)	612,435	12,540	–98.0
Radiography (1967–1988)	4,523	4,263	–5.7
Angiography (1989–1991)	19,029	9,852	–48.2
Digital subtraction angiography (1992–1998)	23,730	17,508	–26.2
Fluoroscopy (1999)	15,391	1,866	–87.9
Nuclear medicine imaging (2000–2014)	45,651	2,273	–95.0
Magnetic resonance imaging (2015)	79,863	11,150	–86.0
<b>All imaging services (1940–2016)</b>	<b>885,794</b>	<b>104,246</b>	<b>–88.2</b>
<b>Counts for the 5 most common <i>Imaging services</i> blocks reported in 2009–10</b>			
Computerised tomography of brain (1952)	214,808	4,300	–98.0
Computerised tomography of abdomen and pelvis(1963)	116,965	1,787	–98.5
Spiral angiography by computerised tomography (1966)	81,402	2,006	–97.5
Magnetic resonance imaging (2015)	79,863	11,150	–86.0
Computerised tomography of spine (1959)	50,997	1,121	–97.8

Source: National Hospital Morbidity Database.

## Revised instructional notes in ACS 0401 *Diabetes mellitus and Impaired glucose regulation*

The Australian Coding Standard for *Diabetes mellitus and Impaired glucose regulation* (ACS 0401) has undergone many changes in the last few ICD-10-AM editions. The numbers separations reporting any diagnosis for diabetes (E10–E14) between 2006–07 and 2010–11 are presented in Table A2.10.

For ICD-10-AM 5th edition (used 1 July 2006 to 30 June 2008), ACS 0401 instructed coders to fully describe all complications of diabetes mellitus.

The coding practice for classifying diabetes under ICD-10-AM 6th edition (used 1 July 2008 to 30 June 2010) was largely consistent with previous editions of ICD-10-AM. However, clarification of how the coding standard for additional diagnoses (ACS 0002) should be applied under ICD-10-AM 6th edition meant that conditions would only be coded as an additional diagnosis if they were 'significant in terms of treatment required, investigations

needed and resources used in each episode of care'. While this clarification resulted in a decrease in the number of conditions being coded as additional diagnoses for all separations, it had a particularly significant impact on the reporting of diabetes as an additional diagnosis for separations that involved a patient with diabetes.

### **Effect on reporting**

Between 2007–08 and 2008–09, the numbers of diagnoses reported for diabetes and impaired glucose regulation (E09–E14) decreased by 38%, from 902,627 diagnoses in 2007–08 to 558,763 diagnoses in 2008–09 (Table A2.10).

The coding practice for classifying diabetes under ICD-10-AM 7th edition (from 1 July 2010) changed as a result of changes made to the ACS specialty standard for *Diabetes Mellitus and impaired glucose regulation* (ACS 0401). The ACS changes resulted in a further decrease between 2009–10 and 2010–11 in the reporting of diabetes-related conditions, due to the condition not meeting the criteria for being assigned as either a principal (ACS 0001) or additional diagnosis (ACS 0002).

Between 2009–10 and 2010–11, the numbers of diagnoses reported for diabetes and impaired glucose regulation (E09–E14) decreased by 38% from 532,995 diagnoses in 2009–10 to 329,747 diagnoses in 2010–11 (Table A2.10). In particular over this period, there was a 43% decrease in the reporting of *Type 2 diabetes mellitus with kidney complication* (E11.2) and a 44% decrease in the reporting of *Type 2 diabetes mellitus with multiple complications* (E11.7).

From 1 July 2012, further changes to ACS 0401 will result in more changes in the coding practice for classifying diabetes under ICD-10-AM 7th edition. The future changes are likely to result in an increase in diabetes being assigned as both principal and additional diagnoses.

**Table A2.10: Diabetes mellitus and impaired glucose regulation, reporting 2006–07 to 2010–11**

Diagnosis		2006–07	2007–08	2008–09	2009–10	2010–11	Change (per cent)	
							2007–08 to 2008–09	2009–10 to 2010–11
							2008–09	2010–11
E09	Impaired glucose regulation	3,998	4,241	2,471	2,184	1,393	-41.7	-36.2
E10	Type 1 diabetes mellitus	64,433	63,642	46,862	47,822	38,030	-26.4	-20.5
E11	Type 2 diabetes mellitus	761,914	825,041	502,947	476,856	285,870	-39.0	-40.1
	E11.0 Type 2 diabetes mellitus with hyperosmolarity	469	860	884	900	1,021	2.8	13.4
	E11.1 Type 2 diabetes mellitus with acidosis	1,220	1,433	1,720	1,950	1,799	20.0	-7.7
	E11.2 Type 2 diabetes mellitus with kidney complication	103,360	112,413	77,596	72,813	41,522	-31.0	-43.0
	E11.3 Type 2 diabetes mellitus with ophthalmic complication	25,119	26,321	20,661	19,081	4,472	-21.5	-76.6
	E11.4 Type 2 diabetes mellitus with neurological complication	10,435	10,991	8,244	7,873	4,815	-25.0	-38.8
	E11.5 Type 2 diabetes mellitus with circulatory complication	26,965	29,051	17,163	15,216	7,548	-40.9	-50.4
	E11.6 Type 2 diabetes mellitus with other specified complication	39,747	42,237	46,017	48,421	51,199	8.9	5.7
	E11.7 Type 2 diabetes mellitus with multiple complications	288,803	314,844	182,787	173,298	96,726	-41.9	-44.2
	E11.9 Type 2 diabetes mellitus without complication	73,311	68,945	19,318	13,932	11,918	-72.0	-14.5
E13	Other specified diabetes mellitus	5,399	5,469	4,268	4,173	3,389	-22.0	-18.8
E14	Unspecified diabetes mellitus	3,919	4,234	2,215	1,960	1,065	-47.7	-45.7
<b>E09–E14 Impaired glucose regulation and diabetes mellitus</b>		<b>835,665</b>	<b>898,386</b>	<b>556,292</b>	<b>530,811</b>	<b>328,354</b>	<b>-38.1</b>	<b>-38.1</b>

Source: National Hospital Morbidity Database.

## Quality of coded data

The comparability of the coded diagnosis, procedure and external cause data can be affected by variations in the quality of the coding, the numbers of diagnoses/procedures reported and can also be influenced by state-specific coding standards.

The quality of coded diagnosis, procedure and external cause data can be assessed using coding audits in which, in general terms, selected records are independently recoded and the resulting codes compared with the codes originally assigned for the separation. There are no national standards for this auditing, so it is not possible to use information on coding audits to make quantitative assessments of data quality on a national basis.

The quality and comparability of the coded data can, however, be gauged by information provided by the states and territories on the quality of the data and by assessment of apparent variation in the reporting of additional diagnoses.

## State-specific coding standards

The Australian Coding Standards were developed for use in both public and private hospitals with the aim of satisfying sound coding convention according to the ICD-10-AM/ACHI. Although all states and territories instruct their coders to follow the

Australian Coding Standards, some jurisdictions also apply state-specific coding standards to deal with state-specific reporting requirements. These standards may be in addition to or instead of the relevant Australian Coding Standard, and may affect the comparability of ICD-10-AM coded data.

For example, there are variations in coding standards between jurisdictions with regard to the reporting of external cause codes and place of occurrence codes. The Australian Coding Standard requires a place of occurrence code to be reported if an external cause code in the range V00–Y89 has been reported, and requires an activity when injured code to be recorded if the external cause code is in the range V00–Y34. The Western Australian coding standard requires the mandatory recording of a place of occurrence and activity when injured code for all records with a diagnosis code in the range S00–T98, regardless of the external cause code reported. The Victorian coding standard does not require the recording of external cause, place of occurrence or activity when injured for separations where the care type is *Rehabilitation care*.

### **State and territory comments on the quality of the data**

The following information has been provided by the states and territories to provide some insight into the quality of the coded data in the NHMD.

#### **New South Wales**

For New South Wales, hospitals perform formal audits on ICD-10-AM coded data at a local level. Data edits are monitored regularly and consistent errors are identified and rectified by individual hospitals.

All NSW public hospitals coded data is routinely processed, monitored and validated using Performance Indicators for Coding Quality (PICQ™) tool by the Ministry of Health and disseminated back to the Local Health Districts and individual hospitals.

#### **Victoria**

As part of a comprehensive health data integrity audit program, the Victorian Department of Health continues to conduct state-wide external audits of admitted patient data across public sites. These audits review the ICD-10-AM/ACHI coding and the application of Australian Coding Standards along with some key demographic data. A total of 10,000–13,000 case records are audited within each audit cycle. The rate of AR-DRG change in records subject to audit is consistently under 10%, indicating a high quality of coding. Coded data is also validated using Performance Indicators for Coding Quality (PICQ™) with published state-wide results for both public and private hospitals.

#### **Queensland**

Hospitals in Queensland conduct their own coding quality audits, and ICD-10-AM validations are automatically executed as part of the general processing of morbidity data in the corporate data collection. Results from a corporate audit program run between 2006–07 and 2010–11 financial years show a change in AR-DRGs of less than 10%.

#### **Western Australia**

The Western Australian Department of Health conducts in-house data quality activities and regular comprehensive external audits of hospital medical records and inpatient data reporting processes. The Edit Protocol for Hospital Morbidity Data System and the Clinical Information Audit Program aims to provide assurances of data quality and integrity,

promoting confidence in the use of health information by hospitals and throughout the system.

### **South Australia**

The South Australian Department of Health recently completed a major audit of coding practices. The rate of AR-DRG change for metropolitan hospitals was marginally above 10%. A result of under 10% is generally regarded as an indication of high quality coding.

The Department conducts a number of other coding improvement activities, aimed at improving compliance with national and state coding standards. For example, desktop audits of coded data are regularly run. Individual hospitals are followed-up as required and results are reported to all coders in quarterly newsletters. A coding educator has been appointed to assist hospitals in further developing their coding knowledge.

### **Tasmania**

In Tasmania, hospitals continue to conduct coding quality improvement activities using the Australian Coding Benchmark Audit tool and PICQ™. Validation of ICD-10-AM data also occurs routinely as the data are processed from the hospitals. A state-wide coding auditor/educator has been appointed and that position will assume the responsibility of managing state-wide coding audits and education in relation to findings from them. Also the position will manage changes/updates to coding classifications and grouping systems.

### **Australian Capital Territory**

The Australian Capital Territory conducts regular coding data quality improvement and integrity activities including analysis using the PICQ™ tool to ensure a high standard of coding quality. Validations are automatically undertaken as part of the processing data flow in the hospital level and corporate level data collections and further education and training supports these quality improvement activities.

### **Northern Territory**

The Northern Territory is committed to the continual improvement of clinical coding across the Northern Territory Hospitals Network, but has experienced challenges in recruiting suitably experienced staff, and maintaining timely coding at all locations. Off-site coding has been used to improve timeliness, but there are ongoing challenges with quality and consistency. New software will be implemented in 2012 and is expected to improve the outcome on both these issues.

### **Apparent variation in reporting of additional diagnoses**

A measure of apparent variation among Australian states and territories in the reporting and coding of additional diagnoses is the proportion of separations in the lowest resource split for adjacent AR-DRGs, standardised to the national distribution of adjacent AR-DRGs to take into account differing casemixes (Coory & Cornes 2005).

Table A2.11 shows that there is variation among jurisdictions, and by sector, in the proportion of separations grouped to the lowest resource split for adjacent AR-DRGs.

### **Method**

An adjacent AR-DRG is a set of AR-DRGs that is split on a basis supplementary to the principal diagnoses and procedures that are used to define the adjacent AR-DRG grouping.

For many adjacent AR-DRGs, this split is based on the inclusion of significant additional diagnoses, also known as complications or comorbidities (CCs). Adjacent AR-DRGs are signified in the AR-DRG classification by having the first three characters in common. The allocation of a fourth character code is hierarchical, with the highest resource use level being assigned an A and the lowest resource use level being assigned the lowest letter in the sequence.

**Table A2.11: Standardised proportion in lowest resource level AR-DRG<sup>(a)</sup> for selected adjacent AR-DRGs version 6.0, public and private hospitals, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>All adjacent AR-DRGs split by complications only</b>									
<b>Public hospitals</b>									
Separations	611,199	514,264	361,334	186,830	148,599	37,650	30,732	28,342	1,918,950
Standardised proportion in lowest resource level	0.78	0.76	0.79	0.81	0.78	0.81	0.79	0.75	0.78
<b>Private hospitals</b>									
Separations	197,567	195,738	194,756	84,448	65,667	17,614	9,919	3,095	768,804
Standardised proportion in lowest resource level	0.82	0.81	0.81	0.83	0.82	0.83	0.78	0.89	0.82
<b>Adjacent AR-DRGs with ‘without complication’ as the lowest resource level AR-DRG</b>									
<b>Public hospitals</b>									
Separations	157,965	137,876	96,150	50,709	38,334	9,900	9,471	8,236	508,641
Standardised proportion in lowest resource level	0.74	0.72	0.75	0.76	0.72	0.75	0.74	0.66	0.74
<b>Private hospitals</b>									
Separations	64,523	62,176	60,077	30,340	21,109	5,379	3,355	1,067	248,021
Standardised proportion in lowest resource level	0.78	0.76	0.77	0.80	0.79	0.78	0.72	0.83	0.77
<b>Adjacent DRGs with ‘without catastrophic or severe complication’ as the lowest resource level AR-DRG</b>									
<b>Public hospitals</b>									
Separations	453,234	376,388	265,184	136,121	110,265	27,750	21,261	20,106	1,410,309
Standardised proportion in lowest resource level	0.80	0.78	0.81	0.83	0.80	0.83	0.81	0.79	0.80
<b>Private hospitals</b>									
Separations	133,044	133,562	134,679	54,108	44,558	12,235	6,564	2,028	520,783
Standardised proportion in lowest resource level	0.84	0.83	0.83	0.84	0.84	0.84	0.80	0.92	0.84

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

Abbreviations: AR-DRG—Australian Refined Diagnosis Related Group; n.p.—not published.

The underlying assumption of this analysis is that variation in the proportions of separations assigned to individual AR-DRGs within an adjacent AR-DRG is caused by variation in the reporting and coding of additional diagnoses that are relevant to the split of the adjacent AR-DRG. A corollary of this assumption is that any variation seen was not caused by age, diagnosis, socioeconomic status or other factors. This assumption is less likely to be valid when comparing hospital sectors which have differing casemixes, or the smaller jurisdictions because of differing population profiles and the limitations of the standardisation method.

The data were directly standardised by scaling the distribution of adjacent AR-DRGs in each jurisdiction/sector to the same distribution as the national total. The resulting proportions of separations in the lowest resource AR-DRG within the adjacent AR-DRG are comparable.

This analysis concentrates on differences in the reporting of additional diagnoses that are significant in AR-DRG assignment within the adjacent AR-DRG groupings. The analysis covers three groups of adjacent AR-DRGs:

1. all applicable adjacent AR-DRGs (that is, excluding adjacent AR-DRGs with other factors affecting partitioning)
2. adjacent AR-DRGs where the lowest split was without complications or comorbidities
3. adjacent AR-DRGs where the lowest split was without catastrophic or severe complications or comorbidities.

Categories 2 and 3 are subsets of category 1.

See Table A2.12 (accompanying this report online) for additional detail on this analysis and the list of AR-DRGs included.

## **Condition onset flag data**

The data element 'Episode of admitted patient care – condition onset flag' was mandated for national collection for the first time for the 2008–09 reporting period.

The condition onset flag is a means of differentiating those conditions which arise during, or arose before, an admitted patient episode of care. It is reported for each ICD-10-AM diagnosis, external cause, place of occurrence, and activity when injured code.

A better understanding of those conditions arising during the episode of care may inform prevention strategies particularly in relation to complications of medical care.

Conditions which arise during the episode of care can include:

- conditions resulting from misadventure during medical or surgical care during the episode of admitted patient care
- abnormal reactions to, or later complication of, surgical or medical care arising during the episode of admitted patient care
- conditions arising during the episode of admitted patient care that may not be related to surgical or medical care (for example, pneumonia).

## **Quality of the Condition onset flag data for 2010–11**

Overall, the provision of Condition onset flag for 2010–11 was very similar to that provided for 2008–09 and 2009–10, in terms of the proportion by sector, by diagnosis chapter, by Urgency of admission and by Same-day/overnight status.

The quality of the Condition onset flag data for 2010–11 was not considered to be sufficient for analytical purposes and presentation in the body of this report. This was for three main reasons:

- The data were not provided for all separations, with major gaps for public hospitals for New South Wales, and for private hospitals for New South Wales and the Northern Territory.
- There was variation in the proportion of separations for which there was a report of a condition with onset during the episode of care, among states and territories for both the public and private sectors. Although some variation could be expected, it was considered that further investigation of the data quality was warranted at this stage.

- There were unexpected reports of condition with onset during the episode of care, such as for congenital conditions and conditions such as cancer. Although the numbers of these reports were small, it was considered that further investigation of the data quality was warranted at this stage.

## Coverage

Incomplete coverage of the COF data continues to limit its application for national reporting.

The coverage of Condition onset flag increased for public hospitals, from 77% in 2009–10 to 88% in 2010–11. (Table A2.13). For private hospitals, coverage increased from 69% in 2009–10 to 77% in 2010–11.

**Table A2.13: Proportion of separations<sup>(a)</sup> with Condition onset flag reported<sup>(b)</sup> (%), public and private hospitals, states and territories, 2010–11**

	Public sector	Private sector
	Separations with onset flag reported (%)	Separations with onset flag reported (%)
New South Wales	58.6	21.5
Victoria	100.0	100.0
Queensland	100.0	100.0
Western Australia	100.0	100.0
South Australia	100.0	100.0
Tasmania	98.6	94.7
Australian Capital Territory	100.0	99.9
Northern Territory	100.0	0.0
<b>Total</b>	<b>87.5</b>	<b>77.3</b>

(a) Separations for which the care type was reported as *Newborn* (without qualified days), and records for *Hospital boarders* and Posthumous organ procurement have been excluded.

(b) The proportion of separations for which Condition onset flag was reported may include records where the flag was provided for some diagnoses and not for others.

## Proportion of separations for which there was a report of a condition with onset during the episode of care

The proportions of separations for which there was a report of a condition with onset during the episode of care were calculated using records for which condition onset flag was not missing.

About 8.2% of public hospital separations for which Condition onset flag was provided reported at least one condition that arose during the episode of care (for separations for which a condition onset flag of 1 or 2 was provided for at least one diagnosis) (Table A2.14). About 7.5% of diagnoses reported for public hospital separations were for conditions reported as arising during the episode of care (Table A2.16).

About 5.2% of private hospital separations for which Condition onset flag was provided reported at least one condition that arose during the episode of care (Table A2.15). About 4.1% of diagnoses reported for private hospital separations were for conditions reported as arising during the episode of care (Table A2.16).

### *Public hospitals*

About 8% of public hospital separations reported at least one condition that arose during the episode of care (Table A2.14). There was marked variation between states and territories, with the overall proportion ranging from 4.9% to 10.5%. Differences in casemix between states and territories may account for some of this variation. However, this variation may indicate that there are differences in the allocation of Condition onset flags.

The proportion of same-day separations that recorded a condition with onset during the episode was 0.8%, with state/territory proportions ranging from 0.5% to 1.8% (Table A2.14).

About 16% of public hospital overnight separations recorded a diagnosis with onset during the episode of care. There was variation by jurisdiction, ranging from 8.4% to 22.8%. For overnight separations with an *Elective* urgency of admission, the proportion reported with a condition with onset during the episode ranged from 8.5% to 23.7%.

**Table A2.14: Proportion of separations<sup>(a)</sup> with condition onset during episode of care, by same-day/overnight status and Urgency of admission, public hospitals, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Emergency	0.8	0.9	1.5	0.6	2.0	0.8	1.8	0.5	1.0
Elective	0.3	0.7	2.1	0.6	2.9	0.6	0.9	0.7	0.8
Other	1.8	4.0	0.7	0.3	0.4	0.6	0.3	0.5	0.6
<i>Total</i>	<i>0.5</i>	<i>0.8</i>	<i>1.3</i>	<i>0.4</i>	<i>1.8</i>	<i>0.6</i>	<i>0.8</i>	<i>0.6</i>	<i>0.8</i>
<b>Overnight separations</b>									
Emergency	5.7	17.8	13.8	9.9	14.0	16.3	14.3	9.4	11.5
Elective	8.5	23.7	19.2	16.6	18.8	21.1	19.2	13.5	17.7
Other	18.4	44.3	38.7	41.7	37.4	23.3	29.2	33.2	31.2
<i>Total</i>	<i>8.4</i>	<i>22.8</i>	<i>18.8</i>	<i>15.1</i>	<i>17.9</i>	<i>18.8</i>	<i>18.1</i>	<i>14.9</i>	<i>15.8</i>
<b>Total</b>	<b>4.9</b>	<b>10.3</b>	<b>9.9</b>	<b>7.3</b>	<b>10.5</b>	<b>9.7</b>	<b>8.9</b>	<b>5.8</b>	<b>8.2</b>

(a) Proportion of separations is calculated for separations for which the Condition onset flag was reported only.

### *Private hospitals*

For private hospitals, data were not available for New South Wales and Northern Territory.

Over 5% of private hospital separations reported at least one condition that arose during the episode of care (Table A2.15). There was marked variation between states and territories, with the overall proportion ranging from 3.7% to 6.5%. As for public hospitals, this variation may indicate that there are differences in the allocation of Condition onset flags.

The proportion of same-day separations that recorded a condition with onset during the episode was 0.4%, with state/territory proportions ranging from 0.2% to 1.1% (Table A2.15).

About 15% of private hospital overnight separations recorded a diagnosis with onset during the episode of care.

### **Diagnoses reported with onset during the episode of care**

Table A2.16 presents information on the number and proportion of additional diagnoses that were reported as arising during the episode of care, by ICD-10-AM disease chapter for public and private hospitals. These data are included only for records for which the Condition onset

flag was reported. It should be noted that some diseases or conditions are coded using more than one code, so the count of additional diagnosis codes is not a count of conditions.

For public hospitals, the disease chapters with the highest proportion of additional diagnoses that arose during the episode of care were *Pregnancy, childbirth and the puerperium* (24%) and *Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism* (18%).

**Table A2.15: Proportion of separations<sup>(a)</sup> with condition onset during episode of care, by same-day/overnight status and urgency of admission, private hospitals, reporting states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Emergency	n.a.	1.7	1.2	0.9	0.8	0.0	0.0	n.a.	1.1
Elective	n.a.	0.4	0.3	0.2	1.3	0.3	0.3	n.a.	0.4
Other	n.a.	0.8	0.2	0.1	0.4	0.4	0.0	n.a.	0.2
<i>Total</i>	<i>n.a.</i>	<i>0.4</i>	<i>0.3</i>	<i>0.2</i>	<i>1.1</i>	<i>0.3</i>	<i>0.3</i>	<i>n.a.</i>	<i>0.4</i>
<b>Overnight separations</b>									
Emergency	n.a.	19.9	10.7	13.7	16.0	6.5	8.1	n.a.	14.4
Elective	n.a.	16.4	9.6	10.8	16.0	10.4	14.1	n.a.	13.1
Other	n.a.	34.7	22.4	42.6	41.9	16.0	32.2	n.a.	32.3
<i>Total</i>	<i>n.a.</i>	<i>18.5</i>	<i>10.7</i>	<i>14.7</i>	<i>17.4</i>	<i>10.8</i>	<i>15.2</i>	<i>n.a.</i>	<i>14.9</i>
<b>Total</b>	<b>n.a.</b>	<b>6.5</b>	<b>3.7</b>	<b>4.7</b>	<b>6.4</b>	<b>4.0</b>	<b>6.5</b>	<b>n.a.</b>	<b>5.2</b>

(a) Proportion of separations is calculated for separations for which the Condition onset flag was reported only.

Abbreviation: n.a.—not available.

For private hospitals, the disease chapters with the highest proportions of additional diagnoses that arose during the episode of care were *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (17%) and *Certain infectious and parasitic diseases* (17%).

Some diseases or disorders are not expected to arise during the episode of care, such as diseases or disorders in the chapters *Neoplasms* and *Congenital malformations, deformations and chromosomal abnormalities*. However, there were some diagnoses in these chapters that were reported as having onset during the episode of care. These may indicate data quality issues that the AIHW will consider with states and territories before publication of future condition onset data.

### High-volume diagnoses with onset during the episode of care

Table A2.17 presents the 20 most common diagnoses (at the 3-character level of the ICD-10-AM classification) reported as having onset during the episode of care, for public and private hospitals. This table provides some evidence that the Condition onset flag data were reported as would be expected and that the data have potential to be useful for analysis purposes in the future.

Six of the top 20 diagnoses were related to childbirth episodes, including perineal lacerations and postpartum haemorrhage. Five were categorised as signs or symptoms, such as nausea and vomiting, retention of urine, pain, headache and fever. One was for an infectious disease and one for complications of medical or surgical care.

**Table A2.16: Conditions (additional diagnoses) with onset during the episode of care, by ICD-10-AM disease chapter, public and private hospitals, selected states and territories<sup>(a)</sup>, 2010–11**

Diagnosis chapter	Public hospitals			Private hospitals			
	Condition with onset during episode	All diagnoses	% with onset during episode	Condition with onset during episode	All diagnoses	% with onset during episode	
A00–B99	Certain infectious and parasitic diseases	30,744	231,748	13.3	7,806	47,449	16.5
C00–D48	Neoplasms	756	779,455	0.1	635	740,129	0.1
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	40,101	225,965	17.7	9,896	70,399	14.1
E00–E90	Endocrine, nutritional and metabolic diseases	97,150	688,838	14.1	16,990	152,857	11.1
F00–F99	Mental and behavioural disorders	17,388	510,241	3.4	3,359	175,170	1.9
G00–G99	Diseases of the nervous system	8,194	255,585	3.2	2,261	122,782	1.8
H00–H59	Diseases of the eye and adnexa	3,387	101,918	3.3	637	137,596	0.5
H60–H95	Diseases of the ear and mastoid process	988	43,423	2.3	258	25,573	1.0
I00–I99	Diseases of the circulatory system	57,113	926,030	6.2	17,687	360,134	4.9
J00–J99	Diseases of the respiratory system	26,816	435,169	6.2	5,433	115,656	4.7
K00–K93	Diseases of the digestive system	42,424	691,286	6.1	13,303	686,486	1.9
L00–L99	Diseases of the skin and subcutaneous tissue	30,615	218,183	14.0	7,371	64,892	11.4
M00–M99	Diseases of the musculoskeletal system and connective tissue	15,825	340,976	4.6	6,176	390,435	1.6
N00–N99	Diseases of the genitourinary system	40,739	621,802	6.6	10,047	281,274	3.6
O00–O99	Pregnancy, childbirth and the puerperium	159,421	679,341	23.5	31,734	242,723	13.1
P00–P96	Certain conditions originating in the perinatal period	16,747	105,479	15.9	1,542	19,745	7.8
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	286	48,412	0.6	43	13,347	0.3
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, n.e.c.	181,500	1,139,587	15.9	67,626	391,508	17.3
S00–T98	Injury, poisoning and certain other consequences of external causes	85,723	953,851	9.0	26,301	169,484	15.5
Z00–Z99	Factors influencing health status and contact with health services	35,802	2,964,188	1.2	5,375	1,472,483	0.4
<b>Total</b>		<b>891,719</b>	<b>11,961,477</b>	<b>7.5</b>	<b>234,480</b>	<b>5,680,122</b>	<b>4.1</b>

(a) For public hospitals, data are included for all states and territories. For private hospitals, data are included for the six jurisdictions that provided Condition onset flag information.

**Table A2.17: The 20 most common conditions (diagnoses) with onset during the episode of care, selected states and territories<sup>(a)</sup>, public and private hospitals, 2010–11**

		Public hospitals	Private hospitals	Total
E87	Other disorders of fluid, electrolyte and acid-base balance	52,397	9,699	62,096
I95	Hypotension	39,456	12,583	52,039
O70	Perineal laceration during delivery	41,281	8,364	49,645
T81	Complications of procedures, not elsewhere classified	28,025	11,540	39,565
R11	Nausea and vomiting	20,544	12,851	33,395
K59	Other functional intestinal disorders	21,709	7,058	28,767
N39	Other disorders of urinary system	20,524	5,551	26,075
B96	Other bacterial agents as the cause of diseases classified to other chapters	18,919	5,327	24,246
O68	Labour and delivery complicated by fetal stress [distress]	19,496	4,318	23,814
D64	Other anaemias	17,222	5,984	23,206
R00	Abnormalities of heart beat	15,824	4,003	19,827
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	16,041	3,399	19,440
O92	Other disorders of breast and lactation associated with childbirth	13,093	5,966	19,059
O72	Postpartum haemorrhage	16,980	2,022	19,002
I48	Atrial fibrillation and flutter	12,798	4,986	17,784
R33	Retention of urine	12,664	4,527	17,191
R07	Pain in throat and chest	12,541	3,918	16,459
E86	Volume depletion	14,495	1,844	16,339
O62	Abnormalities of forces of labour	13,070	2,372	15,442
R50	Fever of other and unknown origin	11,360	3,932	15,292
	Other	473,280	114,236	587,516
<b>Total</b>		<b>891,719</b>	<b>234,480</b>	<b>1,126,199</b>

(a) For public hospitals, data are included for all states and territories. For private hospitals, excludes data for New South Wales and the Northern Territory.

## Australian Refined Diagnosis Related Groups (AR-DRGs)

Australian Refined Diagnosis Related Groups (AR-DRGs) is an Australian admitted patient classification system which provides a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources expected to be used by the hospital. This system categorises acute admitted patient episodes of care into groups with similar conditions and similar expected use of hospital resources, based on information in the hospital morbidity record such as the diagnoses, procedures and demographic characteristics of the patient. This report uses AR-DRG version 6.0 (DoHA 2008) to classify separations, and the most recent cost weights based on version 5.2 (Round 13, 2008–09 DOHA 2010).

The AR-DRG classification is partly hierarchical, with 23 Major Diagnostic Categories (MDCs), divided into *Surgical*, *Medical* and *Other* partitions, and then into 698 individual AR-DRGs.

The MDCs are mostly defined by body system or disease type, and correspond with particular medical specialties. In general, episodes are assigned to MDCs on the basis of the principal diagnosis. Some episodes involving procedures that are particularly resource intensive may be assigned to the Pre-MDC category (AR-DRGs A01Z–A41B), irrespective of

the principal diagnosis (including most organ and bone marrow transplants). Episodes that contain clinically atypical or invalid information are assigned *Error DRGs* (AR-DRGs 801A–801C and 960Z–963Z), even if they were assigned to an MDC (*Error DRGs* are included within *Other DRG* in the *Surgical/Medical/Other DRG* partition).

Episodes are assigned to AR-DRGs within MDCs, mainly on the basis of the procedure codes (in the *Surgical DRG* partition) or the diagnosis codes (in the *Medical DRG* partition). Additional variables including the patient's age, complicating diagnoses/procedures and/or patient clinical complexity level, the length of stay, and the mode of separation are also used for AR-DRG assignment.

Following receipt of the data from states and territories, the AIHW regrouped the data to ensure that the same grouping method was used for all data. The AR-DRGs that resulted from this regrouping are reported here, and may differ slightly from the AR-DRGs derived by the states and territories.

The information in chapters 7, 8, 9 and 10 is presented using different methods of grouping the AR-DRG classification:

- Separations have been categorised as *Childbirth*, *Medical*, *Surgical* or *Other* based on the AR-DRG recorded for the separation
- MDCs – these 23 groups are used to provide information at a high level of aggregation
- AR-DRGs – detailed information is presented for the 20 AR-DRGs having the largest number of separations.

## **AR-DRG versions**

For 2010–11, each separation in the NHMD was classified to AR-DRG version 6.0 (DoHA 2008) on the basis of demographic and clinical characteristics of the patient. AR-DRG version 5.2 has been used throughout this report for cost weights, as cost weights for AR-DRG version 6.0 are designated as interim and are not available for both public and private hospitals.

At the time of writing, 2010–11 cost weights and average costs were not available. In addition, cost weights are not available for AR-DRG version 6.0, which has been used for the majority of tables that present data for MDCs and AR-DRGs. Therefore, the cost by volume information was not available. After this report is published, the website will include updates for the tables that use AR-DRG cost weight and/or average cost /cost by volume information.

Each AR-DRG version is based on a specific edition of the ICD-10-AM/ACHI (Table A2.18). However, AR-DRGs can be mapped from other ICD-10-AM/ACHI editions.

**Table A2.18: ICD-10-AM and AR-DRG versions, 2006–07 to 2010–11**

<b>Year</b>	<b>ICD-10-AM edition</b>	<b>Relevant AR-DRG version</b>	<b>AR-DRG version reported in Australian hospital statistics</b>
2006–07	Fifth edition	Version 5.2	Version 5.1
2007–08	Fifth edition	Version 5.2	Version 5.1
2008–09	Sixth edition	Version 6.0	Version 5.2
2009–10	Sixth edition	Version 6.0	Version 5.2
2010–11 <sup>(a)</sup>	Seventh edition	Version 6.0	Version 6.0

(a) For analyses where cost weights were required, AR-DRG version 5.2 Round 13 cost weights (2008–09) were applied to AR-DRG version 5.2.

For AR-DRG-based time series comparisons, AR-DRG version 5.1 was used for the years 2006–07 to 2007–08 and AR-DRG version 5.2 was used for 2008–09 to 2009–10. For the purpose of these analyses, the coded clinical data for 2006–07 to 2009–10 were grouped to AR-DRG versions 5.1 and 5.2 using the mapping facility in the DRGroup™ software. Similarly, the coded clinical data for 2010–11 were grouped to AR-DRG version 6.0. Due to the mapping necessary to generate the AR-DRG versions, the data presented in these tables may not be comparable to those reported by the states and territories for a small number of AR-DRGs.

Similarly, the AIHW's AR-DRG online data cubes (<[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>) present AR-DRG versions 4.0, 4.1 and 4.2 based on the relevant AR-DRG versions for 1997–98 to 2001–02 and, for the years 2002–03 to 2004–05, the supplied third and fourth edition ICD-10-AM codes were mapped backwards to second edition codes to group the data for those years to AR-DRG version 4.2. Similarly, for the AR-DRG version 5.0/5.1/5.2 cube, which covers the years 1998–99 to 2009–10, the data for 1998–99 to 2001–02 based on earlier editions of the ICD-10-AM were mapped forwards to the third edition codes and then grouped to AR-DRG version 5.0.

### **AR-DRG cost weights and cost estimates**

Cost weights and cost estimates are prepared by the Australian Government Department of Health and Ageing through the National Hospital Cost Data Collection (NHCDC) (DoHA 2010). The NHCDC estimates the average cost of each AR-DRG and the cost weight is the average cost for that AR-DRG divided by the average cost across all AR-DRGs. They were \$4,133 for the public sector, and \$3,047 for the private sector in 2008–09. Separate cost weights are usually estimated for the public and private sectors because of the differences in the range of costs recorded in public and private hospitals.

The latest available cost weights (at the time of publication of this report) were for version 5.2 AR-DRGs for 2008–09 (DoHA 2010). When the NHCDC 2010–11 results become available, updated information using those data will be provided in the tables accompanying this report online at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)>.

#### **Average cost weight**

Average cost weight information provides a guide to the expected resource use for separations, with a value of 1.00 representing the average cost for all separations.

The average cost weight for a hospital (or group of hospitals) is calculated as the sum of the average cost weights for each separation, divided by the total number of separations for the hospital. It represents in a single number the overall relative expected use of resources by a hospital. For example, a hospital with an average cost weight of 1.08 has an 8% more costly casemix than the national average (equal to 1.00).

## **Analysis methods**

### **Cost per casemix-adjusted separation analysis**

The cost per casemix-adjusted separation (Chapter 3) is an indicator of the efficiency of public acute care hospitals. It is a measure of the average recurrent expenditure for each admitted patient, adjusted using AR-DRG cost weights for the resources expected to be used for the separation. A synopsis of the methods used in this analysis is presented below, and more detail is available in *Australian hospital statistics 2000–01* (AIHW 2002).

## **Definition**

The formula used to calculate the cost per casemix-adjusted separation is:

$$\frac{\text{Recurrent expenditure} \times \text{IFRAC}}{\text{Total separations} \times \text{Average cost weight}}$$

where:

- recurrent expenditure is as defined by the recurrent expenditure data elements in the *National health data dictionary* (HDSC 2008)
- IFRAC (admitted patient cost proportion) is the estimated proportion of total hospital expenditure that relates to admitted patients
- total separations excludes *Newborns* (without qualified days) and records that do not relate to admitted patients (*Hospital boarders* and *Posthumous organ procurement*)
- average cost weight is a single number representing the relative expected resource use for the separations (see above).

## **Matters affecting the interpretation of cost per casemix-adjusted separation**

### **The inclusion of non-acute care**

The formula used to calculate the cost per casemix-adjusted separation includes all admitted patient separations and their associated costs. It is appropriate to include the acute care separations, which comprise almost 98% of the total for the hospitals included in the analysis (see Table A2.19, accompanying this report online), as cost weights are available for acute care. However, the 2% of separations that are not acute care are also included and, as there are no cost weights for these separations, the average cost weight for the acute separations for each hospital is used. This method may affect the estimates of cost-weighted separations (see below) for each state and territory, depending on the proportion of non-acute separations for the state or territory. Non-acute separations (including rehabilitation care) generally have higher costs per separation than acute care separations because, although their daily costs are lower, these episodes typically involve longer lengths of stay.

For 2010–11, estimates of expenditure for acute care for admitted patients (acute care IFRACs) were available for some jurisdictions, and the effect of limiting the analysis to acute care is presented below.

### **The inclusion of psychiatric care**

The validity of comparisons of average cost weights is also limited by differences in the extent to which each jurisdiction's psychiatric care services are integrated into its public hospital system. For example, in Victoria, almost all public psychiatric hospitals are mainstreamed into acute hospital services, and psychiatric patient data are therefore included in the acute hospital reports. Cost weights are not as useful as measures of resource requirements for acute psychiatric care because the relevant AR-DRGs are less homogeneous than for other acute care.

### **Cost per acute care casemix-adjusted separation and cost per non-psychiatric acute care casemix-adjusted separation**

As cost weights are available only for acute care separations, the cost per casemix-adjusted separation analysis applies these cost weights to all separations. A more accurate estimate of

cost could be obtained by restricting the analysis to acute, or acute non-psychiatric separations and expenditure.

New South Wales, Victoria and Western Australia provided estimates of expenditure on acute care for admitted patients, so estimates of the cost per casemix-adjusted acute care separation are presented for these jurisdictions (Table A2.20). Separations were included only if their care type was *Acute*, *Newborn* (with qualified days) or for which the care type was not reported.

Hospitals were excluded from the analysis if the estimated cost per day was more than \$1,000 (as this would be considered unreasonably high for non-acute care types) or if the same IFRACs were reported for acute care (and non-psychiatric acute care) as for all care types (where they reported more than 1,000 patient days for non-acute separations).

Using these criteria, the 2010–11 analysis excluded 1 benchmarking hospital for Victoria and 2 benchmarking hospitals for Western Australia.

The estimated cost per acute care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

- \$4,730 in New South Wales, 3.6% less than the cost per casemix-adjusted separation for all separations
- \$3,936 in Victoria, 12.6% less than for all separations
- \$4,739 in Western Australia, 4.8% less than for all separations (Figure A2.1 and Table A2.20).

The estimated cost per non-psychiatric acute care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

- \$4,708 in New South Wales, 4.0% less than the cost per casemix-adjusted separation for all separations
- \$3,897 in Victoria, 13.5% less than for all separations
- \$4,729 in Western Australia, 4.9% less than for all separations.

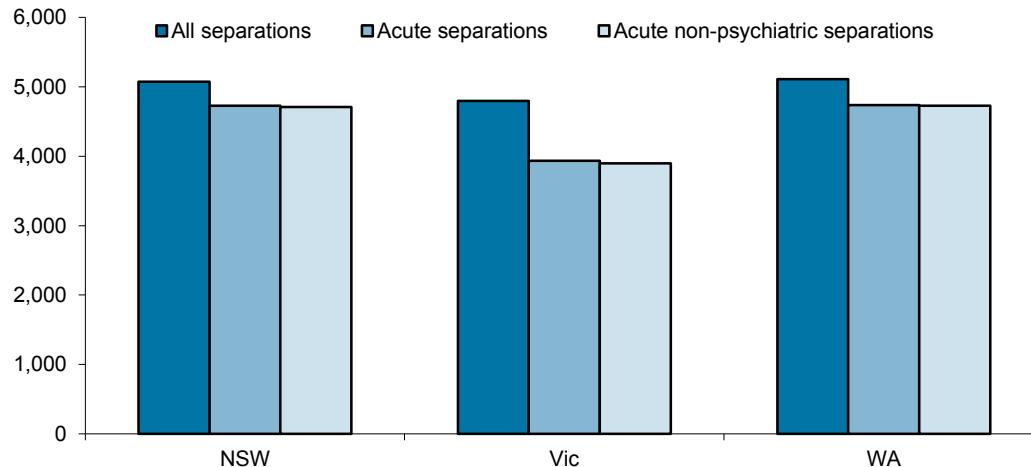
The estimated cost per acute care casemix-adjusted separation, including depreciation and cost per non-psychiatric acute casemix-adjusted separation, including depreciation is available in Table A2.21 accompanying this report online.

**Table A2.20: Cost per casemix-adjusted separation (\$) for acute and non-psychiatric acute separations, subset of selected public acute hospitals<sup>(a)</sup>, New South Wales, Victoria and Western Australia, 2010–11**

	<b>NSW</b>	<b>Vic</b>	<b>WA</b>
<b>Cost per casemix-adjusted separation excluding depreciation</b>	<b>4,904</b>	<b>4,506</b>	<b>4,972</b>
Cost per casemix-adjusted <b>acute</b> separation excluding depreciation <sup>(f)</sup>	4,730	3,936	4,739
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	−3.6%	−12.6%	−4.7%
Cost per casemix-adjusted <b>acute non-psychiatric</b> separation excluding depreciation <sup>(i)</sup>	4,708	3,897	4,729
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	−4.0%	−13.5%	−4.9%
<b>Cost per casemix-adjusted separation including depreciation</b>	<b>5,074</b>	<b>4,800</b>	<b>5,111</b>
Cost per casemix-adjusted <b>acute</b> separation including depreciation <sup>(f)</sup>	4,893	4,194	4,871
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	−3.6%	−12.6%	−4.7%
Cost per casemix-adjusted <b>acute non-psychiatric</b> separation including depreciation <sup>(h)</sup>	4,870	4,152	4,861
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	−4.0%	−13.5%	−4.9%

- (a) Excludes psychiatric hospitals, sub-acute, non-acute and unpeered hospitals or services. This subset excludes hospitals where the admitted patient cost proportion (IFRAC) was equal to the acute IFRAC and more than 1,000 non-acute patient days were recorded. Also excludes hospitals where the apparent cost of non-acute patients exceeded \$1,000 per day and more than \$1,000,000 of expenditure on non-acute patient days was reported.
- (b) Separations where the care type is *Acute, Newborn* (with qualified days), or not reported. Details of acute and non-acute separations and patient days are presented in Table A2.20.
- (c) Separations where the care type is *Acute, Newborn* (with qualified days), or not reported, and excludes records for which psychiatric care days were reported. Psychiatric separations are those with specialised psychiatric care days.

**Cost per casemix-adjusted separation (\$)**



- (a) *All separations* exclude records for which the care type was reported as *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement*.
- (b) *Acute separations* includes separations where the care type is *Acute, Newborn* (with qualified days), or not reported.
- (c) *Non-psychiatric acute separations* are acute separations, excluding those that reported psychiatric care days.
- (d) Excludes psychiatric hospitals, sub-acute, non-acute and unpeered hospitals or services.

**Figure A2.1: Comparison of costs per casemix-adjusted separation for all separations<sup>(a)</sup>, acute separations<sup>(b)</sup> and non-psychiatric acute separations<sup>(c)</sup>, subset of selected public acute hospitals<sup>(d)</sup>, New South Wales, Victoria and Western Australia, 2010–11**

## Cost per casemix-adjusted separation, including capital

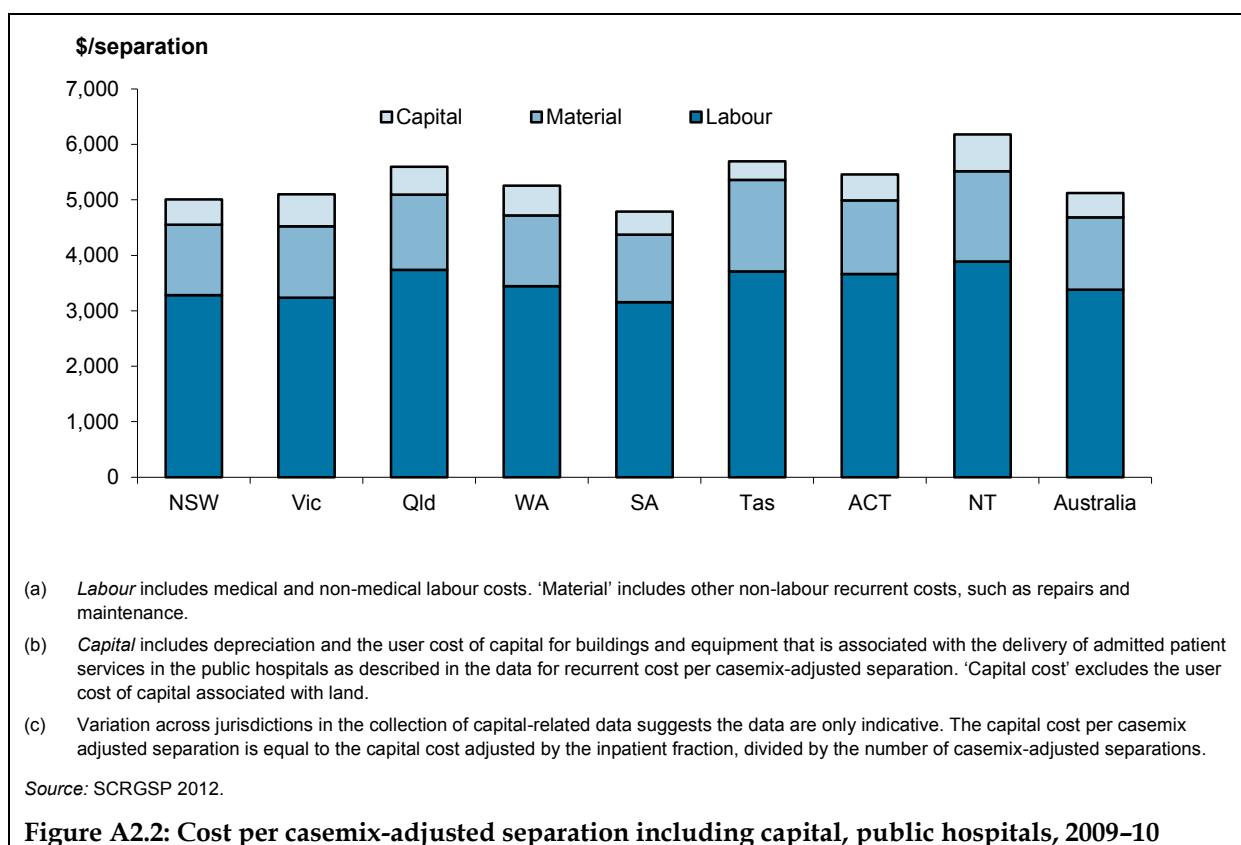
The cost per casemix-adjusted separation analysis includes recurrent expenditure and depreciation for those states that reported it (see Chapter 3).

The Steering Committee for the Review of Government Service Provision (SCRGSP) reported 'total costs per casemix-adjusted separation' by state and territory for 2009–10 (SCRGSP 2012). It was defined as the recurrent cost per casemix-adjusted separation plus the capital costs (depreciation and the user cost of capital of buildings and equipment) per casemix adjusted separation.

'Depreciation is defined as the cost of consuming an asset's services. It is measured by the reduction in value of an asset over the financial year. The user cost of capital is the opportunity cost of the capital invested in an asset, and is equivalent to the return foregone from not using the funds to deliver other government services or to retire debt. Interest payments represent a user cost of capital, so are deducted from capital costs in all jurisdictions to avoid double counting' (SCRGSP 2012).

Excluding the user cost of capital for land, the total cost per casemix-adjusted separation ranged from \$4,789 in South Australia to \$6,179 in the Northern Territory (SCRGSP 2012) (Figure A2.2).

Further details about the SCRGSP calculation of total cost per casemix-adjusted separation are available in the *Report on government services, 2012* (SCRGSP 2012).



## **Relative stay index analysis**

Relative stay indexes (RSIs) have been identified as indicators of efficiency and are presented in Chapter 3. They are calculated as the number of 'observed patient days' for separations in selected AR-DRGs, divided by the number of 'expected patient days', standardised for casemix (based on national figures). An RSI greater than 1.0 indicates that an average patient's length of stay is higher than expected given the casemix for the group of separations of interest. An RSI of less than 1.0 indicates that the length of stay was less than expected.

The standardisation for casemix (based on AR-DRG version 6.0 and the age of the patient for each separation) allows comparisons to be made that take into account variation in types of services provided; however, it does not take into account other influences on length of stay, such as Indigenous status.

The RSI method includes acute care separations only, and excludes separations for patients who died or were transferred within 2 days of admission, or with a length of stay greater than 120 days. Excluded from the analysis were:

- AR-DRGs for rehabilitation (such as Z60A *Rehabilitation with catastrophic/severe complications or comorbidities*)
- predominantly same-day AR-DRGs (such as R63Z *Chemotherapy* and L61Z *Admit for renal dialysis*)
- AR-DRGs with a length of stay component in the definition (see Table A2.22 accompanying this report online)
- *Error* AR-DRGs.

Comparisons with RSIs presented in *Australian hospital statistics 2003–04* (AIHW 2005) and earlier reports should be made with caution, because the indexes for earlier years were calculated using AR-DRG version 4 and, for reports from 2004–05 to 2009–10, the RSIs were calculated using AR-DRG versions 5.0/5.1/5.2.

## **RSI standardisation methods—direct and indirect relative stay indexes**

The two methods for standardisation of the length of stay data used in this report are analogous to direct and indirect age-standardisation methods.

### **Indirect relative stay index**

The indirect relative stay index method applies the national average length of stay (ALOS) for each AR-DRG to the relevant population of interest (number of separations for each AR-DRG in the hospital group) to derive the expected number of patient days. This method is generally used when rate information (ALOS for each AR-DRG in this analysis) for the population of interest is unknown or subject to fluctuation because of small population sizes. It provides a measure of efficiency for a hospital, or group of hospitals, based on their actual activity.

However, an indirectly standardised rate compares a group with a 'standard population rate' so, using this method, rates for different groups are not strictly comparable because each group has a different casemix to which the national ALOS data have been applied. Therefore, the indirectly standardised data for hospital groups should be compared with the national average of 1.00.

### **Direct relative stay index**

For the direct relative stay index method, the ALOS of each AR-DRG for the group of interest is multiplied by the national population (total number of separations in each AR-DRG) to derive the expected number of patient days. This method provides a measure of efficiency for a hospital, or group of hospitals, and is suitable if all or most AR-DRGs are represented in a hospital group.

Direct standardisation methods are generally used where the populations and their characteristics are stable and reasonably similar, for example for total separations for New South Wales and Victoria. Groups can be compared using the directly standardised rates as the activity of each group is weighted using the same set of weights, namely the national casemix.

However, the ALOS data for AR-DRGs which are not represented in a group need to be estimated. The method in this report uses the assumption that the missing AR-DRGs for the hospital group had a relative length of stay that was the same as that for the reported AR-DRGs for the hospital group, weighted by the national distribution of the reported AR-DRGs in the group. Also, this method can scale up AR-DRGs to have an impact that does not reflect their relative volume in a hospital group, which can be particularly problematic if the low-volume AR-DRGs are atypical.

Due to the issues with the direct relative stay index detailed above, this report mainly presents RSI information using the indirect standardised method. However, the direct standardised method has also been presented in Chapter 3. This allows comparison between the two methods and more direct comparison for those jurisdictions and sectors for which the data are presented. Data for the direct standardised method in the public sector in the Northern Territory are suppressed in Table 3.18, because of problems with using the direct standardisation for hospital groups that reported a limited range of AR-DRGs. For public hospitals in the Northern Territory, less than 500 of the 676 DRGs used in the national RSI analysis are represented, so results are likely to have been affected by estimation of the missing ALOS data.

Table A2.23, accompanying this report online, shows the number of AR-DRGs represented in each cell in Table 3.18, so that the number of AR-DRGs for which ALOS was estimated can be derived.

For those jurisdictions and sectors for which RSI statistics are presented in Table 3.17, there were between 494 and 675 AR-DRGs represented, meaning that ALOS data was estimated for up to 182 AR-DRGs.

## **Appendix 3: National Hospital Cost Data Collection**

The National Hospital Cost Data Collection (NHCDC) was established to produce annual updates of Australian Refined Diagnosis Related Group (AR-DRG) cost weights and estimated average costs, as incorporated into tables in chapters 3, 4, 7, 8 and 9. This report uses the cost data for acute admitted patients only. Unless otherwise specified, the cost weight data in this report applies cost weight data for AR-DRG version 5.2 (DoHA 2010) to the AR-DRGs reported in version 5.2.

The NHCDC comprises a voluntary collection of hospital cost and activity data covering the financial year before the collection period, and is coordinated by the Department of Health and Ageing. Both public and private hospital data are included, with the results separately reported for the two sectors. The latest data available at the time of publication of this report were for the 2008–09 financial year (Round 13) for public hospitals and private hospitals (DoHA 2010).

For 2008–09, the NHCDC involved arrangements whereby the hospital data were collected by the individual hospitals, and checked and validated by state/territory/private sector coordinators before being passed on to the Department of Health and Ageing. The production and publication of the final cost weights and associated tables followed extensive quality assurance procedures undertaken by the department and endorsement of the results by the states and territories.

The participating hospitals included both patient costing and cost modelling sites. Cost modelling refers to a process where estimates of costs are produced at the level of each AR-DRG. Cost modelling is a ‘top-down’ approach, where costs from the hospitals’ general ledgers are allocated to acute admitted patients using a series of allocation statistics. Patient costing is a ‘bottom-up’ approach, where the costs of each service provided to an individual patient are measured or estimated to obtain the total cost of treating individual patients.

In 2008–09, 262 public hospitals and 110 private hospitals were included in the collection. Although the coverage of public hospitals was approximately 52% of all public hospitals, the total number of separations was approximately 91% of total acute separations within the year. The coverage of private hospitals was approximately 49% of all private hospitals and the total number of acute separations was approximately 71% (DoHA 2010). The average cost per separation was estimated at \$4,133 for public hospitals and \$3,047 for private hospitals for 2008–09. The public hospitals’ estimate includes an estimate for depreciation.

Further information is provided in the NHCDC report for 2008–09 (DoHA 2010). Cost weights and associated tables for each round of the NHCDC can be obtained from the Casemix pages of the Department of Health and Ageing website at <[www.health.gov.au](http://www.health.gov.au)>.

# Appendix 4: Service Related Groups

## Introduction

The Service Related Group (SRG) classification is based on Australian Refined Diagnosis Related Group (AR-DRG) aggregations and categorises admitted patient episodes into groups representing clinical divisions of hospital activity. SRGs are used to assist in planning services, analysing and comparing hospital activity, examining patterns of service needs and access, and projecting potential trends in services.

The AR-DRG system was not considered appropriate for this purpose as it contains too many classes. Both the Major Diagnostic Categories (MDC) and the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) were also considered unsuitable as they generally relate to body systems rather than services.

An example illustrating the assignment of selected procedures to SRGs is shown below. These examples illustrate the differences between categorising procedures on the basis of ICD-10-AM chapters, MDCs and SRGs.

Procedure	ICD-10-AM chapter	MDC	SRG
Extraction of wisdom teeth	Diseases of the digestive system	MDC 3: Ear, nose and throat	Dentistry
Endoscopic retrograde cholangiopancreatography (ERCP)	Diseases of the digestive system	MDC 6: Digestive system	Gastroenterology
Excision of haemorrhoids	Diseases of the digestive system	MDC 6: Digestive system	Colorectal surgery

For the *Australian hospital statistics* 2001–02 to 2004–05 reports, this analysis used a method based on AR-DRG version 4.2, originally developed by the New South Wales Department of Health and the Australian Government Department of Health and Ageing.

A different methodology was used in *Australian hospital statistics* from 2005–06 to 2009–10, which assigned SRGs based on AR-DRG versions 5.0, 5.1 and 5.2 and was developed by the New South Wales Department of Health (unpublished).

The SRG version used for this report assigns service related group based mostly on AR-DRGs version 6.0, also developed by the New South Wales Ministry of Health. For more information on the methodology used to assign SRGs, see Table A4.6 (which accompanies this report online).

SRGs were allocated using the data in the National Hospital Morbidity Database. The method largely involves aggregations of AR-DRG information. However, the assignment of some separations to SRGs is based on other information, such as procedures, diagnoses and care types. Separations with non-acute care are allocated to separate SRG categories according to the type of care, because the main service type of these separations cannot be ascertained from their diagnoses or procedures.

For public hospitals, separations may also have been assigned to certain specialist SRGs depending on whether or not the hospital had a specialist neurosurgery, perinatology (neonatal intensive care unit) or cardiothoracic unit, as appropriate, as reported to the

National Public Hospital Establishments Database (see Chapter 4). An ‘unallocated’ SRG is assigned for separations with an *Error DRG*.

The classification also incorporates non-specialist SRGs, which are used for smaller hospitals that do not have the specialist services or specialist equipment. There are 46 SRGs, and the 20 most common were presented in Chapter 4.

## State and territory overview

Tables A4.1 to A4.5 (which accompany this report online) present more detailed SRG information by state and territory.

Table A4.1 contains the number of establishments with more than 50 separations, and the number of establishments with more than 360 patient days in each SRG by state and territory and by remoteness area for public hospitals only. This has been included as an indicative measure of the number of specialty units. The best indicative measure of the number of units varies between SRGs and between uses of the measure. For example, for *Maintenance* (SRG 87), 91 hospitals provided more than 50 separations a year and 257 hospitals provided more than 360 patient days, while for *Gastroenterology* (SRG 15) these measures were 453 and 272 hospitals respectively. *Cardiothoracic surgery* (SRG 42) showed very little difference between the two different measures, with 67 hospitals providing more than 50 separations a year and 70 hospitals providing more than 360 patient days.

*Non subspecialty – medicine* (SRG 27) and *Respiratory medicine* (SRG 24) had the greatest number of establishments, with more than 50 separations at 494 and 463 hospitals respectively and also had the greatest number of establishments with more than 360 patient days a year, with 431 and 376 hospitals respectively.

Tables A4.2 and A4.3 contain the number of separations in each SRG category by state and territory for all public and private hospitals respectively. *Renal dialysis* (SRG 23) had the largest number of separations in public hospitals with over 970,000. This was followed by *Obstetrics* (SRG 72) with almost 311,000 (Tables A4.2). In the private sector, *Diagnostic gastrointestinal endoscopy* (SRG 16) recorded the highest number of separations with over 412,000, followed by *Orthopaedics* (SRG 49) with 309,000 (Table A4.3).

Tables A4.4 and A4.5 summarise the number of patient days in each sector by SRG and state and territory. In the public sector, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 1,800,000, followed by *Psychiatry – acute* (SRG 82) with 1,670,000 (Table A4.4). For private hospitals, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 966,000, followed by *Orthopaedics* (SRG 49) with 850,000 (Table A4.5).

# Appendix 5: Potentially preventable hospitalisations

The selected potentially preventable hospitalisations (PPHs) are those conditions where hospitalisation is thought to be 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 PPHs may indicate an increased prevalence of the conditions in the community or poorer functioning of the non-hospital care system. On the other hand, a high rate of PPHs may indicate 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.

The three broad categories of PPHs that have been used in this report include *Vaccine-preventable*, *Acute* and *Chronic* (see Chapter 7 for descriptions of these categories). PPH categories have been sourced from the *Victorian ambulatory care sensitive conditions study* (DHS 2002). A full description of all conditions presented in these tables, including ICD-10-AM codes, can be found in Table A2.5, which accompanies this report online.

Tables A5.1, A5.2 and A5.3 (which accompany this report online) present a range of statistics for PPHs by the:

- state or territory of residence (Table A5.1)
- remoteness area of usual residence of the patient (Table A5.2)
- socioeconomic status group (Table A5.3; see Appendix 2 for information on geographical data).

These tables include separation rates and the standardised separation rate ratio (SRR) against the national total. Statistics are presented for the total PPH rate, the rates for each of the three broad PPH categories as well as rates for individual conditions.

There were about 646,000 selected PPHs in Australia in 2010–11 (Table A5.1), 7.3% of all separations, which translates to a rate of 28 per 1,000 population. The rates ranged from 20 per 1,000 population in the Australian Capital Territory to 47 per 1,000 population in the Northern Territory. The separation rate for *Vaccine-preventable* PPHs in the Northern Territory was 4 times the national rate and the separation rate for Tasmania was half the national rate.

Table A5.2 highlights that separation rates were higher for more remote areas for most PPHs. For example, the rate for *Ear, nose and throat infections* per 1,000 separations was 1.6 in *Major cities*, 1.9 in *Inner regional*, 2.1 in *Outer regional* areas and 3.6 and 4.0 for *Remote* and *Very remote* areas, respectively.

Table A5.3 presents these data by socioeconomic status (SES) group (see Appendix 2). Overall, total PPHs had higher separation rates for patients living in areas classified as being in the lowest SES group, with a rate 23% higher than the national rate, and patients living in areas classified as being in the highest SES group had a rate 20% lower than the national rate.

# Appendix 6: Additional national performance indicators

The performance indicators presented in this appendix are listed in Table A6.1. These performance indicators, specified under the National Healthcare Agreement, have been designated as either 'interim' or 'proxy' measures, and require data development to ensure that the analyses are better suited to the intent of the indicators. The hospital-related indicators are presented against the dimensions of the National Health Performance Framework (NHPF). See *Chapter 3* for more information on the NHPF.

**Table A6.1: Performance indicators presented in this appendix**

Indicator	NHA	Comments
Falls resulting in patient harm in hospitals	✓	Safety: interim measure. Related to the NHA outcome area of <i>Hospital and related care</i> .  Data development is required to identify the place of occurrence of the fall, to identify falls within the hospital, as distinct from the current place of occurrence code of <i>Health service area</i> .
Intentional self-harm in hospitals	✓	Safety: interim measure. Related to the NHA outcome area of <i>Hospital and related care</i> .  Data development is required to identify the place of occurrence of the intentional self-harm, to identify that this occurred within the hospital, as distinct from the current place of occurrence code of <i>Health service area</i> .
Rates of services: outpatient occasions of service	✓	Accessibility: interim measure. Related to the NHA outcome area of <i>Hospital and related care</i> .  Data development is required to improve the consistency of collection, the coverage of private outpatient services and to collect patient-level data to report breakdowns by Indigenous status, remoteness area and socioeconomic area of residence.
Hospital patient days used by those eligible and waiting for residential aged care	✓	Proxy measure. Related to the NHA outcome area of <i>Aged care</i> . Data development is required to identify when the patient received an aged care assessment and was deemed eligible for residential aged care.

Abbreviation: NHA—National Healthcare Agreement.

## Hospital and related care

### Safety

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

#### Performance indicator: falls resulting in patient harm in hospitals

This indicator is intended to report hospital separations where a fall occurred in hospitals, resulting in patient harm. The rates presented here may underestimate falls occurring in hospitals as the place of occurrence was not reported for about 24% of separations with an external cause of injury of falls. It is also possible that these rates may overestimate falls as it

is not currently possible to identify falls specifically in hospitals – the current data identifies falls occurring in any health service area. However, separations with an injury or poisoning principal diagnosis are excluded to minimise the inclusion of falls occurring prior to admission.

Table A6.2 presents the number of separations that reported a fall in a health service area per 1,000 population. More falls were reported by public hospitals than by private hospitals and there were large variations in the rates reported among states and territories.

**Table A6.2: Separations for falls resulting in patient harm in health service areas, per 1,000 separations, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Rate	Total Number
<b>Hospital sector</b>										
Private	1.3	1.2	1.5	1.2	1.6	1.6	2.3	0.3	1.3	4,761
Public	4.2	2.8	3.0	2.8	3.4	n.p.	n.p.	n.p.	3.3	17,448
<b>Indigenous status<sup>(a)</sup></b>										
Indigenous	1.1	1.0	1.1	0.8	0.7	2.7	0.9	0.6	0.9	300
Other Australians	3.1	2.2	2.3	2.2	2.7	2.7	2.0	1.8	2.6	20,971
<b>Remoteness of residence<sup>(b)</sup></b>										
Major cities	3.1	2.0	2.2	2.1	2.8	0.0	2.7	0.9	2.5	14,730
Inner regional	3.0	2.9	2.4	2.5	2.4	3.8	1.7	0.0	2.8	4,964
Outer regional	2.7	3.1	2.4	2.2	2.2	2.9	3.6	1.5	2.5	2,068
Remote and Very remote	1.6	2.1	2.1	1.4	2.1	2.0	7.8	0.8	1.5	351
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>										
1—Lowest	3.4	2.6	2.6	2.3	2.6	3.2	2.8	0.8	2.8	5,147
2	3.2	2.3	2.4	2.0	3.0	4.0	2.5	1.8	2.7	4,876
3	3.5	2.3	2.5	2.1	2.7	3.9	4.3	1.4	2.6	4,705
4	2.6	2.0	2.0	1.7	2.5	3.4	1.7	1.9	2.1	3,566
5—Highest	2.6	2.1	1.6	2.3	2.4	0.0	3.1	0.6	2.3	3,817
<b>Total<sup>(d)</sup></b>	<b>3.1</b>	<b>2.2</b>	<b>2.3</b>	<b>2.1</b>	<b>2.7</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2.5</b>	<b>22,209</b>

(a) Other Australians includes separations for which the Indigenous status was not reported. The Australian totals for Indigenous/other Australians do not include data for the Australian Capital Territory or Tasmania.

(b) Separations are reported by remoteness area of usual residence, not remoteness of hospital. Not all remoteness areas are represented in each state or territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(c) Socioeconomic status for area of residence is based on the ABS Index of Relative Socio-Economic Disadvantage (IRSD). The socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

(d) Total includes separations for which place of residence was not known or not stated.

Abbreviations: n.p.—not published.

## Performance indicator: intentional self-harm in hospitals

This indicator is intended to report hospital separations in which a patient self-harmed during the episode of care. The rates presented here may underestimate intentional self-harm as the place of occurrence was not reported for about 35% separations with an external cause of intentional self-harm. It is also possible that these rates may overestimate as it is not currently possible to identify intentional self-harm specifically in hospitals – the current data identifies self-harm occurring in a health service area. However, separations

with an injury or poisoning principal diagnosis are excluded to minimise the inclusion of falls occurring prior to admission.

Table A6.3 presents the number of separations that reported intentional self-harm in a health service area per 1,000 population. Overall, intentional self-harm was reported for about 2 out of every 10,000 separations.

**Table A6.3: Separations for intentional self-harm in a health service area, per 1,000 separations, states and territories, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	
									Rate	Number
<b>Hospital sector</b>										
Private	0.1	0.2	0.1	0.3	<0.1	0.0	0.1	0.0	0.1	505
Public	0.2	0.1	0.2	0.4	0.2	n.p.	n.p.	n.p.	0.2	960
<b>Indigenous status<sup>(a)</sup></b>										
Indigenous	0.2	0.2	0.1	0.1	<0.1	0.0	0.4	<0.1	0.1	36
Other Australians	0.1	0.1	0.2	0.4	0.1	0.1	0.1	0.1	0.2	1,386
<b>Remoteness of residence<sup>(b)</sup></b>										
Major cities	0.1	0.1	0.2	0.4	0.1	..	0.2	..	0.2	1,072
Inner regional	0.1	0.1	0.1	0.3	0.1	0.2	..	..	0.1	241
Outer regional	0.1	0.1	0.1	0.3	0.1	<0.1	..	0.1	0.1	107
Remote	0.0	0.3	0.1	0.3	<0.1	0.0	..	0.0	0.1	27
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>										
1—Lowest	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.1	210
2	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.1	256
3	0.2	0.2	0.2	0.3	0.2	0.2	0.0	<0.1	0.2	333
4	0.1	0.1	0.2	0.5	0.1	0.5	0.1	0.0	0.2	305
5—Highest	0.2	0.2	0.2	0.5	<0.1	..	0.1	0.0	0.2	343
<b>Total<sup>(d)</sup></b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.4</b>	<b>0.1</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.2</b>	<b>1,465</b>

(a) Other Australians includes separations for which the Indigenous status was not reported. The Australian totals for Indigenous/other Australians do not include data for the Australian Capital Territory or Tasmania.

(b) Separations are reported by remoteness area of usual residence, not remoteness of hospital. Not all remoteness areas are represented in each state or territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(c) Socioeconomic status for area of residence is based on the ABS Index of Relative Socio-Economic Disadvantage (IRSD). The socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory. Separations are reported by jurisdiction of hospitalisation, regardless of the jurisdiction of usual residence.

(d) Total includes separations for which place of residence was not known or not stated.

Abbreviations: ..—not applicable; n.p.—not published.

## Accessibility

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

### Performance indicator: rates of services—outpatient occasions of service

This indicator is intended to report the rates of outpatient occasions of service. However, classification of certain services varies considerably across jurisdictions and comparability of the data is affected by differences in counting and admission practices and the use of

outpatient clinics by interstate patients (particularly in the Australian Capital Territory). In addition, as these data are not currently provided at a patient-level, the rates are not age-standardised to account for the different age profiles in different jurisdictions and they cannot be presented by Indigenous status, remoteness area and socioeconomic status of area of usual residence.

Table A6.4 presents the number of public hospital outpatient services per 1,000 population for selected types of service. There were large variations in the rates between states and territories, indicating that there may be variation in the way these services are provided, for example, either as admitted patient services or in a non-hospital setting.

**Table A6.4: Outpatient occasions of service per 1,000 population<sup>(a)</sup>, public hospitals, states and territories<sup>(b)</sup>, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	
									Rate	Number
<b>Per 1,000 population</b>										
Allied health	91.2	204.9	132.3	511.4	107.8	295.2	89.4	54.3	176.3	3,937,475
Dental	55.8	83.4	0.0	5.3	4.8	0.0	0.0	0.0	39.7	886,157
Dialysis	3.2	0.0	..	0.0	0.0	0.0	0.0	0.0	1.0	23,235
Drug and alcohol	188.4	17.4	14.3	0.0	0.0	0.0	0.0	0.0	68.2	1,523,305
Endoscopy	3.2	0.0	2.8	0.0	15.0	..	8.3	0.0	2.8	63,404
Mental health	129.5	136.9	15.4	34.5	9.5	6.0	2.9	0.0	83.5	1,863,695
Other medical/ surgical/obstetric	679.3	312.9	587.0	364.7	566.9	666.1	1008.2	586.4	533.0	11,901,445
<b>Total outpatient care<sup>(c)(d)(e)</sup></b>	<b>1150.5</b>	<b>755.5</b>	<b>751.8</b>	<b>915.9</b>	<b>704.0</b>	<b>967.4</b>	<b>1108.9</b>	<b>640.8</b>	<b>904.6</b>	<b>20,198,716</b>

(a) Crude rate based on the ABS Estimated Resident Population at 30 June 2010.

(b) Public psychiatric hospitals are excluded.

(c) Total outpatient care presented in this table includes occasions of service for *Drug and alcohol* and *Mental health*, that are not included in total Outpatient occasions of service in Table 6.1.

(d) It is possible that a single occasion of service may have more than one outpatient type recorded if a person attends multiple clinics in a single 'session', meaning that the total could be less than the sum of the components.

(e) Total excludes *Accident and emergency*, *Pharmacy*, *Community health*, *District nursing*, *Pathology*, *Radiology and organ imaging* and *Other outreach*.

Abbreviation: ..not applicable.

## Aged care

### Performance indicator: number of hospital patient days used by those eligible and waiting for residential aged care

This indicator is related to the NHA outcome area of 'Aged care'.

This indicator is intended to report the number of hospital patient days taken up by Australians waiting for a residential aged care place. However, the current data collected do not identify whether an aged care assessment has been made and there may also be variations in the use of the care type *Maintenance* between jurisdictions.

Table A6.5 presents the number of hospital patient days (per 1,000 patient days) for overnight separations with a care type of *Maintenance* and a diagnosis for *Person awaiting admission to residential aged care service*. There were large variations in the rates between states and territories, which may in part reflect variation in the use of the care type *Maintenance*.

There was also variation in the rates according to remoteness area of the patient and socioeconomic status, with the highest rates of patient days reported for persons residing in *Remote* areas, and those in the lowest socioeconomic group.

**Table A6.5: Hospital patient days per 1,000 patient days, used by those eligible and waiting for residential aged care<sup>(a)</sup>, 2010–11**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Indigenous status<sup>(b)</sup></b>									
Indigenous	11.1	1.3	44.9	2.2	11.8	<0.1	..	17.8	18.9
Other Australians	7.2	2.3	23.7	11.1	28.6	12.3	10.5	18.1	11.5
<b>Remoteness of residence<sup>(c)</sup></b>									
Major cities	5.2	0.1	16.2	4.8	24.6	..	12.0	..	7.4
Inner regional	8.2	4.9	16.7	7.5	7.6	13.9	0.8	..	9.5
Outer regional	17.7	19.5	58.7	42.4	35.4	9.8	..	20.3	33.9
Remote	115.2	n.p.	91.2	45.8	n.p.	n.p.	..	24.4	72.2
Very remote	n.p.	..	56.3	1.5	n.p.	n.p.	..	12.1	26.5
<b>Socioeconomic status of area of residence<sup>(d)</sup></b>									
1—Lowest	12.6	4.9	27.7	15.2	23.1	14.5	..	12.1	16.2
2	7.0	4.0	34.6	19.0	48.0	12.1	3.1	16.2	15.5
3	7.5	1.5	25.1	6.8	29.7	8.9	16.6	36.3	11.0
4	4.4	1.4	17.5	8.7	15.5	9.0	11.8	17.1	8.3
5—Highest	3.9	0.2	17.2	7.4	17.6	..	10.4	8.7	6.2
<b>Total</b>	<b>7.3</b>	<b>2.3</b>	<b>24.6</b>	<b>10.5</b>	<b>28.0</b>	<b>12.1</b>	<b>10.3</b>	<b>17.9</b>	<b>11.7</b>

(a) Includes patient days for overnight separations with a care type of *Maintenance*, for which the separation mode was not *Other* (was not discharged to their place of usual residence) and had a diagnosis of Z75.11 *Person awaiting admission to residential aged care service*.

(b) Other Australians includes separations for which the Indigenous status was not reported. The Australian totals for Indigenous/other Australians do not include data for the Australian Capital Territory or Tasmania.

(c) Not all remoteness areas are represented in each state or territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

(d) Socioeconomic status of area is based on the ABS Index of Relative Socio-Economic Disadvantage (IRSD). Disaggregation by socioeconomic status of area is by usual residence, not socioeconomic status of area of hospital 'site'. The socioeconomic groups represent approximately 20% of the national population, but do not necessarily represent 20% of the population in each state or territory.

*Abbreviation:* ..—not applicable; n.p.—not published.

# Glossary

Definitions in the *Glossary* contain an identification number from the Metadata Online Registry (METeOR). METeOR is Australia's central repository for health, community services and housing assistance metadata, or 'data about data'. It provides definitions for data for health and community services-related topics and specifications for related national minimum data sets (NMDSS), such as the NMDSS which form the basis of this report. METeOR can be viewed on the AIHW website at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

For further information on the terms used in this report, refer to the definitions in the *National health data dictionary version 14* (HDSC 2008).

<b>Activity when injured</b>	The type of activity being undertaken by a person at the time of injury. METeOR identifier: 391320
<b>Acute</b>	Having a short and relatively severe course.
<b>Acute care</b>	See <i>Care type</i> .
<b>Acute care hospital</b>	See <i>Establishment type</i> .
<b>Additional diagnosis</b>	Conditions or complaints either coexisting with the principal diagnosis or arising during the episode of care. METeOR identifier: 391322
<b>Adjustment</b>	A summarising procedure for a statistical measure in which the effects of differences in composition of the populations being compared have been minimised by statistical methods.
<b>Administrative and clerical staff</b>	Staff engaged in administrative and clerical duties. Medical staff and nursing staff, diagnostic and health professionals and any domestic staff primarily or partly engaged in administrative and clerical duties are excluded. Civil engineers and computing staff are included in this category. METeOR identifier: 270496 See <i>Full-time equivalent staff</i> .
<b>Administrative expenditure</b>	All expenditure incurred by establishments (but not central administrations) of a management expense/administrative support nature, such as any rates and taxes, printing, telephone, stationery and insurance expenses (including workers compensation). METeOR identifier: 270107

<b>Admitted patient</b>	A patient who undergoes a hospital's formal admission process to receive treatment and/or care. This treatment and/or care is provided over a period of time and can occur in hospital and/or in the person's home (for hospital-in-the-home patients).  METeOR identifier: 268957
<b>Admitted patient cost proportion</b>	The ratio of admitted patient costs to total hospital costs, also known as the inpatient fraction or <i>IFRAC</i> .
<b>Adverse event</b>	An incident in which harm resulted to a person receiving health care.
<b>Age standardisation</b>	A set of techniques used to remove, as far as possible, the effects of differences in age when comparing two or more populations.
<b>Alcohol and drug treatment centre</b>	See <i>Establishment type</i> .
<b>Arrival mode—transport</b>	The mode of transport by which the person arrives at the emergency department.  METeOR identifier: 270000
<b>Australian Classification of Health Interventions (ACHI)</b>	ACHI was developed by the National Centre for Classification in Health (NCCH). The 6th edition was used for the 2008–09 procedures data for admitted patients in Australian hospitals.
<b>Australian Refined Diagnosis Related Groups (AR-DRGs)</b>	An Australian system of diagnosis related groups (DRGs). DRGs provide a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources required by the hospital. Each AR-DRG represents a class of patients with similar clinical conditions requiring similar hospital services.
<b>Available beds</b>	The average number of beds which are immediately available for use by an admitted patient within the establishment.  METeOR identifier: 374151  From 1 July 2009, superseded by:  <i>Average available beds for same-day patients</i> and  <i>Average available beds for overnight-stay patients</i>
<b>Average available beds for overnight-stay patients</b>	Average available beds for overnight-stay patients are the number of beds available to provide overnight accommodation for patients (other than neonatal cots (non-special-care) and beds occupied by hospital-in-the-home patients), averaged over the counting period.  METeOR identifier: 374151

<b>Average available beds for same-day patients</b>	The number of beds, chairs or trolleys available to provide accommodation for same-day patients, averaged over the counting period.  METeOR identifier: 373966
<b>Average length of stay</b>	The average number of patient days for admitted patient episodes. Patients admitted and separated on the same day are allocated a length of stay of 1 day.
<b>Capital expenditure</b>	Expenditure on large-scale fixed assets (for example, new buildings and equipment with a useful life extending over a number of years).  METeOR identifier: 270516
<b>Care type</b>	<p>The care type defines the overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), or the type of service provided by the hospital for boarders or posthumous organ procurement (other care).</p> <p>Admitted patient care consists of the following categories:</p> <ul style="list-style-type: none"> <li>• <i>Acute care</i></li> <li>• <i>Rehabilitation care</i></li> <li>• <i>Palliative care</i></li> <li>• <i>Geriatric evaluation and management</i></li> <li>• <i>Psychogeriatric care</i></li> <li>• <i>Maintenance care</i></li> <li>• <i>Newborn care</i></li> <li>• <i>Other admitted patient care</i> – this is where the principal clinical intent does not meet the criteria for any of the above.</li> </ul> <p>Other services include:</p> <ul style="list-style-type: none"> <li>• <i>Posthumous organ procurement</i></li> <li>• <i>Hospital boarder</i>.</li> </ul>
	METeOR identifier: 270174
<b>Casemix</b>	The range and types of patients (the mix of cases) treated by a hospital or other health service. Casemix classifications (such as AR-DRGs) provide a way of describing and comparing hospitals and other services for management purposes.
<b>Chronic</b>	Persistent and long-lasting.
<b>Clinical urgency</b>	A clinical assessment of the urgency with which a patient requires elective hospital care.  METeOR identifier: 270008

<b>Compensable patient</b>	An individual who is entitled to receive or has received a compensation payment with respect to an injury or disease.  METeOR identifier: 270100
<b>Condition onset flag</b>	A means of differentiating those conditions which arise during, or arose before, an admitted patient episode of care. Having this information can provide an insight into the kinds of conditions patients already have when entering hospital and what arises during the episode of care. A better understanding of those conditions arising during the episode of care may inform prevention strategies, particularly in relation to complications of medical care.  METeOR identifier: 354816
<b>Cost weight</b>	The costliness of an AR-DRG relative to all other AR-DRGs such that the average cost weight for all separations is 1.00. A separation for an AR-DRG with a cost weight of 5.0, therefore, on average costs 10 times as much as a separation with a cost weight of 0.5.  There are separate cost weights for AR-DRGs in the public and private sectors, reflecting the differences in the range of costs in the different sectors. In this report, average cost weights using public cost weights are based on AR-DRG version 5.2 2008–09 public sector estimated cost weights (DoHA 2010). These were applied to AR-DRG version 5.1/5.2 DRGs for 2006–07 to 2010–11 reference years.
<b>Department of Veterans' Affairs patient</b>	A person whose charges for the hospital admission are met by the Department of Veterans' Affairs (DVA). These patients include eligible veterans and war widows/widowers. The data are supplied by the states and territories and the eligibility to receive hospital treatment as a DVA patient may not necessarily have been confirmed by the DVA.  METeOR identifier: 270092
<b>Diagnosis related group (DRG)</b>	A widely used casemix classification system used to classify admissions into groups with similar clinical conditions (related diagnoses) and similar resource usage. This allows the activity and performance of hospitals to be compared on a common basis. In Australian acute hospitals, <i>Australian Refined DRGs</i> are used.  METeOR identifier: 391295

<b>Diagnostic and allied health professionals</b>	<p>Qualified staff (other than qualified medical and nursing staff) engaged in duties of a diagnostic, professional or technical nature (but also including diagnostic and health professionals whose duties are primarily or partly of an administrative nature). This category includes all allied health professionals and laboratory technicians (but excludes civil engineers and computing staff).</p> <p>METeOR identifier: 270495</p> <p>See <i>Full-time equivalent staff</i>.</p>
<b>Domestic and other staff</b>	<p>Domestic staff are staff engaged in the provision of food and cleaning services including those primarily engaged in administrative duties such as food services manager. Dieticians are excluded. This category also includes all staff not elsewhere included (primarily maintenance staff, trades people and gardening staff).</p> <p>METeOR identifier: 270498</p> <p>See <i>Full-time equivalent staff</i>.</p>
<b>Domestic services expenditure</b>	<p>The cost of all domestic services, including electricity, other fuel and power, domestic services for staff, accommodation and kitchen expenses, but not including salaries and wages, food costs or equipment replacement and repair costs.</p> <p>METeOR identifier: 270283</p>
<b>Drug supplies expenditure</b>	<p>The cost of all drugs, including the cost of containers.</p> <p>METeOR identifier: 270282</p>
<b>Elective care</b>	<p>Care that, in the opinion of the treating clinician, is necessary and for which admission can be delayed for at least 24 hours.</p> <p>METeOR identifier: 335036</p>
<b>Elective surgery</b>	<p>Elective care in which the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians and some procedures for which the associated waiting time is strongly influenced by factors other than the supply of services.</p> <p>METeOR identifier: 335048</p>
<b>Elective surgical separation</b>	<p>Separation for which the urgency of admission was reported as <i>Elective</i> (admission could be delayed by at least 24 hours) and where the assigned Australian Refined Diagnosis Related Group was <i>Surgical</i> (excluding childbirth-related AR-DRGs), and the principal diagnosis was not Z41 (<i>Cosmetic surgery</i>).</p>

<b>Emergency department waiting time to service delivery</b>	The time elapsed for each patient from presentation to the emergency department to commencement of service by a treating medical officer or nurse. It is calculated by deducting the date and time the patient presents from the date and time of the service event.  METeOR identifier: 390412
<b>Emergency occasion of service</b>	A non-admitted patient occasion of service reported to the National Public Hospital Establishments Database with a <i>Type of non-admitted patient occasion of service</i> type of <i>Emergency services</i> .
<b>Enrolled nurses</b>	Enrolled nurses are division 2 nurses who are registered with Australian Health Practitioner Regulation Agency – Nursing and Midwifery board of Australia.  Includes general enrolled nurse and specialist enrolled nurse (for example, mothercraft nurses in some states).  METeOR identifier: 270497  See <i>Full-time equivalent staff</i> .
<b>Episode end status</b>	The status of the patient at the end of the non-admitted patient emergency department occasion of service.  METeOR identifier: 322641
<b>Episode of care</b>	The period of admitted patient care between a formal or statistical admission and a formal or statistical separation, characterised by only one care type (see <i>Care type</i> and <i>Separation</i> ).  METeOR identifier: 270174 ( <i>Care type</i> )  METeOR identifier: 268956 ( <i>Episode of admitted patient care</i> )
<b>Error DRGs</b>	AR-DRGs to which separations are grouped if their records contain clinically inconsistent or invalid information.
<b>Establishment type</b>	Type of establishment (defined in terms of legislative approval, service provided and patients treated) for each separately administered establishment. Establishment types include: <ul style="list-style-type: none"> <li>• <i>Acute care hospitals</i></li> <li>• <i>Psychiatric hospitals</i></li> <li>• <i>Alcohol and drug treatment centres</i></li> <li>• <i>Hospices</i>.</li> </ul> METeOR identifier: 269971
<b>External cause</b>	The environmental event, circumstance or condition as the cause of injury, poisoning and other adverse effect.  METeOR identifier: 361926

<b>Full-time equivalent staff</b>	<p>Full-time equivalent staff units are the on-job hours paid for (including overtime) and hours of paid leave of any type for a staff member (or contract employee, where applicable) divided by the number of ordinary time hours normally paid for a full-time staff member when on the job (or contract employee, where applicable) under the relevant award or agreement for the staff member (or contract employee occupation, where applicable). For more detailed information see the glossary entries for the staffing categories:</p> <ul style="list-style-type: none"> <li>• <i>Salaried medical officers</i></li> <li>• <i>Registered nurses</i></li> <li>• <i>Enrolled nurses</i></li> <li>• <i>Student nurses</i></li> <li>• <i>Other personal care staff</i></li> <li>• <i>Diagnostic and allied health professionals</i></li> <li>• <i>Administrative and clerical staff</i></li> <li>• <i>Domestic and other staff</i>.</li> </ul>
	METeOR identifier: 270543
<b>Funding source for hospital patient</b>	The principal source of funds for an admitted patient episode or non-admitted patient service event, as represented by a code.
	METeOR identifier: 339080
<b>Geriatric evaluation and management</b>	See <i>Care type</i> .
<b>Group session</b>	The number of non-admitted group session occasions of service provided by an establishment.
	METeOR identifier: 269674
<b>HASAC (Health and Allied Services Advisory Council) ratio</b>	For hospitals where the IFRAC is not available or is clearly inconsistent with the data, admitted patient costs are estimated by the HASAC ratio (see Appendix 2).
<b>Hospice</b>	See <i>Establishment type</i> .
<b>Hospital</b>	A health-care facility established under Commonwealth, state or territory legislation as a hospital or a free-standing day procedure unit and authorised to provide treatment and/or care to patients.
	METeOR identifier: 268971
<b>Hospital boarder</b>	See <i>Care type</i> .

<b>Hospital-in-the-home care</b>	Provision of care to hospital admitted patients in their place of residence as a substitute for hospital accommodation. Place of residence may be permanent or temporary.  METeOR identifier: 270305
<b>IFRAC (inpatient fraction)</b>	A measure used to calculate the cost per casemix-adjusted separation. It is the ratio of admitted patient costs to total hospital costs, also known as the admitted patient cost proportion ratio (see Appendix 2).
<b>Indicator procedure</b>	A procedure which is of high volume, and is often associated with long waiting periods. Elective surgery waiting time statistics for indicator procedures give a specific indication of waiting time for these in particular areas of elective care provision.  METeOR identifier: 334976
<b>Indigenous status</b>	A measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin. This is in accord with the first two of three components of the Commonwealth definition below:  An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives.  METeOR identifier: 291036
<b>Inpatient</b>	See <i>Admitted patient</i> .  METeOR identifier: 268957
<b>Interactive data cubes</b>	A multidimensional representation of data which provides fast retrieval from multiple layers of information.
<b>International Classification of Diseases (ICD)</b>	The World Health Organization's internationally accepted classification of diseases and related health conditions. The 10th revision, Australian modification (ICD-10-AM) is currently in use in Australian hospitals for admitted patients.
<b>Inter-hospital contracted care</b>	An episode of care for an admitted patient whose treatment and/or care is provided under an arrangement (either written or verbal) between a hospital purchaser (contracting hospital) and a provider of an admitted service (contracted hospital) and for which the activity is recorded by both hospitals.  METeOR identifier: 270409

<b>Length of stay</b>	The length of stay of an overnight patient is calculated by subtracting the date the patient is admitted from the date of separation and deducting days the patient was on leave. A same-day patient is allocated a length of stay of 1 day.  METeOR identifier: 269982
<b>Licensed bed</b>	A bed in a private hospital, licensed by the relevant state or territory health authority.
<b>Maintenance care</b>	See <i>Care type</i> .
<b>Major Diagnostic Categories (MDCs)</b>	A high level of groupings of patients used in the AR-DRG classification. They correspond generally to the major organ systems of the body.  METeOR identifier: 391298
<b>Medical and surgical supplies expenditure</b>	The cost of all consumables of a medical or surgical nature (excluding drug supplies) but not including expenditure on equipment repairs.  METeOR identifier: 270358
<b>Mode of admission</b>	The mechanism by which a person begins an episode of admitted patient care.  METeOR identifier: 269976
<b>Mode of separation</b>	Status at separation of person (discharge/transfer/death) and place to which person is released (where applicable).  METeOR identifier: 270094
<b>National health data dictionary (NHDD)</b>	A publication that contains a core set of uniform definitions relating to the full range of health services and a range of population parameters.
<b>Newborn care</b>	See <i>Care type</i> .
<b>Non-admitted patient</b>	A patient who receives care from a recognised non-admitted patient service/clinic of a hospital.  METeOR identifier: 268973
<b>Non-admitted patient occasion of service</b>	Occurs when a patient attends a functional unit of the hospital for the purpose of receiving some form of service, but is not admitted. A visit for administrative purposes is not an occasion of service.  METeOR identifier: 270506

<b>Number of days of hospital-in-the-home care</b>	The number of hospital-in-the-home days occurring within an episode of care for an admitted patient.  METeOR identifier: 270305
<b>Occasion of service</b>	Non-admitted patient occasion of service.
<b>Other care</b>	See <i>Care type</i> .
<b>Other personal care staff</b>	Includes attendants, assistants or home assistance, home companions, family aides, ward helpers, warders, orderlies, ward assistants and nursing assistants engaged primarily in the provision of personal care to patients or residents; they are not formally qualified or undergoing training in nursing or allied health professions.  METeOR identifier: 270171  See <i>Full-time equivalent staff</i> .
<b>Other recurrent expenditure</b>	Recurrent expenditure not included elsewhere in any of the recurrent expenditure categories.  METeOR identifier: 270126
<b>Other revenue</b>	All other revenue received by the establishment that is not included under patient revenue or recoveries (but not including revenue payments received from state or territory governments). This includes revenue such as investment income from temporarily surplus funds and income from charities, bequests and accommodation provided to visitors.  METeOR identifier: 364799
<b>Outpatient</b>	See <i>Non-admitted patient</i> .  METeOR identifier: 268973
<b>Outpatient clinic service</b>	An examination, consultation, treatment or other service provided to non-admitted non-emergency patients in a specialty unit or under an organisational arrangement administered by a hospital.  METeOR identifier: 336980
<b>Outpatient clinic type</b>	The nature of services which are provided by <i>Outpatient clinic services</i> .  METeOR identifier: 291073
<b>Overnight-stay patient</b>	A patient who, following a clinical decision, receives hospital treatment for a minimum of 1 night (that is, who is admitted to and separated from the hospital on different dates).

<b>Palliative care</b>	See <i>Care type</i> .
<b>Patient days</b>	The total number of days for patients who were admitted for an episode of care and who separated during a specified reference period. A patient who is admitted and separated on the same day is allocated 1 patient day.  METeOR identifier: 270045
<b>Patient election status</b>	Accommodation chargeable status elected by patient on admission. The categories are:  <i>Public</i> : A patient admitted to a hospital who has agreed to be treated by doctors of the hospital's choice and to accept shared accommodation. This means the patient is not charged.  <i>Private</i> : A patient admitted to a hospital who decides to choose the doctor(s) who will treat them and/or to have private ward accommodation. They are charged for medical services, food and accommodation.  METeOR identifier: 326619
<b>Patient presentation at emergency department</b>	The presentation of a patient at an emergency department occurs following the arrival of the patient at the emergency department. It is the earliest occasion of being registered clerically or triaged.  METeOR identifier: 270393
<b>Patient revenue</b>	Revenue received by, and due to, an establishment in respect of individual patient liability for accommodation and other establishment charges.  METeOR identifier: 364797
<b>Patient transport</b>	The direct cost of transporting patients, excluding salaries and wages of transport staff.  METeOR identifier: 270048
<b>Payments to visiting medical officers</b>	All payments made to visiting medical officers for medical services provided to hospital (public) patients on a sessionally paid or fee-for-service basis.  METeOR identifier: 270049
<b>Peer group</b>	Groupings of hospitals into broadly similar groups in terms of their volume of admitted patient activity and their geographical location.
<b>Percentile</b>	Any one of 99 values that divide the range of probability distribution or sample into 100 intervals of equal probability or frequency.

<b>Performance indicator</b>	A statistic or other unit of information that reflects, directly or indirectly, the extent to which an expected outcome is achieved or the quality of processes leading to that outcome.
<b>Place of occurrence of external cause</b>	The place where the external cause of injury, poisoning or adverse effect occurred. METeOR identifier: 391334
<b>Posthumous organ procurement</b>	See <i>Care type</i> .
<b>Potentially preventable hospitalisation (selected)</b>	Those conditions where hospitalisation is thought to be avoidable if timely and adequate non-hospital care is provided.
<b>Pre-MDC (Pre-Major Diagnostic Category)</b>	Seventeen AR-DRGs to which separations are grouped, regardless of their principal diagnoses, if they involve procedures that are particularly resource-intensive (transplants, tracheostomies or extracorporeal membrane oxygenation without cardiac surgery).
<b>Principal diagnosis</b>	The diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care. METeOR identifier: 391326
<b>Private hospital</b>	A privately owned and operated institution, catering for patients who are treated by a doctor of their own choice. Patients are charged fees for accommodation and other services provided by the hospital and relevant medical and paramedical practitioners. Acute care and psychiatric hospitals are included, as are private free-standing day hospital facilities. See also <i>Establishment type</i> .
<b>Procedure</b>	A clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in the acute care setting. METeOR identifier: 391349
<b>Psychiatric hospital</b>	See <i>Establishment type</i> .
<b>Psychogeriatric care</b>	See <i>Care type</i> .

<b>Public hospital</b>	A hospital controlled by a state or territory health authority. Public hospitals offer free diagnostic services, treatment, care and accommodation to all eligible patients. See also <i>Establishment type</i> .
<b>Public patient</b>	includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of <i>Reciprocal health care agreements</i> , <i>Other hospital or public authority</i> (with a public patient election status) and <i>No charge raised</i> (in public hospitals).
<b>Qualified days</b>	<p>The number of qualified days within newborn episodes of care. Days within newborn episodes of care are either qualified or unqualified. This definition includes all babies who are 9 days old or less. A newborn day is qualified (acute) when a newborn meets at least one of the following criteria:</p> <ul style="list-style-type: none"> <li>• is the second or subsequent live born infant of a multiple birth, whose mother is currently an admitted patient</li> <li>• is admitted to an intensive care facility in a hospital, being a facility approved by the Australian Government Health Minister for the purpose of the provision of special care</li> <li>• remains in hospital without its mother</li> <li>• is admitted to the hospital without its mother.</li> </ul> <p>METeOR identifier: 268957 (<i>Admitted patient</i>)</p> <p>METeOR identifier: 270033 (<i>Newborn qualification status</i>)</p>
<b>Recoveries</b>	All revenue received that is in the nature of a recovery of expenditure incurred. This includes income from provision of meals and accommodation to hospital staff, income from the use of hospital facilities for private practice and some recoveries relating to inter-hospital services.
	METeOR identifier: 364805
<b>Recurrent expenditure</b>	Expenditure on goods and services which are used up during the year, for example, salaries and wages expenditure and non-salary expenditure such as payments to visiting medical officers.
	METeOR identifier: 269132

<b>Registered nurses</b>	<p>Registered nurses must be registered as division 1 nurses with the Australian Health Practitioner Regulation Agency – Nursing and Midwifery board of Australia.</p> <p>This is a comprehensive category and includes community mental health, general nurse, intellectual disability nurse, midwife (including pupil midwife), psychiatric nurse, senior nurse, charge nurse (now unit manager), supervisory nurse and nurse educator. This category also includes nurses engaged in administrative duties no matter what the extent of their engagement, for example, directors of nursing and assistant directors of nursing.</p> <p>METeOR identifier: 270500</p> <p>See <i>Full-time equivalent staff</i>.</p>
<b>Rehabilitation care</b>	See <i>Care type</i> .
<b>Relative stay index (RSI)</b>	The actual number of patient days for acute care separations in selected AR-DRGs divided by the expected number of patient days adjusted for casemix. An RSI greater than 1 indicates that an average patient's length of stay is higher than would be expected given the jurisdiction's casemix distribution. An RSI of less than 1 indicates that the number of patient days used was less than would have been expected. See Appendix 2 for further information.
<b>Remoteness area</b>	<p>A classification of the remoteness of a location using the Australian Standard Geographical Classification Remoteness Structure (2006), based on the Accessibility / Remoteness Index of Australia (ARIA) which measures the remoteness of a point based on the physical road distance to the nearest urban centre. The categories are:</p> <ul style="list-style-type: none"> <li>• <i>Major cities</i></li> <li>• <i>Inner regional</i></li> <li>• <i>Outer regional</i></li> <li>• <i>Remote</i></li> <li>• <i>Very remote</i></li> <li>• <i>Migratory</i>.</li> </ul>

<b>Removal from waiting list</b>	<p>The reason a patient is removed from an elective surgery waiting list.</p> <p>The reason-for-removal categories are:</p> <ul style="list-style-type: none"> <li>• <i>Admitted as an elective patient for awaited procedure in this hospital or another hospital</i></li> <li>• <i>Admitted as an emergency patient for awaited procedure in this hospital or another hospital</i></li> <li>• <i>Could not be contacted</i> (includes patients who have died while waiting whether or not the cause of death was related to the condition requiring treatment)</li> <li>• <i>Treated elsewhere for awaited procedure, but not as a patient of this hospital's waiting list</i></li> <li>• <i>Surgery not required or declined</i></li> <li>• <i>Transferred to another hospital's waiting list</i></li> <li>• <i>Not known.</i></li> </ul>
	METeOR identifier: 269959
<b>Repairs and maintenance expenditure</b>	<p>The costs incurred in maintaining, repairing, replacing and providing additional equipment; maintaining and renovating buildings and minor additional works.</p>
	METeOR identifier: 269970
<b>Salaried medical officers</b>	<p>Medical officers employed by the hospital on a full-time or part-time salaried basis. This excludes visiting medical offices engaged on an honorary, sessional or fee-for-service basis. This category includes salaried medical officers who are engaged in administrative duties regardless of the extent of that engagement (for example, clinical superintendent and medical superintendent).</p>
	METeOR identifier: 270494
	See <i>Full-time equivalent staff</i> .
<b>Same-day patient</b>	An admitted patient who is admitted and separated on the same date.
<b>Separation</b>	An episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care either by being discharged, dying, transferring to another hospital or changing type of care.
<b>Separation rate</b>	<p>The total number of episodes of care for admitted patients divided by the total number of persons in the population under study.</p> <p>Often presented as a rate per 1,000 or 10,000 members of a population. Rates may be crude or standardised (see Appendix 2).</p>

<b>Separation rate ratio</b>	The separation rate for one population divided by the separation rate of another.
<b>Sepations</b>	<p>The total number of episodes of care for admitted patients, which can be total hospital stays (from admission to discharge, transfer or death) or portions of hospital stays beginning or ending in a change of type of care (for example, from acute to rehabilitation) that cease during a reference period.</p> <p>METeOR identifier: 270407</p>
<b>Service Related Group (SRG)</b>	A classification based on Australian Refined Diagnostic Related Group (AR-DRG) aggregations for categorising admitted patient episodes into groups representing clinical divisions of hospital activity.
<b>Specialised service</b>	<p>A facility or unit dedicated to the treatment or care of patients with particular conditions or characteristics, such as an intensive care unit.</p> <p>METeOR identifier: 269612</p>
<b>Student nurses</b>	<p>A person employed by a health establishment who is currently studying in years one to three of a three-year certificate course. This includes any person commencing or undertaking a three-year course of training leading to registration as a nurse by the state or territory registration board. This includes full-time general student nurse and specialist student nurse (such as mental deficiency nurse) but excludes practising nurses enrolled in post-basic training courses.</p> <p>METeOR identifier: 270499</p> <p>See <i>Full-time equivalent staff</i>.</p>
<b>Superannuation employer contributions</b>	Contributions paid on behalf of establishment employees either by the establishment or a central administration such as a state health authority.
	METeOR identifier: 270371
<b>Surgical procedure</b>	A procedure used to define surgical Australian Refined Diagnosis Related Groups' version 5.2 (DoHA 2006).
<b>Surgical specialty</b>	The area of clinical expertise held by the doctor who will perform the surgery of interest.
	METeOR identifier: 270146
<b>Trainee nurse</b>	Includes any person commencing or undertaking a 1-year course of training leading to registration as an enrolled nurse by the state/territory registration board (includes all trainee/pupil nurses).
	METeOR identifier: 270493

<b>Triage category</b>	Used in the emergency departments of hospitals to indicate the urgency of the patient's need for medical and nursing care. Patients are triaged into one of five categories on the Australasian Triage Scale. The triage category is allocated by an experienced registered nurse or medical practitioner.
	METeOR identifier: 390392
<b>Type of non-admitted patient occasion of service</b>	A broad classification of services provided to non-admitted patients, including emergency, dialysis, pathology, radiology and organ imaging, endoscopy, other medical/surgical/diagnostic, mental health, drug and alcohol, dental, pharmacy, allied health, community health, district nursing and other outreach.
	METeOR identifier: 270395, 270502–270514 ( <i>Type of non-admitted patient occasion of service</i> )
<b>Visiting medical officer</b>	A medical practitioner appointed by the hospital to provide medical services for hospital (public) patients on an honorary, sessionally paid or fee-for-service basis.
	METeOR identifier: 270049
<b>Waiting time at admission</b>	The time elapsed for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were admitted to hospital for the procedure.
	METeOR identifier: 269477

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# Related publications

This report, *Australian hospital statistics 2010–11*, is part of an annual series. The earlier editions and any published subsequently can be downloaded for free from the AIHW website <[www.aihw.gov.au/hospitals-publications/](http://www.aihw.gov.au/hospitals-publications/)>. The website also includes information on ordering printed copies.

Recently the report has undergone substantial revision. Statistics reported in the hard copy are more concise than those presented in the report prior to 2010–11, with smaller tables, and graphs and figures interspersed in the text. More detailed statistics can be found in the supplementary tables at the end of each chapter, or presented as additional tables online. See <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

Accompanying the release of *Australian hospital statistics 2010–11* is *Australia's hospitals 2010–11 at a glance*.

The following AIHW publications relating to hospitals, hospital service utilisation and hospital resources might also be of interest:

- AIHW 2011. Australian hospital statistics 2009–10. Cat. no. HSE 40. Canberra: AIHW.
- AIHW 2010. Australian hospital statistics 2008–09. Cat. no. HSE 84. Canberra: AIHW.
- AIHW 2010. Australia's hospitals 2008–09 at a glance. Cat. no. HSE 89. Canberra: AIHW.
- AIHW 2010. Australian hospital statistics 2009–10: emergency department care and elective surgery waiting times. Health services series no. 38. Cat. no. HSE 93. Canberra: AIHW.
- AIHW 2009. Australian hospital statistics 2007–08. Cat. no. HSE 71. Canberra: AIHW.
- AIHW 2008. Elective surgery in Australia: new measures of access. Cat. no. HSE 57. Canberra: AIHW.
- AIHW 2008. Australian hospital statistics 2006–07. Cat. no. HSE 55. Canberra: AIHW.
- AIHW 2007. Australian hospital statistics 2005–06. Cat. no. HSE 50. Canberra: AIHW.
- AIHW 2007. Report on the evaluation of the National Minimum Data Set for Public Hospital Establishments. Cat. no. HSE 45. Canberra: AIHW.

Please see <[www.aihw.gov.au/publications-catalogue/](http://www.aihw.gov.au/publications-catalogue/)> to access a complete list of AIHW publications relating to Australia's health and welfare.