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Please check the online version at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)> for any amendments.**

# Foreword

I am pleased to present *Australian hospital statistics 2009–10*, an authoritative annual report that provides a comprehensive range of performance information and other statistics about public and private hospitals. As for the 2008–09 report, it is accompanied by a shorter companion report—*Australia's hospitals 2009–10 at a glance*. 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 Institute's comprehensive national hospitals databases, also the source of data for the Institute's *MyHospitals* website, and for hospital performance indicators reported by the Council of Australian Governments' (COAG) Reform Council and in the Report on Government Services (ROGS), prepared by the Steering Committee for the Review of Government Service Provision. The use of the Institute's databases 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 reports this year enhance consistency and seamlessness between national hospital reporting processes. First, both this report and *Australia's hospitals 2009–10 at a glance* incorporate statistics that align with information on *MyHospitals*, such that they provide equivalent information (provided on *MyHospitals* for individual hospitals) for states, territories and Australia as a whole. In addition, an increased number of performance indicators for the National Healthcare Agreements are included, creating better alignment with reporting of those indicators by the COAG Reform Council and in ROGS.

Information is only useful if it is timely, so it is pleasing that this report is being released one month earlier than previous reports in this series. This follows even timelier release of 2009–10 data on emergency department care and elective surgery waiting times in a separate report published by the Institute in November 2010, six months earlier than previously available.

The Institute has been able to improve timeliness of these reports with the cooperation of the state and territory health authorities, and through the development and use of an on-line tool for submission and checking of hospital data, the Institute's *Validata*. The Institute thanks the states and territories for their assistance in achieving this improved timeliness. We look forward to working with them, and with other stakeholders, to improve timeliness further for future years.

The Institute will continue to shape its suite of *Australian hospital statistics* products to suit the needs of users. Comments are always welcome.

David Kalisch  
Director  
April 2011

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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
ave	average
CC	complication and/or comorbidity
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
NESWTDC	National Elective Surgery Waiting Times Data Collection
NHA	National Healthcare Agreement
NHCDC	National Hospital Cost Data Collection
NHDC	National Health Data Committee
NHDD	Natioanl Health Data Dictionary
NHISSC	National Health Information Standards and Statistics Committee

NHMBWG	National Health Ministers' Benchmarking Working Group
NHMD	National Hospital Morbidity Database
NHPA	National Health Priority Area
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 1,326 hospitals in Australia in 2009–10. The 753 public hospitals accounted for 67% of hospital beds (56,900) and the 573 private hospitals accounted for 33% (28,000), these proportions are unchanged from 2008–09.

## Accident and emergency services

Public hospitals provided about 7.4 million accident and emergency services in 2009–10, increasing by 4% on average each year between 2005–06 and 2009–10. Overall, 70% of patients were seen on time in emergency departments, with 100% of resuscitation patients (those requiring treatment immediately) being seen within 2 minutes of arriving at the emergency department.

## Admitted patient care

There were 8.5 million separations for admitted patients in 2009–10—5.1 million in public hospitals and almost 3.5 million in private hospitals. This was an increase of 3.2% on average each year between 2005–06 and 2009–10 for public hospitals, and 5.0% for private hospitals.

The proportion of admissions that were ‘same-day’ continued to increase, by 5% on average each year between 2005–06 and 2009–10, accounting for 58% of the total in 2009–10 (51% in public hospitals and 68% in private hospitals). For overnight separations, the average length of stay was 5.9 days in 2009–10, down from 6.2 days in 2005–06.

About 4% of separations were for non-acute care. Between 2005–06 and 2009–10, *Rehabilitation* care in private hospitals increased by 19% on average each year and *Geriatric evaluation and management* in public hospitals increased by 11% on average each year.

Readmissions to the same public hospital varied with the type of surgery. There were 24 readmissions per 1,000 separations for knee replacement and 4 per 1,000 separations for cataract surgery.

## Elective surgery

There were 1.9 million admissions for planned (elective) surgery in 2009–10. There were about 30 separations per 1,000 population for public elective surgery each year between 2005–06 and 2009–10; rates for other elective surgery increased from about 49 per 1,000 to 55 per 1,000 over that time. Half of the patients admitted for elective surgery in public hospitals waited 36 days or less after being placed on the waiting list, an increase from 32 days in 2005–06.

## Expenditure and funding

Public hospitals spent about \$33.7 billion in 2009–10. Adjusted for inflation, expenditure increased by an average of 5.4% each year between 2005–06 and 2009–10. In 2008–09, states and territories were the source of 54% of funds for public hospitals and the Commonwealth government funded 38%. This compared with the figures of 54% and 39%, respectively, in 2007–08.

Between 2005–06 and 2009–10, public patient separations increased by 2.8% on average each year, those funded by *Private health insurance* increased by 6.4%, while those funded by the *Department of Veterans' Affairs* decreased by 1.3%.

# 1 Introduction

*Australian hospital statistics 2009–10* 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 2008–09 (AIHW 2010a, 2009 and earlier). Previous reports include *Australia's hospitals 2008–09 at a glance* (AIHW 2010b) and *Australian hospital statistics 2009–2010 Emergency department care and elective surgery waiting times* (AIHW 2010c). This report is accompanied by *Australia's hospitals 2009–10 at a glance* (AIHW 2011), which presents a summary of the information 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 data supplied by state and territory health authorities are used by the AIHW to assemble five 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 receive 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.

Detailed information about the AIHW's hospital databases is provided in *Appendix 2*.

### 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**

As in *Australian hospital statistics 2008–09*, 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 provided by hospitals)
- admitted patient care, with separate chapters for same-day acute care, overnight acute care, elective 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, accident and 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, revised as agreed by the National Health Information Standards and Statistics Committee (NHISSC) in 2008. It 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 accident and 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 services. 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 data on overnight acute admitted patient care.

*Chapter 10* presents information on elective surgery.

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

*Appendix 1* includes notes on the presentation of data, the population estimates used to calculate population rates, analysis methods and the quality and comparability of the data.

*Appendix 2* provides information on the AIHW's hospitals databases, the hospitals covered by each of the data sources and the categorisation of hospitals as public or private.

*Appendix 3* provides summary information on the Department of Health and Ageing's 2009–10 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.

*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 2008–09*, were introduced to:

- Improve the alignment of information with that presented on the *MyHospitals* website
  - Since *Australian hospital statistics 2008–09* was published, the *MyHospitals* website has been developed and released. *MyHospitals* includes hospital-level summaries of admitted patient care in 'broad categories of service' according to the urgency of admission and the type of care provided (including childbirth and mental health). National and jurisdiction-level summaries of these 'broad categories of service' are included in chapters 2, 7, 8 and 9.
- Improve coverage of National Healthcare Agreement (NHA) hospital performance indicators
  - For *Australian hospital statistics 2008–09*, most of the NHA hospitals performance indicators were incorporated into *Chapter 3*. However, *Australian hospital statistics 2008–09* did not include breakdowns by Indigenous status, remoteness area and socioeconomic status for many of these indicators, as published by the COAG Reform Council. These additional breakdowns are presented in *Chapter 3*, or in additional tables that accompany this report online.
  - In addition, some indicators not included in *Australian hospital statistics 2008–09* are presented in *Appendix 6*.
- Reduce content relating to the emergency department care and elective surgery waiting times
  - In 2010, the AIHW released *Australian hospital statistics 2009–10: emergency department care and elective surgery waiting times* (AIHW 2010c). Some data already published in that report have been excluded from this report to minimise duplication. The emergency department care chapter (*Chapter 5*) and elective surgery chapter (*Chapter 10*) retain 'headline' statistics and include data not presented in the earlier report. All tables previously included in the earlier report have been updated on the AIHW's website to ensure that they are consistent with the data in this report.

## **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 2009–10?*
- *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, discussions of what the data show refer to summary tables and figures that are placed immediately below the related text. Where appropriate, tables and figures within the chapter are accompanied by footnotes referring readers to the more detailed statistical tables at the end of the chapter.

## **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 2009–10 at a glance* are presented in PDF format and all tables are available as downloadable Excel spreadsheets. The website also includes additional data in Excel spreadsheets on diagnoses, procedures and AR-DRGs for admitted patients. Some of the report's tables are presented with more detail online. For example, some 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 2009–10 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 2009–10 (using ICD-10-AM to classify diagnoses)
  - mental health-related separations for 2001–02 to 2008–09 (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
- 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).

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 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 2009–10
- elective surgery waiting times summary statistics for:
  - reason for removal from waiting lists (2002–03 to 2009–10)
  - surgical specialty (2001–02 to 2009–10)
  - indicator procedure (2001–02 to 2009–10).

## 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. At the time of writing, 2009–10 cost weights and average costs were not available. 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 most analyses requiring the application of cost weights.

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: 2005–06 to 2009–10**

This chapter presents an overview of hospital resources and hospital activity between 2005–06 and 2009–10.

### **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 2008–09. For 2009–10, information on the number of private hospitals and private hospital beds was mainly provided by states and territories. The Department of Health and Ageing provided data on the number of *Private free standing day hospital facilities* and beds for jurisdictions where data were not available from states and territories (see *Appendix 1*). Private hospital expenditure and revenue information for 2009–10 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 (ABS 2010, 2008). 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 2*). 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 2009–10, all public hospitals were included except for a small mothercraft hospital in the Australian Capital Territory. Private hospital data were not for private freestanding day facilities in the Australian Capital Territory and the Northern Territory (see *Appendix 2*).
- From 2009–10, the data for the Albury Base Hospital (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. 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.
- 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 *appendices 1* and *2*).
- 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.
- In 2006–07, there were two new public hospitals created in Western Australia, which covered contracted public hospital services previously provided by two private hospitals.

### **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 2*).

#### *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 1*). Bed numbers may differ from those reported in previous editions of *Australian hospital statistics* due to revision of historic bed counts.

*(continued)*

### **Box 2.1 (continued)**

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 '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. See *Appendix 1* for the data reported for 2009–10.

#### *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 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.

#### *Variation in admission practices*

- Admission practices varied between public and private sectors, states and territories, and over time (see *Appendix 1*). For example, there was variation in admission practices for some 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.
- 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 2005–06 to 2009–10 (or the latest available year of data), and annual change between 2008–09 and 2009–10 (or the change between the two latest available years of data if the 2009–10 data are unavailable). Annual change rates are not adjusted for any changes in data coverage and/or recategorisation of the hospital as public or private, except where noted in the text.
- *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.
- *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. Further information about age-standardisation is presented in *Appendix 1*.
- 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. Further information about the AR-DRG classification and cost weights is included in *Appendix 1*.
- The relative stay index (RSI) is calculated as the actual number of patient days for separations in selected AR-DRGs (version 5.2) divided by the expected number of patient days (based on national figures for the years 2005–06 to 2009–10 combined) and standardised for casemix. Further information on the calculation of the RSI is presented in *Appendix 1*.
- For reasons of confidentiality, data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory have not been published.

# Hospital resources 2005–06 to 2009–10

## How many hospitals?

In 2009–10, there were 753 public hospitals and 573 private hospitals, compared with 755 public hospitals and 547 private hospitals in 2005–06 (Table 2.1). For 2009–10, Tasmania reported 3 public psychiatric hospitals as one statewide mental health service while maintaining the same number of campuses. Therefore, the apparent decrease in the number of public psychiatric hospitals between 2008–09 and 2009–10 does not reflect an actual decrease in hospital sites.

More information on the types of hospitals, and their distribution by state and territory in 2009–10 is provided in *Chapter 4*.

**Table 2.1: Public and private hospitals<sup>(a)</sup>, 2005–06 to 2009–10**

	2005–06	2006–07 <sup>(b)</sup>	2007–08	2008–09	2009–10 <sup>(c)</sup>	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	736	739	742	737	736	0.0	-0.1
Public psychiatric hospitals	19	19	20	19	17	-2.7	-10.5
<i>Total</i>	755	758	762	756	753	-0.1	-0.4
<b>Private hospitals</b>							
Private free standing day hospital facilities	256	268	272	285	293	3.4	2.8
Other private hospitals	291	289	280	276	280	-1.0	1.4
<i>Total</i>	547	557	552	561	573	1.2	2.1
<b>All hospitals</b>	<b>1,302</b>	<b>1,315</b>	<b>1,314</b>	<b>1,317</b>	<b>1,326</b>	<b>0.5</b>	<b>0.7</b>

(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 2006–07, there were two new public hospitals created in Western Australia, which covered contracted public hospital services previously provided by two private hospitals.

(c) In 2009–10, there were fewer reporting units for Tasmania. 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.

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

*Abbreviation:* Ave—average.

## How many beds?

Between 2005–06 and 2009–10, hospital bed numbers rose overall, but there was variation in the size and direction of the changes in bed numbers for public and private hospitals (Table 2.2). For 2009–10, the number of available beds was reported separately as the number of same-day and overnight admitted patient beds (see *Appendix 1*).

**Table 2.2: Public and private hospital beds and beds per 1,000 population<sup>(a)</sup>, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	52,236	53,563	54,137	54,382	54,812	1.2	0.8
Public psychiatric hospitals	2,366	2,341	2,330	2,140	2,088	-3.1	-2.4
<i>Total</i>	<i>54,601</i>	<i>55,904</i>	<i>56,467</i>	<i>56,522</i>	<i>56,900</i>	<i>1.0</i>	<i>0.7</i>
<i>Beds per 1,000 population<sup>(b)</sup></i>	<i>2.66</i>	<i>2.68</i>	<i>2.66</i>	<i>2.61</i>	<i>2.57</i>	<i>-1.2</i>	<i>-3.5</i>
<b>Private hospitals<sup>(c)</sup></b>							
Private free standing day hospital facilities	2,114	2,251	2,151	2,168	2,260	1.7	4.2
Other private hospitals	24,113	24,427	25,617	25,298	25,778	1.7	1.9
<i>Total</i>	<i>26,227</i>	<i>26,678</i>	<i>27,768</i>	<i>27,466</i>	<i>28,038</i>	<i>1.7</i>	<i>2.1</i>
<i>Beds per 1,000 population<sup>(b)</sup></i>	<i>1.28</i>	<i>1.28</i>	<i>1.31</i>	<i>1.27</i>	<i>1.27</i>	<i>0.4</i>	<i>2.1</i>
<b>All hospitals</b>	<b>80,828</b>	<b>82,582</b>	<b>84,235</b>	<b>83,988</b>	<b>84,938</b>	<b>1.2</b>	<b>1.1</b>
<b>Beds per 1,000 population<sup>(b)</sup></b>	<b>3.93</b>	<b>3.96</b>	<b>3.97</b>	<b>3.88</b>	<b>3.83</b>	<b>-0.6</b>	<b>-1.2</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 2007–08, Victorian private hospitals changed the counting basis for beds from average available beds to licensed (registered) beds. This resulted in an increase of 783 beds in 2007–08 compared to 2006–07 for Victorian private hospitals.

(c) In 2009–10, the number of available beds for public hospitals was reported separately as the number of same-day and overnight admitted patient beds. See *Appendix 1* for more information.

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

*Abbreviation:* Ave—average.

## Did hospital expenditure and revenue change?

Recurrent expenditure for public hospitals in 2009–10 was \$33.7 billion in current price terms (unadjusted for inflation), an increase of 7.6% from 2008–09 (Table 2.3). In constant price terms (adjusted for inflation) the increase in recurrent expenditure for public hospitals was 5.2% between 2005–06 and 2009–10 (Table 2.3). Total revenue for public hospitals increased in constant price terms by an average of 8.4% per year between 2005–06 and 2009–10 (Table 2.3).

**Table 2.3: Recurrent expenditure<sup>(a)</sup> and revenue (\$ million), public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Total recurrent expenditure<sup>(a)</sup>, constant prices<sup>(b)</sup></b>							
Public hospitals	26,509	27,938	29,833	31,322	32,473	5.2	3.7
Private hospitals	7,148	7,182	n.a.	8,137	n.a.	n.a.	n.a.
<b>All hospitals</b>	<b>33,658</b>	<b>35,120</b>	n.a.	<b>39,460</b>	n.a.	n.a.	n.a.
<b>Total recurrent expenditure<sup>(a)</sup>, current prices</b>							
Public hospitals	23,964	26,290	28,908	31,322	33,706	8.9	7.6
Private hospitals	6,498	6,967	n.a.	8,137	n.a.	n.a.	n.a.
<b>All hospitals</b>	<b>30,462</b>	<b>33,256</b>	n.a.	<b>39,460</b>	n.a.	n.a.	n.a.
<b>Total revenue, constant prices<sup>(b)</sup></b>							
Public hospitals	2,387	2,567	2,778	2,975	3,295	8.4	10.1
Private hospitals	7,702	7,773	n.a.	8,982	n.a.	n.a.	n.a.
<b>All hospitals</b>	<b>10,089</b>	<b>10,339</b>	n.a.	<b>11,957</b>	n.a.	n.a.	n.a.
<b>Total revenue, current prices</b>							
Public hospitals	2,158	2,415	2,691	2,975	3,420	12.2	15.0
Private hospitals	7,001	7,539	n.a.	8,982	n.a.	n.a.	n.a.
<b>All hospitals</b>	<b>9,159</b>	<b>9,955</b>	n.a.	<b>11,957</b>	n.a.	n.a.	n.a.

(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. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.

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

Abbreviations: Ave—average; n.a.—not available.

## How many people were employed in public hospitals?

Between 2005–06 and 2009–10, the numbers of full-time equivalent staff employed in public hospitals in Australia increased by an average of 3.2% annually. There was variation in the relative size and direction of change across staff categories during this period (Table 2.4), with the greatest percentage increase occurring in the *Salaried medical officers* category (7.5%). The number of *Salaried medical officers* also had the greatest percentage increase between 2008–10 and 2009–10 (4.8%).

**Table 2.4: Full-time equivalent staff, public hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
Salaried medical officers	22,859	24,439	26,996	29,166	30,576	7.5	4.8
Total nurses	99,009	103,967	107,089	111,870	113,938	3.6	1.8
Diagnostic and allied health professionals	32,231	34,240	36,013	35,506	35,456	2.4	-0.1
Administrative and clerical staff	33,702	36,844	36,909	37,640	38,158	3.2	1.4
Other personal care staff, domestic and other staff	33,577	35,139	33,341	32,714	33,289	-0.2	1.8
<b>Total staff</b>	<b>221,379</b>	<b>234,630</b>	<b>240,344</b>	<b>246,895</b>	<b>251,416</b>	<b>3.2</b>	<b>1.8</b>

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

*Abbreviations:* Ave—average; n.a.—not available.

## Hospital activity 2005–06 to 2009–10

### 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 2.5% per year between 2005–06 and 2009–10 (Table 2.5). After adjusting for an undercount of non-admitted patient occasions of service for Tasmania for 2009–10, it is estimated that the average increase was about 2.7% per year.

**Table 2.5: Non-admitted patient occasions of service ('000)<sup>(a)</sup>, public and private hospitals<sup>(b)</sup>, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
Public acute hospitals <sup>(c)</sup>	44,750	46,141	48,355	49,161	49,471	2.5	0.6
Other private hospitals	1,734	1,743	n.a.	2,026	n.a.	n.a.	n.a.
<b>Total</b>	<b>46,484</b>	<b>47,884</b>	<b>n.a.</b>	<b>51,186</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) 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.

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

*Abbreviations:* Ave—average; 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 2005–06 and 2009–10, the overall number of hospital separations rose from 7.3 million to 8.5 million separations. The rate of growth in separations was higher for private hospitals than for public hospitals. In 2009–10, private hospitals accounted for 40.4% of separations, compared to 38.9% in 2005–06 (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, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	4,451	4,646	4,729	4,880	5,062	3.3	3.7
Public psychiatric hospitals	16	15	15	11	11	-7.9	0.9
<i>Total</i>	<i>4,466</i>	<i>4,661</i>	<i>4,744</i>	<i>4,891</i>	<i>5,073</i>	<i>3.2</i>	<i>3.7</i>
<b>Private hospitals</b>							
Private free standing day hospital facilities	547	570	668	729	783	9.4	7.4
Other private hospitals	2,298	2,371	2,462	2,528	2,678	3.9	5.9
<i>Total</i>	<i>2,846</i>	<i>2,942</i>	<i>3,130</i>	<i>3,257</i>	<i>3,462</i>	<i>5.0</i>	<i>6.3</i>
<b>All hospitals</b>	<b>7,312</b>	<b>7,603</b>	<b>7,874</b>	<b>8,148</b>	<b>8,535</b>	<b>3.9</b>	<b>4.7</b>

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

Abbreviation: Ave—average.

Between 2005–06 and 2009–10, the number of separations per 1,000 population rose by an average of 1.6% per year overall, 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 33.6% between 2005–06 and 2009–10 with an average decrease of 9.7% per year. The highest growth in separation rate was observed in *Private free standing day hospital facilities* (6.9% on average per year) (Table 2.7). Over the same period, overnight separation rates increased less (0.3% per year) than the overall separation rate.

**Table 2.7: Separations per 1,000 population<sup>(a)</sup>, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	212.9	217.8	216.9	218.8	221.1	1.0	1.0
Public psychiatric hospitals	0.8	0.7	0.7	0.5	0.5	-9.7	-1.4
<i>Total</i>	213.6	218.5	217.6	219.3	221.6	0.9	1.0
Overnight separations	108.8	110.5	110.4	110.0	110.3	0.4	0.3
<b>Private hospitals</b>							
Private free standing day hospital facilities	26.0	26.5	30.3	32.4	33.9	6.9	4.7
Other private hospitals	108.6	109.6	111.4	111.9	115.5	1.6	3.2
<i>Total</i>	134.6	136.2	141.7	144.3	149.5	2.7	3.6
Overnight separations	48.6	48.3	48.6	47.9	48.7	0.1	1.6
<b>All hospitals</b>	<b>348.2</b>	<b>354.7</b>	<b>359.3</b>	<b>363.6</b>	<b>371.0</b>	<b>1.6</b>	<b>2.0</b>
<b>Overnight separations</b>	<b>157.4</b>	<b>158.8</b>	<b>159.0</b>	<b>158.0</b>	<b>159.1</b>	<b>0.3</b>	<b>0.7</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.

*Abbreviation:* Ave—average.

Time series data for the years 2005–06 to 2009–10 on separations for public patients, private patients and other categories of patients in the public and private sectors are presented in Table 7.1 in *Chapter 7*.

## 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 2005–06 and 2009–10, the number of same-day separations rose at a greater rate than that for all separations (Table 2.8), with the rate of increase being higher in the private sector. In 2009–10, same-day separations accounted for 57.6% of separations, compared with 55.3% of separations in 2005–06. For more information on same-day acute admitted patient care, see *Chapter 8*.

There was an increase in overnight separations between 2005–06 and 2009–10 (Table 2.8), with the rate of increase being higher for public hospitals than private hospitals. In 2009–10, overnight separations made up 49.3% of separations in public hospitals and 32.3% of separations in private hospitals. For more information on overnight acute admitted patient care, see *Chapter 9*.

**Table 2.8: Same-day and overnight separations ('000), public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)					
						Ave since 2005–06	Since 2008–09				
<b>Same-day separations</b>		('000s)									
Public hospitals											
Public acute hospitals	2,214	2,331	2,362	2,460	2,573	3.8	4.6				
Public psychiatric hospitals	2	2	2	1	1	-21.9	10.6				
<i>Total</i>	2,216	2,333	2,364	2,461	2,574	3.8	4.6				
<i>Proportion of total separations (%)</i>	49.6	50.0	49.8	50.3	50.7	0.6	0.8				
Private hospitals											
Private free standing day hospital facilities	545	568	666	728	782	9.4	7.4				
Other private hospitals	1,282	1,341	1,399	1,456	1,562	5.0	7.3				
<i>Total</i>	1,827	1,909	2,065	2,184	2,344	6.4	7.3				
<i>Proportion of total separations (%)</i>	64.2	64.9	66.0	67.0	67.7	1.3	1.0				
<b>All hospitals</b>	<b>4,043</b>	<b>4,242</b>	<b>4,429</b>	<b>4,645</b>	<b>4,918</b>	<b>5.0</b>	<b>5.9</b>				
<b>Proportion of total separations (%)</b>	<b>55.3</b>	<b>55.8</b>	<b>56.2</b>	<b>57.0</b>	<b>57.6</b>	<b>1.0</b>	<b>1.1</b>				
<b>Overnight separations</b>											
Public hospitals											
Public acute hospitals	2,237	2,315	2,368	2,420	2,489	2.7	2.9				
Public psychiatric hospitals	14	13	13	10	11	-6.4	0.3				
<i>Total</i>	2,250	2,328	2,380	2,430	2,499	2.7	2.8				
Private hospitals											
Private free standing day hospital facilities	2	2	2	1	1	-15.2	1.0				
Other private hospitals	1,016	1,031	1,062	1,073	1,117	2.4	4.1				
<i>Total</i>	1,018	1,033	1,065	1,074	1,118	2.4	4.1				
<b>All hospitals</b>	<b>3,269</b>	<b>3,361</b>	<b>3,445</b>	<b>3,504</b>	<b>3,617</b>	<b>2.6</b>	<b>3.2</b>				

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

Abbreviation: Ave—average.

## 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 Diagnosis* related groups (DRGs)). See the section *What care was provided?* for more information on these broad categories of service.

Between 2005–06 and 2009–10, same-day separations with an urgency of admission of *Emergency* increased by 3.0% per year for public hospitals and decreased by 7.4% for private

hospitals (Table 2.9). For *Non-emergency* admissions, same-day separations increased for both public and private hospitals (4.1% and 6.5% per year, respectively).

**Table 2.9: Same-day separations by broad category of service, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Childbirth	4,870	5,455	5,919	6,436	6,939	9.3	7.8
Specialist mental health <sup>(a)</sup>	15,270	12,821	10,644	16,268	11,153	-7.6	-31.4
<i>Emergency</i>	443,321	471,784	474,074	490,598	499,002	3.0	1.7
Surgical	18,916	20,002	19,933	20,361	19,879	1.2	-2.4
Medical	420,113	447,202	449,855	465,923	474,711	3.1	1.9
Other	4,292	4,580	4,286	4,314	4,412	0.7	2.3
<i>Non-emergency</i>	1,752,285	1,842,748	1,872,963	1,947,577	2,057,070	4.1	5.6
Surgical	323,236	326,170	329,666	339,840	345,631	1.7	1.7
Medical	1,218,277	1,295,292	1,329,912	1,385,183	1,475,431	4.9	6.5
Other	210,772	221,286	213,385	222,554	236,008	2.9	6.0
<i>Total</i>	2,215,746	2,332,808	2,363,600	2,460,879	2,574,164	3.8	4.6
<b>Private hospitals</b>							
Childbirth	177	155	162	148	151	-3.9	2.0
Specialist mental health	88,901	89,740	88,905	103,897	114,838	6.6	10.5
<i>Emergency</i>	17,891	27,313	17,709	12,404	13,178	-7.4	6.2
Surgical	5,122	8,363	5,850	2,621	2,749	-14.4	4.9
Medical	10,647	12,971	8,833	8,263	8,576	-5.3	3.8
Other	2,122	5,979	3,026	1,520	1,853	-3.3	21.9
<i>Non-emergency</i>	1,720,465	1,791,493	1,958,325	2,067,217	2,215,398	6.5	7.2
Surgical	596,056	619,305	670,816	702,309	740,835	5.6	5.5
Medical	604,467	628,806	707,317	771,272	846,955	8.8	9.8
Other	519,942	543,382	580,192	593,636	627,608	4.8	5.7
<i>Total</i>	1,827,434	1,908,701	2,065,101	2,183,666	2,343,565	6.4	7.3
<b>Total same-day separations</b>	<b>4,043,180</b>	<b>4,241,509</b>	<b>4,428,701</b>	<b>4,644,545</b>	<b>4,917,729</b>	<b>5.0</b>	<b>5.9</b>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 200 same-day separations with specialised mental health care in 2008–09.

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

*Abbreviation:* Ave—average.

For overnight separations between 2005–06 and 2009–10, the number of separations with an urgency of admission of *Emergency* increased by 2.5% per year for public hospitals and decreased by 1.8% per year for private hospitals (Table 2.10). For *Non-emergency* admissions, overnight separations increased for both public and private hospitals (3.3% per year and 3.2% per year, respectively).

**Table 2.10: Overnight separations by broad category of service, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Childbirth	186,419	197,506	200,476	201,727	204,162	2.3	1.2
Specialist mental health <sup>(a)</sup>	82,998	86,172	86,125	86,950	85,675	0.8	-1.5
<i>Emergency</i>	<i>1,340,545</i>	<i>1,376,590</i>	<i>1,418,342</i>	<i>1,449,896</i>	<i>1,480,397</i>	<i>2.5</i>	<i>2.1</i>
Surgical	183,363	190,379	197,785	205,662	209,499	3.4	1.9
Medical	1,114,112	1,141,381	1,175,086	1,194,220	1,219,802	2.3	2.1
Other	43,070	44,830	45,471	50,014	51,096	4.4	2.2
<i>Non-emergency</i>	<i>640,368</i>	<i>668,204</i>	<i>675,517</i>	<i>691,571</i>	<i>729,033</i>	<i>3.3</i>	<i>5.4</i>
Surgical	302,126	311,314	311,767	320,068	329,371	2.2	2.9
Medical	316,482	333,427	340,135	349,600	377,057	4.5	7.9
Other	21,760	23,463	23,615	21,903	22,605	1.0	3.2
<i>Total</i>	<i>2,250,330</i>	<i>2,328,472</i>	<i>2,380,460</i>	<i>2,430,144</i>	<i>2,499,267</i>	<i>2.7</i>	<i>2.8</i>
<b>Private hospitals</b>							
Childbirth	77,857	79,479	80,925	81,242	84,169	2.0	3.6
Specialist mental health	24,766	25,703	26,921	27,481	30,805	5.6	12.1
<i>Emergency</i>	<i>177,756</i>	<i>170,886</i>	<i>159,252</i>	<i>153,314</i>	<i>165,540</i>	<i>-1.8</i>	<i>8.0</i>
Surgical	32,771	31,931	27,798	27,683	30,062	-2.1	8.6
Medical	135,417	129,021	122,245	116,374	125,349	-1.9	7.7
Other	9,568	9,934	9,209	9,257	10,129	1.4	9.4
<i>Non-emergency</i>	<i>738,094</i>	<i>756,868</i>	<i>797,686</i>	<i>811,722</i>	<i>837,636</i>	<i>3.2</i>	<i>3.2</i>
Surgical	456,743	468,885	492,575	504,314	522,542	3.4	3.6
Medical	244,381	249,692	267,187	269,033	276,143	3.1	2.6
Other	36,970	38,291	37,924	38,375	38,951	1.3	1.5
<i>Total</i>	<i>1,018,473</i>	<i>1,032,936</i>	<i>1,064,784</i>	<i>1,073,759</i>	<i>1,118,150</i>	<i>2.4</i>	<i>4.1</i>
<b>Total overnight separations</b>	<b>3,268,803</b>	<b>3,361,408</b>	<b>3,445,244</b>	<b>3,503,903</b>	<b>3,617,417</b>	<b>2.6</b>	<b>3.2</b>

(b) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 1,900 overnight separations with specialised mental health care in 2008–09.

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

Abbreviation: Ave—average.

## 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* includes separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health* includes separations for which specialised psychiatric care days were reported.

- *Surgical* includes separations for which the AR-DRG belonged to the *Surgical* partition. Excludes separations for *Childbirth* and *Specialist mental health*.
- *Medical* includes separations for which the AR-DRG belonged to the *Medical* partition. Excludes separations for *Childbirth* and *Specialist mental health*.
- *Other* includes separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions. Excludes separations for *Childbirth* and *Specialist mental health*.

Between 2005–06 and 2009–10, the number of same-day separations for *Specialist mental health* care in private hospitals increased by about 6.6% per year; it varied for public hospitals. Private hospitals provided an increasing share of *Specialist mental health* same-day separations, accounting for about 85% in 2005–06 and about 91% in 2009–10 (Table 2.9).

Private hospitals also accounted for an increasing proportion of overnight separations for *Specialist mental health* care (Table 2.10). For 2009–10, Tasmania was unable to fully indentify specialised psychiatric care days in public acute hospitals which accounted for about 1,900 overnight separations with specialised mental health care in 2008–09. After adjusting for the shortfall for Tasmania, there was an average annual increase of 0.8% each year for *Specialist mental health* care between 2005–06 and 2009–10.

Public hospitals consistently accounted for about 71% of overnight *Childbirth* separations between 2005–06 and 2009–10.

### 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 for public and private hospitals declined slightly overall between 2005–06 and 2009–10 (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 2005–06 and 2009–10, 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, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Average public cost weight of separations<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.02	1.02	1.02	1.01	1.01	-0.4	-0.6
Public psychiatric hospitals	2.67	2.63	2.69	2.97	2.98	2.8	0.4
Total	1.02	1.02	1.02	1.01	1.01	-0.4	-0.6
Private hospitals							
Private free standing day hospital facilities	0.48	0.49	0.47	0.47	0.48	-0.1	1.8
Other private hospitals	1.03	1.04	1.05	1.04	1.04	0.2	-0.2
Total	0.92	0.93	0.92	0.91	0.91	-0.4	-0.2
<b>All hospitals</b>	<b>0.99</b>	<b>0.99</b>	<b>0.98</b>	<b>0.97</b>	<b>0.97</b>	<b>-0.5</b>	<b>-0.5</b>
<b>Average private cost weight of separations<sup>(b)</sup></b>							
Private hospitals							
Private free standing day hospital facilities	0.35	0.35	0.34	0.34	0.34	-0.2	1.3
Other private hospitals	0.96	0.96	0.98	0.97	0.97	0.2	-0.4
Total	0.84	0.84	0.84	0.82	0.82	-0.6	-0.5

(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.

Abbreviation: Ave—average.

## How long did people stay in hospital?

Between 2005–06 and 2009–10, total patient days rose for both public and private hospitals. In 2009–10, 69% of patient days were in public hospitals (Table 2.12). Patient days for *Public psychiatric hospitals* declined between 2005–06 and 2009–10. 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 2005–06 and 2009–10, 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 Organisation 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 1.1% between 2005–06 and 2009–10 (Table 2.12).

Between 2005–06 and 2009–10, overall patient days per 1,000 population declined slightly for *Public hospitals* and for *Other private hospitals* (Table 2.13). Over the same period, patient days per 1,000 population increased by about 6.9% per year for *Private free standing day hospital facilities*.

**Table 2.12: Patient days and average length of stay, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Patient days ('000)</b>							
Public hospitals							
Public acute hospitals	16,332	16,781	17,122	17,302	17,476	1.7	1.0
Public psychiatric hospitals	661	658	714	587	663	0.1	12.9
<i>Total</i>	<b>16,993</b>	<b>17,439</b>	<b>17,836</b>	<b>17,889</b>	<b>18,139</b>	<b>1.6</b>	<b>1.4</b>
Private hospitals							
Private free standing day hospital facilities	548	570	668	729	783	9.4	7.4
Other private hospitals	6,790	6,915	7,139	7,164	7,479	2.4	4.4
<i>Total</i>	<b>7,338</b>	<b>7,485</b>	<b>7,807</b>	<b>7,893</b>	<b>8,262</b>	<b>3.0</b>	<b>4.7</b>
<b>All hospitals</b>	<b>24,331</b>	<b>24,925</b>	<b>25,643</b>	<b>25,782</b>	<b>26,401</b>	<b>2.1</b>	<b>2.4</b>
<b>Average length of stay (days)</b>							
Public hospitals							
Public acute hospitals	3.7	3.6	3.6	3.5	3.5	-1.5	-2.6
Public psychiatric hospitals	42.5	43.3	48.4	52.8	59.1	8.6	11.9
<i>Total</i>	<b>3.8</b>	<b>3.7</b>	<b>3.8</b>	<b>3.7</b>	<b>3.6</b>	<b>-1.5</b>	<b>-2.2</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	3.0	2.9	2.9	2.8	2.8	-1.4	-1.5
<i>Total</i>	<b>2.6</b>	<b>2.5</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>	<b>-1.9</b>	<b>-1.5</b>
<b>All hospitals</b>	<b>3.3</b>	<b>3.3</b>	<b>3.3</b>	<b>3.2</b>	<b>3.1</b>	<b>-1.8</b>	<b>-2.2</b>
<b>Average length of stay, excluding same-day separations (days)</b>							
Public hospitals							
Public acute hospitals	6.3	6.2	6.2	6.1	6.0	-1.3	-2.4
Public psychiatric hospitals	48.2	50.3	55.0	56.0	63.0	7.0	12.6
<i>Total</i>	<b>6.6</b>	<b>6.5</b>	<b>6.5</b>	<b>6.3</b>	<b>6.2</b>	<b>-1.3</b>	<b>-1.9</b>
Private hospitals							
Private free standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	-1.1	-4.7
Other private hospitals	5.4	5.4	5.4	5.3	5.3	-0.6	-0.5
<i>Total</i>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>5.3</b>	<b>5.3</b>	<b>-0.5</b>	<b>-0.4</b>
<b>All hospitals</b>	<b>6.2</b>	<b>6.2</b>	<b>6.2</b>	<b>6.0</b>	<b>5.9</b>	<b>-1.1</b>	<b>-1.6</b>

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

Abbreviations: Ave—average.

**Table 2.13: Patient days per 1,000 population<sup>(a)</sup>, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	772.0	775.7	772.6	762.4	750.0	-0.7	-1.6
Public psychiatric hospitals	32.0	31.5	33.2	27.0	29.7	-1.9	10.2
<i>Total</i>	<i>804.0</i>	<i>807.2</i>	<i>805.8</i>	<i>789.3</i>	<i>779.7</i>	<i>-0.8</i>	<i>-1.2</i>
<b>Private hospitals</b>							
Private free standing day hospital facilities	26.0	26.5	30.3	32.4	33.9	6.9	4.7
Other private hospitals	317.7	315.9	318.3	311.9	317.3	-0.0	1.7
<i>Total</i>	<i>343.6</i>	<i>342.5</i>	<i>348.6</i>	<i>344.3</i>	<i>351.2</i>	<i>0.5</i>	<i>2.0</i>
<b>All hospitals</b>	<b>1,147.6</b>	<b>1,149.7</b>	<b>1,154.4</b>	<b>1,133.7</b>	<b>1,130.9</b>	<b>-0.4</b>	<b>-0.2</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.

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

Abbreviation: Ave—average.

## Relative stay index

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

Table 2.14 presents RSI information for 2005–06 to 2009–10. Over that period there was some variation between hospital sectors in the RSI. The directly standardised RSI for public hospitals was consistently lower than that for private hospitals between 2005–06 and 2009–10.

**Table 2.14: Relative stay index, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Indirectly standardised relative stay index<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.00	0.99	0.99	0.98	0.96	..	..
Public psychiatric hospitals	1.23	1.21	1.21	1.25	1.25	..	..
Total	1.01	1.00	0.99	0.98	0.96	..	..
Private hospitals							
Private free standing day hospital facilities	0.77	0.77	0.75	0.77	0.76	..	..
Other private hospitals	1.07	1.06	1.05	1.04	1.02	..	..
Total	1.06	1.04	1.03	1.02	1.00	..	..
<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	0.99	0.97	-1.1	-1.9
Public psychiatric hospitals	1.98	2.38	2.94	2.52	3.58	16.0	42.2
Total	1.02	1.01	1.00	0.99	0.97	-1.1	-1.9
Private hospitals							
Private free standing day hospital facilities	0.45	0.40	0.40	0.44	0.41	-2.3	-7.7
Other private hospitals	1.11	1.11	1.10	1.11	1.08	-0.6	-2.1
Total	1.10	1.10	1.08	1.09	1.07	-0.7	-2.3
<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>-1.8</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 1* 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 1* for details on the methodology.

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

*Abbreviation* ..—not applicable; Ave—average.

# 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 late 2006, the NHPC identified the need to review the framework and 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 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 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 2010* (AIHW 2010e)
- the National Healthcare Agreement (NHA) (CRC 2010).

Most of the performance indicators presented in this report align with the NHA performance indicators for the outcome area of 'hospital and related care' (CRC 2010). The NHA includes 70 performance indicators and nine performance benchmarks (including a number for 'hospital and related care') that are to be reported regularly under the Intergovernmental Agreement on Federal Financial Relations. The NHA performance indicators based on 2007–08 hospital data have been published by the COAG Reform Council (CRC 2010). The performance indicators presented here are based on data for the 2009–10 financial year and on specifications anticipated to be used for the Council's 2012 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 *appendices 1 and 2*. While the rates could be interpreted as reflecting hospital system performance, they may also reflect variation in underlying needs for hospitalisation, admission and data recording practices, and availability of non-hospital services.

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

<b>Table(s)</b>	<b>Indicator</b>	<b>Related national indicator set</b>	
		<b>NHA</b>	<b>NHPF</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	Unplanned/unexpected readmissions within 28 days of selected surgical admissions	✓	
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 and Figure 3.1	Waiting times for emergency department care	✓	✓
Tables 3.9 and 3.10	Waiting times for elective surgery	✓	✓
Table 3.11, and Figures 3.2 to 3.4	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 case mix-adjusted separation for acute care episodes	✓	✓
Tables 3.17, S3.8	Relative stay index		✓
Figure 3.5, Table S3.10	Average length of stay for selected AR-DRGs		✓

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

Interim 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 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</b> , Table A6.4. Proxy measure. 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 1*)
- public hospitals includes *Public acute* and *Public psychiatric* hospitals
- private hospitals includes *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 1*).

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

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

## **Effectiveness**

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

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

Accreditation is recognised through a variety of bodies, including the Australian Council on Healthcare Standards, EQuIP, Business Excellence Australia, the Quality Improvement Council, and hospitals 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, 637 public hospitals were accredited by one or more providers at 30 June 2010, with 52,651 public hospital beds (85% of public hospitals and 93% of public hospital beds) (Table 3.4). These hospitals delivered 95% of separations and 93% 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.

A total of 316 private hospitals were accredited in 2008–09, with 22,855 private hospital beds (56% of hospitals, accounting for 84% of the beds).

The proportion of public hospital beds in accredited hospitals ranged from 82% in New South Wales to 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory. The proportion of separations in accredited public hospitals ranged from 85% in New South Wales to 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory.

The comparability of accreditation data among states and territories is limited because of the voluntary nature of participation in award schemes for hospitals in some jurisdictions. As accreditation for public hospitals was counted as at 30 June 2010, some hospitals that were accredited for the majority of the financial year, but had their accreditation status lapse shortly before this date, were counted as non-accredited.

**Table 3.4: Selected statistics by accreditation status and states and territories, public hospitals 2009–10, private hospitals, 2008–09**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals<sup>(a)</sup></b>									
Total hospitals	226	150	170	95	80	24	3	5	753
Accredited hospitals	165	150	142	95	73	4	3	5	636
Accredited (%)	73	100	84	100	91	17	100	100	84
Total beds	19,608	13,186	10,911	5,376	4,859	1,359	907	694	56,900
Accredited beds	16,037	13,186	10,585	5,376	4,743	1,123	907	694	52,651
Accredited (%)	82	100	97	100	98	83	100	100	93
Separations in accredited hospitals (%)	85	100	98	100	99	95	100	100	95
Patient days in accredited hospitals (%)	83	100	98	100	98	80	100	100	93
<b>Private hospitals<sup>(b)</sup></b>									
Total hospitals	176	152	106	50	54	n.p.	n.p.	n.p.	564
Accredited hospitals	89	84	66	30	31	n.p.	n.p.	n.p.	316
Accredited (%)	51	55	62	60	57	n.p.	n.p.	n.p.	56
Total beds	7,052	7,271	6,304	3,305	1,988	n.p.	n.p.	n.p.	27,180
Accredited beds	5,076	6,360	5,580	3,113	1,543	n.p.	n.p.	n.p.	22,855
Accredited (%)	72	87	89	94	78	n.p.	n.p.	n.p.	84

(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) Accreditation statistics for private hospitals were sourced from the Australian Bureau of Statistics Private hospitals Australia (ABS 2010). As these data are for 2008–09, the numbers of private hospitals and private hospital beds presented here do not match the numbers presented in chapters 2 and 4.

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.

In 2009–10, 4.9% of separations reported an ICD-10-AM code for an adverse event. The proportion of separations with an adverse event was 5.8% in the public sector and 3.7% 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, 2009–10**

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	102,367	2.0	24,015	0.7	126,382	1.5
Misadventures to patients during surgical and medical care	13,005	0.3	5,238	0.2	18,243	0.2
Procedures causing abnormal reactions/complications	163,411	3.2	91,109	2.6	254,520	3.0
Other external causes of adverse events	5,339	0.1	978	0.0	6,317	0.1
<b>Place of occurrence of injury and poisoning</b>						
Place of occurrence: Health service area	286,168	5.6	123,917	3.6	410,085	4.8
<b>Diagnoses</b>						
Selected post-procedural disorders	40,029	0.8	23,851	0.7	63,880	0.7
Haemorrhage and haematoma complicating a procedure	23,928	0.5	14,124	0.4	38,052	0.4
Infection following a procedure	23,000	0.4	11,336	0.3	34,336	0.4
Complications of internal prosthetic devices	59,359	1.2	34,331	1.0	93,690	1.1
Other diagnoses of complications of medical and surgical care	42,903	0.8	17,987	0.5	60,890	0.7
<b>Total (any of the above)<sup>(b)</sup></b>	<b>297,391</b>	<b>5.8</b>	<b>127,692</b>	<b>3.7</b>	<b>425,083</b>	<b>4.9</b>

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

(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 55% of separations with an adverse event reported *Procedures causing abnormal reactions/complications* and 34% 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 26% reported *Complications of internal prosthetic devices, implants and grafts*.

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

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

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

Rates of unplanned or unexpected readmissions were highest for *Hysterectomy* (31 per 1,000 separations) and *Prostatectomy* (30 per 1,000) (Table 3.6). For *Cataract extraction*, fewer than 4 in 1,000 separations had a readmission within 28 days.

**Table 3.6: Number and rate of unplanned/unexpected readmissions<sup>(a)(b)</sup> within 28 days to the same public hospital, selected surgical procedures, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Knee replacement</b>									
Separations	4,481	2,776	2,003	n.a.	933	289	180	35	10,697
Number of readmissions	100	68	69	n.a.	14	7	0	n.p.	259
Per 1,000 separations	22.3	24.5	34.4	n.a.	15.0	24.2	0.0	n.p.	24.2
<b>Hip replacement</b>									
Separations	3,125	2,526	1,307	n.a.	771	273	168	31	8,201
Number of readmissions	47	40	26	n.a.	n.p.	6	n.p.	0	124
Per 1,000 separations	15.0	15.8	19.9	n.a.	n.p.	22.0	n.p.	0.0	15.1
<b>Tonsillectomy</b>									
Separations	6,287	7,795	4,624	n.a.	2,354	468	335	224	22,087
Number of readmissions	123	195	143	n.a.	76	24	6	22	589
Per 1,000 separations	19.6	25.0	30.9	n.a.	32.3	51.3	17.9	98.2	26.7
<b>Hysterectomy</b>									
Separations	3,761	3,355	2,270	n.a.	1,073	337	151	85	11,032
Number of readmissions	105	95	85	n.a.	26	22	n.p.	n.p.	338
Per 1,000 separations	27.9	28.3	37.4	n.a.	24.2	65.3	n.p.	n.p.	30.6
<b>Prostatectomy</b>									
Separations	2,887	2,874	1,239	n.a.	772	175	57	51	8,055
Number of readmissions	96	68	39	n.a.	26	5	n.p.	10	245
Per 1,000 separations	33.3	23.7	31.5	n.a.	33.7	28.6	n.p.	196.1	30.4
<b>Cataract extraction</b>									
Separations	19,125	18,411	7,242	n.a.	5,622	865	1,010	540	52,815
Number of readmissions	74	61	30	n.a.	25	6	n.p.	7	205
Per 1,000 separations	3.9	3.3	4.1	n.a.	4.4	6.9	n.p.	13.0	3.9
<b>Appendicectomy</b>									
Separations	8,944	6,677	4,929	n.a.	1,772	502	640	291	23,755
Number of readmissions	198	164	119	n.a.	64	9	15	15	584
Per 1,000 separations	22.1	24.6	24.1	n.a.	36.1	17.9	23.4	51.5	24.6

(a) Includes readmissions to the same hospital only, for public hospitals.

(b) Total excludes data for Western Australia.

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

Abbreviations: n.a.—not available; n.p.—not published due to less than five readmissions

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

## Responsiveness

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

There are no indicators of responsiveness available for hospitals.

## Continuity of care

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

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

## Accessibility

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

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

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

Emergency department waiting times information is summarised as the proportions 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 Australasian Triage Scale that has five categories that incorporate the time by which the patient should receive care (ACEM 2000). For more information on triage categories see *Chapter 5*.

For 2009–10, for all triage categories overall, the proportion of presentations in which patients received emergency department care within the required time was 68%, ranging from 49% in the Northern Territory to 73% 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, selected public hospitals<sup>(c)</sup>, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	99	99	100	99	100	100	100
Emergency	81	80	77	68	77	70	83	63	78
Urgent	69	70	59	51	61	49	60	47	64
Semi-urgent	71	65	65	60	62	61	56	44	65
Non-urgent	86	84	88	89	85	86	77	84	86
<b>Total</b>	<b>73</b>	<b>71</b>	<b>65</b>	<b>60</b>	<b>66</b>	<b>60</b>	<b>63</b>	<b>49</b>	<b>68</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 1*.

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 only slight differences overall in the proportion of presentations seen on time for *Indigenous Australians* compared to *Other Australians* (66% and 69% respectively) and there was little variation by socioeconomic status of the patient's area of usual residence. Patients from *Very remote* areas were the group with the lowest proportion of presentations seen on time.

Additional information on the proportion seen on time by triage category and by state and territory is included in additional 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, selected public hospitals<sup>(c)</sup>, 2009–10**

	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	Total
<b>Hospital peer group</b>						
Principal referral and specialist women's and children's	100	77	62	64	86	67
Large hospitals	99	80	71	70	85	73
<b>Indigenous status<sup>(d)</sup></b>						
Indigenous	100	74	62	62	87	66
Other Australians	100	78	64	66	86	69
<b>Remoteness of residence<sup>(e)</sup></b>						
Major cities	100	79	63	65	84	68
Inner regional	99	75	64	67	88	69
Outer regional	100	78	66	67	90	70
Remote	99	76	71	71	92	74
Very remote	100	71	59	55	88	61
<b>Socioeconomic status of area of residence<sup>(f)</sup></b>						
1—Lowest	99	79	65	65	86	68
2	100	77	64	66	85	69
3	99	77	64	65	86	68
4	100	77	60	63	85	65
5—Highest	100	80	66	68	86	71
<b>Total</b>	<b>100</b>	<b>78</b>	<b>64</b>	<b>65</b>	<b>86</b>	<b>68</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 1*.
- (d) *Other Australians* includes presentations for which the Indigenous status was *Not reported*. The totals exclude 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 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.

## 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, socioeconomic status groups and Indigenous status. The linked data accounted for about 91% of the records provided with waiting times. For Tasmania, it was not possible to link the elective surgery waiting times and admitted patient care data. For

those states for which linking was possible, there was some variation in the linked data coverage between states and territories, ranging from 59% for the Northern Territory to 99% for New South Wales, Queensland, Western Australia and South Australia (Table 3.9).

Table 3.9 presents waiting time statistics for all patients admitted from public hospital waiting lists for elective surgery, and for those records with demographic data available (linked with the admitted patient care data). In 2009–10, the overall median waiting time for patients who were admitted from waiting lists was 36 days. It ranged from 27 days in Queensland to 73 days in the Australian Capital Territory. The 90th percentile for waiting time ranged from 150 days in Queensland to 357 days in the Australian Capital Territory, with an overall value of 247 days (Table 3.9). In 2009–10, 3.6% 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>, by state and territory, 2009–10**

	NSW	Vic	Qld	WA <sup>(c)</sup>	SA	Tas <sup>(d)</sup>	ACT	NT	Total
<b>Elective surgery waiting times data<sup>(a)</sup></b>									
Number of admissions	198,503	155,761	113,884	61,298	44,227	16,610	9,778	9,028	609,089
Days waited at 50th percentile	44	36	27	32	36	36	73	53	36
Days waited at 90th percentile	330	196	150	161	189	332	357	279	247
% waited more than 365 days	4.9	2.8	2.5	1.5	1.1	8.7	9.5	5.6	3.6
<b>Elective surgery waiting times records with demographic data<sup>(b)(c)</sup></b>									
Number of admissions	196,031	129,917	113,169	58,720	43,675	n.a.	9,703	5,368	556,603
Proportion linked (%)	99	83	99	96	99	n.a.	99	59	91
Days waited at 50th percentile	44	36	28	31	36	n.a.	74	42	36
Days waited at 90th percentile	330	191	151	160	189	n.a.	357	256	245
% waited more than 365 days	4.9	2.7	2.5	1.5	1.1	n.a.	9.5	5.3	3.3

(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 91% of records (excluding Tasmania) in the National Elective Surgery Waiting Times Data Collection for 2009–10. This information included the sex, age group, Indigenous status and area of usual residence of the patient.

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

(d) The linked demographic data for Tasmania were not available.

Abbreviation: n.a.—not available.

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* (40 days and 35 days respectively) (Table 3.10). There were also variations by socioeconomic area of residence, with persons from higher socioeconomic groups having shorter overall median waiting times than those from lower socioeconomic groups. Persons residing in *Remote* areas and *Major cities* had shorter 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.

**Table 3.10: Waiting time statistics for patients admitted from public hospital waiting lists for elective surgery<sup>(a)(b)</sup>, by Indigenous status, remoteness area of residence and socioeconomic status of area of residence, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Aust
<b>Indigenous status<sup>(c)</sup></b>									
Indigenous	49	36	35	33	33	n.a.	n.p.	47	40
Other Australians	44	36	27	31	36	n.a.	n.p.	40	35
<b>Remoteness of residence<sup>(d)</sup></b>									
Major cities	40	37	27	33	37	n.a.	77	n.p.	35
Inner regional	53	34	28	28	31	n.a.	68	n.p.	37
Outer regional	60	28	31	32	28	n.a.	n.p.	43	39
Remote	35	26	33	28	29	n.a.	n.p.	37	33
Very remote	50	n.p.	34	29	27	n.a.	n.p.	50	38
<b>Socioeconomic status of area of residence<sup>(e)</sup></b>									
1—Lowest	49	42	29	29	37	n.a.	56	47	40
2	57	34	28	31	36	n.a.	63	59.5	41
3	41	37	27	30	36	n.a.	74	35	34
4	37	35	27	35	34	n.a.	80	43	33
5—Highest	27	31	25	33	34	n.a.	73	48	30
<b>Total</b>	<b>44</b>	<b>36</b>	<b>28</b>	<b>32</b>	<b>36</b>	<b>n.a.</b>	<b>74</b>	<b>42</b>	<b>35</b>

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

(b) For the 91% of elective surgery records for which demographic data were available (see Table 3.9). The linked demographic data for Tasmania were not available.

(c) *Other Australians* includes records for which the Indigenous status was *Not reported*. The totals exclude data for Tasmania and the Australian Capital Territory.

(d) 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. Data not published for remoteness areas that are not included in the state/territory of hospital.

(e) 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.

*Abbreviation:* n.a.—not available n.p.—not published.

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

### Performance indicator: Rates of service—overnight separations

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

Rates of overnight separations in public hospitals ranged from 95 per 1,000 in Tasmania to 185 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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
Public	114.5	108.4	102.0	105.5	119.6	95.0	122.0	184.7	110.3
Private	38.2	51.7	60.6	53.5	51.2	n.p.	n.p.	n.p.	48.7
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	244.5	234.6	281.7	360.9	354.6	n.p.	n.p.	370.4	293.1
Other Australians	152.4	161.4	159.6	153.4	170.5	n.p.	n.p.	150.1	157.5
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	147.0	152.6	152.7	147.8	161.2	..	138.5	..	150.6
Inner regional	157.9	179.3	173.3	169.1	165.1	139.8	n.p.	..	167.8
Outer regional	181.0	191.8	167.2	185.3	225.6	142.1	..	160.8	179.0
Remote	240.7	268.0	221.6	209.9	210.0	143.8	..	219.4	218.1
Very remote	256.3	..	251.3	232.8	230.4	160.9	..	303.4	260.6
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	167.3	163.8	188.3	247.8	198.5	137.1	n.p.	255.1	177.3
2	150.1	175.9	179.4	168.8	168.9	186.8	n.p.	203.9	164.7
3	157.3	163.2	157.7	153.9	179.8	139.7	303.0	252.2	160.1
4	140.7	157.0	151.7	152.9	142.7	137.4	191.0	137.7	150.1
5—Highest	139.8	143.8	131.2	138.6	137.4	..	128.7	174.0	138.9
<b>Total</b>	<b>152.7</b>	<b>160.2</b>	<b>162.6</b>	<b>159.0</b>	<b>170.8</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>159.1</b>

(a) *Other Australians* includes records for which the Indigenous status was *Not reported*. The totals exclude data for Tasmania and the Australian Capital 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.

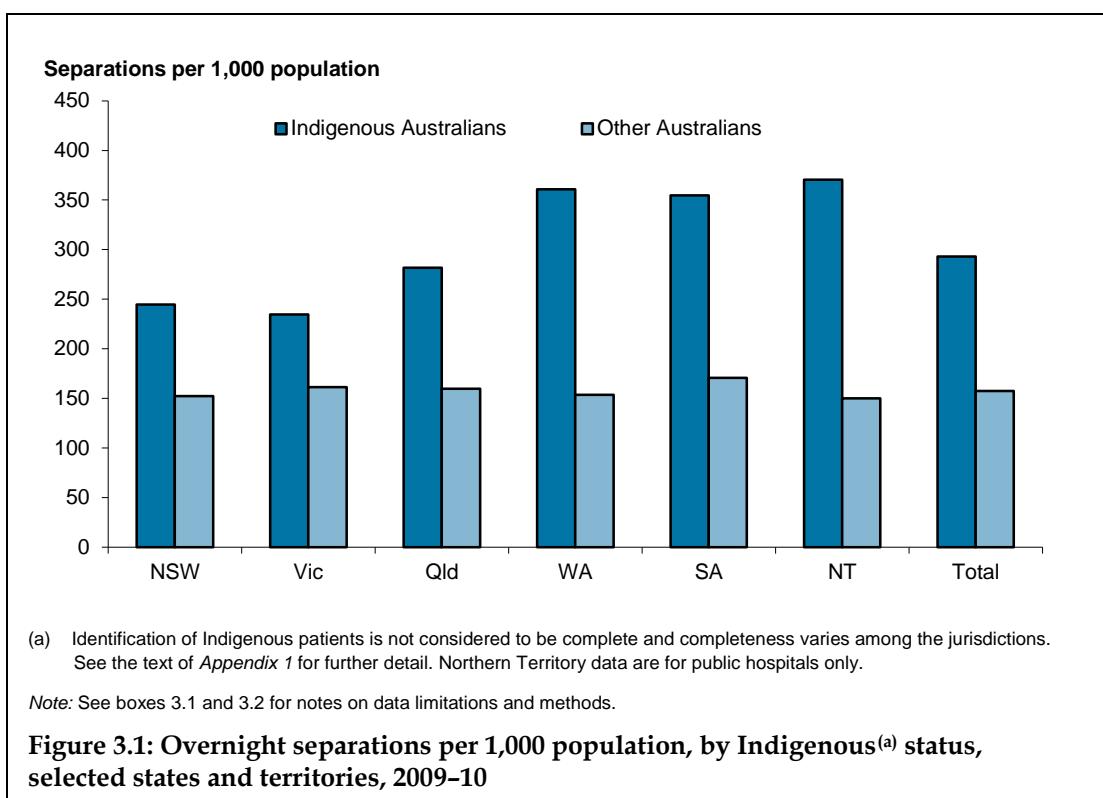
(c) Disaggregation by socioeconomic group is based on the patient's usual residence, not the location of the hospital. The socioeconomic status of area of residence is based on the ABS Index of Relative Socio-economic Disadvantage (IRSD). These socioeconomic groups represent approximately 20% of the 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 also variations in rates of overnight separations by Indigenous status, remoteness area of residence and socioeconomic status of area of residence.

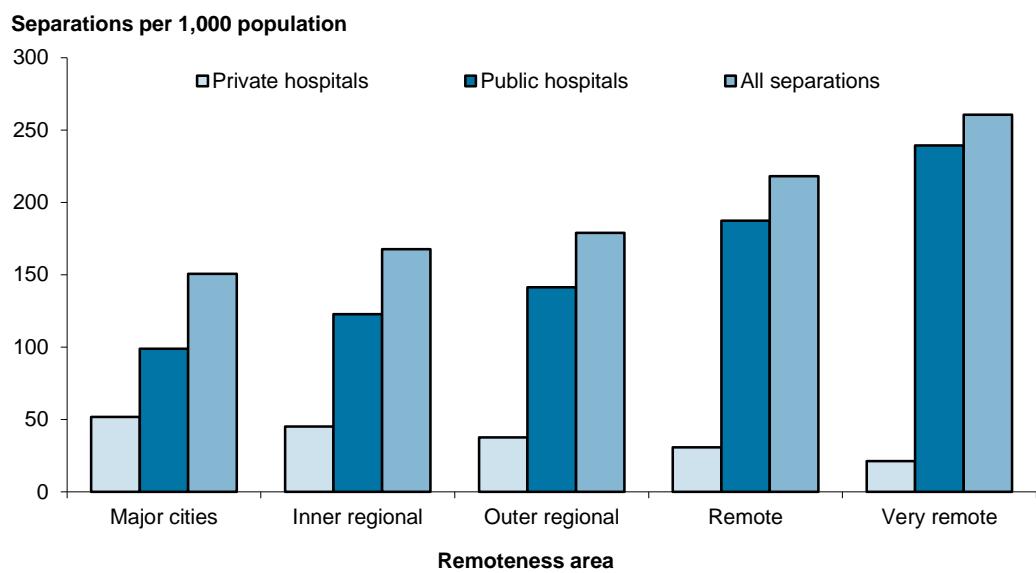
There were 293 overnight separations for patients reported as Indigenous per 1,000 Indigenous persons. This was about 1.8 times the rate for *Other Australians*. Overnight separation rates by Indigenous status are presented for the six jurisdictions with data of sufficient quality for analytical purposes (see Appendix 1). The rate of overnight separations for *Indigenous Australians* was almost twice the rate for *Other Australians* (157 per 1,000) (Figure 3.1). 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 by area of residence. Persons usually resident in *Very remote* areas had 261 overnight separations per 1,000 population compared with 151 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 99 per 1,000 population in *Major cities* to 239 per 1,000 in *Very remote* areas (Figure 3.2). For private hospitals, rates of overnight separations decreased with remoteness, ranging from 21 per 1,000 in *Very remote* areas to 52 per 1,000 in *Major cities*.

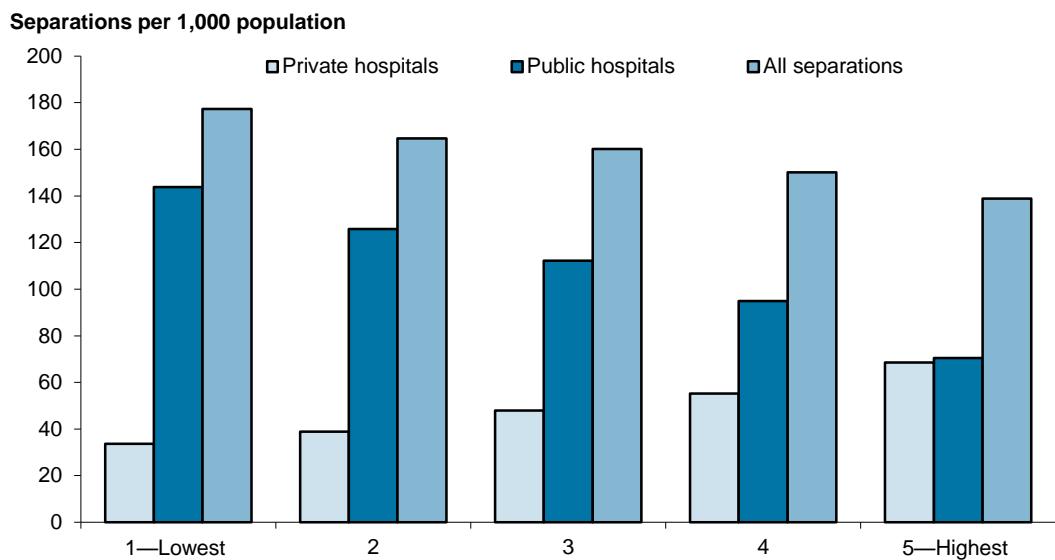
There was less variation by socioeconomic group, with persons from the lowest socioeconomic group having an overnight separation rate about 1.3 times as high as persons from the highest socioeconomic group. Rates of overnight separations in public hospitals increased with socioeconomic disadvantage, 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, 2009–10**



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, 2009–10**

## Performance indicator: Rates of services—hospital procedures

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

Table 3.12 presents separations per 1,000 population for the procedures, by state or territory of residence. There was some variation among states and territories. For example, separations for *Cataract extraction* ranged from 6.9 per 1,000 population in the Australian Capital Territory to 9.8 per 1,000 population in Western Australia.

**Table 3.12: Separations per 1,000 population for hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Cataract extraction	8.9	8.3	9.4	9.8	7.7	9.6	6.9	8.1	8.8
Cholecystectomy	2.1	2.3	2.3	2.1	2.3	2.3	2.3	1.8	2.2
Coronary angioplasty	1.5	1.6	1.4	1.4	1.5	1.4	3.2	..	1.5
Coronary artery bypass graft	0.5	0.6	0.6	0.3	0.6	0.5	0.7	..	0.5
Cystoscopy	3.9	5.2	5.1	6.8	5.4	5.5	4.8	3.1	4.9
Haemorrhoidectomy	2.6	1.5	1.4	1.1	1.3	2.0	1.1	2.2	1.8
Hip replacement	1.3	1.5	1.2	1.6	1.5	1.8	2.3	0.5	1.4
Hysterectomy <sup>(b)</sup> , females aged 15–69	2.3	2.2	2.6	2.5	2.8	2.7	2.4	1.8	2.4
Inguinal herniorrhaphy	2.1	2.2	2.3	2.2	2.1	2.4	2.3	2.1	2.2
Knee replacement	1.7	1.5	1.8	1.8	1.9	1.5	2.5	0.5	1.7
Myringotomy	1.4	1.8	1.5	2.0	3.2	1.4	2.5	1.1	1.7
Prostatectomy <sup>(c)</sup>	2.9	3.5	2.7	2.5	2.8	3.0	3.4	1.7	2.9
Septoplasty	1.0	1.4	0.9	0.9	1.4	0.5	1.2	0.4	1.1
Tonsillectomy	2.1	2.3	2.2	2.4	2.9	1.8	3.0	1.0	2.2
Varicose veins, stripping and ligation	0.5	0.8	0.5	0.5	0.7	0.7	1.0	0.4	0.6

(a) The procedures are defined using Australian Classification of Health Interventions (ACHI) codes in Appendix 1.

(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 by hospital sector, Indigenous status, remoteness area of usual residence and socioeconomic status is available in additional tables that accompany this report online. The additional tables include the numbers of separations, the separation rates and standardised separation rate ratios (SRRs).

## 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 statistical discharge practice and in assignment of care type categories between jurisdictions.

**Table 3.13: Overnight separations for non-acute care per 1,000 population, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Rehabilitation	4.9	5.1	3.7	4.6	3.7	3.5	10.2	1.3	4.6
Palliative care	1.1	1.1	1.6	1.3	0.9	0.6	2.0	2.7	1.2
Geriatric evaluation and management	0.4	2.1	0.4	0.3	0.6	0.1	2.1	0.2	0.9
Psychogeriatric care	0.1	0.3	0.1	0.7	0.1	0.0	0.1	0.0	0.2
Maintenance care	0.8	0.1	1.4	0.7	1.2	0.7	5.0	3.4	0.9
<b>Total</b>	<b>7.3</b>	<b>8.7</b>	<b>7.2</b>	<b>7.5</b>	<b>6.5</b>	<b>5.0</b>	<b>19.4</b>	<b>7.6</b>	<b>7.7</b>

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

Abbreviation: n.p.—not published.

There was a large difference in the overall rate of overnight non-acute care between public and private hospitals (5.3 per 1,000 population and 2.4 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* (10.6 per 1,000 and 7.8 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 separations and persons residing in *Major cities* having the highest rate.

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

**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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
Public	5.0	5.7	5.0	5.5	4.5	3.6	16.7	7.6	5.3
Private	2.3	3.0	2.2	2.0	2.1	n.p.	n.p.	n.p.	2.4
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	7.1	12.1	13.5	12.0	7.3	n.p.	n.p.	11.7	10.6
Other Australians	7.6	9.0	7.1	7.5	6.9	n.p.	n.p.	5.1	7.8
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	7.8	9.2	7.9	7.7	7.2	..	15.7	..	8.3
Inner regional	6.3	7.9	6.3	6.5	4.1	5.9	n.p.	..	6.7
Outer regional	6.1	6.8	5.7	6.8	4.8	3.2	..	7.5	6.0
Remote	7.4	9.1	4.9	7.8	4.6	3.7	..	5.2	5.9
Very remote	5.6	..	7.4	6.8	5.4	10.6	..	9.9	7.9
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	7.1	7.8	7.3	7.7	6.8	4.0	n.p.	8.9	7.1
2	5.8	8.0	7.6	8.1	6.4	5.3	n.p.	5.2	6.9
3	8.3	8.8	6.7	7.3	6.8	6.1	34.9	10.1	7.9
4	6.8	9.0	7.6	8.3	6.3	7.8	20.5	4.7	8.0
5—Highest	9.1	9.7	6.5	6.7	5.9	..	14.5	7.8	8.7
<b>Total</b>	<b>7.3</b>	<b>8.7</b>	<b>7.2</b>	<b>7.5</b>	<b>6.5</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>7.7</b>

(a) *Other Australians* includes records for which the Indigenous status was *Not reported*. The totals exclude data for Tasmania and the Australian Capital 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 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.

## 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 patients' condition. It is calculated for selected public acute hospitals as the average recurrent expenditure for each separation, adjusted using AR-DRG cost weights for the resources expected to be used for the separation. As such it can be taken as a measure of the relative technical efficiency of hospitals.

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

Details of the methods used in this analysis are presented in *Appendix 1*.

The scope of the analysis includes public hospitals that provide mainly acute care. These are the hospitals in the public hospital peer groups of *Principal referral and specialist women's and children's hospitals*, *Large hospitals*, *Medium hospitals* and *Small acute hospitals* (see *Appendix 1*). Hospitals included in this analysis accounted for 97% of separations in public acute and psychiatric hospitals in 2009–10, 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*.

The *Average cost weight* is sourced from the National Hospital Morbidity Database, 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*.

Nationally, the average cost per casemix-adjusted separation was \$4,706 (excluding depreciation). There was some variation in the average cost per casemix-adjusted separation by state and territory (Table 3.15).

A large portion of the costs was attributed to *Non-medical labour* and *Medical labour* costs. Nationally these costs were \$2,357 and \$1,041, respectively, per casemix-adjusted separation. Depreciation added an average of 4.2% (\$199) to the cost of each separation. More detailed information is available in Table S3.1, at the end of this chapter.

**Table 3.15: Cost (\$) per casemix-adjusted separation (excluding depreciation), selected public hospitals, states and territories, 2009–10**

	<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>
Medical labour costs	1,061	894	1,099	1,163	1,094	1,141	1,182	1,043	1,041
Non-medical labour costs	2,226	2,385	2,642	2,285	2,065	2,575	2,482	2,847	2,357
Nursing	1,186	1,248	1,293	1,115	1,213	1,307	1,287	1,705	1,229
Other staff (includes superannuation)	1,041	1,137	1,348	1,170	852	1,267	1,195	1,142	1,128
Other recurrent costs (excludes depreciation)	1,270	1,312	1,352	1,281	1,214	1,653	1,325	1,627	1,308
Depreciation	156	318	192	120	151	106	157	46	199
<b>Total (excludes depreciation)</b>	<b>4,557</b>	<b>4,591</b>	<b>5,093</b>	<b>4,728</b>	<b>4,374</b>	<b>5,369</b>	<b>4,989</b>	<b>5,517</b>	<b>4,706</b>

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information is available in tables S3.2 to S3.7 at the end of this chapter.

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

Table 3.16 presents costs per casemix-adjusted separation data for selected public hospital peer groups. Public hospitals can be classified into peer groups that allow a more meaningful

comparison of cost data. The peer group classification allocates hospitals into broadly similar groups in terms of their level of admitted patient activity and their geographical location (see *Appendix 1*).

**Table 3.16: Cost (\$) per casemix-adjusted separation (excluding depreciation), by public hospital peer group, selected public hospitals<sup>(b)</sup>, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Principal referral and specialist women's and children's hospitals	4,565	4,637	5,216	4,560	4,510	5,148	n.p.	5,458	4,746
Large hospitals	4,328	4,243	3,751	4,322	4,245	n.p.	n.p.	..	4,310
Medium hospitals	4,651	4,199	4,681	5,297	3,921	n.p.	..	..	4,600
Small acute hospitals	5,194	5,578	5,131	6,570	3,624	4,507	..	5,944	5,357
<b>Total (selected hospitals)</b>	<b>4,557</b>	<b>4,591</b>	<b>5,093</b>	<b>4,728</b>	<b>4,374</b>	<b>5,369</b>	<b>4,989</b>	<b>5,517</b>	<b>4,706</b>

*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.

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

### Performance indicator: Relative stay indexes

Relative stay indexes (RSIs) are calculated as the observed number of patient days for separations in selected AR-DRGs, divided by the expected number of patient days (based on national figures), standardised for casemix. The adjustment for casemix allows variation in 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 1*.

The indirectly standardised relative stay index 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 relative stay index is re-scaled so each group represents the national casemix and allows comparison of RSI values across groups of hospitals.

Table 3.17 presents both indirectly and directly standardised RSIs for all hospitals for 2009–10. For the hospitals included in the cost per casemix-adjusted separation analysis (see above), the RSI was 1.00 overall.

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

Table 3.17 also presents RSI information for the *Medical*, *Surgical* and *Other* categories of AR-DRGs (DoHA 2006). These figures indicate relatively shorter lengths of stay for *Medical* separations in public hospitals, and for *Surgical* and *Other* separations in private hospitals.

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

**Table 3.17: Relative stay index by medical/surgical/other type of AR-DRG, public and private hospitals, states and territories, 2009–10**

Type of hospital	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Indirectly standardised relative stay index<sup>(b)</sup></b>									
<b>Public hospitals</b>	<b>1.04</b>	<b>0.92</b>	<b>0.94</b>	<b>1.00</b>	<b>1.01</b>	<b>1.05</b>	<b>0.93</b>	<b>1.16</b>	<b>0.99</b>
Medical	1.02	0.90	0.91	0.97	0.99	1.07	0.96	1.09	0.96
Surgical	1.08	0.97	1.03	1.06	1.08	1.02	0.89	1.36	1.04
Other	1.14	0.97	1.02	1.00	1.05	1.01	0.90	1.26	1.04
<b>Private hospitals</b>	<b>1.03</b>	<b>1.04</b>	<b>1.05</b>	<b>1.04</b>	<b>0.97</b>	n.p.	n.p.	n.p.	<b>1.03</b>
Medical	1.20	1.13	1.16	1.08	1.01	n.p.	n.p.	n.p.	1.14
Surgical	0.93	0.97	0.96	1.02	0.94	n.p.	n.p.	n.p.	0.96
Other	0.90	0.94	0.99	0.98	0.94	n.p.	n.p.	n.p.	0.95
<b>All hospitals</b>	<b>1.04</b>	<b>0.96</b>	<b>0.99</b>	<b>1.01</b>	<b>1.00</b>	n.p.	n.p.	n.p.	<b>1.00</b>
Medical	1.05	0.95	0.98	0.99	0.99	n.p.	n.p.	n.p.	1.00
Surgical	1.02	0.97	0.99	1.04	1.01	n.p.	n.p.	n.p.	1.00
Other	1.05	0.95	1.00	0.99	1.00	n.p.	n.p.	n.p.	1.00
<b>Directly standardised relative stay index<sup>(c)</sup></b>									
<b>Public hospitals</b>	<b>1.06</b>	<b>0.94</b>	<b>0.97</b>	<b>1.01</b>	<b>1.03</b>	<b>1.06</b>	<b>0.97</b>	<b>1.25</b>	<b>1.00</b>
Medical	1.03	0.90	0.91	0.97	0.99	1.08	0.98	1.11	0.96
Surgical	1.10	0.99	1.05	1.08	1.08	1.04	0.96	1.49	1.05
Other	1.16	0.99	1.05	1.01	1.08	1.03	1.00	1.42	1.06
<b>Private hospitals</b>	<b>1.12</b>	<b>1.09</b>	<b>1.12</b>	<b>1.13</b>	<b>1.05</b>	n.p.	n.p.	n.p.	<b>1.10</b>
Medical	1.24	1.16	1.20	1.20	1.11	n.p.	n.p.	n.p.	1.18
Surgical	0.93	0.97	0.97	1.02	0.95	n.p.	n.p.	n.p.	0.96
Other	0.93	0.95	1.02	1.06	0.98	n.p.	n.p.	n.p.	0.97
<b>All hospitals</b>	<b>1.04</b>	<b>0.96</b>	<b>0.99</b>	<b>1.02</b>	<b>1.01</b>	n.p.	n.p.	n.p.	<b>1.00</b>
Medical	1.05	0.96	0.98	1.00	1.00	n.p.	n.p.	n.p.	1.00
Surgical	1.02	0.98	1.00	1.04	1.02	n.p.	n.p.	n.p.	1.00
Other	1.05	0.96	1.00	1.00	1.02	n.p.	n.p.	n.p.	1.00

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.

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

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

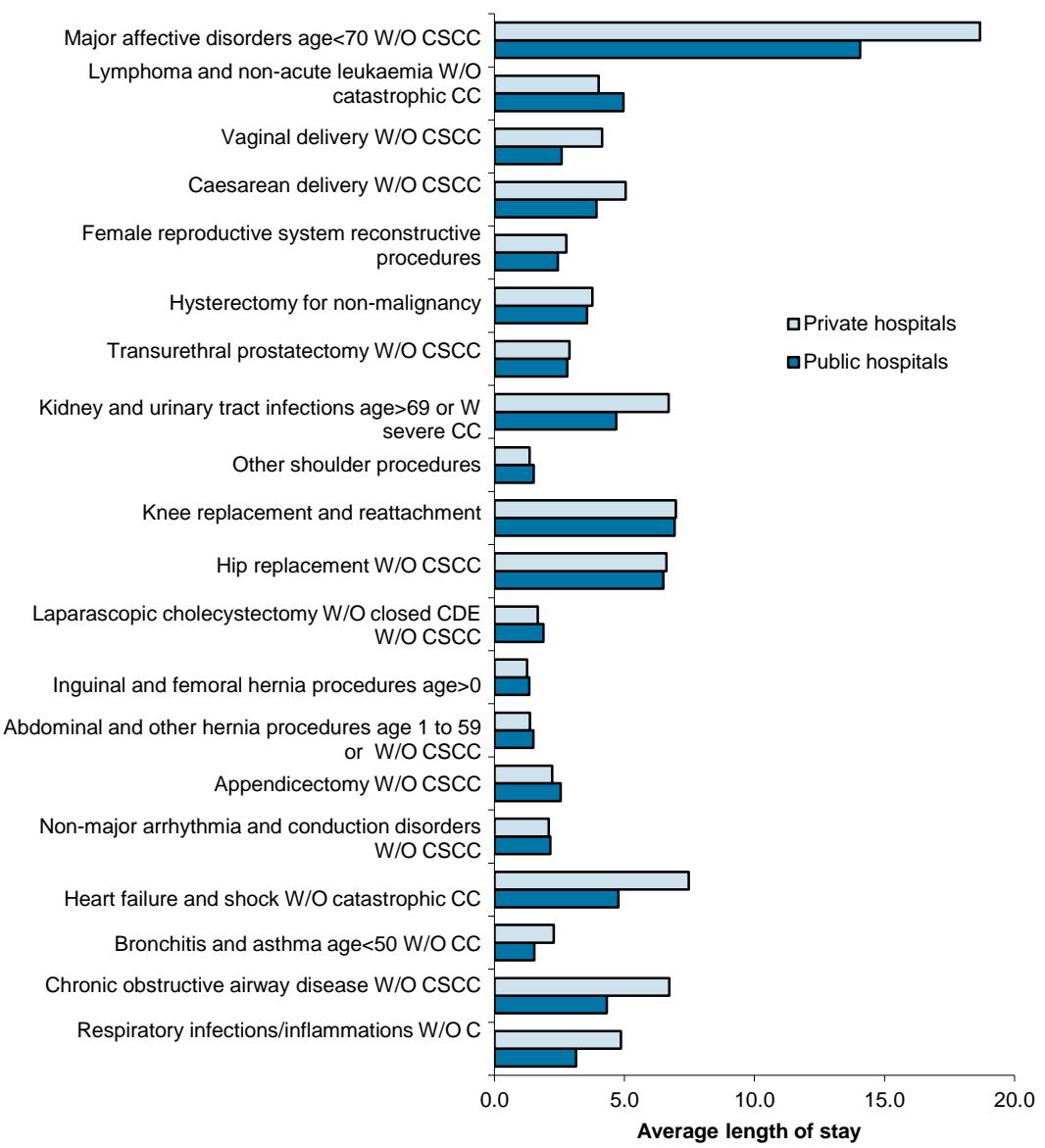
- homogeneity, where variation is more likely to be attributable to the hospital's performance rather than variations in the patients themselves
- representativeness across clinical groups (Major Diagnostic Categories) and surgical and medical AR-DRGs
- differences between jurisdictions and/or sectors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

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

Figure 3.5 presents the average 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 20 selected AR-DRGs. The average length of stay for U63B *Major affective disorders age <70 without catastrophic or severe complications or comorbidities* was 14.1 days for public hospitals and 18.7 days for private hospitals.

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

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



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

Abbreviations: cat/severe—catastrophic and/or severe; CC—complications and comorbidities; CDE—common duct exploration; W—with; W/O—without; W/O-CSCC— without catastrophic and/or severe complications and comorbidities.

**Figure 3.4: Average length of stay (days) for selected AR-DRGs version 5.2, public and private hospitals, 2009–10**

## Supplementary tables

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

**Table S3.1:**

- (a) Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included. See *Appendix 1* for further information.
- (b) 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 is 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) Depreciation reported for a subset of South Australian hospitals. For Tasmania, depreciation has not been identified separately for 2 hospitals where services are purchased from the private sector.
- (e) For Tasmania, an award restructure within the Medical category of visiting medical officers has resulted in a decrease in expenditure for *Visiting Medical Officers* and an increase for *Salaried/Sessional Staff*.
- (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) 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.

**Table S3.2 to S3.7:**

- (a) Casemix-adjusted separations is 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*.

*(continued)*

**Box 3.4 (continued):**

- (b) Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included. See *Appendix 1* for further information.
- (c) The number of different version 5.2 AR-DRGs provided by a hospital for which there were at least five acute separations.
- (d) Average cost weight from the National Hospital Morbidity Database, based on 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).
- (e) Indirectly standardised relative stay index calculated as observed divided by expected length of stay modelled on age and AR-DRG version 5.2, 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 1* for details on the methodology.
- (f) Average cost per casemix-adjusted separation excluding depreciation.
- (g) Average cost per casemix-adjusted separation including depreciation. Depreciation reported for a subset of South Australian and Tasmanian hospitals.
- (h) 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<sup>(a)</sup> and average cost data for selected public acute hospitals<sup>(a)</sup>, states and territories, 2009–10**

	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	1,186	1,248	1,293	1,115	1,213	1,307	1,287	1,705	1,229
Diagnostic/allied health	303	383	381	280	239	294	330	369	332
Administrative	295	277	323	367	251	369	347	356	302
Other staff	219	232	330	281	131	281	139	417	243
Superannuation	225	245	315	241	232	324	379	n.a.	251
<i>Total non-medical labour costs</i>	<i>2,226</i>	<i>2,385</i>	<i>2,642</i>	<i>2,285</i>	<i>2,065</i>	<i>2,575</i>	<i>2,482</i>	<i>2,847</i>	<i>2,357</i>
<b>Other recurrent costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Domestic services	137	107	119	115	89	86	204	127	120
Repairs/maintenance	89	81	97	149	87	68	49	129	94
Medical supplies	480	395	546	309	316	686	419	385	441
Drug supplies	241	265	251	256	227	357	134	239	251
Food supplies	39	46	37	31	29	44	20	45	39
Administration	199	262	279	193	102	250	389	284	227
Other	85	156	23	228	365	162	110	417	136
<i>Total other recurrent costs excluding depreciation</i>	<i>1,270</i>	<i>1,312</i>	<i>1,352</i>	<i>1,281</i>	<i>1,214</i>	<i>1,653</i>	<i>1,325</i>	<i>1,627</i>	<i>1,308</i>
Depreciation <sup>(d)</sup>	156	318	192	120	151	106	157	46	199
<i>Total excluding medical labour costs and depreciation</i>	<i>3,496</i>	<i>3,697</i>	<i>3,994</i>	<i>3,566</i>	<i>3,280</i>	<i>4,228</i>	<i>3,807</i>	<i>4,474</i>	<i>3,665</i>
<b>Medical labour costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Public patients									
Salaried/sessional staff	559	679	923	835	732	918	754	897	713
Visiting medical officer payments <sup>(e)</sup>	228	71	78	161	185	3	245	94	144
Private patients (estimated) <sup>(f)</sup>	274	143	98	167	177	220	184	52	185
<i>Total medical labour costs</i>	<i>1,061</i>	<i>894</i>	<i>1,099</i>	<i>1,163</i>	<i>1,094</i>	<i>1,141</i>	<i>1,182</i>	<i>1,043</i>	<i>1,041</i>
<b>Total cost per casemix-adjusted separation excluding depreciation</b>	<b>4,557</b>	<b>4,591</b>	<b>5,093</b>	<b>4,728</b>	<b>4,374</b>	<b>5,369</b>	<b>4,989</b>	<b>5,517</b>	<b>4,706</b>
<b>Total cost per casemix-adjusted separation including depreciation</b>	<b>4,713</b>	<b>4,909</b>	<b>5,285</b>	<b>4,848</b>	<b>4,525</b>	<b>5,474</b>	<b>5,147</b>	<b>5,563</b>	<b>4,905</b>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

Abbreviation: n.a.—not available.

**Table S3.2: Cost per casemix-adjusted separation<sup>(a)</sup> and other statistics, acute, non-acute and total selected public hospitals, states and territories, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix-adjusted sep excl dep <sup>(f)</sup>	Cost/casemix-adjusted sep inc dep <sup>(g)</sup>
<b>Total benchmarking hospitals in cost per casemix-adjusted separation analysis<sup>(b)</sup></b>							
NSW	129	11,506	219	1.06	1.07	4,557	4,713
Vic	67	20,460	176	0.98	0.93	4,591	4,909
Qld	73	12,234	214	1.01	0.95	5,093	5,285
WA	35	13,900	225	0.95	1.01	4,728	4,848
SA	38	9,540	241	1.09	1.03	4,374	4,525
Tas	9	10,997	249	1.05	1.08	5,369	5,474
ACT	2	44,178	441	1.01	0.92	4,989	5,147
NT	5	19,939	262	0.69	1.17	5,517	5,563
<i>Total</i>	<i>358</i>	<i>13,643</i>	<i>192</i>	<i>1.01</i>	<i>1.00</i>	<i>4,706</i>	<i>4,905</i>
<b>Non-acute hospitals in cost per casemix-adjusted separation analysis</b>							
NSW	56	677	21	0.91	1.00	9,592	9,908
Vic	13	959	16	0.81	1.39	4,870	5,597
Qld	28	896	36	0.81	0.88	4,730	4,958
WA	47	337	12	1.08	1.03	7,326	7,597
SA	21	592	22	0.77	1.10	10,411	10,772
Tas	2	419	18	0.84	2.04	6,979	7,247
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>170</i>	<i>616</i>	<i>17</i>	<i>0.87</i>	<i>1.04</i>	<i>7,716</i>	<i>8,068</i>
<b>Public hospitals (including Psychiatric and unpeered) in cost per casemix-adjusted separation analysis</b>							
NSW	226	6,846	134	1.07	1.07	4,718	4,879
Vic	95	14,742	113	0.98	0.93	4,682	5,009
Qld	170	5,429	150	1.00	0.95	5,159	5,358
WA	95	5,325	153	0.96	1.01	5,017	5,146
SA	80	4,788	165	1.08	1.04	4,716	4,875
Tas	24	4,236	170	1.05	1.12	5,455	5,565
ACT <sup>(h)</sup>	2	44,178	441	1.01	0.92	4,989	5,147
NT	5	19,939	262	0.69	1.17	5,517	5,563
<i>Total</i>	<i>698</i>	<i>7,234</i>	<i>124</i>	<i>1.01</i>	<i>1.00</i>	<i>4,853</i>	<i>5,058</i>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

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

**Table S3.3: Principal referral and specialist women's & children's hospitals – cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix-adjusted sep excl dep <sup>(f)</sup>	Cost/casemix-adjusted sep inc dep <sup>(g)</sup>
<b>Principal referral hospitals: Major cities and regional</b>							
NSW	27	37,631	440	1.10	1.09	4,526	4,677
Vic	18	58,535	394	1.00	0.91	4,589	4,888
Qld	16	42,355	384	1.05	0.98	5,060	5,236
WA	5	53,561	438	1.02	1.04	4,514	4,615
SA	4	51,964	503	1.19	1.06	4,398	4,570
Tas	2	39,705	489	1.04	1.05	5,148	5,269
ACT	1	70,319	556	0.99	n.p.	n.p.	n.p.
NT	2	41,872	415	0.73	1.20	5,458	5,502
<i>Total</i>	<i>75</i>	<i>46,086</i>	<i>389</i>	<i>1.05</i>	<i>1.00</i>	<i>4,681</i>	<i>4,874</i>
<b>Specialist women's and children's hospitals</b>							
NSW	3	18,567	238	1.26	1.11	5,310	5,529
Vic	2	28,193	240	1.33	0.98	5,384	5,847
Qld	3	15,277	204	1.21	0.96	7,248	7,537
WA	2	19,402	203	1.30	1.06	4,814	4,917
SA	1	30,263	324	1.13	n.p.	n.p.	n.p.
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>11</i>	<i>20,635</i>	<i>230</i>	<i>1.26</i>	<i>1.05</i>	<i>5,616</i>	<i>5,865</i>
<b>Total Principal referral and specialist women's and children's hospitals</b>							
NSW	30	35,725	426	1.11	1.09	4,565	4,720
Vic	20	55,500	329	1.02	0.91	4,637	4,946
Qld	19	38,080	392	1.06	0.98	5,216	5,399
WA	7	43,801	383	1.06	1.04	4,560	4,661
SA	5	47,623	467	1.18	1.08	4,510	4,667
Tas	2	39,705	489	1.04	1.05	5,148	5,269
ACT	1	70,319	556	0.99	n.p.	n.p.	n.p.
NT	2	41,872	415	0.73	1.20	5,458	5,502
<i>Total</i>	<i>86</i>	<i>42,831</i>	<i>368</i>	<i>1.06</i>	<i>1.01</i>	<i>4,746</i>	<i>4,943</i>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

**Table S3.4: Large hospitals – cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix-adjusted sep excl dep <sup>(f)</sup>	Cost/casemix-adjusted sep inc dep <sup>(g)</sup>
<b>Large hospitals: Major cities</b>							
NSW	12	13,745	253	1.07	1.00	4,286	4,418
Vic	2	17,012	115	0.90	0.92	4,705	5,115
Qld	2	21,621	290	0.84	0.86	3,261	3,405
WA	2	21,719	300	0.77	0.91	4,365	4,447
SA	2	16,719	288	1.19	0.96	4,245	4,390
Tas	0	..	..	..	..	..	..
ACT	1	18,037	326	1.10	n.p.	n.p.	n.p.
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>21</i>	<i>16,053</i>	<i>261</i>	<i>0.99</i>	<i>0.97</i>	<i>4,244</i>	<i>4,406</i>
<b>Large hospitals: Regional and Remote</b>							
NSW	4	10,432	245	0.83	0.91	4,520	4,671
Vic	8	14,433	256	0.88	0.95	4,153	4,375
Qld	2	13,088	259	0.79	0.90	4,638	4,774
WA	2	15,643	249	0.68	0.99	4,252	4,374
SA	0	..	..	..	..	..	..
Tas	1	8,663	263	1.31	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>17</i>	<i>13,136</i>	<i>241</i>	<i>0.85</i>	<i>0.95</i>	<i>4,417</i>	<i>4,593</i>
<b>Total Large hospitals</b>							
NSW	16	12,917	271	1.02	0.99	4,328	4,464
Vic	10	14,948	221	0.89	0.95	4,243	4,520
Qld	4	17,354	274	0.82	0.87	3,751	3,895
WA	4	18,681	274	0.73	0.94	4,322	4,420
SA	2	16,719	288	1.19	0.96	4,245	4,390
Tas	1	8,663	263	1.31	n.p.	n.p.	n.p.
ACT	1	18,037	326	1.10	n.p.	n.p.	n.p.
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>38</i>	<i>14,748</i>	<i>245</i>	<i>0.94</i>	<i>0.96</i>	<i>4,310</i>	<i>4,478</i>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

**Table S3.5: Medium hospitals – cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, states and territories, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix-adjusted sep excl dep <sup>(f)</sup>	Cost/casemix-adjusted sep inc dep <sup>(g)</sup>
<b>Medium hospitals: Major cities (&lt;10,000) and Regional (&lt;8,000)</b>							
NSW	9	8,208	201	0.85	0.96	4,160	4,302
Vic	4	8,916	203	0.70	0.95	4,247	4,665
Qld	3	9,735	207	0.66	0.61	3,800	3,960
WA	6	10,822	178	0.79	0.95	5,324	5,475
SA	4	9,529	215	0.79	0.90	4,073	4,200
Tas	1	8,495	222	0.84	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	27	9,270	204	0.78	0.91	4,518	4,697
<b>Medium hospitals: Major cities and Regional (&lt;5,000 acute weighted separations)</b>							
NSW	24	3,306	76	0.90	1.10	5,074	5,248
Vic	13	4,175	102	0.70	1.03	4,178	4,535
Qld	9	3,799	127	0.79	0.86	5,315	5,573
WA	2	3,620	123	0.80	0.84	5,057	5,254
SA	9	3,579	129	0.86	0.87	3,752	3,877
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	57	3,636	99	0.82	1.00	4,681	4,913
<b>Total Medium hospitals</b>							
NSW	33	4,643	133	0.88	1.04	4,651	4,810
Vic	17	5,291	136	0.70	1.00	4,199	4,575
Qld	12	5,283	147	0.73	0.76	4,681	4,898
WA	8	9,021	164	0.79	0.93	5,297	5,453
SA	13	5,410	156	0.83	0.88	3,921	4,048
Tas	1	8,495	222	0.84	n.p.	n.p.	n.p.
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	84	5,447	142	0.80	0.96	4,600	4,806

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

**Table S3.6: Small hospitals – cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix-adjusted sep excl dep <sup>(f)</sup>	Cost/casemix-adjusted sep inc dep <sup>(g)</sup>
<b>Small regional acute hospitals</b>							
NSW	46	1,077	47	0.80	1.04	5,058	5,302
Vic	20	1,070	36	0.75	1.28	5,578	6,460
Qld	24	1,101	52	0.76	0.93	4,339	4,729
WA	4	1,604	71	0.78	1.12	6,108	6,483
SA	13	1,040	51	0.83	1.00	3,716	3,862
Tas	5	480	22	0.87	1.70	4,507	4,615
ACT	0	..	..	..	..	..	..
NT	0	..	..	..	..	..	..
<i>Total</i>	<i>112</i>	<i>1,069</i>	<i>37</i>	<i>0.78</i>	<i>1.07</i>	<i>4,884</i>	<i>5,266</i>
<b>Remote acute hospitals</b>							
NSW	4	793	34	0.66	0.97	7,700	8,207
Vic	0	..	..	..	..	..	..
Qld	14	738	48	0.77	1.03	7,154	7,658
WA	12	2,217	81	0.77	0.87	6,660	6,990
SA	5	1,426	55	0.82	0.91	3,445	3,627
Tas	0	..	..	..	..	..	..
ACT	0	..	..	..	..	..	..
NT	3	5,317	110	0.51	0.96	5,944	6,009
<i>Total</i>	<i>38</i>	<i>1,663</i>	<i>60</i>	<i>0.70</i>	<i>0.93</i>	<i>6,259</i>	<i>6,574</i>
<b>Total Small acute hospitals</b>							
NSW	50	1,054	46	0.79	1.04	5,194	5,452
Vic	20	1,070	36	0.75	1.28	5,578	6,460
Qld	38	967	45	0.76	0.96	5,131	5,547
WA	16	2,063	79	0.77	0.92	6,570	6,906
SA	18	1,147	52	0.82	0.97	3,624	3,784
Tas	5	480	22	0.87	1.70	4,507	4,615
ACT	0	..	..	..	..	..	..
NT	3	5,317	110	0.51	0.96	5,944	6,009
<b>Total</b>	<b>150</b>	<b>1,219</b>	<b>39</b>	<b>0.76</b>	<b>1.03</b>	<b>5,357</b>	<b>5,712</b>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

**Table S3.7: Teaching hospitals – cost per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, states and territories, 2009–10**

	Number of hospitals <sup>(b)</sup>	Separations per hospital	AR-DRGs (5+) per hospital <sup>(c)</sup>	Average cost weight <sup>(d)</sup>	Relative stay index <sup>(e)</sup>	Cost/casemix -adjusted sep excl dep <sup>(f)</sup>	Cost/casemix -adjusted sep incl dep <sup>(g)</sup>
NSW	20	41,156	429	1.15	1.10	4,561	4,723
Vic	5	28,215	239	1.18	0.97	5,154	5,491
Qld	22	32,956	365	1.07	0.97	5,224	5,411
WA	6	43,824	339	1.09	1.07	4,686	4,787
SA	9	31,242	363	1.18	1.05	4,489	4,643
Tas	3	29,358	413	1.07	1.06	5,297	5,406
ACT	2	44,178	441	1.01	0.92	4,989	5,147
NT	2	41,872	415	0.73	1.20	5,458	5,502
<b>Total</b>	<b>69</b>	<b>36,138</b>	<b>378</b>	<b>1.10</b>	<b>1.04</b>	<b>4,847</b>	<b>5,014</b>

Note: See boxes 3.1 to 3.4 for notes on limitations of the data and methods.

**Box 3.5: Notes for Chapter 3 supplementary table S3.8**

**Table S3.8:**

- (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).
- (b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore the number of separations in this category may be underestimated and others may be overestimated.
- (c) *Other* includes separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a public patient election status), *Other, No charge raised* (in private hospitals) and *Not reported*.

**Table S3.8: Relative stay index (directly standardised), by funding source, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.02	0.92	0.94	0.98	1.00	1.04	0.94	1.15	0.97
Private health insurance	1.08	0.96	1.04	1.09	1.08	1.03	0.95	1.01	1.05
Self-funded <sup>(b)</sup>	1.04	0.90	0.91	1.00	0.88	0.00	0.99	1.23	0.99
Workers compensation	1.15	1.01	1.11	1.15	1.14	0.97	0.93	1.35	1.10
Motor vehicle third party personal claim	1.18	0.88	1.22	1.14	1.28	1.08	0.81	1.34	1.08
Department of Veterans' Affairs	1.00	0.93	0.92	0.93	1.02	1.11	0.77	1.40	0.97
Other <sup>(c)</sup>	1.53	1.07	1.12	1.11	1.09	0.94	1.04	1.45	1.25
<b>Total</b>	<b>1.04</b>	<b>0.92</b>	<b>0.94</b>	<b>1.00</b>	<b>1.01</b>	<b>1.04</b>	<b>0.93</b>	<b>1.16</b>	<b>0.99</b>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	0.96	0.76	0.00	0.00	1.18	n.p.	n.p.	n.p.	1.15
Private health insurance	1.03	1.04	1.05	1.03	0.97	n.p.	n.p.	n.p.	1.03
Self-funded <sup>(b)</sup>	0.91	0.92	0.83	0.85	0.80	n.p.	n.p.	n.p.	0.89
Workers compensation	0.94	1.02	0.94	0.91	0.93	n.p.	n.p.	n.p.	0.96
Motor vehicle third party personal claim	0.84	1.01	0.79	0.97	1.29	n.p.	n.p.	n.p.	1.00
Department of Veterans' Affairs	1.18	1.06	1.21	1.26	1.01	n.p.	n.p.	n.p.	1.16
Other <sup>(c)</sup>	0.88	0.98	0.86	1.11	1.21	n.p.	n.p.	n.p.	0.96
<b>Total</b>	<b>1.03</b>	<b>1.04</b>	<b>1.05</b>	<b>1.04</b>	<b>0.97</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.03</b>
<b>All hospitals</b>									
Public patients <sup>(a)</sup>	1.02	0.92	0.94	0.98	1.00	n.p.	n.p.	n.p.	0.97
Private health insurance	1.05	1.03	1.05	1.04	0.99	n.p.	n.p.	n.p.	1.04
Self-funded <sup>(b)</sup>	0.96	0.92	0.85	0.86	0.82	n.p.	n.p.	n.p.	0.91
Workers compensation	1.01	1.01	1.00	0.98	0.99	n.p.	n.p.	n.p.	1.01
Motor vehicle third party personal claim	1.17	0.90	1.22	1.13	1.28	n.p.	n.p.	n.p.	1.07
Department of Veterans' Affairs	1.06	1.00	1.15	1.13	1.02	n.p.	n.p.	n.p.	1.07
Other <sup>(c)</sup>	1.38	1.05	0.93	1.11	1.14	n.p.	n.p.	n.p.	1.11
<b>Total</b>	<b>1.04</b>	<b>0.96</b>	<b>0.99</b>	<b>1.01</b>	<b>1.00</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, 2009–10**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Cataract extraction</b>									
Separations	70,076	48,960	41,131	21,101	15,551	5,864	2,027	914	205,624
Separations not within state of residence (%)	2	2	2	<1	3	25	20	1	3
Proportion of separations public patients <sup>(b)</sup> (%)	98	98	98	100	97	75	80	99	97
Separation rate <sup>(c)</sup>	8.9	8.3	9.4	9.8	7.7	9.6	6.9	8.1	8.8
Standardised separation rate ratio (SRR)	1.0	0.9	1.1	1.1	0.9	1.1	0.8	0.9	
<b>Cholecystectomy</b>									
Separations	15,604	12,790	10,405	4,677	4,043	1,219	790	365	49,893
Separations not within state of residence (%)	2	2	2	1	2	1	20	8	2
Proportion of separations public patients (%)	60	62	51	54	60	60	50	71	58
Separation rate <sup>(c)</sup>	2.1	2.3	2.3	2.1	2.3	2.3	2.3	1.8	2.2
Standardised separation rate ratio (SRR)	1.0	1.0	1.1	0.9	1.1	1.1	1.0	0.8	
<b>Coronary angioplasty</b>									
Separations	11,754	9,554	6,498	3,286	2,876	850	1,033	..	35,851
Separations not within state of residence (%)	2	3	10	1	10	1	43	..	5
Proportion of separations public patients (%)	47	45	44	45	53	54	48	..	46
Separation rate <sup>(c)</sup>	1.5	1.6	1.4	1.4	1.5	1.4	3.2	..	1.5
Standardised separation rate ratio (SRR)	1.0	1.1	0.9	0.9	1.0	0.9	2.1	..	
<b>Coronary artery bypass graft</b>									
Separations	3,888	3,465	2,826	624	1,083	277	212	..	12,375
Separations not within state of residence (%)	4	4	7	1	12	<1	47	..	6
Proportion of separations public patients (%)	51	51	50	54	48	52	61	..	51
Separation rate <sup>(c)</sup>	0.5	0.6	0.6	0.3	0.6	0.5	0.7	..	0.5
Standardised separation rate ratio (SRR)	0.9	1.1	1.2	0.5	1.1	0.9	1.3	..	

*(continued)*

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2009–10**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Cystoscopy</b>									
Separations	30,410	30,442	23,019	15,095	10,287	3,299	1,539	476	114,567
Separations not within state of residence (%)	2	2	4	<1	2	<1	28	3	2
Proportion of separations public patients (%)	36	47	32	40	40	30	37	48	39
Separation rate <sup>(c)</sup>	3.9	5.2	5.1	6.8	5.4	5.5	4.8	3.1	4.9
Standardised separation rate ratio (SRR)	0.8	1.1	1.0	1.4	1.1	1.1	1.0	0.6	
<b>Haemorrhoidectomy</b>									
Separations	19,036	8,456	6,333	2,524	2,296	1,074	391	438	40,548
Separations not within state of residence (%)	1	2	1	<1	1	<1	11	1	1
Proportion of separations public patients (%)	28	41	22	42	28	38	28	30	31
Separation rate <sup>(c)</sup>	2.6	1.5	1.4	1.1	1.3	2.0	1.1	2.2	1.8
Standardised separation rate ratio (SRR)	1.4	0.8	0.8	0.6	0.7	1.1	0.6	1.2	
<b>Hip replacement</b>									
Separations	10,588	9,190	5,627	3,537	3,092	1,120	711	65	33,930
Separations not within state of residence (%)	2	3	5	<1	3	<1	34	3	3
Proportion of separations public patients (%)	39	39	36	38	35	36	43	65	38
Separation rate <sup>(c)</sup>	1.3	1.5	1.2	1.6	1.5	1.8	2.3	0.5	1.4
Standardised separation rate ratio (SRR)	0.9	1.1	0.9	1.1	1.1	1.3	1.6	0.4	
<b>Hysterectomy, females aged 15–69</b>									
Separations	8,186	6,081	5,747	2,843	2,332	711	434	187	26,521
Separations not within state of residence (%)	2	2	3	<1	2	1	24	1	2
Proportion of separations public patients (%)	39	50	35	35	43	43	31	42	41
Separation rate <sup>(c)</sup>	2.3	2.2	2.6	2.5	2.8	2.7	2.4	1.8	2.4
Standardised separation rate ratio (SRR)	1.0	0.9	1.1	1.1	1.2	1.2	1.0	0.7	

(continued)

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2009–10**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Inguinal herniorrhaphy</b>									
Separations	15,979	12,616	10,239	5,051	3,665	1,335	769	382	50,036
Separations not within state of residence (%)	2	2	2	<1	1	<1	22	3	2
Proportion of separations public patients (%)	39	43	35	40	43	42	38	43	40
Separation rate <sup>(c)</sup>	2.1	2.2	2.3	2.2	2.1	2.4	2.3	2.1	2.2
Standardised separation rate ratio (SRR)	1.0	1.0	1.0	1.0	0.9	1.1	1.0	1.0	
<b>Knee replacement</b>									
Separations	13,749	8,847	8,262	3,981	3,657	960	809	73	40,338
Separations not within state of residence (%)	1	3	6	<1	6	<1	36	4	4
Proportion of separations public patients (%)	35	34	27	32	28	32	25	49	32
Separation rate <sup>(c)</sup>	1.7	1.5	1.8	1.8	1.9	1.5	2.5	0.5	1.7
Standardised separation rate ratio (SRR)	1.0	0.9	1.1	1.0	1.1	0.9	1.5	0.3	
<b>Myringotomy (with insertion of tube)</b>									
Separations	9,537	9,084	6,531	4,302	4,718	676	836	281	35,965
Separations not within state of residence (%)	2	2	3	<1	1	10	24	1	3
Proportion of separations public patients (%)	30	39	27	35	34	39	26	70	33
Separation rate <sup>(c)</sup>	1.4	1.8	1.5	2.0	3.2	1.4	2.5	1.1	1.7
Standardised separation rate ratio (SRR)	0.8	1.0	0.9	1.2	1.9	0.8	1.5	0.6	
<b>Prostatectomy</b>									
Separations	10,612	9,591	5,904	2,767	2,573	871	508	93	32,919
Separations not within state of residence (%)	3	2	6	<1	2	<1	36	2	3
Proportion of separations public patients (%)	32	33	25	30	33	26	20	54	31
Separation rate <sup>(c)</sup>	2.9	3.5	2.7	2.5	2.8	3.0	3.4	1.7	2.9
Standardised separation rate ratio (SRR)	1.0	1.2	0.9	0.9	1.0	1.0	1.2	0.6	

*(continued)*

**Table S3.9 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2009–10**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Septoplasty</b>									
Separations	7,503	7,771	4,095	2,057	2,346	246	445	100	24,563
Separations not within state of residence (%)	3	2	4	<1	2	<1	27	<1	3
Proportion of separations public patients (%)	22	33	17	28	31	23	32	31	26
Separation rate <sup>(c)</sup>	1.0	1.4	0.9	0.9	1.4	0.5	1.2	0.4	1.1
Standardised separation rate ratio (SRR)	0.9	1.3	0.8	0.8	1.3	0.4	1.1	0.4	
<b>Tonsillectomy</b>									
Separations	13,873	11,618	9,663	5,328	4,218	855	1,040	249	46,844
Separations not within state of residence (%)	2	3	3	<1	1	<1	28	1	3
Proportion of separations public patients (%)	36	50	29	38	40	40	27	59	38
Separation rate <sup>(c)</sup>	2.1	2.3	2.2	2.4	2.9	1.8	3.0	1.0	2.2
Standardised separation rate ratio (SRR)	0.9	1.0	1.0	1.1	1.3	0.8	1.4	0.4	
<b>Varicose veins, stripping and ligation</b>									
Separations	3,993	4,608	2,422	1,185	1,209	386	343	82	14,228
Separations not within state of residence (%)	1	1	3	<1	1	<1	26	<1	2
Proportion of separations public patients (%)	32	43	26	20	42	22	28	40	34
Separation rate <sup>(c)</sup>	0.5	0.8	0.5	0.5	0.7	0.7	1.0	0.4	0.6

(a) The procedures are defined using ACHI codes as detailed in *Appendix 1*.

(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 1*.

Abbreviation: . .—not applicable.

**Table S3.10: Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>E62C Respiratory infections/inflammations W/O CC</b>										
ALOS (days)	Public	3.5	2.7	2.7	3.1	3.2	4.2	3.2	3.5	3.1
	Private	5.0	5.2	4.6	4.4	4.6	n.p.	n.p.	n.p.	4.9
	<i>Total</i>	3.6	3.2	3.1	3.2	3.5	n.p.	n.p.	n.p.	3.4
Separations	Public	9,912	6,651	5,299	3,005	2,470	648	394	600	28,979
	Private	612	1,478	1,473	363	483	n.p.	n.p.	n.p.	4,547
	<i>Total</i>	10,524	8,129	6,772	3,368	2,953	n.p.	n.p.	n.p.	33,526
<b>E65B Chronic obstructive airway disease W/O catastrophic or severe CC</b>										
ALOS (days)	Public	4.7	3.8	4.1	4.4	4.1	5.4	4.3	4.2	4.3
	Private	7.0	6.8	6.8	7.1	5.5	n.p.	n.p.	n.p.	6.7
	<i>Total</i>	4.9	4.3	4.7	4.8	4.3	n.p.	n.p.	n.p.	4.7
Separations	Public	10,026	5,716	5,462	2,273	2,470	833	266	561	27,607
	Private	676	1,307	1,690	392	475	n.p.	n.p.	n.p.	4,674
	<i>Total</i>	10,702	7,023	7,152	2,665	2,945	n.p.	n.p.	n.p.	32,281
<b>E69C Bronchitis and asthma age&lt;50 W/O CC</b>										
ALOS (days)	Public	1.6	1.4	1.4	1.6	1.7	1.7	1.7	1.9	1.5
	Private	2.5	2.6	2.0	2.2	3.3	n.p.	n.p.	n.p.	2.3
	<i>Total</i>	1.6	1.4	1.5	1.7	1.7	n.p.	n.p.	n.p.	1.6
Separations	Public	10,582	7,377	5,377	2,120	2,850	464	295	308	29,373
	Private	127	251	646	97	86	n.p.	n.p.	n.p.	1,224
	<i>Total</i>	10,709	7,628	6,023	2,217	2,936	n.p.	n.p.	n.p.	30,597

*(continued)*

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>F62B Heart failure and shock W/O catastrophic CC</b>										
	ALOS (days)	Public	5.3	4.0	4.5	4.5	5.3	5.7	5.4	4.8
		Private	8.3	7.2	7.5	7.1	7.1	n.p.	n.p.	n.p.
		<i>Total</i>	5.6	4.8	5.5	4.9	5.7	n.p.	n.p.	5.3
	Separations	Public	8,103	5,883	4,026	2,226	1,984	555	306	277
		Private	953	2,007	1,800	473	587	n.p.	n.p.	6,040
		<i>Total</i>	9,056	7,890	5,826	2,699	2,571	n.p.	n.p.	29,400
<b>F71B Non-major arrhythmia and conduction disorders W/O catastrophic or severe CC</b>										
	ALOS (days)	Public	2.5	1.9	2.0	1.8	2.2	2.2	2.4	2.2
		Private	2.0	2.2	2.3	1.6	2.0	n.p.	n.p.	n.p.
		<i>Total</i>	2.4	2.0	2.1	1.7	2.1	n.p.	n.p.	2.1
	Separations	Public	11,661	8,371	5,903	2,768	2,994	762	572	292
		Private	2,206	3,284	3,671	1,478	1,410	n.p.	n.p.	12,500
		<i>Total</i>	13,867	11,655	9,574	4,246	4,404	n.p.	n.p.	45,823
<b>G07B Appendectomy W/O Catastrophic or Severe CC</b>										
	ALOS (days)	Public	2.7	2.5	2.3	2.4	2.6	2.4	2.6	2.7
		Private	2.3	2.3	2.0	2.4	2.5	n.p.	n.p.	2.6
		<i>Total</i>	2.7	2.5	2.2	2.4	2.6	n.p.	n.p.	2.5
	Separations	Public	6,996	4,939	3,786	2,427	1,335	407	490	197
		Private	766	1,112	1,959	629	382	n.p.	n.p.	n.p.
		<i>Total</i>	7,762	6,051	5,745	3,056	1,717	n.p.	n.p.	25,629

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>G08B</b>	<b>Abdominal and other hernia procedures age 1 to 59 or W catastrophic or severe CC</b>									
ALOS (days)	Public	1.5	1.5	1.4	1.5	1.7	1.4	1.5	1.7	1.5
	Private	1.4	1.4	1.2	1.5	1.6	n.p.	n.p.	n.p.	1.4
	<i>Total</i>	1.4	1.4	1.3	1.5	1.7	n.p.	n.p.	n.p.	1.4
Separations	Public	2,308	2,187	1,565	820	649	218	101	88	7,936
	Private	2,422	1,763	2,039	924	550	n.p.	n.p.	n.p.	8,060
	<i>Total</i>	4,730	3,950	3,604	1,744	1,199	n.p.	n.p.	n.p.	15,996
<b>G09Z</b>	<b>Inguinal and femoral hernia procedures age&gt;0</b>									
ALOS (days)	Public	1.3	1.4	1.3	1.2	1.4	1.2	1.3	1.5	1.3
	Private	1.3	1.3	1.2	1.3	1.3	n.p.	n.p.	n.p.	1.3
	<i>Total</i>	1.3	1.3	1.2	1.3	1.3	n.p.	n.p.	n.p.	1.3
Separations	Public	5,360	4,681	3,015	1,740	1,367	440	193	136	16,932
	Private	7,305	5,417	5,212	2,324	1,594	n.p.	n.p.	n.p.	23,090
	<i>Total</i>	12,665	10,098	8,227	4,064	2,961	n.p.	n.p.	n.p.	40,022
<b>H08B</b>	<b>Laparoscopic cholecystectomy W/O closed CDE W/O catastrophic or severe CC</b>									
ALOS (days)	Public	1.9	1.9	1.8	1.9	1.9	1.6	2.0	2.2	1.9
	Private	1.5	1.8	1.7	1.7	1.8	n.p.	n.p.	n.p.	1.7
	<i>Total</i>	1.7	1.8	1.7	1.8	1.9	n.p.	n.p.	n.p.	1.8
Separations	Public	6,890	5,559	3,933	1,919	1,760	551	288	176	21,076
	Private	5,256	4,000	4,174	1,798	1,297	n.p.	n.p.	n.p.	17,376
	<i>Total</i>	12,146	9,559	8,107	3,717	3,057	n.p.	n.p.	n.p.	38,452

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>I03C</b>	<b>Hip replacement W/O catastrophic or severe CC</b>									
	ALOS (days)	Public	6.6	6.4	6.5	6.5	6.6	5.4	n.p.	6.5
		Private	6.3	6.9	6.3	7.8	6.8	n.p.	n.p.	6.6
		<i>Total</i>	6.4	6.7	6.4	7.3	6.7	n.p.	n.p.	6.6
	Separations	Public	2,931	2,090	1,169	870	712	297	158	22
		Private	4,164	3,762	2,532	1,473	1,479	n.p.	n.p.	14,202
		<i>Total</i>	7,095	5,852	3,701	2,343	2,191	n.p.	n.p.	22,451
<b>I04Z</b>	<b>Knee replacement and reattachment</b>									
	ALOS (days)	Public	6.8	6.9	7.4	7.5	6.6	6.3	4.4	n.p.
		Private	6.7	7.2	6.6	8.8	6.7	n.p.	n.p.	7.0
		<i>Total</i>	6.7	7.1	6.8	8.4	6.7	n.p.	n.p.	7.0
	Separations	Public	4,915	3,117	2,210	1,280	1,119	303	199	35
		Private	7,867	5,562	5,706	2,535	2,468	n.p.	n.p.	25,322
		<i>Total</i>	12,782	8,679	7,916	3,815	3,587	n.p.	n.p.	38,500
<b>I16Z</b>	<b>Other shoulder procedures</b>									
	ALOS (days)	Public	1.5	1.6	1.4	1.4	1.7	1.7	1.4	n.p.
		Private	1.4	1.3	1.3	1.4	1.4	n.p.	n.p.	1.3
		<i>Total</i>	1.4	1.4	1.3	1.4	1.4	n.p.	n.p.	1.4
	Separations	Public	1,884	1,596	1,246	982	611	133	126	45
		Private	8,524	7,761	6,613	5,083	2,932	n.p.	n.p.	32,381
		<i>Total</i>	10,408	9,357	7,859	6,065	3,543	n.p.	n.p.	39,004

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>L63B</b>	<b>Kidney and urinary tract infections age&gt;69 W/O catastrophic CC</b>									
ALOS (days)	Public	5.2	4.1	4.3	4.6	4.9	5.3	4.1	5.4	4.7
	Private	7.3	6.8	6.4	6.5	6.9	n.p.	n.p.	n.p.	6.7
	<i>Total</i>	5.3	4.7	4.9	4.9	5.3	n.p.	n.p.	n.p.	5.0
Separations	Public	7,046	4,696	3,499	1,628	1,583	260	194	121	19,027
	Private	552	1,238	1,484	328	357	n.p.	n.p.	n.p.	4,070
	<i>Total</i>	7,598	5,934	4,983	1,956	1,940	n.p.	n.p.	n.p.	23,097
<b>M02B</b>	<b>Transurethral prostatectomy W/O catastrophic or severe CC</b>									
ALOS (days)	Public	3.1	2.6	2.6	2.7	2.8	3.1	n.p.	n.p.	2.8
	Private	2.7	2.9	2.9	2.7	3.3	n.p.	n.p.	n.p.	2.9
	<i>Total</i>	2.9	2.8	2.8	2.7	3.1	n.p.	n.p.	n.p.	2.9
Separations	Public	2,096	2,018	951	539	556	126	38	35	6,359
	Private	3,719	3,384	2,363	987	891	n.p.	n.p.	n.p.	11,853
	<i>Total</i>	5,815	5,402	3,314	1,526	1,447	n.p.	n.p.	n.p.	18,212
<b>N04Z</b>	<b>Hysterectomy for non-malignancy</b>									
ALOS (days)	Public	3.5	3.7	3.3	3.6	3.6	3.4	3.9	4.6	3.6
	Private	3.7	4.2	3.4	3.7	4.0	n.p.	n.p.	n.p.	3.8
	<i>Total</i>	3.6	3.9	3.4	3.7	3.8	n.p.	n.p.	n.p.	3.7
Separations	Public	3,382	3,111	1,893	988	1,022	292	130	82	10,900
	Private	4,324	2,698	3,437	1,702	1,135	n.p.	n.p.	n.p.	14,080
	<i>Total</i>	7,706	5,809	5,330	2,690	2,157	n.p.	n.p.	n.p.	24,980

*(continued)*

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>N06Z Female reproductive system reconstructive procedures</b>										
	ALOS (days)	Public	2.6	2.4	2.0	2.7	2.4	2.3	2.0	n.p.
		Private	2.9	2.8	2.3	3.0	3.0	n.p.	n.p.	2.8
		<i>Total</i>	2.8	2.6	2.2	2.9	2.8	n.p.	n.p.	2.6
	Separations	Public	2,111	1,766	1,089	522	612	220	57	21
		Private	3,497	2,164	2,593	1,049	1,002	n.p.	n.p.	10,813
		<i>Total</i>	5,608	3,930	3,682	1,571	1,614	n.p.	n.p.	17,211
<b>O01C Caesarean delivery W moderate complicating diagnosis<sup>(c)</sup></b>										
	ALOS (days)	Public	4.0	3.9	3.6	4.0	4.3	4.0	3.9	4.7
		Private	5.1	5.1	4.6	5.6	5.2	n.p.	n.p.	5.0
		<i>Total</i>	4.4	4.4	4.0	4.8	4.6	n.p.	n.p.	4.4
	Separations	Public	15,325	10,959	8,846	4,027	3,081	903	776	566
		Private	8,301	7,156	7,341	4,010	1,719	n.p.	n.p.	30,031
		<i>Total</i>	23,626	18,115	16,187	8,037	4,800	n.p.	n.p.	74,514
<b>O60B Vaginal delivery W severe complicating diagnosis<sup>(c)</sup></b>										
	ALOS (days)	Public	2.7	2.5	2.4	2.7	2.8	2.8	2.3	2.9
		Private	4.2	4.2	3.9	4.4	4.2	n.p.	n.p.	4.1
		<i>Total</i>	3.0	2.9	2.8	3.2	3.1	n.p.	n.p.	3.0
	Separations	Public	35,977	27,197	20,334	10,019	6,824	1,813	2,007	1,236
		Private	11,420	10,130	7,423	4,360	2,415	n.p.	n.p.	37,854
		<i>Total</i>	47,397	37,327	27,757	14,379	9,239	n.p.	n.p.	143,261

(continued)

**Table S3.10 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs version 5.2, public and private hospitals, states and territories, 2009–10**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>R61B Lymphoma and non-acute leukaemia W/O catastrophic CC</b>										
ALOS (days)	Public	5.2	4.3	4.8	5.2	5.1	5.2	8.3	n.p.	5.0
	Private	3.5	3.6	5.3	2.9	4.1	n.p.	n.p.	n.p.	4.0
	<i>Total</i>	<i>4.9</i>	<i>3.9</i>	<i>5.1</i>	<i>3.9</i>	<i>4.6</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>4.5</i>
Separations	Public	2,705	2,191	999	716	738	268	153	41	7,811
	Private	626	2,212	1,601	869	683	n.p.	n.p.	n.p.	6,113
	<i>Total</i>	<i>3,331</i>	<i>4,403</i>	<i>2,600</i>	<i>1,585</i>	<i>1,421</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>13,924</i>
<b>U63B Major affective disorders age&lt;70 W/O catastrophic or severe CC</b>										
ALOS (days)	Public	15.1	13.8	13.3	14.3	12.2	15.4	17.4	12.7	14.1
	Private	19.4	19.1	20.8	13.5	18.0	n.p.	n.p.	n.p.	18.7
	<i>Total</i>	<i>16.7</i>	<i>16.4</i>	<i>16.9</i>	<i>13.9</i>	<i>13.5</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>16.0</i>
Separations	Public	5,850	4,035	2,841	1,945	2,386	379	267	148	17,851
	Private	3,682	3,954	2,698	1,800	695	n.p.	n.p.	n.p.	13,399
	<i>Total</i>	<i>9,532</i>	<i>7,989</i>	<i>5,539</i>	<i>3,745</i>	<i>3,081</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>31,250</i>

(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.

(b) Average length of stay has been suppressed for AR-DRGs for which less than 50 separations were reported.

(c) Maternity services purchased from the private sector rather than being provided by public hospitals will result in an understating of separation rates for obstetric conditions in the public sector.

Abbreviations: ALOS—average length of stay; CC—complications and comorbidities; CDE—common duct exploration; n.p.—not published; W—with; W/O—without.

# 4 Australia's hospital resources

This chapter presents an overview of public and private hospitals in 2009–10, 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 2008–09* (AIHW 2010d). 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.

Information on expenditure and revenue for private hospitals was sourced from the Australian Bureau of Statistics' *Private hospitals Australia 2008–09* (ABS 2010). For 2009–10, information on the number of private hospitals and private hospital beds was mainly provided by states and territories. Information on the number of *Private free standing day hospital facilities* and beds for New South Wales, South Australia and the Northern Territory was sourced from the Department of Health and Ageing (DoHA 2010, unpublished data) as data were not available from states and territories (see *Appendix 1*).

### 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 *Appendix 2*).

#### 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.
- 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.
- For Queensland, bed numbers are based on a count on 30 June 2010.

(continued)

**Box 4.1 (continued)**

- 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. See *Appendix 1* for more information.

**Public hospital financial data**

- A small number of establishments in 2009–10 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, such as recurrent expenditure on purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals.
- Expenditure on public patients hospitalised in other jurisdictions may not be included in the report.

**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 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 (see *Appendix 2*).

**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 2*).
- 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.

(continued)

**Box 4.1 (continued)**

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 chapter was based on the ABS 2006 Australian Standard Geographical Classifications (see Appendix 1). Beds per 1,000 population in remoteness area is reported as a crude rate based on the 30 June 2009 population in the remoteness area in question.
- Depreciation represents a significant portion of expenditure, and expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions.

## How do hospitals vary across states and territories?

### How many hospitals?

Table 4.1 presents the number of public and private hospitals by state and territory for 2009–10. It shows 30% of reported hospitals were in New South Wales, 23% in Victoria, 21% in Queensland and 11% in Western Australia.

**Table 4.1: Public and private hospitals, states and territories, 2009–10**

	NSW	Vic <sup>(a)</sup>	Qld <sup>(b)</sup>	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Total
<b>Public hospitals</b>									
Public acute hospitals	218	149	166	94	78	23	3	5	736
Public psychiatric hospitals	8	1	4	1	2	1	0	0	17
<b>Private hospitals<sup>(d)</sup></b>									
Private free standing day hospital facilities	89	82	53	32	25	2	9	1	293
Other private hospitals	84	79	53	23	31	6	3	1	280
<b>Total</b>	<b>399</b>	<b>311</b>	<b>276</b>	<b>150</b>	<b>136</b>	<b>32</b>	<b>15</b>	<b>7</b>	<b>1,326</b>

(a) The number of hospitals in Victoria is reported as a count of the campuses that reported data separately to the National Hospital Morbidity Database in 2009–10.

(b) The count of private hospitals and licensed beds in Queensland was based on data as at June 2010.

(c) 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.

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

*Abbreviation:* . —not applicable.

## How many beds?

In 2009–10, the number of available beds in public acute hospitals ranged from 2.3 per 1,000 population in Queensland and Western Australia, to 3.0 per 1,000 population in the Northern Territory (Table 4.2). The total number of available beds in public and private hospitals combined ranged from 3.6 per 1,000 population in the Northern Territory to 4.6 per 1,000 population in Tasmania in 2009–10.

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. See *Appendix 1* for more information.

**Table 4.2: Public and private hospital average available beds<sup>(a)</sup> and number of average available beds per 1,000 population<sup>(b)</sup>, states and territories, 2009–10**

	NSW	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Available or licensed beds<sup>(a)</sup></b>									
Public hospitals									
Public acute hospitals	18,651	13,032	10,453	5,163	4,632	1,280	907	694	54,812
Public psychiatric hospitals	956	154	458	213	227	79	..	..	2,088
Private hospitals <sup>(d)</sup>									
Private free standing day hospital facilities	644	621	414	351	150	9	64	7	2,260
Other private hospitals	6,323	6,880	5,945	3,085	2,158	939	328	120	25,778
<b>Total beds</b>	<b>26,575</b>	<b>20,687</b>	<b>17,270</b>	<b>8,812</b>	<b>7,167</b>	<b>2,307</b>	<b>1,299</b>	<b>821</b>	<b>84,938</b>
<b>Available or licensed beds per 1,000 population<sup>(a)(b)</sup></b>									
Public hospitals									
Public acute hospitals	2.6	2.4	2.3	2.3	2.8	2.5	2.6	3.0	2.5
Public psychiatric hospitals	0.1	<0.1	0.1	0.1	0.1	0.2	..	..	0.1
Private hospitals <sup>(d)</sup>									
Private free standing day hospital facilities	0.1	0.1	0.1	0.2	0.1	<0.1	0.2	<0.1	0.1
Other private hospitals	0.9	1.3	1.3	1.4	1.3	1.9	0.9	0.5	1.2
<b>Total beds per 1,000 population<sup>(a)(b)</sup></b>	<b>3.7</b>	<b>3.8</b>	<b>3.9</b>	<b>3.9</b>	<b>4.4</b>	<b>4.6</b>	<b>3.7</b>	<b>3.6</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. The Australian Bureau of Statistics' Private Hospitals Australia reported 27,180 private hospital beds/chairs in 2008–09 (ABS 2010).

(b) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 31 December 2009.

(c) The count of private hospitals and licensed beds in Queensland was based on data as at June 2010.

(d) Information on private hospital bed numbers was mainly provided by states and territories. Information on the number of Private free standing day hospital facilities beds for New South Wales, South Australia and the Northern Territory was sourced from the Department of Health and Ageing (DoHA 2010, unpublished data).

*Note:* See boxes 4.1 and 4.2 for notes on data limitations and methods. See *Appendix 1* for notes on average available beds for same-day and overnight admitted patients.

*Abbreviation:* ..—not applicable.

# Public hospitals

## How diverse are public hospitals?

The **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 1*.

The 753 public hospitals are very diverse in size and in the types of services they provided for admitted and non-admitted patients (Table 4.3). The diversity of admitted patient services provided by each type can be gauged by the average number of Australian Refined Diagnosis Related Groups reported (AR-DRGs).

In 2009–10, there were:

- 75 *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 454 AR-DRGs on average). These hospitals accounted for a total of 3.3 million separations or 65% of the total for public hospitals (Figure 4.1), and for 10.9 million days or 61% 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 20,635 separations per hospital, specialising in maternity and other specialist services for women, and/or specialist paediatric services.
- 43 *Large hospitals*—26 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 265 AR-DRGs), with an average of 15,190 separations per hospital.
- 92 *Medium hospitals*—23 in major cities and 69 in regional areas. They delivered an average of 5,899 separations per hospital (with a narrower range of services than the *Large hospitals*), most had accident and emergency services (rather than formal emergency departments) and some had outpatient clinics.
- 154 *Small acute hospitals*—116 in regional areas and 38 in remote areas. They delivered mainly acute care for admitted patients, with an average of 1,218 separations per hospital in the year, with a relatively narrow range of services (5 or more separations for an average of 51 AR-DRGs). They generally did not have emergency departments although most provided accident and 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 and 2 in regional areas.
- 8 specialist *Mothercraft hospitals*—located in Sydney, Melbourne, Brisbane and Canberra.

- 83 *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.
- 78 *Multi-purpose services* – in regional and remote areas. These hospitals were generally combined with services for residential aged care and mainly provide non-acute admitted patient care.
- 184 other hospitals, mainly small or specialist hospitals.

More information on hospitals by state and territory is presented in supplementary tables at the end of *Chapter 3*.

**Table 4.3: The diversity of public hospitals, 2009–10**

Hospital type	Number of hospitals												
	Location			Services provided									
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Accident and 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	50	24	1	75	75	75	74	74	413	43,591	3.3	8.4	454
Specialist women's and children's	11	0	0	11	9	9	11	11	199	20,635	3.1	0.4	231
Large	26	16	1	43	41	41	38	36	142	15,190	3.0	13.9	265
Medium	23	69	0	92	30	76	8	46	64	5,899	3.1	23.2	143
Small acute	0	116	38	154	20	146	2	20	22	1,218	3.1	9.1	51
Psychiatric <sup>(f)</sup>	13	4	0	17	0	0	0	0	123	658	58.8	52.4	10
Rehabilitation	6	2	0	8	0	0	1	1	69	975	21.8	90.8	13
Mothercraft	8	0	0	8	0	0	0	0	26	1,681	3.7	0.0	9
Small non-acute	16	54	13	83	3	61	1	3	32	805	11.0	71.8	30
Multi-purpose services	0	45	33	78	0	70	0	0	12	346	3.9	29.1	13
Other	28	86	70	184	6	122	0	1	11	284	9.7	79.3	5
<b>Total</b>	<b>181</b>	<b>419</b>	<b>156</b>	<b>753</b>	<b>184</b>	<b>600</b>	<b>135</b>	<b>192</b>	<b>76</b>	<b>6,718</b>	<b>3.6</b>	<b>17.1</b>	<b>98</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 accident and emergency occasions of service data to the National Public Hospital Establishments Database.

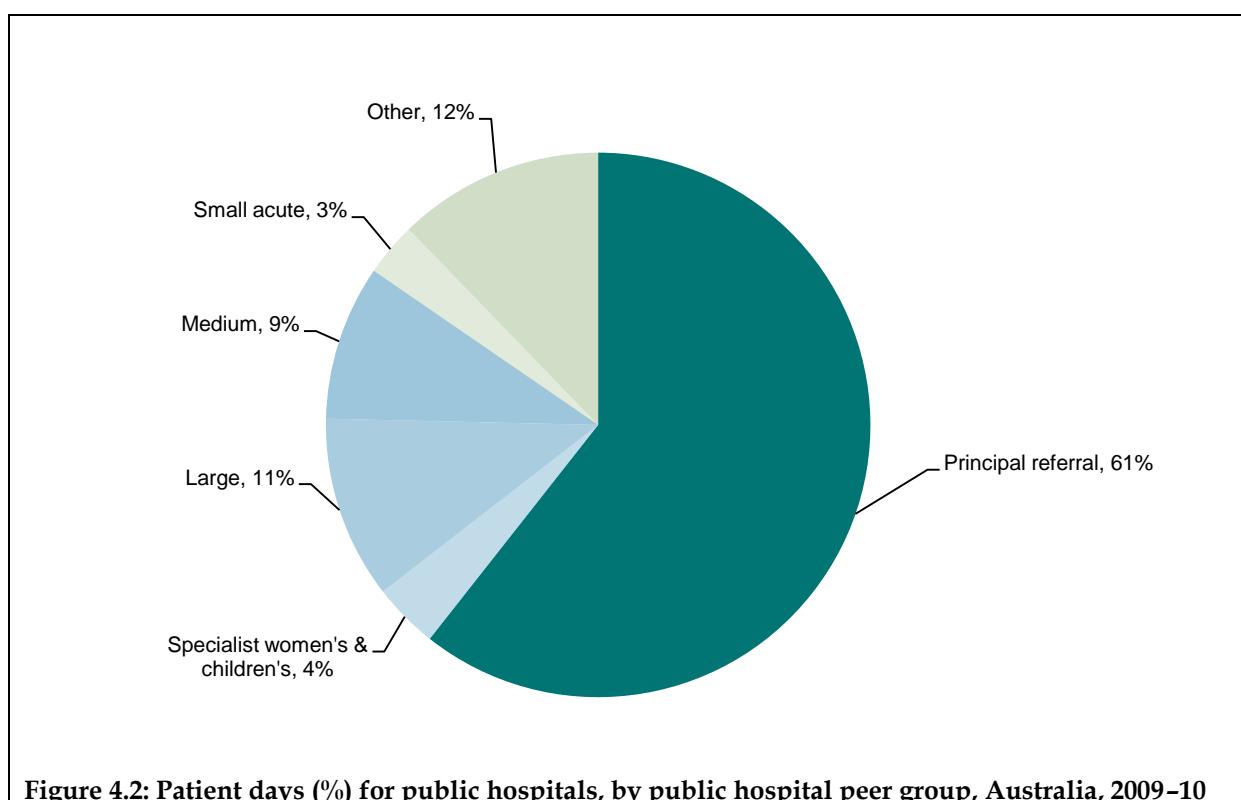
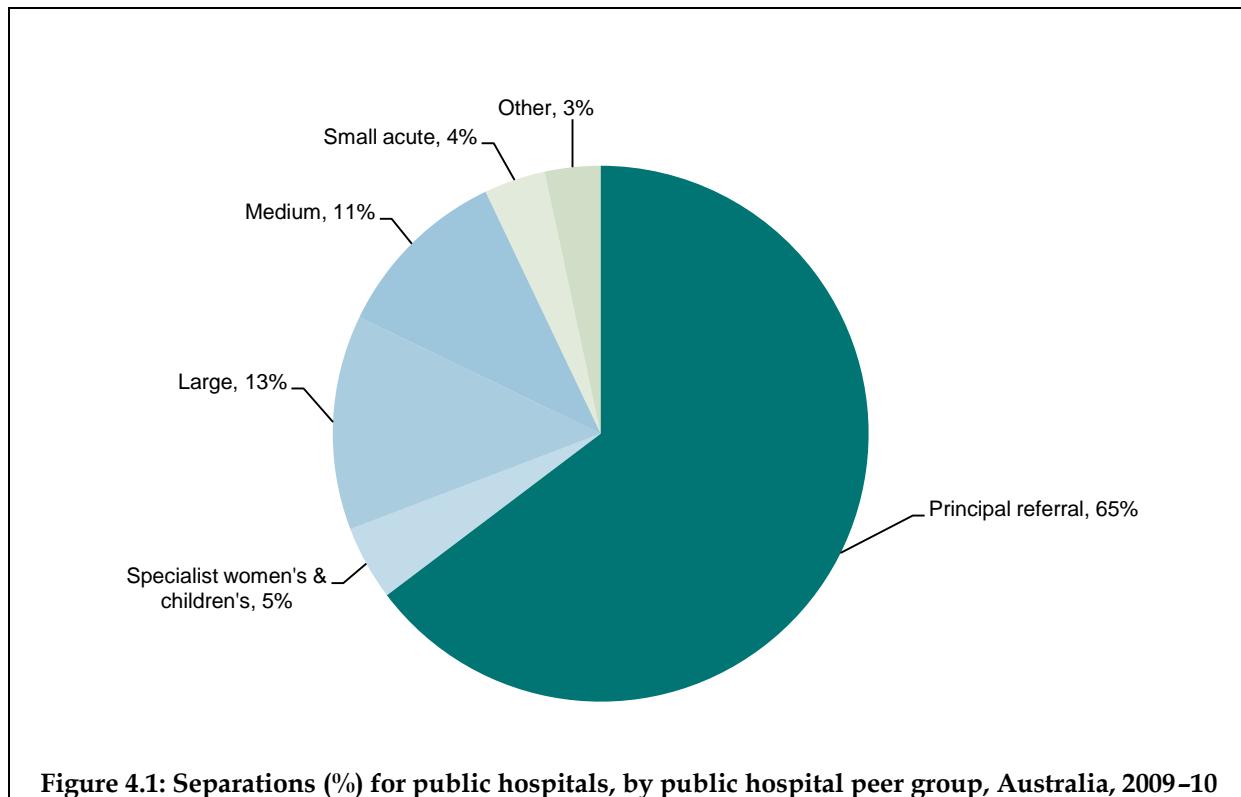
(c) This is the number of hospitals reporting outpatient clinic-level non-admitted patient data to the National Outpatient Care Database.

(d) This is the number of hospitals reporting episode-level 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.

(f) For 2009–10, Tasmania reported three public psychiatric hospitals as one establishment. These were previously reported separately.

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



## How many hospital beds?

Grouping hospitals by number of available beds showed that the majority are very small (Table 4.4). 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 1,008 beds and was located in Brisbane. Over 70% of hospitals had 50 beds or less.

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 40% of hospital beds were in hospitals with more than 200 to 500 beds (Table S4.1)

**Table 4.4: Number of public acute and psychiatric hospitals and average available beds, by hospital size, 2009–10**

Hospital size	Hospitals	Proportion of total public hospital beds (per cent)	Average available beds	Proportion of total public hospital beds (per cent)
10 or fewer beds	215	29.0	1,001	1.8
More than 10 to 50 beds	322	43.0	8,009	14.1
More than 50 to 100 beds	72	10.0	5,293	9.3
More than 100 to 200 beds	64	8.0	9,667	17.0
More than 200 to 500 beds	57	8.0	17,400	30.6
More than 500 beds	23	3.0	15,530	27.3
<b>Total</b>	<b>753</b>	<b>100.0</b>	<b>56,900</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 4.5 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* (36,943).

In 2009–10, there were 2 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 4.5: Number of hospitals, average available beds and number of average available beds per 1,000 population resident in area<sup>(a)</sup>, by remoteness area, public acute and psychiatric hospitals, 2009–10**

Remoteness area	Hospitals	Average available beds	Average available beds per 1,000 population resident in area <sup>(a)</sup>
Major cities	178	36,953	2.5
Inner regional	194	11,475	2.7
Outer regional	225	6,481	3.1
<i>Total regional</i>	<i>419</i>	<i>17,956</i>	<i>2.8</i>
Remote	80	1,409	4.3
Very remote	76	579	3.3
<i>Total remote</i>	<i>156</i>	<i>1,987</i>	<i>4.0</i>
<b>Total</b>	<b>753</b>	<b>56,900</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 2009.

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 *Salary expenditure* and *Non-salary expenditure*, is presented in Table 4.6. Nationally, total recurrent expenditure by public acute and psychiatric hospitals, excluding depreciation, was over \$33.7 billion in 2009–10.

With payments to *Visiting medical officers* and payments for outsourced services excluded, salary payments accounted for 62% of the \$33.7 billion spent within the public hospital system.

Depreciation represents a significant portion of expenditure, and expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions. In 2009–10, depreciation ranged from 6.8% of total expenditure in Victoria to 0.8% in the Northern Territory.

**Table 4.6: Recurrent expenditure (\$'000,000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2009–10**

	NSW <sup>(b)</sup>	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
Salary expenditure	6,385	5,408	4,227	2,242	1,630	509	376	323	21,099
Non-salary expenditure	4,644	3,729	2,485	1,375	1,101	330	276	152	14,093
<b>Total recurrent expenditure including depreciation</b>	<b>11,029</b>	<b>9,138</b>	<b>6,712</b>	<b>3,617</b>	<b>2,731</b>	<b>839</b>	<b>651</b>	<b>475</b>	<b>35,193</b>
Public acute hospitals	10,787	9,089	6,593	3,530	2,633	824	651	475	34,583
Public psychiatric hospitals	242	49	118	87	98	15	..	..	610
<b>Total recurrent expenditure excluding depreciation</b>	<b>10,644</b>	<b>8,520</b>	<b>6,457</b>	<b>3,523</b>	<b>2,638</b>	<b>822</b>	<b>631</b>	<b>471</b>	<b>33,706</b>
Public acute hospitals	10,408	8,473	6,344	3,437	2,541	807	631	471	33,113
Public psychiatric hospitals	235	47	113	85	97	15	..	..	593

(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 statewide 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 \$3.42 billion in revenue in 2009–10 (Table 4.7). This was equivalent to 10.2% of total recurrent expenditure (excluding depreciation). Revenue as a proportion of total expenditure varied among the states and territories, ranging from less than 5% in the Northern Territory to over 12% in New South Wales.

**Table 4.7: Revenue (\$'000), public acute and psychiatric hospitals, states and territories, 2009–10**

	NSW	Vic	Qld <sup>(a)</sup>	WA	SA <sup>(b)</sup>	Tas	ACT	NT	Total
Patient revenue	680,835	305,091	371,280	134,844	132,792	42,205	38,427	9,744	1,715,217
Recoveries	355,097	147,282	54,392	33,491	n.a.	9,092	11,829	12,564	623,748
Other revenue	298,133	531,987	164,865	36,472	40,541	6,485	2,348	13	1,080,825
<b>Total revenue</b>	<b>1,334,065</b>	<b>984,360</b>	<b>590,537</b>	<b>204,807</b>	<b>173,333</b>	<b>57,762</b>	<b>52,604</b>	<b>22,321</b>	<b>3,419,790</b>
Public acute hospitals	1,321,632	983,461	584,311	203,366	170,730	57,051	52,604	22,321	3,395,476
Public psychiatric hospitals	12,434	899	6,227	1,440	2,603	711	..	..	24,314

(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.

*Abbreviation:* ..—not applicable.

## 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 251,400 full-time equivalent staff were employed in the public hospital sector in 2009–10. Nurses constituted 45.3% (almost 114,000) of public hospital staff. There were around 31,000 *Salaried medical officers* employed in public hospitals throughout Australia, representing 12.2% of the public hospital labour force (Table 4.8).

The average salary for full-time equivalent *Nurses* in 2009–10 was around \$83,900 nationally (Table 4.8), which was an increase of 7.3% compared with the average salary of \$78,200 in 2008–09 (AIHW 2010a). In 2009–10, the average salary for full-time equivalent *Salaried medical officers* was around \$168,000, which was a 6.3% increase over the previous year.

**Table 4.8: Average full-time equivalent staff<sup>(a)</sup> and average salaries, public acute and psychiatric hospitals, states and territories, 2009–10**

	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>Full-time equivalent staff numbers</b>									
Salaried medical officers	9,043	7,689	6,238	3,109	2,561	922	620	395	30,576
Total nurses	36,976	29,667	20,006	10,710	10,277	2,708	2,075	1,521	113,938
Other personal care staff	n.a.	n.a.	969	n.a.	861	n.a.	179	11	n.a.
Diagnostic and allied health professionals	11,240	13,333	4,835	2,680	1,915	530	552	371	35,456
Administrative and clerical staff <sup>(g)</sup>	11,206	11,141	6,501	4,239	2,881	998	717	477	38,158
Domestic and other staff	9,205	7,011	7,243	4,127	1,823	1,080	163	617	31,269
<b>Total staff</b>	<b>77,668</b>	<b>68,840</b>	<b>45,791</b>	<b>24,865</b>	<b>20,317</b>	<b>6,238</b>	<b>4,305</b>	<b>3,392</b>	<b>251,416</b>
<b>Average salaries (\$)</b>									
Salaried medical officers	147,133	165,958	186,325	198,745	169,945	151,707	159,013	195,572	168,026
Total nurses	81,078	81,210	85,976	83,484	76,596	79,273	81,878	96,654	81,974
Other personal care staff	n.a.	n.a.	74,934	n.a.	39,453	n.a.	53,430	75,723	n.a.
Diagnostic and allied health professionals	69,099	54,878	99,989	80,619	80,485	84,501	78,095	85,922	69,996
Administrative and clerical staff <sup>(g)</sup>	64,665	48,173	63,012	66,560	53,632	57,416	63,833	64,376	58,737
Domestic and other staff	60,365	64,857	52,266	56,162	35,611	48,367	53,424	56,829	56,978
<b>Total staff</b>	<b>82,213</b>	<b>78,564</b>	<b>92,300</b>	<b>90,167</b>	<b>80,221</b>	<b>81,579</b>	<b>87,228</b>	<b>95,161</b>	<b>83,922</b>

(a) Where average full-time equivalent staff numbers were not available, staff numbers at 30 June 2010 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) In South Australia, *Total nurses* include Trainee nurses.

(f) For Tasmania, an award restructure within the Medical category of visiting medical officers has resulted in a decrease in expenditure for *Visiting Medical Officers* and an increase for *Salaried/Sessional Staff*. 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.

Abbreviation: n.a.—not available.

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 4.6 and S4.3.

## What specialised services were provided?

### Specialised service units

In 2009–10, the most common specialised services offered by hospitals were *Domiciliary care service*, services provided by *Nursing home care units* and *Obstetric/maternity service* (Table 4.9).

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.

**Table 4.9: Number of public acute hospitals with selected specialised services, 2009–10**

Specialised service unit	Major cities	Regional	Remote	Australia <sup>(a)</sup>
Domiciliary care service	83	245	66	411
Intensive care unit (level III)	53	21	1	78
In-vitro fertilisation unit	6	1	0	9
Maintenance renal dialysis centre	66	71	14	167
Major plastic/reconstructive surgery unit	44	3	0	48
Neonatal intensive care unit (level III)	22	4	0	26
Nursing home care unit	13	178	54	260
Obstetric/maternity service	65	140	22	241
Oncology unit	64	51	1	125
Rehabilitation unit	86	53	1	143

(a) Total includes hospitals for which remoteness was *Not reported*.

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 S4.4 at the end of this chapter.

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

## 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 4.10 presents the number of public hospitals reporting more than 360 patient days in each SRG 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 4.10: Number of public hospitals reporting more than 360 patient days for the 20 most common Service Related Groups, by remoteness area of hospital, 2009–10**

Service Related Group	Major cities	Regional	Remote	Australia
Respiratory medicine	97	189	16	<b>302</b>
Maintenance	65	154	39	<b>258</b>
Orthopaedics	107	140	10	<b>257</b>
Cardiology	94	147	10	<b>251</b>
Medicine, no definitive subspecialty	115	132	6	<b>253</b>
Surgery, no definitive subspecialty	106	122	12	<b>240</b>
Gastroenterology	95	103	5	<b>203</b>
Neurology	97	99	4	<b>200</b>
Obstetrics	65	116	14	<b>195</b>
Rehabilitation	95	93	2	<b>190</b>
Immunology & infections	91	75	12	<b>178</b>
Acute psychiatry	100	60	2	<b>162</b>
Medical oncology	85	62	0	<b>147</b>
Acute definitive geriatrics	94	57	1	<b>152</b>
Diagnostic gastrointestinal endoscopy	82	61	0	<b>143</b>
Endocrinology	84	48	1	<b>134</b>
Renal dialysis	61	76	7	<b>144</b>
Colorectal surgery	83	51	2	<b>136</b>
Gynaecology	74	55	3	<b>132</b>
Renal medicine	82	47	4	<b>133</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.

**Table S4.1: Number of public acute and psychiatric hospitals and average available beds, by hospital size, states and territories, 2009–10**

Hospital size <sup>(a)</sup>	NSW	Vic <sup>(b)</sup>	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
10 or fewer beds	31	41	74	44	10	14	1	0	215
More than 10 to 50 beds	119	48	62	31	55	5	0	2	322
More than 50 to 100 beds	27	22	10	4	6	2	0	1	72
More than 100 to 200 beds	23	18	10	9	2	1	0	1	64
More than 200 to 500 beds	18	17	9	5	5	1	1	1	57
More than 500 beds	8	4	5	2	2	1	1	0	23
<b>Total</b>	<b>226</b>	<b>150</b>	<b>170</b>	<b>95</b>	<b>80</b>	<b>24</b>	<b>3</b>	<b>5</b>	<b>753</b>
<b>Available beds</b>									
10 or fewer beds	130	225	241	245	74	76	10	..	1,001
More than 10 to 50 beds	3,128	1,204	1,415	751	1,378	81	..	52	8,009
More than 50 to 100 beds	1,976	1,613	709	307	462	166	..	60	5,293
More than 100 to 200 beds	3,475	2,562	1,659	1,342	309	130	..	189	9,667
More than 200 to 500 beds	5,612	5,206	2,779	1,432	1,422	330	227	393	17,400
More than 500 beds	5,287	2,376	4,108	1,299	1,214	576	670	..	15,530
<b>Total</b>	<b>19,608</b>	<b>13,186</b>	<b>10,911</b>	<b>5,376</b>	<b>4,859</b>	<b>1,359</b>	<b>907</b>	<b>694</b>	<b>56,900</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 June 2010.

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, 2009–10**

Remoteness area	NSW	Vic <sup>(d)</sup>	Qld <sup>(e)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Major cities	67	53	18	22	15	..	3	..	178
Inner regional	77	59	27	9	15	7	..	..	194
Outer regional	65	36	54	28	28	13	..	1	225
<i>Total regional</i>	<i>142</i>	<i>95</i>	<i>81</i>	<i>37</i>	<i>43</i>	<i>20</i>	<i>..</i>	<i>1</i>	<i>419</i>
Remote	12	2	27	22	13	2	..	2	80
Very remote	5	..	44	14	9	2	..	2	76
<i>Total remote</i>	<i>17</i>	<i>2</i>	<i>71</i>	<i>36</i>	<i>22</i>	<i>4</i>	<i>..</i>	<i>4</i>	<i>156</i>
<b>Total all remoteness areas<sup>(f)</sup></b>	<b>226</b>	<b>150</b>	<b>170</b>	<b>95</b>	<b>80</b>	<b>24</b>	<b>3</b>	<b>5</b>	<b>753</b>
<b>Average available beds<sup>(a)(g)</sup></b>									
Major cities	13,519	9,484	5,999	3,880	3,163	0	907	..	36,953
Inner regional	4,283	2,914	2,279	476	425	1,098	..	..	11,475
Outer regional	1,593	773	2,037	601	844	239	..	393	6,481
<i>Total regional</i>	<i>5,876</i>	<i>3,550</i>	<i>4,463</i>	<i>1,103</i>	<i>1,301</i>	<i>1,253</i>	<i>..</i>	<i>335</i>	<i>18,175</i>
Remote	202	14	332	289	311	12	..	249	1,409
Very remote	11	..	264	130	112	10	..	52	579
<i>Total remote</i>	<i>213</i>	<i>14</i>	<i>596</i>	<i>419</i>	<i>423</i>	<i>22</i>	<i>..</i>	<i>301</i>	<i>1,987</i>
<b>Total all remoteness areas<sup>(f)</sup></b>	<b>19,608</b>	<b>13,186</b>	<b>10,911</b>	<b>5,376</b>	<b>4,859</b>	<b>1,359</b>	<b>907</b>	<b>694</b>	<b>56,900</b>

*(continued)*

**Table S4.2 (continued): 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, 2009–10**

Remoteness area	NSW	Vic <sup>(d)</sup>	Qld <sup>(e)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Number of average available beds per 1,000 population resident in area<sup>(b)</sup></b>									
<i>Major cities</i>									
Major cities	2.6	2.3	2.3	2.4	2.7	..	2.6	..	2.5
Inner regional	3.0	2.7	2.3	1.6	2.1	3.4	..	..	2.7
Outer regional	3.5	3.0	3.0	3.0	4.6	1.4	..	3.1	3.1
<i>Total regional</i>	<i>3.1</i>	<i>2.7</i>	<i>2.6</i>	<i>2.2</i>	<i>3.3</i>	<i>2.7</i>	<i>..</i>	<i>3.1</i>	<i>2.8</i>
Remote	6.1	3.0	3.8	3.0	6.7	1.5	..	5.1	4.3
Very remote	2.4	..	5.3	2.6	8.0	3.9	..	1.0	3.3
<i>Total remote</i>	<i>5.7</i>	<i>3.0</i>	<i>4.4</i>	<i>2.9</i>	<i>7.0</i>	<i>2.1</i>	<i>..</i>	<i>3.0</i>	<i>4.0</i>
<b>Total all remoteness areas<sup>(f)</sup></b>	<b>2.7</b>	<b>2.4</b>	<b>2.5</b>	<b>2.4</b>	<b>3.0</b>	<b>2.7</b>	<b>2.6</b>	<b>3.1</b>	<b>2.6</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) Average available beds per 1,000 population is reported as a crude rate based on the estimated resident population as at 30 June 2009.

(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 2010.

(f) Includes hospitals for which remoteness area was *Not reported*.

(g) 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.

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

Abbreviation: ..—not applicable.

**Table S4.3: Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2009–10**

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	1,330,448	1,276,004	1,162,274	617,908	435,197	139,921	98,510	77,317	5,137,579
Registered nurses	n.a.	2,409,229	1,549,187	858,876	663,793	191,274	151,213	137,149	n.a.
Enrolled nurses	n.a.	n.a.	167,963	35,218	119,224	20,624	18,662	9,886	n.a.
Student nurses	..	..	2,873	..	4,158	2,750	..	..	9,781
<b>Total nurses</b>	<b>2,997,912</b>	<b>2,409,229</b>	<b>1,720,022</b>	<b>894,093</b>	<b>787,174</b>	<b>214,649</b>	<b>169,875</b>	<b>147,035</b>	<b>9,339,989</b>
Other personal care staff	n.a.	n.a.	72,613	n.a.	33,952	n.a.	9,540	838	116,943
Diagnostic and allied health professionals	776,677	731,683	483,452	216,096	154,110	44,793	43,119	31,849	2,481,779
Administrative and clerical staff	724,624	536,673	409,626	282,137	154,494	57,320	45,754	30,676	2,241,304
Domestic and other staff	555,654	454,697	378,540	231,805	64,927	51,954	8,729	35,075	1,781,654
<b>Total salary and wages expenditure</b>	<b>6,385,316</b>	<b>5,408,285</b>	<b>4,226,527</b>	<b>2,242,040</b>	<b>1,629,854</b>	<b>508,910</b>	<b>375,527</b>	<b>322,790</b>	<b>21,099,248</b>
<b>Non-salary expenditure</b>									
Payments to visiting medical officers	543,736	141,071	99,474	119,325	113,076	374	32,046	8,116	1,057,218
Superannuation payments	566,766	469,579	408,175	187,454	147,897	51,889	49,666	0	1,881,426
Drug supplies	566,135	498,031	315,839	191,576	132,773	53,983	17,532	20,613	1,796,481
Medical and surgical supplies	1,118,297	744,176	676,426	223,947	183,664	103,089	54,764	33,225	3,137,643
Food supplies	100,731	89,943	49,362	26,816	20,482	7,890	2,668	3,873	301,758
Domestic services	350,980	204,493	156,238	89,209	57,557	14,981	26,795	10,987	911,236
Repairs and maintenance	225,171	156,366	126,634	115,364	59,076	10,763	6,400	11,135	710,865
Patient transport	97,024	49,878	32,372	36,315	25,074	6,393	1,583	20,170	268,810
Administrative expenses	504,630	504,561	363,907	150,697	64,890	41,630	51,078	24,489	1,706,883
Interest payments	8,045	0	0	5,067	0	0	104	0	13,216
Depreciation	385,567	617,549	254,088	94,107	93,124	17,208	20,520	3,984	1,486,147
Other recurrent expenditure	176,998	253,740	2,508	135,041	203,694	22,087	12,784	15,777	822,629
<b>Total non-salary expenditure excluding depreciation</b>	<b>4,258,514</b>	<b>3,111,838</b>	<b>2,230,936</b>	<b>1,280,810</b>	<b>1,008,182</b>	<b>313,080</b>	<b>255,420</b>	<b>148,384</b>	<b>12,607,164</b>
<b>Total non-salary expenditure including depreciation</b>	<b>4,644,081</b>	<b>3,729,386</b>	<b>2,485,024</b>	<b>1,374,916</b>	<b>1,101,307</b>	<b>330,288</b>	<b>275,940</b>	<b>152,368</b>	<b>14,093,311</b>

(continued)

**Table S4.3 (continued): Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2009–10**

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>	10,643,830	8,520,123	6,457,463	3,522,850	2,638,037	821,990	630,946	471,174	<b>33,706,412</b>
Public acute hospitals	10,408,462	8,473,430	6,343,992	3,437,375	2,541,159	806,916	630,946	471,174	<b>33,113,454</b>
Psychiatric hospitals	235,368	46,693	113,471	85,474	96,877	15,074	..	..	<b>592,958</b>
<b>Total expenditure including depreciation</b>	11,029,397	9,137,671	6,711,551	3,616,956	2,731,161	839,199	651,467	475,158	<b>35,192,559</b>
Public acute hospitals	10,786,959	9,089,158	6,593,309	3,530,022	2,632,787	824,122	651,467	475,158	<b>34,582,982</b>
Psychiatric hospitals	242,438	48,513	118,242	86,935	98,374	15,076	..	..	<b>609,577</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 statewide 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, an award restructure within the Medical category of visiting medical officers has resulted in a decrease in expenditure for *Visiting Medical Officers* and an increase for *Salaried/Sessional Staff*.

*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: Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2009–10**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA <sup>(c)</sup>	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Acute renal dialysis unit</b>	<b>25</b>	<b>13</b>	<b>16</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>66</b>
Major cities	15	12	5	3	4	..	1	..	40
Regional	10	0	10	0	0	2	0	1	23
Remote	0	0	1	0	0	0	0	1	2
<b>Acute spinal cord injury unit</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>
Major cities	3	2	1	2	1	..	0	..	9
<b>AIDS unit</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>16</b>
Major cities	8	1	1	2	1	..	1	..	14
Regional	0	0	1	0	0	0	0	0	1
Remote	0	0	0	0	0	0	0	1	1
<b>Alcohol and drug unit</b>	<b>77</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>109</b>
Major cities	25	8	4	3	2	..	1	..	43
Regional	51	3	6	0	1	1	0	0	62
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>10</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>31</b>
Major cities	10	7	4	4	2	..	1	..	28
Regional	0	0	1	0	0	1	0	0	2
<b>Clinical genetics unit</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>29</b>
Major cities	9	8	1	3	2	..	1	..	24
Regional	2	0	1	0	0	1	0	0	4
<b>Coronary care unit</b>	<b>46</b>	<b>23</b>	<b>20</b>	<b>5</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>110</b>
Major cities	31	13	11	5	6	..	2	..	68
Regional	15	2	9	0	2	3	0	1	32
Remote	0	0	0	0	1	0	0	1	2
<b>Diabetes unit</b>	<b>23</b>	<b>21</b>	<b>13</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>73</b>
Major cities	21	16	8	6	5	..	1	..	57
Regional	2	1	5	0	0	3	0	1	12
<b>Domiciliary care service</b>	<b>181</b>	<b>93</b>	<b>30</b>	<b>59</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>411</b>
Major cities	39	27	3	7	7	..	0	..	83
Regional	125	49	13	31	27	0	0	0	245
Remote	17	0	14	21	13	0	0	1	66
<b>Geriatric assessment unit</b>	<b>65</b>	<b>40</b>	<b>0</b>	<b>23</b>	<b>14</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>147</b>
Major cities	40	26	0	7	7	..	2	..	82
Regional	25	10	0	15	6	3	0	0	59
Remote	0	0	0	1	1	0	0	0	2

(continued)

**Table S4.4 (continued): Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2009–10**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA <sup>(c)</sup>	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Hospice care unit</b>	<b>40</b>	<b>26</b>	<b>11</b>	<b>30</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>123</b>
Major cities	15	15	6	0	5	..	1	..	42
Regional	25	8	5	19	4	1	0	1	63
Remote	0	0	0	11	4	0	0	0	15
<b>Infectious diseases unit</b>	<b>13</b>	<b>13</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>47</b>
Major cities	13	12	7	4	4	..	1	..	41
Regional	0	0	3	0	0	1	0	0	4
Remote	0	0	0	0	0	0	0	1	1
<b>Intensive care unit (level III)</b>	<b>39</b>	<b>16</b>	<b>9</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>78</b>
Major cities	24	13	7	4	4	..	1	..	53
Regional	15	0	2	0	0	3	0	1	21
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	1	1	0	2	..	0	..	6
Regional	0	1	0	0	0	0	0	0	1
<b>Maintenance renal dialysis centre</b>	<b>59</b>	<b>63</b>	<b>10</b>	<b>12</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>167</b>
Major cities	23	26	3	7	6	..	1	..	66
Regional	32	22	3	4	7	2	0	1	71
Remote	4	0	4	1	2	0	0	3	14
<b>Major plastic/reconstructive surgery unit</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>48</b>
Major cities	14	13	7	5	4	..	1	..	44
Regional	0	0	2	0	0	1	0	0	3
<b>Neonatal intensive care unit (level III)</b>	<b>12</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>26</b>
Major cities	11	4	2	2	2	..	1	..	22
Regional	1	0	1	0	0	1	0	1	4
<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>77</b>	<b>75</b>	<b>10</b>	<b>45</b>	<b>43</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>260</b>
Major cities	1	11	0	1	0	..	0	..	13
Regional	65	49	4	21	32	7	0	0	178
Remote	11	0	6	23	11	3	0	0	54
<b>Obstetric/maternity service</b>	<b>77</b>	<b>56</b>	<b>41</b>	<b>29</b>	<b>28</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>241</b>
Major cities	28	15	8	8	4	..	2	..	65
Regional	48	27	27	14	20	3	0	1	140
Remote	1	0	6	7	4	0	0	4	22

*(continued)*

**Table S4.4 (continued): Number of public acute hospitals<sup>(a)</sup> with specialised services, by remoteness area, states and territories, 2009–10**

Specialised services	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA <sup>(c)</sup>	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Oncology unit</b>	<b>44</b>	<b>38</b>	<b>16</b>	<b>13</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>125</b>
Major cities	21	20	8	6	7	..	2	..	64
Regional	23	9	8	6	2	3	0	0	51
Remote	0	0	0	1	0	0	0	0	1
<b>Psychiatric unit/ward</b>	<b>45</b>	<b>31</b>	<b>18</b>	<b>18</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>127</b>
Major cities	29	23	10	15	8	..	2	..	87
Regional	16	3	8	3	0	3	0	1	34
Remote	0	0	0	0	0	0	0	1	1
<b>Refractory epilepsy unit</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>
Major cities	5	4	1	3	3	..	0	..	16
<b>Rehabilitation unit</b>	<b>58</b>	<b>35</b>	<b>15</b>	<b>19</b>	<b>9</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>143</b>
Major cities	35	22	8	13	6	..	2	..	86
Regional	23	10	7	6	3	3	0	1	53
Remote	0	0	0	0	0	0	0	1	1
<b>Sleep centre</b>	<b>12</b>	<b>10</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>39</b>
Major cities	12	8	5	3	4	..	0	..	32
Regional	0	0	2	0	1	2	0	0	5
<b>Specialist paediatric service</b>	<b>44</b>	<b>29</b>	<b>19</b>	<b>10</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>118</b>
Major cities	26	18	8	5	4	..	2	..	63
Regional	18	5	10	3	3	4	0	1	44
Remote	0	0	1	2	1	0	0	1	5
<b>Transplantation unit—bone marrow</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>31</b>
Major cities	14	6	4	3	1	..	1	..	29
Regional	0	0	0	0	0	1	0	0	1
<b>Transplantation unit—heart (including heart/lung)</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>
Major cities	2	2	1	2	0	..	0	..	7
<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>6</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
Major cities	6	6	2	3	1	..	0	..	18

(a) Excludes psychiatric hospitals. Rows for Regional and Remote with no units are omitted from 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 department activity
- 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?

### National Public Hospital Establishments Database

Data on accident and emergency occasions of service were sourced from the National Public Hospital Establishments Database (NPHED), which has essentially full coverage of public hospitals (see *Appendix 2*). For the purposes of this report, accident and 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 accident and 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. For all other states and territories, both *Emergency presentations* and other types of occasions of service were included, at least for hospitals reporting episode-level data.

Terms relevant to the discussion of emergency department care are summarised in Box 5.1.

### National Non-admitted Patient Emergency Department Care Database

The National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) 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).

The scope of this NMDS in 2009–10 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*) in *Australian hospital statistics 2008–09* (AIHW 2010a). The peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see *Appendix 1*). The use of this classification as an interim measure to define the scope of this collection is under review.

Timely provision of the NNAPEDCD data by state and territory health authorities allowed this information to be reported in *Australian hospital statistics 2009–10: Emergency department care and elective surgery waiting times* (AHS: EDES) (AIHW 2010c) in November 2010. This report presents selected headline statistics from the earlier report, as well as additional

information not provided in that report because the public hospital establishments data were not available.

The *AHS: EDES* online report will include updates for those tables included in the report that present coverage estimates based on data from the Public hospital establishments NMDS, as well as updates due to data resupplies.

For 2009–10, 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 (for all hospitals that were required to report episode-level data). Data were provided for 84 *Principal referral and specialist women's and children's hospitals* and 41 *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
- 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.

Between 2005–06 and 2009–10, the proportion of accident and emergency occasions of service for which detailed episode-level data were available increased from 78% to 81% (Table 5.1).

In 2009–10, coverage for the NNAPECD (all peer group A and B hospitals) was approximately 100%, which represented, and provided detailed information for, 81% of all public hospital accident and emergency occasions of service. The proportion for all public hospitals ranged from 68% for South Australia to 100% for the Australian Capital Territory and the Northern Territory (see Table S5.1 at the end of this chapter). However, this may underestimate the proportion because some accident and emergency occasions of service were for services other than emergency presentations (see Box 5.3 for more detail).

The detailed information presented for all episode-level records 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.

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

The **triage category** indicates the urgency of the patient's need for medical and nursing care (NHDC 2003). 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...?' (ACEM 2000). The Australasian Triage Scale has five categories that incorporate the time by which the patient should receive care: *Immediately life-threatening*, *Imminently life-threatening*, *Potentially life-threatening*, *Potentially serious* and *Less urgent*. The categories are presented in this report as:

- *Resuscitation*: immediate (within seconds)
- *Emergency*: within 10 minutes
- *Urgent*: within 30 minutes
- *Semi-urgent*: within 60 minutes
- *Non-urgent*: within 120 minutes.

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

The emergency department service **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* for all states and territories except South Australia. As one South Australian hospital is unable to report type of visit data and most presentations are expected to be emergencies, all presentations that have type of visit *Emergency presentation* or *Not reported* are included for South Australia.

**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.

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.

The **duration of service event** 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.

The **duration of non-admitted patient episode** is the length of time between presentation to the emergency department and the end of the non-admitted patient episode.

The **time in emergency department** is the length of time between presentation to the emergency department and physical departure from the emergency department.

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

When interpreting the data presented, the reader should note the following:

The proportion of accident and emergency occasions of service for which detailed episode-level data were available was 100% for *Principal referral and Specialist women's and children's hospitals* and *Large hospitals* (peer group A and B hospitals), but only about 81% for all hospitals.

Nationally consistent data definitions are not agreed for all data items. Therefore, comparability across jurisdictions may be limited. Development and implementation of standard data definitions is ongoing.

- There is variation in the practices of managing and recording patients who were *Dead on arrival*. For some jurisdictions, these patients are the responsibility of the emergency department but not for others.
- There is also variation in the recording of patients who die while in the emergency department. For New South Wales, the episode end status for presentations in which the patient died in the emergency department was categorised as *Admitted to this hospital*.
- There is variation between jurisdictions in the point at which the emergency department presentation is recorded as completed for those patients subsequently admitted within the emergency department and/or elsewhere in the hospital. This will affect the comparability of presentation length statistics across jurisdictions.
- For Western Australia, the data presented in this report are based on patients who commenced an episode in an emergency department between 1 July 2009 and 30 June 2010. Therefore, the data for Western Australia do not include records for patients who commenced the episode before 1 July 2009 and completed the episode on or after 1 July 2009. In addition, the data includes episodes that commenced before 30 June 2010, but were not completed within the reporting period. It is expected that these presentations would be counterbalanced overall by the number of presentations occurring in a similar way in adjacent reporting periods.
- For Victoria and Tasmania, the conclusion of the non-admitted patient episode is reported as the time of physical departure for patients admitted to short-stay wards within the emergency department.
- New South Wales was unable to supply valid waiting time data for approximately 3,500 records, the majority of which were referrals to a General Practitioner (GP) clinic co-located with the emergency department. These records were therefore not used to derive waiting time statistics or presentation length statistics.
- Approximately 4,300 records for Western Australia had the recorded physical departure time occurring before the recorded episode end time, or the recorded episode end time occurring before the recorded service commencement time. These records were therefore not used in deriving emergency department presentation length statistics.

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

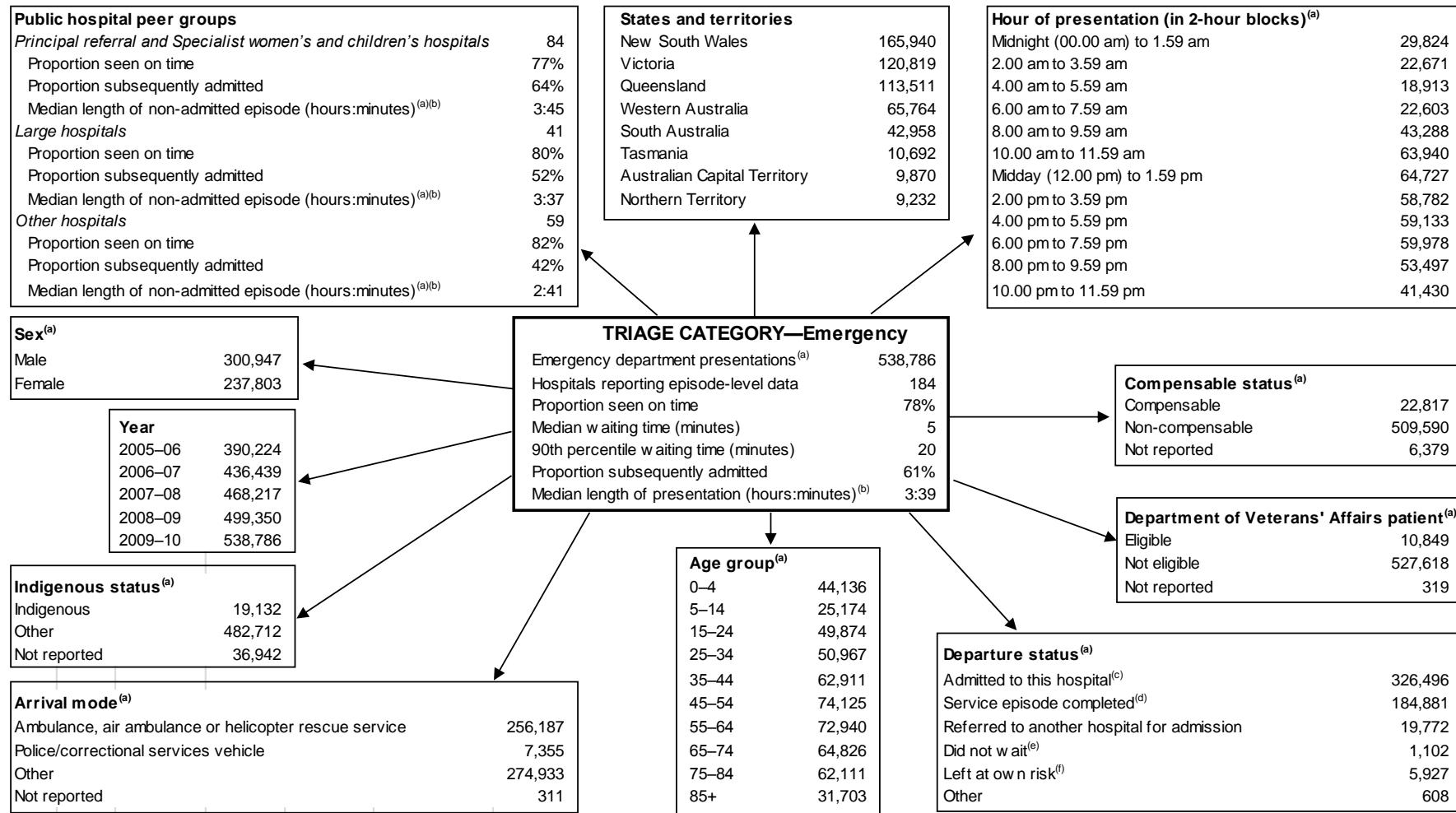
The proportion of emergency services with episode-level data for 2009–10 is calculated as the number of presentations reported to the NNAPECD divided by the number of accident and emergency occasions of service reported to the National Public Hospital Establishments Database (NPHE) as a percentage. This may underestimate the NNAPECD proportion because some accident and emergency occasions of service are for other than emergency presentations. As accident and emergency occasions of service may have been undercounted 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 accident and emergency occasions of service reported to the NPHE.

- Statistics for waiting time and emergency department presentation length, as well as the proportion of presentations ending in admission, are not presented in this report for patients with a type of visit other than *Emergency presentation* (or *Not reported* for South Australia).
- The median and 90th percentile waiting time are determined from the time elapsed between presentation in the emergency department and commencement of service. In addition, presentations were excluded if the waiting time was missing or invalid, or the patient had an episode end status of *Did not wait to be attended by a health care professional* or was *Dead on arrival*.
- 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 Australasian Triage Scale definition (see Box 5.1). Presentations were excluded if the triage category was *Not reported*.
- 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 calculations of median duration of service event, median duration of non-admitted patient episode and median time in emergency department also 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 service commencement time, episode end time and physical departure time were all valid and occurred in sequence. It should be noted that some of these times may coincide (for example, a patient's episode end time and physical departure time may be the same).

Figure 5.1 presents an example of the information available from the NNAPEDCD, for presentations for which patients were assigned a triage category of *Emergency* (triage category 2) at the time of presentation at the emergency department.

In 2009–10:

- there were almost 540,000 emergency department presentations assigned an *Emergency* triage category, reported by 184 hospitals
- slightly over three-quarters of *Emergency* patients were seen within 10 minutes
- the median waiting time for *Emergency* patients was 5 minutes, and 90% of *Emergency* patients were seen within 20 minutes
- over 60% of *Emergency* patients were subsequently admitted to the same hospital (including admission within the emergency department)
- over half of *Emergency* patients were aged 45 years and over
- 48% of *Emergency* patients had an arrival mode of *Ambulance, air ambulance or helicopter rescue service*
- the number of *Emergency* patients who presented to emergency departments in major public hospitals increased by 8% between 2008–09 and 2009–10
- over one third of *Emergency* patients arrived overnight (between 8 pm and 8 am).



(a) For episodes with a type of visit of *Emergency presentation* or *Not reported* (South Australia only).

(b) Includes records for which Indigenous status 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 Emergency Triage category non-admitted patient emergency department presentations with other data elements, 2009–10**

## How has activity changed over time?

Between 2005–06 and 2009–10 the number of accident and emergency occasions of service reported to the NPHED increased from 6.3 million to 7.4 million, an average annual increase of 4%. Over the same period, the number of presentations reported to the NNAPEDCD increased by 4.9% per year, from 4.9 million to 5.9 million.

The proportion of occasions of service for which detailed episode-level data were available has been relatively stable, with slight improvement in coverage for 2009–10 (Table 5.1).

**Table 5.1: Non-admitted patient emergency department presentation coverage statistics, public hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005– 06	Since 2008– 09
Accident and emergency occasions of service reported to NPHED	6,327,784	6,741,304	7,100,618	7,171,667	7,390,459	4.0	3.1
Hospitals reporting emergency department episode-level data	153	164	165	184	184	4.7	0.0
Number of emergency department presentations reported to NNAPEDCD	4,914,896	5,287,451	5,537,196	5,742,140	5,957,960	4.9	3.8
<b>Estimated proportion of occasions of service with episode-level data (%)<sup>(a)</sup></b>	<b>78</b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>0.9</b>	<b>0.7</b>

(a) The number of presentations reported to the NNAPEDCD divided by the number of accident and 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: Ave—average.

Between 2005–06 and 2009–10 both the proportion of *Emergency presentations* treated within an appropriate time and the median waiting time of *Emergency presentations* remained relatively stable, despite increasing numbers of presentations. The time by which 90% of presentations were seen was slightly more variable over this period, and decreased between 2007–08 and 2009–10 (Table 5.2).

**Table 5.2: Non admitted patient emergency department *Emergency presentation* waiting time statistics, major public hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10
Proportion seen on time (%)	69	70	69	70	70
Median waiting time to service delivery (minutes)	24	24	24	23	23
90th percentile waiting time to service delivery (minutes)	123	120	124	119	115
Proportion ending in admission (%)	28	27	27	27	27

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 2009–10?

In 2009–10, Australian public hospitals provided about 7.4 million non-admitted patient accident and emergency occasions of service (Table 5.3).

Detailed episode-level information was available for over 5.9 million emergency department presentations (about 81% of accident and emergency occasions of service). The detailed information presented below for all episode-level records 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.

**Table 5.3: Non-admitted patient emergency department presentations, public hospitals, states and territories, 2009–10**

	Accident and emergency occasions of service (NPHED)	Emergency department presentations (NNAPECD)
New South Wales	2,442,982	2,035,783
Victoria	1,591,819	1,432,745
Queensland	1,578,490	1,134,092
Western Australia	823,402	600,613
South Australia	554,906	373,700
Tasmania	159,472	141,630
Australian Capital Territory	106,806	106,814
Northern Territory	132,582	132,583
<b>Total</b>	<b>7,390,459</b>	<b>5,957,960</b>

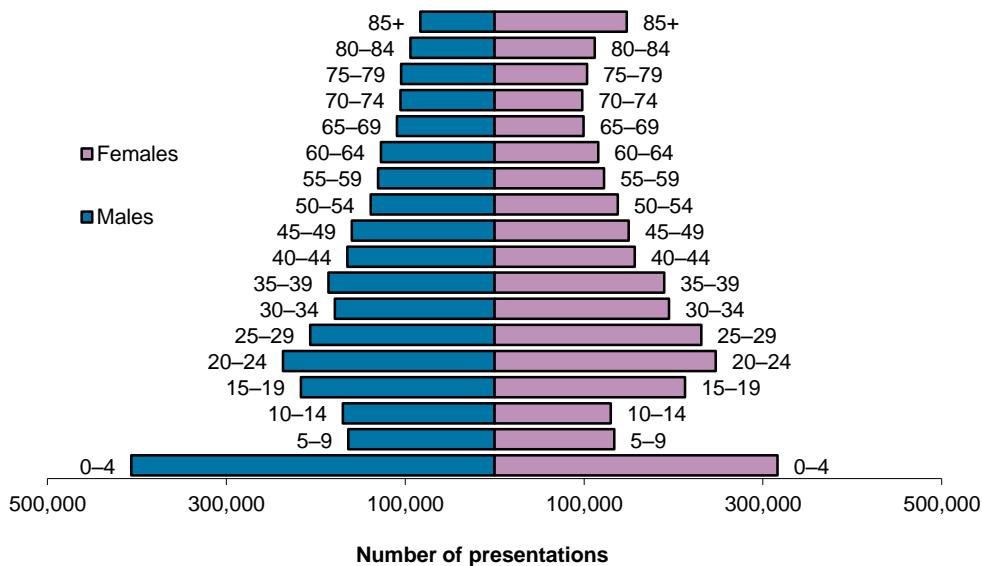
*Note:* See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information for public hospital peer groups is available in Table S5.2 at the end of this chapter

## 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 males than females in most age groups. Females accounted for more presentations than males in the 20–39 year age group and the 80 years and over age group. The most common age group reported for emergency department presentations were 0–4 years (12%), followed by 20–24 years (8%).



Note: See boxes 5.1, 5.2 and 5.3 for notes on data limitations and methods. Additional information by sex and age group by states and territories is available in Table S5.3 at the end of this chapter.

**Figure 5.2: Non-admitted patient emergency department presentations, by age group and sex, major public hospitals, 2009–10**

## Aboriginal and Torres Strait Islander people

### Box 5.4: Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2009–10 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 5.4 presents Indigenous status data by state and territory of the hospital. Nationally, 4.5% of all presentations were for *Indigenous Australians*. The Northern Territory had the highest proportion of emergency department presentations for *Indigenous Australians* (42%), while Victoria and South Australia (both 1.3%) recorded the lowest proportions. Indigenous status was *Not reported* for about 5% of presentations.

**Table 5.4: Non-admitted patient emergency department presentations, by Indigenous status, major public hospitals, states and territories, 2009–10**

	Indigenous Australians	Non-Indigenous	Not reported	Total
New South Wales <sup>(a)</sup>	74,436	1,717,248	247,099	2,035,783
Victoria	18,980	1,405,668	8,097	1,432,745
Queensland	62,454	1,054,945	16,693	1,134,092
Western Australia	44,877	552,466	3,270	600,613
South Australia	7,823	337,894	30,983	373,700
Tasmania	5,091	131,511	5,028	141,630
Australian Capital Territory	2,304	102,917	1,593	106,814
Northern Territory	56,311	76,187	85	132,583
<b>Total</b>	<b>269,276</b>	<b>5,375,836</b>	<b>312,848</b>	<b>5,957,960</b>

(a) For New South Wales, Indigenous status information had been recorded in the patient administration system for the majority of those records presented here as *Not reported*. However, due to systems issues, the information was not available at the time of reporting. See Appendix 1 for more detail.

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 2009–10, the majority of presentations to emergency departments reported an arrival mode of *Other* (Table 5.5). However, there was variation in arrival mode by triage category. For example, for the arrival mode *Ambulance, air ambulance or helicopter rescue service*, the proportion for *Resuscitation* patients was much higher (85%) than the proportion for *Non-urgent* patients (4%).

**Table 5.5: Non-admitted patient emergency department presentations, by triage category and arrival mode, major public hospitals, 2009–10**

Arrival mode	Triage category					
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	Total <sup>(a)</sup>
Ambulance, air ambulance or helicopter rescue service	35,743	256,835	654,831	417,844	32,018	1,398,128
Police/correctional services vehicle	360	7,374	24,628	15,530	5,168	53,178
Other	5,857	275,531	1,244,414	2,257,192	716,434	4,504,206
Not stated/unknown	70	313	689	679	178	2,448
<b>Total</b>	<b>42,030</b>	<b>540,053</b>	<b>1,924,562</b>	<b>2,691,245</b>	<b>753,798</b>	<b>5,957,960</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.

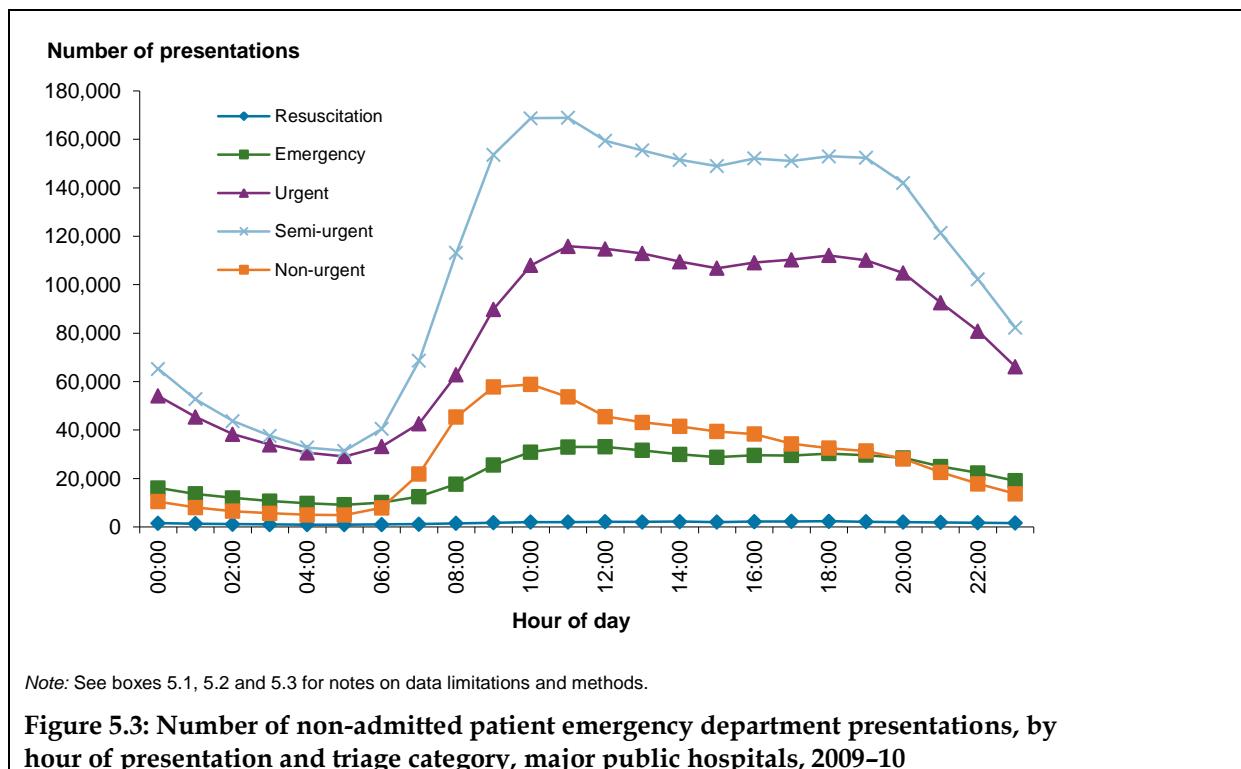
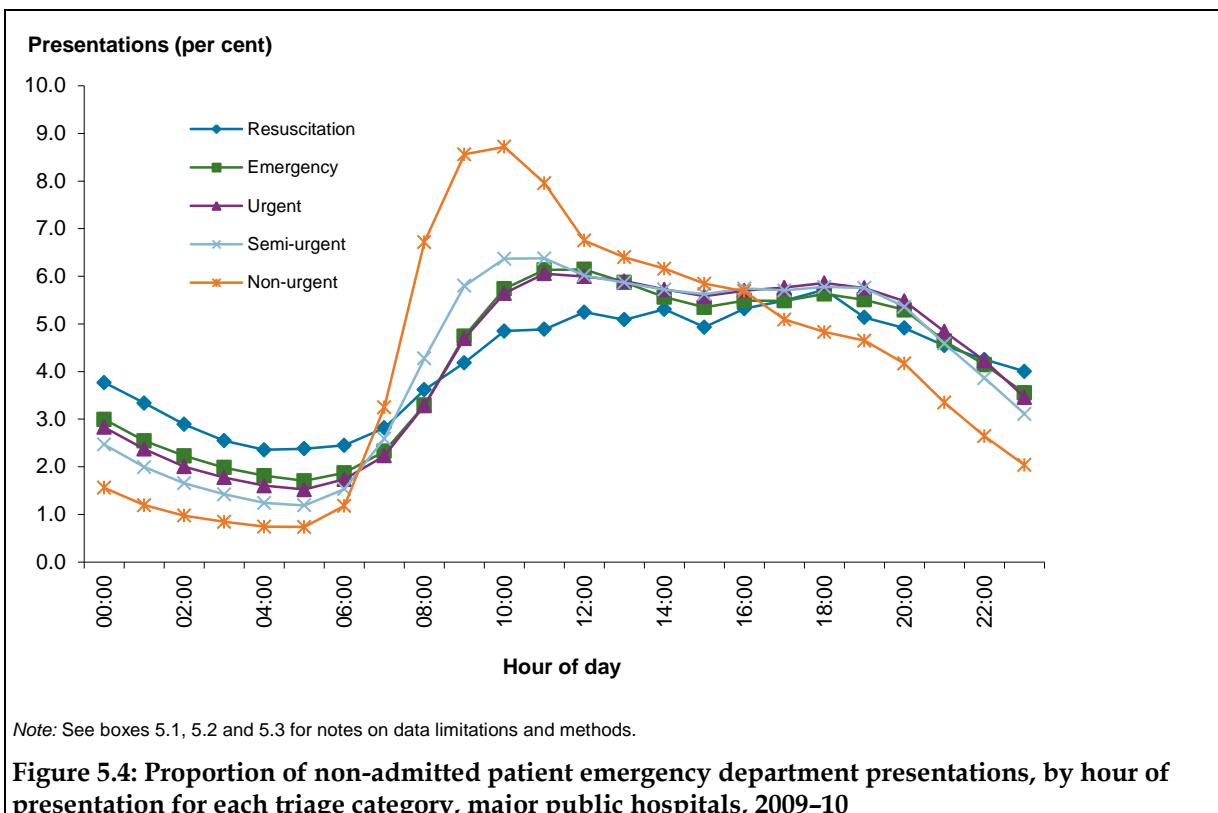


Figure 5.4 illustrates the relative distribution of use within each triage category across the 24-hour period. The figure shows that for the *Resuscitation* triage category, emergency department presentations are more evenly distributed throughout the day than for other triage categories.



## 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 S5.5 at the end of this chapter.

Of the 6 million presentations reported to the NNAPEDCD for 2009–10, 97% 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 patients who are *Dead on arrival* are only occasionally 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). 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...?' (ACEM 2000). For more detail refer to Box 5.1.

Nationally in 2009–10, less than 1% of *Emergency presentations* were assigned a triage category of *Resuscitation*, and about 9% 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 2009–10: Emergency department care and elective surgery waiting times* (AHS: EDES, AIHW 2010c).

## 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* (or *Not reported* for South Australia).

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 Australasian Triage Scale definition. 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. For more detailed information about the methods used to derive the proportion of *Emergency presentations* seen on time and other waiting time statistics, refer to Box 5.3.

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 5.8 presents the proportion of all *Emergency presentations* reported to the NNAPECD that were seen on time, by state and territory and triage category for 2009–10. As indicated in Box 5.3, certain *Emergency presentations* are excluded from the calculation of the figures provided in this table. For 2009–10, there were almost 319,000 presentations with an episode end status of *Did not wait* or *Dead on arrival* which were excluded from this analysis.

Approximately 28,000 additional presentations with missing or invalid waiting times were also excluded.

For 2009–10, 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 56% in the Northern Territory to 75% in New South Wales (Table 5.6). The proportion also varied by triage category. About 100% of *Resuscitation* patients and 78% of *Emergency* patients were seen on time.

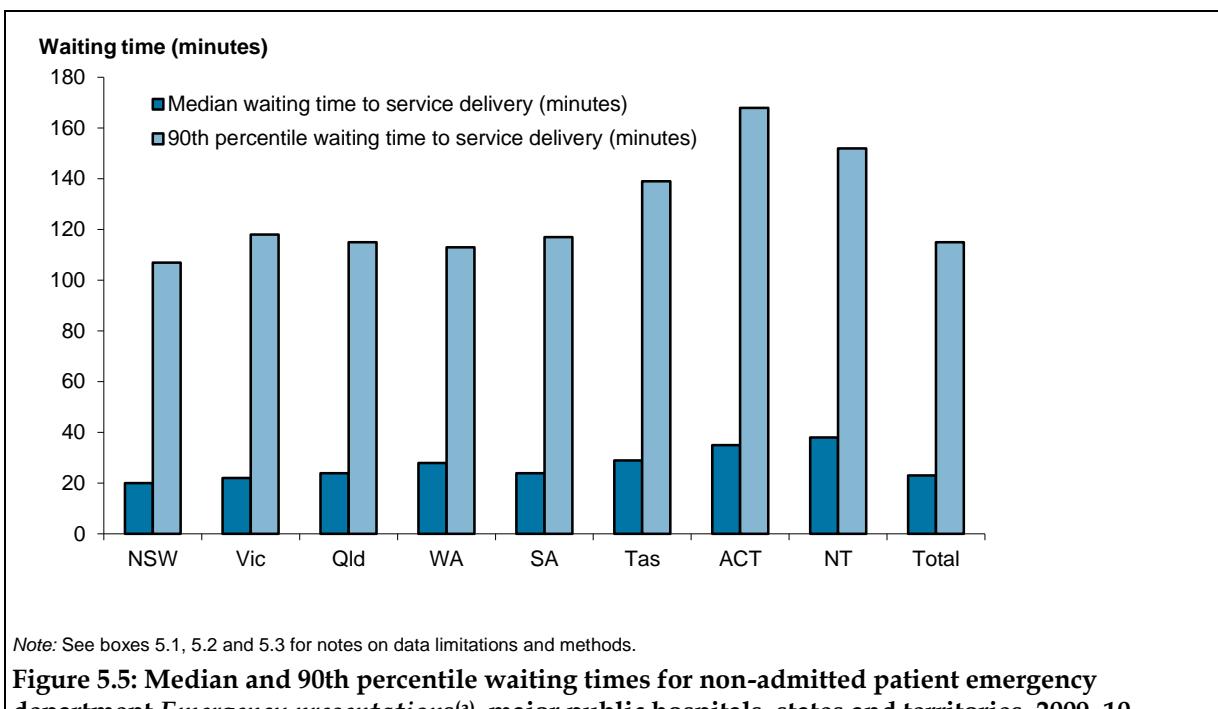
**Table 5.6: Proportion (%) of non-admitted patient emergency department *Emergency presentations* seen on time by triage category, major public hospitals<sup>(a)</sup>, states and territories, 2009–10**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	99	99	100	99	100	100	100
Emergency	82	80	77	71	78	71	83	63	78
Urgent	70	71	60	55	63	52	60	49	65
Semi-urgent	73	67	66	64	63	63	56	51	68
Non-urgent	89	85	89	92	85	88	77	91	88
<b>Total</b>	<b>75</b>	<b>72</b>	<b>66</b>	<b>64</b>	<b>67</b>	<b>63</b>	<b>63</b>	<b>56</b>	<b>70</b>

(a) Values are derived from all hospitals that reported to the NNAPECD. In addition to providing data to the NNAPECD 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 NNAPECD 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 2009–10, 50% of all *Emergency presentations* were attended by a medical officer or nurse within 23 minutes and 90% were attended within 115 minutes. There was marked variation between states and territories in these waiting time measures. The median varied from 20 minutes in New South Wales to 38 minutes for the Northern Territory (Figure 5.5). The 90th percentile varied from 107 minutes in New South Wales to 168 minutes in the Australian Capital Territory.



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 non-admitted patient emergency department Emergency presentations<sup>(a)</sup>, major public hospitals, states and territories, 2009–10**

Additional information by peer group for states and territories is available in Table S2.14 of AHS: EDES (AIHW 2010c).

## How long did patients stay?

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

- **median 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)
- **median 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
- **median 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* (or *Not reported* for South Australia only). 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.

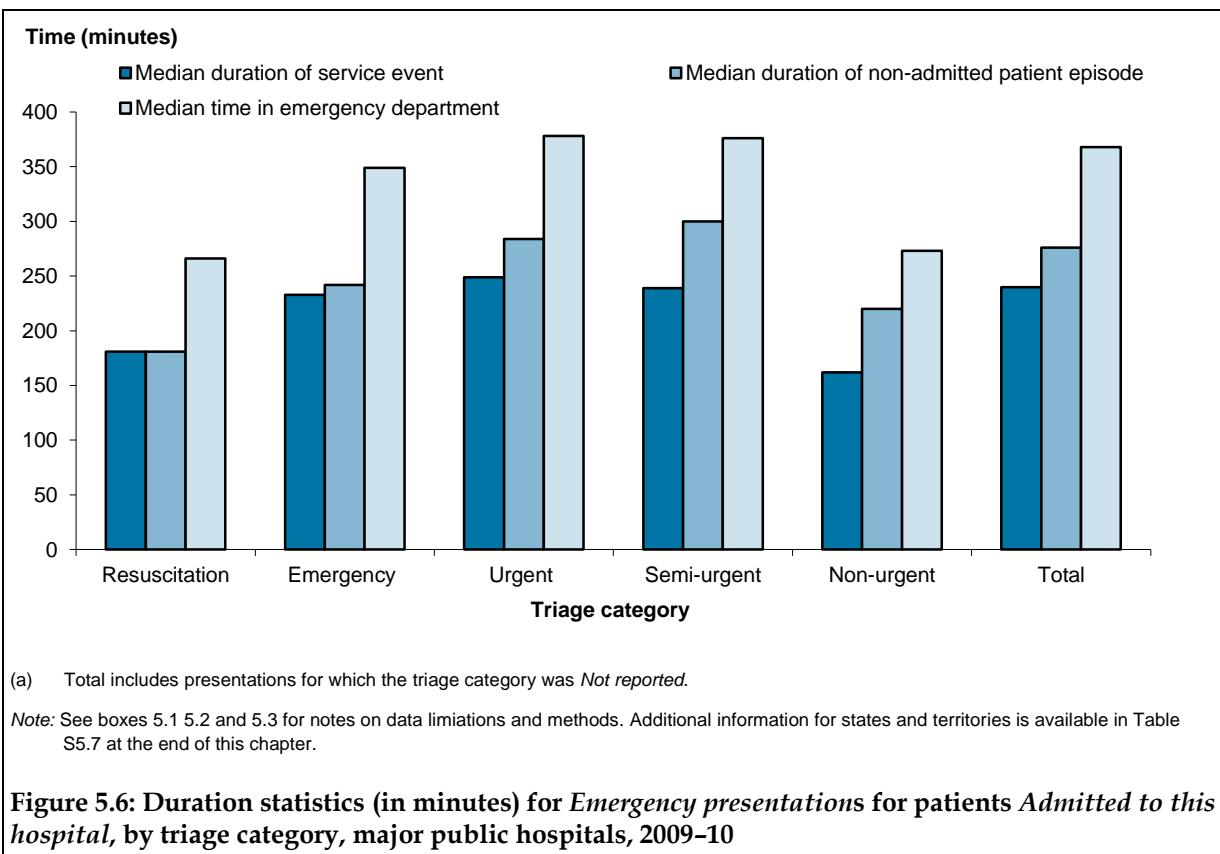
The timing and duration of emergency department activity are affected by whether or not the patient presenting to the emergency department is subsequently admitted to the same hospital. As a result, summary length of presentation statistics are presented separately for patients subsequently admitted 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 (240 minutes) and the median duration of non-admitted patient episode was 4 hours and 36 minutes (276 minutes) (Figure 5.6).

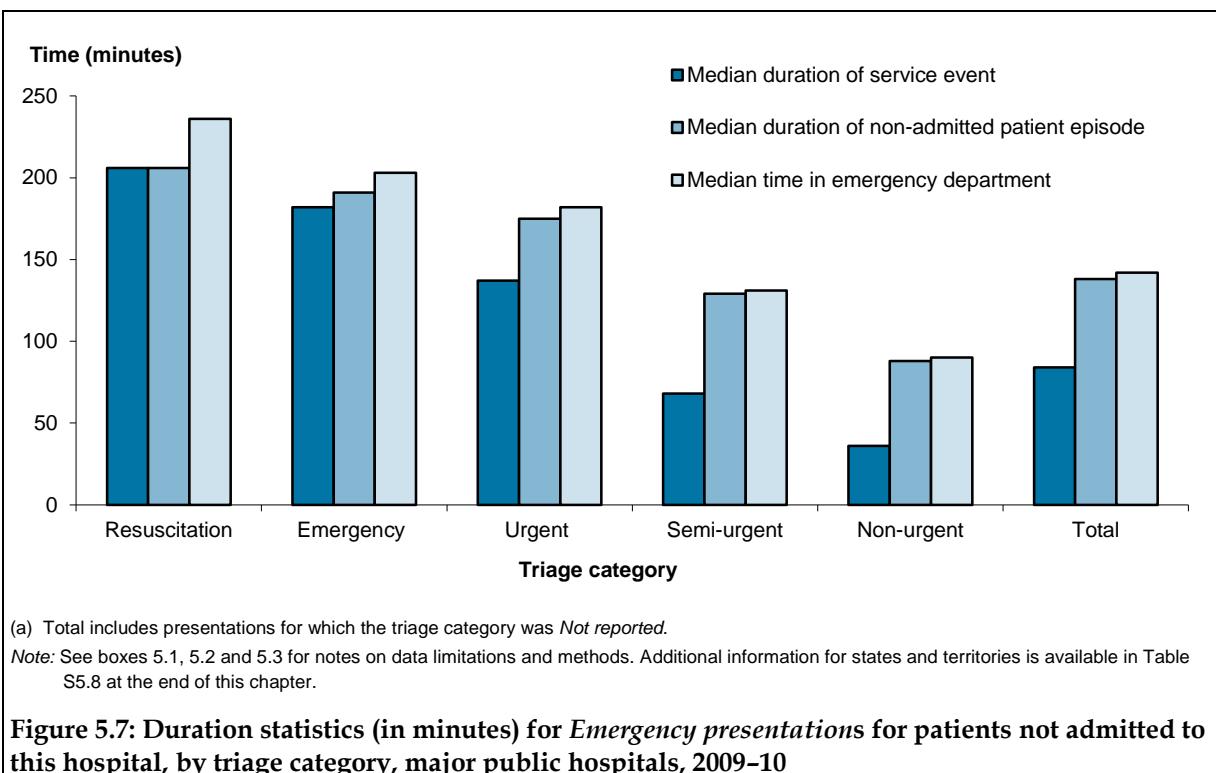


The presentation length statistics varied by triage category. For *Resuscitation* patients, the median duration of non-admitted patient episode was generally the same as the median duration of the service event, which reflects the short waiting times for these patients. *Non-urgent* patients who were *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 24 minutes (84 minutes) and the median duration of the non-admitted patient episode was 2 hours and 18 minutes (138 minutes).

The presentation length statistics 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 26 minutes and for *Non-urgent* patients it was 36 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 S5.8 at the end of this chapter and in Table 2.11 of *AHS: EDES* (AIHW 2010c).

For 2009–10, 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*.

Overall, 5.3% 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 S5.8, and in Table 2.13 of *AHS: EDES* (AIHW 2010c).

Nationally, 27% of all *Emergency presentations* had 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*. Western Australia had the lowest proportion of *Resuscitation* patients with an episode end status of *Admitted to this hospital*.

## **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: Methods—Chapter 5 Supplementary tables

#### Tables S5.1

- (a) The number of presentations reported to the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) divided by the number of accident and emergency occasions of service reported to the National Public Hospital Establishments Database (NPHED) as a percentage.

#### Tables S5.2

- (a) Includes records for which the type of visit was reported as *Emergency presentation* or was *Not reported* (South Australia only).
- (b) The number of presentations reported to the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) divided by the number of accident and emergency occasions of service reported to the National Public Hospital Establishments Database (NPHED) as a percentage.
- (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*.

#### Tables S5.6 and S5.7

- (a) Includes records for which the type of visit was reported as *Emergency presentation* or was *Not reported* (South Australia only).
- (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 service event 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) There is variation in the time recorded as the time of departure from the emergency department for patients admitted subsequent to a non-admitted emergency department presentation.
- (f) Includes presentations for which the triage category was *Not reported*.

**Table S5.1: Non-admitted patient emergency department presentations, by public hospital peer group, states and territories, 2009–10**

	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 episode-level data	29	20	18	7	5	2	1	2	84
Presentations reported with episode-level data	1,271,306	975,704	887,183	336,554	285,442	89,902	57,487	97,394	4,000,972
Estimated proportion of presentations with episode-level data (%) <sup>(a)</sup>	100	100	100	100	100	100	100	100	100
<b>Large hospitals</b>									
Hospitals reporting emergency department episode-level data	16	13	4	4	2	1	1	0	41
Presentations reported with episode-level data	423,408	357,038	150,491	135,339	41,035	25,958	49,327	..	1,182,596
Estimated proportion of presentations with episode-level data (%) <sup>(a)</sup>	100	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 episode-level data	39	7	4	5	1	1	0	3	60
Presentations reported with episode-level data	341,069	100,003	96,418	128,720	47,223	25,770	..	35,189	774,392
Estimated proportion of presentations with episode-level data (%) <sup>(a)</sup>	46	39	18	37	21	59	..	100	35
<b>Total</b>									
Hospitals reporting emergency department episode-level data	84	39	26	16	8	4	2	5	184
Presentations reported with episode-level data	2,035,783	1,432,745	1,134,092	600,613	373,700	141,630	106,814	132,583	5,957,960
Estimated proportion of presentations with episode-level data (%) <sup>(a)</sup>	83	90	72	73	68	89	100	100	81

(a) The number of presentations reported to the NNAPEDCD divided by the number of accident and 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.

Abbreviation: ..—not applicable.

**Table S5.2: Non-admitted patient emergency department *Emergency presentation*<sup>(a)</sup> statistics, by triage category and public hospital peer group, Australia, 2005–06 to 2009–10**

Triage category and peer group	2005–06	2006–07	2007–08	2008–09	2009–10
<b>Coverage of episode-level data for hospitals in peer groups A and B</b>					
Hospitals reporting emergency department episode-level data	118	119	124	122	125
Presentations reported with waiting times data	4,312,108	4,607,684	4,895,446	4,916,995	5,183,568
Estimated proportion of occasions with waiting times data (%) <sup>(b)</sup>	100	100	100	100	100
<b>Principal referral and specialist women's and children's hospitals</b>					
Hospitals reporting emergency department episode-level data	77	81	81	83	84
Presentations reported with waiting times data	3,202,097	3,526,341	3,648,559	3,801,547	4,000,972
Estimated proportion of occasions of service with waiting times data (%) <sup>(b)</sup>	100	100	100	100	100
Proportion by triage category (%)					
Resuscitation	<1	<1	<1	<1	<1
Emergency	9	10	10	10	11
Urgent	35	35	35	35	35
Semi-urgent	45	45	44	44	43
Non-urgent	10	10	10	10	10
<i>Total</i> <sup>(c)</sup>	100	100	100	100	100
Proportion seen on time (%) <sup>(d)</sup>					
Resuscitation	100	99	100	100	100
Emergency	75	76	74	75	77
Urgent	60	63	60	61	62
Semi-urgent	61	63	62	63	64
Non-urgent	86	86	85	86	86
<i>Total</i> <sup>(c)</sup>	65	66	65	66	67
Median waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	6	5	6	6	5
Urgent	23	22	24	23	22
Semi-urgent	43	41	42	41	39
Non-urgent	33	33	34	34	33
<i>Total</i> <sup>(c)</sup>	27	25	26	25	24

(continued)

**Table S5.2: (continued) Non-admitted patient emergency department *Emergency presentation<sup>(a)</sup>* statistics, by triage category and public hospital peer group, Australia, 2005–06 to 2009–10**

Triage category and peer group	2005–06	2006–07	2007–08	2008–09	2009–10
<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	0
Emergency	24	22	24	23	21
Urgent	101	96	107	103	98
Semi-urgent	163	158	161	157	151
Non-urgent	144	142	146	145	144
<i>Total<sup>(c)</sup></i>	132	127	132	128	122
Proportion ending in admission (%) <sup>(e)(f)</sup>					
Resuscitation	83	82	81	82	81
Emergency	67	64	64	64	64
Urgent	46	44	44	43	43
Semi-urgent	19	19	18	18	18
Non-urgent	6	6	6	6	6
<i>Total<sup>(c)</sup></i>	32	31	31	31	31
<b>Large hospitals</b>					
Hospitals reporting emergency department episode-level data	41	38	43	39	41
Presentations reported with waiting times data	1,110,011	1,081,343	1,246,887	1,115,448	1,182,596
Estimated proportion of occasions of service with waiting times data (%) <sup>(b)</sup>	100	100	100	100	100
Proportion by triage category (%)					
Resuscitation	<1	<1	<1	<1	<1
Emergency	6	6	6	6	7
Urgent	27	27	27	28	28
Semi-urgent	48	48	49	48	48
Non-urgent	18	19	19	18	16
<i>Total<sup>(c)</sup></i>	100	100	100	100	100
Proportion seen on time (%) <sup>(d)</sup>					
Resuscitation	99	99	99	99	99
Emergency	80	82	81	82	80
Urgent	70	70	70	72	72
Semi-urgent	69	69	69	71	71
Non-urgent	87	87	86	86	85
<i>Total</i>	73	73	73	74	74

(continued)

**Table S5.2: (continued) Non-admitted patient emergency department *Emergency presentation*<sup>(a)</sup> statistics, by triage category and public hospital peer group, Australia, 2005–06 to 2009–10**

Triage category and peer group	2005–06	2006–07	2007–08	2008–09	2009–10
<b>Large hospitals (continued)</b>					
90th percentile waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	19	18	18	17	18
Urgent	72	74	73	71	71
Semi-urgent	134	132	133	126	124
Non-urgent	140	142	146	145	148
<i>Total</i>	115	116	117	111	110
Proportion ending in admission (%) <sup>(b)(f)</sup>					
Resuscitation	67	66	64	65	63
Emergency	57	57	55	54	52
Urgent	38	37	35	36	35
Semi-urgent	14	13	13	14	13
Non-urgent	3	3	3	3	3
<i>Total</i>	22	21	20	21	21
<b>All hospitals<sup>(g)</sup></b>					
Hospitals reporting emergency department episode-level data	153	164	165	184	184
Presentations reported with waiting times data	4,914,896	5,287,451	5,537,196	5,742,140	5,957,960
Estimated proportion of occasions of service with waiting times data (%) <sup>(c)(d)</sup>	78	78	78	80	81
Proportion by triage category (%)					
Resuscitation	<1	<1	<1	<1	<1
Emergency	8	8	8	9	9
Urgent	31	31	31	32	32
Semi-urgent	46	46	46	45	45
Non-urgent	14	13	13	13	13
<i>Total</i>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Proportion seen on time (%) <sup>(e)</sup>					
Resuscitation	99	99	100	100	100
Emergency	77	78	76	77	78
Urgent	64	65	63	64	65
Semi-urgent	65	66	66	67	68
Non-urgent	87	88	87	88	88
<i>Total</i>	<b>69</b>	<b>70</b>	<b>69</b>	<b>70</b>	<b>70</b>

*(continued)*

**Table S5.2: (continued) Non-admitted patient emergency department *Emergency presentation*<sup>(a)</sup> statistics, by triage category and public hospital peer group, Australia, 2005–06 to 2009–10**

Triage category and peer group	2005–06	2006–07	2007–08	2008–09	2009–10
<b>All hospitals (continued)</b>					
Median waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	5	5	6	5	5
Urgent	21	20	21	21	20
Semi-urgent	37	36	36	35	35
Non-urgent	29	28	28	28	28
<b>Total<sup>(c)</sup></b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>23</b>
90th percentile waiting time to service delivery (minutes)					
Resuscitation	0	0	0	0	0
Emergency	23	21	23	22	20
Urgent	93	90	97	93	90
Semi-urgent	149	146	148	143	139
Non-urgent	136	133	137	134	134
<b>Total<sup>(c)</sup></b>	<b>123</b>	<b>120</b>	<b>124</b>	<b>119</b>	<b>115</b>
Proportion ending in admission (%) <sup>(e)(f)</sup>					
Resuscitation	80	79	78	79	78
Emergency	64	62	61	61	61
Urgent	43	42	41	40	40
Semi-urgent	17	16	16	16	16
Non-urgent	5	5	4	5	5
<b>Total<sup>(c)</sup></b>	<b>28</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</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 S5.3: Non-admitted patient emergency department presentations, by age group and sex, major public hospitals, states and territories, 2009–10

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Males</b>										
	0–4	141,667	92,704	79,079	45,657	24,735	7,505	6,672	8,342	406,361
	5–14	118,997	78,720	68,233	37,566	19,834	7,529	5,619	6,424	342,922
	15–24	151,782	103,370	96,109	48,473	26,206	12,362	9,373	10,359	458,034
	25–34	129,856	90,703	82,008	40,273	22,396	9,553	7,906	11,491	394,186
	35–44	120,184	84,580	71,215	35,542	20,736	8,676	6,161	11,616	358,710
	45–54	107,366	74,279	59,147	29,894	18,361	7,993	5,463	9,440	311,943
	55–64	95,454	66,063	49,013	25,149	16,346	7,130	4,830	6,481	270,466
	65–74	82,408	56,575	40,102	20,263	13,654	6,033	3,548	3,681	226,264
	75–84	76,329	52,893	32,143	17,931	14,683	4,883	2,891	1,497	203,250
	85 and over	34,428	21,911	12,388	7,775	7,397	1,781	1,378	259	87,317
	<i>Total<sup>(a)</sup></i>	<b>1,058,617</b>	<b>721,799</b>	<b>589,437</b>	<b>308,523</b>	<b>184,348</b>	<b>73,461</b>	<b>53,842</b>	<b>69,599</b>	<b>3,059,626</b>
<b>Females</b>										
	0–4	109,575	71,154	62,435	36,466	19,077	6,000	5,032	6,517	316,256
	5–14	89,064	60,641	52,517	29,408	16,099	6,158	4,514	5,264	263,665
	15–24	145,484	106,065	97,933	48,540	29,448	12,297	9,590	10,768	460,125
	25–34	129,331	112,887	81,164	42,924	30,316	8,907	8,644	11,809	425,982
	35–44	109,003	87,393	66,739	34,577	22,544	8,014	6,384	11,348	346,002
	45–54	96,465	68,724	55,571	28,421	17,332	7,450	5,305	8,288	287,556
	55–64	83,814	59,167	42,713	22,044	14,300	6,272	4,583	5,157	238,050
	65–74	72,451	50,483	33,726	17,654	12,383	5,172	3,293	2,358	197,520
	75–84	83,113	56,481	31,449	18,715	16,047	4,858	3,302	1,064	215,029
	85 and over	58,555	37,949	20,342	13,311	11,802	3,026	2,323	409	147,717
	<i>Total<sup>(a)</sup></i>	<b>976,917</b>	<b>710,945</b>	<b>544,589</b>	<b>292,060</b>	<b>189,348</b>	<b>68,160</b>	<b>52,971</b>	<b>62,984</b>	<b>2,897,974</b>
<b>Persons<sup>(b)</sup></b>										
	0–4	251,256	163,858	141,524	82,124	43,812	13,505	11,704	14,859	722,642
	5–14	208,072	139,361	120,756	66,977	35,934	13,688	10,133	11,688	606,609
	15–24	297,296	209,435	194,050	97,016	55,656	24,659	18,963	21,127	918,202
	25–34	259,231	203,590	163,183	83,197	52,713	18,461	16,551	23,300	820,226
	35–44	229,223	171,973	137,970	70,128	43,280	16,691	12,545	22,964	704,774
	45–54	203,859	143,004	114,723	58,318	35,693	15,444	10,768	17,728	599,537
	55–64	179,292	125,230	91,728	47,199	30,646	13,403	9,413	11,638	508,549
	65–74	154,877	107,058	73,829	37,921	26,037	11,207	6,841	6,039	423,809
	75–84	159,455	109,374	63,593	36,647	30,730	9,741	6,193	2,561	418,294
	85 and over	93,003	59,860	32,736	21,086	19,199	4,807	3,701	668	235,060
	<i>Total<sup>(a)(b)</sup></i>	<b>2,035,783</b>	<b>1,432,745</b>	<b>1,134,092</b>	<b>600,613</b>	<b>373,700</b>	<b>141,630</b>	<b>106,814</b>	<b>132,583</b>	<b>5,957,960</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 S5.4: Non-admitted patient emergency department presentations, by triage category and arrival mode, major public hospitals, states and territories, 2009–10**

Triage category and arrival mode	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Ambulance, air ambulance or helicopter rescue service	10,240	7,752	8,011	4,249	3,717	737	448	589	35,743
Police/correctional services vehicle	90	134	74	40	9	3	1	9	360
Other <sup>(a)</sup>	1,835	1,371	1,055	676	590	74	68	188	5,857
Not stated/unknown	66	0	0	0	0	4	0	0	70
<i>Total</i>	<i>12,231</i>	<i>9,257</i>	<i>9,140</i>	<i>4,965</i>	<i>4,316</i>	<i>818</i>	<i>517</i>	<i>786</i>	<i>42,030</i>
<b>Emergency</b>									
Ambulance, air ambulance or helicopter rescue service	80,103	55,721	59,762	25,987	21,458	5,890	4,025	3,889	256,835
Police/correctional services vehicle	2,323	1,461	1,907	733	118	266	343	223	7,374
Other <sup>(a)</sup>	84,062	63,892	51,857	39,189	21,421	4,490	5,499	5,121	275,531
Not stated/unknown	215	0	0	29	4	61	4	0	313
<i>Total</i>	<i>166,703</i>	<i>121,074</i>	<i>113,526</i>	<i>65,938</i>	<i>43,001</i>	<i>10,707</i>	<i>9,871</i>	<i>9,233</i>	<i>540,053</i>
<b>Urgent</b>									
Ambulance, air ambulance or helicopter rescue service	209,128	148,953	163,273	47,599	48,634	17,441	10,164	9,639	654,831
Police/correctional services vehicle	10,808	3,753	4,273	2,509	1,056	848	502	879	24,628
Other <sup>(a)</sup>	384,954	277,795	283,001	135,380	84,358	30,204	22,696	26,026	1,244,414
Not stated/unknown	365	0	0	126	9	179	10	0	689
<i>Total</i>	<i>605,255</i>	<i>430,501</i>	<i>450,547</i>	<i>185,614</i>	<i>134,057</i>	<i>48,672</i>	<i>33,372</i>	<i>36,544</i>	<i>1,924,562</i>
<b>Semi-urgent</b>									
Ambulance, air ambulance or helicopter rescue service	173,202	96,444	73,856	27,792	23,601	9,170	6,014	7,765	417,844
Police/correctional services vehicle	6,549	1,460	2,162	2,075	611	575	309	1,789	15,530
Other <sup>(a)</sup>	723,866	570,602	394,729	269,766	139,003	55,911	42,439	60,876	2,257,192
Not stated/unknown	186	1	0	312	9	167	4	0	679
<i>Total</i>	<i>903,803</i>	<i>668,507</i>	<i>470,747</i>	<i>299,945</i>	<i>163,224</i>	<i>65,823</i>	<i>48,766</i>	<i>70,430</i>	<i>2,691,245</i>

(continued)

**Table S5.4 (continued): Non-admitted patient emergency department presentations, by triage category and arrival mode, major public hospitals, states and territories, 2009–10**

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	19,647	4,799	3,580	923	1,765	383	379	542	32,018
Police/correctional services vehicle	2,493	261	785	357	282	406	62	522	5,168
Other <sup>(a)</sup>	322,138	195,954	85,767	42,761	27,045	14,398	13,845	14,526	716,434
Not stated/unknown	46	0	0	90	10	30	2	0	178
<i>Total</i>	<b>344,324</b>	<b>201,014</b>	<b>90,132</b>	<b>44,131</b>	<b>29,102</b>	<b>15,217</b>	<b>14,288</b>	<b>15,590</b>	<b>753,798</b>
<b>Total<sup>(b)</sup></b>									
Ambulance, air ambulance or helicopter rescue service	492,713	313,738	308,482	106,552	99,175	34,014	21,030	22,424	1,398,128
Police/correctional services vehicle	22,375	7,075	9,201	5,714	2,076	2,098	1,217	3,422	53,178
Other <sup>(a)</sup>	1,519,298	1,111,931	816,409	487,790	272,417	105,077	84,547	106,737	4,504,206
Not stated/unknown	1,397	1	0	557	32	441	20	0	2,448
<b>Total<sup>(b)</sup></b>	<b>2,035,783</b>	<b>1,432,745</b>	<b>1,134,092</b>	<b>600,613</b>	<b>373,700</b>	<b>141,630</b>	<b>106,814</b>	<b>132,583</b>	<b>5,957,960</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 S5.5: Non-admitted patient emergency department presentations, by type of visit and public hospital peer group, states and territories, 2009–10**

Type of visit and peer group	NSW	Vic	Qld	WA <sup>(a)</sup>	SA <sup>(b)</sup>	Tas	ACT	NT	Total
<b>Principal referral and Specialist women's and children's hospitals</b>									
Emergency presentation	1,252,298	960,610	872,868	330,516	281,589	88,501	57,482	95,692	3,939,556
Return visit, planned	14,223	12,676	10,635	5,351	2,585	1,401	0	1,660	48,531
Pre-arranged admission	2,063	340	3,286	356	502	0	4	0	6,551
Patient in transit	26	195	305	0	0	0	1	3	530
Dead on arrival	2,058	1,694	89	..	..	0	0	39	3,880
Not reported	638	189	0	331	766	0	0	0	1,924
<i>Total</i>	<i>1,271,306</i>	<i>975,704</i>	<i>887,183</i>	<i>336,554</i>	<i>285,442</i>	<i>89,902</i>	<i>57,487</i>	<i>97,394</i>	<i>4,000,972</i>
<b>Large hospitals</b>									
Emergency presentation	412,880	336,733	142,345	134,494	6,476	25,957	48,838	0	1,108,723
Return visit, planned	8,870	18,841	7,854	813	27	0	436	0	36,841
Pre-arranged admission	338	896	266	21	185	0	2	0	1,758
Patient in transit	8	48	20	0	0	0	20	0	9,61
Dead on arrival	214	432	6	..	..	1	31	0	68,42
Not reported	98	38	0	11	34,347	0	0	0	34,494
<i>Total</i>	<i>423,408</i>	<i>357,038</i>	<i>150,491</i>	<i>135,339</i>	<i>41,035</i>	<i>25,958</i>	<i>49,327</i>	<i>0</i>	<i>1,182,596</i>
<b>Other hospitals</b>									
Emergency presentation	322,556	95,180	90,344	128,149	45,597	25,766	0	31,313	738,905
Return visit, planned	17,852	4,339	5,884	557	1,549	0	0	3,860	34,041
Pre-arranged admission	366	209	108	13	10	0	0	0	706
Patient in transit	20	4	40	0	0	0	0	11	75
Dead on arrival	200	267	42	..	..	4	0	1	51,45
Not reported	75	4	0	1	67	0	0	4	151
<i>Total</i>	<i>341,069</i>	<i>100,003</i>	<i>96,418</i>	<i>128,720</i>	<i>47,223</i>	<i>25,770</i>	<i>0</i>	<i>35,189</i>	<i>774,392</i>
<b>Total</b>									
Emergency presentation	1,988,734	1,392,523	1,105,557	593,159	333,662	140,224	106,320	127,005	5,787,184
Return visit, planned	40,945	35,856	24,373	6,721	4,161	1,401	436	5,520	119,413
Pre-arranged admission	2,767	1,495	3,660	390	697	0	6	0	9,015
Patient in transit	54	247	365	0	0	0	21	14	701
Dead on arrival	2,472	2,393	137	..	..	5	31	40	5,078
Not reported	811	231	0	343	35,180	0	0	4	36,569
<b>Total presentations reported at episode-level</b>	<b>2,035,783</b>	<b>1,432,745</b>	<b>1,134,092</b>	<b>600,613</b>	<b>373,700</b>	<b>141,630</b>	<b>106,814</b>	<b>132,583</b>	<b>5,957,960</b>

(a) For Western Australia patients who are *Dead on arrival* are only occasionally 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

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

**Table S5.6 Non-admitted patient 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, major public hospitals, states and territories, 2009–10**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	3:17	5:04	2:26	1:30	1:53	4:09	2:06	1:42	3:01
Median duration of service event <sup>(c)</sup>	3:17	5:04	2:26	1:29	1:53	4:09	2:06	1:42	3:01
Median time in emergency department <sup>(d)(e)</sup>	4:21	5:06	4:26	3:48	3:55	4:09	3:55	4:13	4:26
<b>Emergency</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	4:33	5:29	3:20	2:15	2:22	5:39	3:43	1:57	4:02
Median duration of service event <sup>(c)</sup>	4:25	5:21	3:11	2:06	2:14	5:29	3:36	1:44	3:53
Median time in emergency department <sup>(d)(e)</sup>	5:54	5:30	6:05	5:33	5:46	5:39	7:50	7:02	5:49
<b>Urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	5:21	5:50	3:56	2:44	2:58	6:40	4:56	2:27	4:44
Median duration of service event <sup>(c)</sup>	4:48	5:20	3:17	2:04	2:21	5:46	4:01	1:40	4:09
Median time in emergency department <sup>(d)(e)</sup>	6:30	5:51	6:43	5:35	6:19	6:40	9:10	6:49	6:18
<b>Semi-urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	5:36	5:47	3:54	2:56	3:28	6:27	5:24	2:45	5:00
Median duration of service event <sup>(c)</sup>	4:40	4:49	2:46	1:53	2:18	5:10	3:29	1:13	3:59
Median time in emergency department <sup>(d)(e)</sup>	6:36	5:49	6:31	5:35	6:32	6:27	10:02	5:59	6:16
<b>Non-urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	4:13	4:02	2:26	2:12	1:53	4:27	3:38	1:47	3:40
Median duration of service event <sup>(c)</sup>	3:15	3:03	1:30	1:20	0:47	3:21	1:52	1:03	2:42
Median time in emergency department <sup>(d)(e)</sup>	5:05	4:02	4:17	3:42	3:21	4:27	6:38	2:02	4:33
<b>Total</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	5:11	5:43	3:44	2:36	2:54	6:19	4:41	2:24	4:36
Median duration of service event <sup>(c)</sup>	4:37	5:09	3:08	2:00	2:15	5:30	3:43	1:33	4:00
Median time in emergency department <sup>(d)(e)</sup>	6:20	5:44	6:27	5:31	6:07	6:19	8:52	6:26	6:08

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 S5.7 Non-admitted patient 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, major public hospitals, states and territories, 2009–10**

Triage category	NSW	Vic	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Total
<b>Resuscitation</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	3:26	3:10	3:27	3:50	3:34	3:28	2:08	3:20	3:26
Median duration of service event <sup>(c)</sup>	3:26	3:10	3:27	3:50	3:34	3:28	2:08	3:20	3:26
Median time in emergency department <sup>(d)</sup>	3:54	3:13	4:26	3:50	4:07	3:28	2:59	3:20	3:56
<b>Emergency</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	3:32	2:53	3:03	3:08	3:05	3:55	3:28	3:30	3:11
Median duration of service event <sup>(c)</sup>	3:23	2:44	2:52	2:57	2:57	3:43	3:18	3:18	3:02
Median time in emergency department <sup>(d)</sup>	3:45	2:54	3:31	3:08	3:21	3:55	3:54	3:30	3:23
<b>Urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	3:05	2:48	2:49	2:38	3:19	3:17	3:24	3:03	2:55
Median duration of service event <sup>(c)</sup>	2:31	2:15	2:07	1:55	2:40	2:20	2:36	2:10	2:17
Median time in emergency department <sup>(d)</sup>	3:13	2:49	3:02	2:38	3:27	3:17	3:41	3:03	3:02
<b>Semi-urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	2:15	2:09	2:02	1:52	2:33	2:02	2:43	2:17	2:09
Median duration of service event <sup>(c)</sup>	1:20	1:08	1:01	0:55	1:28	0:58	1:20	0:58	1:08
Median time in emergency department <sup>(d)</sup>	2:20	2:09	2:07	1:52	2:35	2:02	2:50	2:17	2:11
<b>Non-urgent</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	1:34	1:27	1:16	1:18	1:49	1:12	1:58	1:08	1:28
Median duration of service event <sup>(c)</sup>	0:43	0:30	0:30	0:35	0:48	0:30	0:39	0:30	0:36
Median time in emergency department <sup>(d)</sup>	1:37	1:27	1:19	1:18	1:49	1:12	2:01	1:08	1:30
<b>Total</b>									
Median duration of non-admitted patient episode <sup>(b)</sup>	2:22	2:12	2:18	2:05	2:44	2:20	2:48	2:20	2:18
Median duration of service event <sup>(c)</sup>	1:32	1:15	1:24	1:11	1:50	1:17	1:35	1:08	1:24
Median time in emergency department <sup>(d)</sup>	2:28	2:12	2:26	2:05	2:49	2:20	2:58	2:20	2:22

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: Non-admitted patient emergency department presentations, by triage category and episode end status, major public hospitals, states and territories, 2009–10**

Triage category and episode end status	NSW <sup>(a)</sup>	Vic	Qld	WA <sup>(b)</sup>	SA <sup>(b)</sup>	Tas	ACT	NT	Total
<b>Resuscitation</b>									
Admitted to this hospital <sup>(b)</sup>	9,928	8,292	6,346	3,373	3,355	646	373	565	32,878
Departed without being admitted or referred <sup>(c)</sup>	1,289	666	1,565	510	515	36	60	164	4,805
Referred to another hospital for admission	827	136	631	619	285	34	23	0	2,555
Did not wait <sup>(d)</sup>	8	0	10	1	0	0	2	0	21
Left at own risk <sup>(e)</sup>	66	55	91	35	20	1	0	5	273
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	106	470	425	133	95	58	52	1,339
Dead on arrival, not treated in emergency department <sup>(g)</sup>	89	1	27	..	..	6	1	0	124
Not reported	24	1	0	2	8	0	0	0	35
<i>Total</i>	12,231	9,257	9,140	4,965	4,316	818	517	786	42,030
<b>Emergency</b>									
Admitted to this hospital <sup>(b)</sup>	103,516	87,816	61,675	32,278	25,185	5,815	5,467	5,671	327,423
Departed without being admitted or referred <sup>(c)</sup>	55,157	31,427	43,868	28,339	14,300	4,575	4,069	3,421	185,156
Referred to another hospital for admission	5,421	803	5,578	4,537	2,975	232	256	20	19,822
Did not wait <sup>(d)</sup>	371	221	278	112	92	10	7	13	1,104
Left at own risk <sup>(e)</sup>	2,053	787	1,929	600	351	48	59	106	5,933
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	19	194	68	53	25	13	2	374
Dead on arrival, not treated in emergency department <sup>(g)</sup>	4	0	4	..	..	0	0	0	8
Not reported	181	1	0	4	45	2	0	0	233
<i>Total</i>	166,703	121,074	113,526	65,938	43,001	10,707	9,871	9,233	540,053
<b>Urgent</b>									
Admitted to this hospital <sup>(b)</sup>	250,892	218,701	143,428	64,351	55,297	15,337	12,831	15,988	776,825
Departed without being admitted or referred <sup>(c)</sup>	317,406	197,369	274,717	111,581	68,650	31,004	18,380	19,188	1,038,295
Referred to another hospital for admission	11,840	1,689	12,131	7,061	5,185	613	818	57	39,394
Did not wait <sup>(d)</sup>	13,319	8,777	13,819	1,285	3,574	1,483	1,136	963	44,356
Left at own risk <sup>(e)</sup>	11,406	3,941	6,319	1,265	1,122	201	197	348	24,799
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	15	95	51	28	17	10	0	216
Dead on arrival, not treated in emergency department <sup>(g)</sup>	8	0	38	..	..	0	0	0	46
Not reported	384	9	0	20	201	17	0	0	631
<i>Total</i>	605,255	430,501	450,547	185,614	134,057	48,672	33,372	36,544	1,924,562

(continued)

**Table S5.8 (continued): Non-admitted patient emergency department presentations, by triage category and episode end status, major public hospitals, states and territories, 2009–10**

Triage category and episode end status	NSW <sup>(a)</sup>	Vic	Qld	WA <sup>(b)</sup>	SA <sup>(b)</sup>	Tas	ACT	NT	Total
<b>Semi-urgent</b>									
Admitted to this hospital <sup>(b)</sup>	157,333	137,897	49,110	34,385	25,541	6,666	6,312	10,245	427,489
Departed without being admitted or referred <sup>(c)</sup>	653,749	477,941	368,626	254,465	122,276	54,124	35,234	51,212	2,017,627
Referred to another hospital for admission	7,321	1,191	3,888	3,939	2,408	310	380	54	19,491
Did not wait <sup>(d)</sup>	65,162	44,037	41,546	5,842	11,225	4,515	6,586	8,413	187,326
Left at own risk <sup>(e)</sup>	19,720	7,379	7,562	1,196	1,572	182	251	506	38,368
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	7	12	13	3	4	3	0	42
Dead on arrival, not treated in emergency department <sup>(g)</sup>	20	0	3	..	..	1	0	0	24
Not reported	498	55	0	105	199	21	0	0	878
<i>Total</i>	<i>903,803</i>	<i>668,507</i>	<i>470,747</i>	<i>299,945</i>	<i>163,224</i>	<i>65,823</i>	<i>48,766</i>	<i>70,430</i>	<i>2,691,245</i>
<b>Non-urgent</b>									
Admitted to this hospital <sup>(b)</sup>	18,665	8,693	2,795	1,584	2,369	568	374	821	35,869
Departed without being admitted or referred <sup>(c)</sup>	276,421	174,259	74,661	40,397	23,581	13,177	11,272	12,684	626,452
Referred to another hospital for admission	677	125	238	152	174	26	56	26	1,474
Did not wait <sup>(d)</sup>	40,112	16,291	11,337	1,846	2,630	1,423	2,529	1,933	78,101
Left at own risk <sup>(e)</sup>	5,633	1,629	1,012	135	294	13	55	86	8,857
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	0	4	1	0	0	2	1	8
Dead on arrival, not treated in emergency department <sup>(g)</sup>	2,679	0	85	..	..	3	0	39	2,806
Not reported	137	17	0	16	54	7	0	0	231
<i>Total</i>	<i>344,324</i>	<i>201,014</i>	<i>90,132</i>	<i>44,131</i>	<i>29,102</i>	<i>15,217</i>	<i>14,288</i>	<i>15,590</i>	<i>753,798</i>
<b>Total<sup>(f)</sup></b>									
Admitted to this hospital <sup>(b)</sup>	540,426	461,401	263,354	135,985	111,747	29,032	25,357	33,290	1,600,592
Departed without being admitted or referred <sup>(c)</sup>	1,304,570	881,662	763,437	435,295	229,322	102,916	69,015	86,669	3,872,886
Referred to another hospital for admission	26,092	3,944	22,466	16,308	11,027	1,215	1,533	157	82,742
Did not wait <sup>(d)</sup>	121,034	69,326	66,990	9,087	17,521	7,431	10,260	11,322	312,971
Left at own risk <sup>(e)</sup>	38,982	13,791	16,913	3,231	3,359	445	562	1,051	78,334
Died in emergency department as a non-admitted patient <sup>(f)</sup>	..	147	775	560	217	141	86	55	1,981
Dead on arrival, not treated in emergency department <sup>(g)</sup>	2,822	2,391	157	..	..	403	1	39	5,813
Not reported	1,857	83	0	147	507	47	0	0	2,641
<b>Total<sup>(f)</sup></b>	<b>2,035,783</b>	<b>1,432,745</b>	<b>1,134,092</b>	<b>600,613</b>	<b>373,700</b>	<b>141,630</b>	<b>106,814</b>	<b>132,583</b>	<b>5,957,960</b>

(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 patients who are *Dead on arrival* are only occasionally managed and reported by emergency departments. In South Australia, patients who were *Dead on arrival* are not managed and/or reported by the emergency department.

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?

### National Public Hospital Establishments Database

Some data on outpatient-related occasions of service and group sessions were sourced from the National Public Hospital Establishments Database (NPHED) which has almost complete coverage of public hospitals (see *Appendix 2*). Data on non-admitted patient care activity for the NPHED are collected for 14 non-admitted patient service types. In addition to outpatient services, these service types cover a range of non-admitted patient care services that are not in scope for the National Outpatient Care Database (NOCD).

### National Outpatient Care Database

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 2009–10 as counts of individual occasions of service and group sessions for 24 types of outpatient clinics.

The scope for the Outpatient care NMDS for 2009–10 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 2008–09* (AIHW 2010a). 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 2009–10, 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. Tasmania was not able to provide outpatient care data for one *Principal referral hospital*, which reported about 140,000 occasions of service to the NOCD in 2008–09. 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 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*.

These data have also been included in analyses of NOCD data presented in this chapter.

While the proportion of individual outpatient occasions of service and group sessions for which clinic-level data were available was 95% for peer groups A and B (excluding one

Tasmanian hospital for which data were not available), coverage for all public hospitals was only about 78% for individual occasions of service and 80% 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. While the proportion of individual outpatient-related occasions of service and group sessions for which clinic-level data were available was 95% for peer groups A (*Principal referral* and *Specialist women's and children's hospitals*) and B (*Large hospitals*), coverage for all public hospitals was only about 78% for individual occasions of service and 80% 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 Western Australia, counts of outpatient group sessions reported to the NOCD actually 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.
- Tasmania were not able to provide outpatient care data for one *Principal referral hospital*, which reported about 280,000 occasions of service to the NPHED and about 140,000 occasions of service to the NOCD in 2008–09.

### **Box 6.2: What methods were used?**

- For the purposes of aligning the two data sources, 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*.
- 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*.

(continued)

**Box 6.2 (continued)**

- The number of occasions of service for the non-admitted patient service type *Accident and emergency* 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 2005–06 and 2009–10.

Between 2005–06 and 2009–10, outpatient care delivered in specialist outpatient clinics increased by an average of almost 3% per year with *Dialysis* showing the largest relative increase in number of individual occasions of service (49% per year). Over the same period *Endoscopy and related procedures* increased by about 21% per year; *Dental services* decreased by over 6% per year; and *Community health, Outreach and District nursing* decreased by almost 4% per year (Table 6.1).

## How much patient activity was there in 2009–10?

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 by state and territory.

In 2009–10, public hospitals provided over 42 million service episodes for non-admitted patients:

- 16.8 million service episodes were delivered in specialist outpatient clinics with the chief contributors being *Medical/surgical/obstetric* and *Allied health*
- *Mental health* and *Alcohol and drug services* delivered 3.2 million services
- *Pharmacy, Pathology and Radiology and organ imaging* made up a further 16.8 million services
- 5.3 million occasions were for *Community health, Outreach and District nursing* services.

**Table 6.1 Number of individual occasions of service<sup>(a)</sup> for outpatient and other non-admitted patient services, public acute hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10 <sup>(c)</sup>	Change (per cent)						
						Ave since 2005–06	Since 2008–09					
<b>Individual occasions of service</b>												
Outpatient care												
Allied health	3,681,164	3,659,763	3,715,798	3,751,560	3,848,123	1.1	2.6					
Dental	1,134,303	1,084,156	1,034,822	775,382	864,430	-6.6	11.5					
Dialysis	10,079	32,798	25,319	25,612	50,045	49.3	95.4					
Endoscopy and related procedures	25,991	24,429	46,995	57,885	54,723	20.5	-5.5					
Other medical/surgical/obstetric <sup>(b)</sup>	10,073,999	11,031,151	11,545,782	11,905,566	11,972,166	4.4	0.6					
<i>Total outpatient occasions of service</i>	<b>14,925,536</b>	<b>15,832,297</b>	<b>16,368,716</b>	<b>16,516,005</b>	<b>16,789,487</b>	<b>3.0</b>	<b>1.7</b>					
Pharmacy, Pathology, Radiology and organ imaging	14,462,913	14,909,645	16,212,632	17,065,627	16,814,847	3.8	-1.5					
Mental health, Alcohol & drug	3,079,504	3,154,917	3,078,262	3,042,035	3,180,247	0.8	4.5					
Community health, Outreach and District nursing	5,953,122	5,502,733	5,594,899	5,365,453	5,296,174	-2.9	-1.3					
<b>Total non-admitted patient occasions of service</b>	<b>38,421,075</b>	<b>39,399,592</b>	<b>41,254,509</b>	<b>41,989,120</b>	<b>42,080,755</b>	<b>2.3</b>	<b>0.2</b>					

(a) Reporting arrangements have varied significantly across years and across jurisdictions.

(b) Other medical/surgical/obstetric includes the 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*.

(c) For 2009–10, Tasmania was not able to provide occasions of service data for one hospital that reported about 280,000 non-admitted patient occasions of service to the NPHED in 2008–09.

*Note:* See boxes 6.1 and 6.2 for notes on data limitations and methods.

*Abbreviation:* Ave—average.

*Source:* National Public Hospital Establishments Database.

The proportion of non-admitted patient occasions of service which are related to outpatient care varies across states, from 34% in New South Wales to 70% in South Australia. 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. For example, *Pharmacy, Pathology and Radiology and organ imaging* accounted for 60% of all non-admitted patient occasions of service in the Northern Territory, but only 14% of all non-admitted patient occasions of service in South Australia.

In 2009–10, almost 328,000 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 32% of the sessions (see Table S6.2).

**Table 6.2: Number of individual occasions of service ('000)<sup>(a)</sup> for outpatient and other non-admitted patient services, public acute hospitals, states and territories, 2009–10**

Type of service	NSW <sup>(b)</sup>	Vic	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT <sup>(d)</sup>	Total <sup>(e)</sup>
<b>Outpatient care</b>									
				<b>('000)</b>					
Allied health	691	1,089	643	1,096	176	111	30	12	3,848
Dental	485	356	..	12	9	<1	..	..	864
Dialysis	50	..	<1	..	..	..	..	..	50
Endoscopy and related procedures	17	..	11	..	24	<1	3	..	55
Other medical/surgical/obstetric <sup>(f)</sup>	5,207	1,649	2,691	794	928	222	347	135	11,972
<i>Total outpatient occasions of service</i>	<i>6,451</i>	<i>3,094</i>	<i>3,345</i>	<i>1,902</i>	<i>1,136</i>	<i>335</i>	<i>380</i>	<i>147</i>	<i>16,789</i>
Pharmacy <sup>(g)</sup> , Pathology, Radiology and organ imaging	7,262	1,935	5,557	1,189	232	61	122	223	16,815
Mental health, Alcohol and drug	2,103	782	185	80	27	<1	2	..	3,180
Community health, Outreach and District nursing <sup>(h)</sup>	3,158	529	414	927	206	<1	46	..	5,296
<b>Total non-admitted patient occasions of service</b>	<b>18,974</b>	<b>6,341</b>	<b>9,500</b>	<b>4,098</b>	<b>1,602</b>	<b>396</b>	<b>550</b>	<b>370</b>	<b>42,081</b>

- (a) Reporting arrangements have varied significantly across years and across jurisdictions.
- (b) From 2009–10, the data for the Albury Base Hospital 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 now included in statistics for Victoria whereas they were formerly reported by, and included in statistics for New South Wales.
- (c) Tasmania was not able to provide data for one hospital that reported about 280,000 occasions of service to the NPHED in 2008–09.
- (d) Radiology figures for the Northern Territory are underestimated and Pathology figures relate only to three of the five hospitals.
- (e) Includes only those states and territories for which data were available.
- (f) Other medical/surgical/obstetric includes the 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.
- (g) Justice Health in New South Wales reported a large number of occasions of service for Pharmacy which may not be typical for other hospitals
- (h) 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.

Source: National Public Hospital Establishments Database.

## What care was provided?

Clinic-level data were provided to the NOCD for over 13 million occasions of service for individuals and 190,000 group sessions for non-admitted patient outpatient clinic care. The estimated proportion of outpatient-related occasions of service for all hospitals that also reported to the NOCD was about 78% for individual occasions of service, and about 80% for group sessions (see Table S6.1). Clinic-level data were provided for 84 *Principal referral* and *specialist women's and children's hospitals*, 38 *Large hospitals* and 12 *Other hospitals* (not classified in peer groups A or B). Coverage varied significantly by state and territory, ranging from 67% for the Australian Capital Territory to 95% for the Northern Territory for individual occasions of service, and from 22% for the Australian Capital Territory to 100% for Western Australia and the Northern Territory for group occasions of service.

## Individual occasions of service

In 2009–10, just over half of individual outpatient occasions of service reported to the NOCD were provided by *Allied Health, Medical and Obstetrics* clinics (Table 6.3).

**Table 6.3: Outpatient care individual occasions of service<sup>(a)</sup>, by outpatient clinic-type, major public hospitals, states and territories, 2009–10**

Clinic type	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Allied health	556,971	804,649	525,606	503,695	170,876	77,632	29,709	10,431	2,679,569
Dental	188,712	181,622	0	4,823	8,941	2,500	0	0	386,598
Gynaecology	53,984	44,689	67,365	23,434	36,392	8,091	5,117	6,405	245,477
Obstetrics	873,865	324,950	386,475	112,303	120,295	46,590	59,354	24,872	1,948,704
Cardiology	66,753	22,880	82,462	34,288	24,918	34,019	12,299	2,248	279,867
Endocrinology	168,039	52,057	67,749	31,440	31,343	15,679	12,491	370	379,168
Oncology	317,352	120,695	90,317	64,310	12,097	26,871	15,083	1,750	648,475
Respiratory	160,427	14,114	56,030	18,722	30,289	4,587	5,351	1,403	290,923
Gastroenterology	37,050	23,737	35,312	13,813	19,511	1,689	6,191	1,074	138,377
Medical	1,110,871	225,149	334,238	264,571	115,780	44,009	32,043	20,785	2,147,446
General practice /primary care	203,005	157	28,801	694	0	0	0	0	232,657
Paediatric	105,879	9,843	48,404	10,048	29,473	20,005	7,267	7,099	238,018
Endoscopy	16,635	0	10,981	1	16,459	824	2,602	701	48,203
Plastic surgery	35,504	73,806	32,603	41,687	27,068	5,421	5,792	1,347	223,228
Urology	25,366	44,306	47,273	18,516	13,280	1,928	1,725	414	152,808
Orthopaedic	224,839	202,347	279,768	87,952	63,818	22,513	14,915	13,070	909,222
Ophthalmology	141,342	95,278	78,310	54,567	61,629	6,500	8,050	13,396	459,072
Ear, nose and throat surgery	35,139	39,267	46,653	24,315	21,180	2,192	3,045	3,959	175,750
Pre-admission and pre-anaesthesia	190,314	91,455	149,499	28,724	44,401	12,273	7,554	7,940	532,160
Chemotherapy	81,508	0	2,978	598	21,680	5,647	8,959	1,905	123,275
Dialysis	49,303	0	0	2,427	0	0	0	3,821	55,551
Surgery	95,686	141,311	143,931	48,931	78,003	23,119	8,610	16,205	555,796
Paediatric surgery	9,839	22,389	7,289	285	3,432	0	1,611	0	44,845
Renal medicine	144,261	0	63,017	0	12,751	1,205	6,340	0	227,574
<b>Total</b>	<b>4,892,644</b>	<b>2,534,701</b>	<b>2,585,061</b>	<b>1,390,144</b>	<b>963,616</b>	<b>363,294</b>	<b>254,108</b>	<b>139,195</b>	<b>13,122,763</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.

(b) Tasmania was not able to provide data for one hospital that reported 140,000 occasions of service to the NOCD in 2008–09.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods.

Source: National Outpatient Care Database.

## Group occasions of service

In 2009–10, over 76% of group sessions reported to the NOCD were provided by *Allied Health* clinics (Table 6.4).

**Table 6.4: Outpatient care group occasions of service<sup>(a)</sup>, by outpatient clinic-type, major public hospitals, states and territories, 2009–10**

Clinic type	NSW	Vic	Qld	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Allied health	12,765	8,045	6,093	110,571	6,180	833	165	0	144,652
Gynaecology	129	0	15	0	0	0	0	0	144
Obstetrics	3,505	0	2,181	0	1,363	0	110	0	7,159
Cardiology	1,915	0	1,367	0	315	41	0	0	3,638
Endocrinology	1,252	0	322	0	100	100	64	0	1,838
Oncology	608	0	43	7	0	0	1	0	659
Respiratory	2,262	0	8	0	98	0	0	0	2,368
Gastroenterology	123	0	105	0	83	0	0	0	311
Medical	21,091	490	677	406	3,057	2	15	139	25,877
General practice /primary care	195	70	0	32	0	0	0	0	297
Paediatric	540	0	11	0	507	0	0	0	1,058
Plastic surgery	0	0	0	0	402	0	0	0	402
Urology	15	0	0	0	0	0	0	0	15
Orthopaedic	354	0	0	85	9	0	0	0	448
Ophthalmology	2	0	0	3	0	0	0	0	5
Ear, nose and throat surgery	5	0	0	0	0	0	0	0	5
Pre-admission and pre-anaesthesia	129	0	0	0	1	0	0	0	130
Chemotherapy	174	0	0	0	0	0	0	0	174
Dialysis	38	0	0	0	0	0	0	0	38
Surgery	126	0	73	0	96	8	3	0	306
Renal medicine	479	0	0	0	17	0	0	0	496
<b>Total</b>	<b>45,707</b>	<b>8,605</b>	<b>10,895</b>	<b>111,104</b>	<b>12,228</b>	<b>984</b>	<b>358</b>	<b>139</b>	<b>190,020</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 *Dental, Endoscopy* and *Paediatric surgery*.

(b) Tasmania was not able to provide data for one hospital that reported 140,000 occasions of service to the NOCD in 2008–09.

*Note:* See boxes 6.1 and 6.2 for notes on data limitations and methods.

*Source* National Outpatient Care Database.

## Additional information

Further detailed information on non-admitted patient care by state or territory of hospitalisation and public hospital peer groups 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

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) Reporting arrangements have varied significantly across years and across jurisdictions.
- (b) From 2009–10, the data for the Albury Base Hospital 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 now included in statistics for Victoria whereas they were formerly reported by, and included in statistics for New South Wales.
- (c) Tasmania was not able to provide data for one hospital that reported about 280,000 occasions of service to the NPHED (and reported 140,000 to the NOCD) in 2008–09.
- (d) *Radiology* figures for the Northern Territory are underestimated and *Pathology* figures relate only to three of the five hospitals.
- (e) Includes only those states and territories for which data are available.
- (f) *Other medical/surgical/obstetric* includes the outpatient services of *Gynaecology; Obstetrics; Cardiology; Endocrinology; Oncology; Respiratory; Gastroenterology; Medica;; General practice primary car;; Paediatric; Plastic surger;; Urology; Orthopaedic surgery; Ophthalmology; Ear, nose and throat; Chemotherapy; Paediatric surgery and Renal medical.*
- (g) 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.
- (h) 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*.
- (i) 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, 2009–10**

Peer group	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Hospitals reporting outpatient occasions of service									
Individual occasions of service	30	20	19	6	5	1	1	2	84
Group occasions of service	28	11	16	6	5	0	1	1	68
Occurrences of service reported									
Individual occasions of service	4,330,123	1,953,868	2,406,385	1,035,008	829,760	269,787	204,243	139,195	11,168,369
Group occasions of service	39,397	4,794	10,259	59,445	10,628	0	267	139	124,929
<b>Large hospitals</b>									
Hospitals reporting outpatient occasions of service									
Individual occasions of service	12	15	4	3	2	1	1	0	38
Group occasions of service	11	9	4	3	2	1	1	0	31
Occurrences of service reported									
Individual occasions of service	562,521	531,561	178,676	94,303	122,033	58,576	49,865	0	1,597,535
Group occasions of service	6,310	3,341	636	25,820	1,462	984	91	0	38,644
<b>Other hospitals</b>									
Hospitals reporting outpatient occasions of service									
Individual occasions of service	0	1	0	9	1	1	0	0	12
Group occasions of service	..	30,992	..	260,833	11,823	34,931	..	..	338,579
Occurrences of service reported									
Individual occasions of service	..	274	..	25,839	138	0	..	..	26,251
<b>Total</b>									
Hospitals reporting outpatient occasions of service									
Individual occasions of service	42	36	23	18	8	3	2	2	134
Group occasions of service	39	21	20	17	8	1	2	1	109
Occurrences of service reported									
Individual occasions of service	4,892,644	2,516,421	2,585,061	1,390,144	963,616	363,294	254,108	139,195	13,104,483
Group occasions of service	45,707	8,409	10,895	111,104	12,228	984	358	139	189,824
Estimated proportion of occasions of service in NOCD <sup>(b)</sup>									
Individual occasions of service	76	82	77	73	85	n.a.	67	95	78
Group occasions of service	62	35	76	100	93	n.a.	22	100	80

(a) Tasmania was not able to provide data for one hospital that reported 140,000 outpatient-related occasions of service to the NPHED and the NOCD in 2008–09. The estimated proportion of occasions of service in the NOCD does not include that hospital.

(b) 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.

**Table S6.2 Outpatient occasions of service<sup>(a)</sup>, public acute hospitals, states and territories, 2009–10**

Type of non-admitted patient service	NSW <sup>(b)</sup>	Vic	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT <sup>(d)</sup>	Total <sup>(e)</sup>
<b>Individual occasions of service</b>									
Outpatient care									
Allied health	691,145	1,088,909	642,720	1,096,022	176,314	111,117	30,130	11,766	3,484,123
Dental	485,184	356,488	..	12,477	8,941	1,340	..	..	864,430
Dialysis	50,039	..	6	..	..	..	..	..	50,045
Endoscopy and related procedures	16,939	..	11,027	..	23,545	610	2,602	..	54,723
Other medical/surgical/obstetric <sup>(f)</sup>	5,207,285	1,648,687	2,691,152	793,561	927,519	221,879	347,242	134,841	11,972,166
<b>Total outpatient occasions of service</b>	<b>6,450,592</b>	<b>3,094,084</b>	<b>3,344,905</b>	<b>1,902,060</b>	<b>1,136,319</b>	<b>334,946</b>	<b>379,974</b>	<b>146,607</b>	<b>16,789,487</b>
Mental health	694,389	696,065	76,696	79,713	27,414	1,613	1,746	..	1,577,636
Alcohol and drug	1,408,493	86,050	108,068	..	..	..	..	..	1,602,611
Pharmacy <sup>(g)</sup>	3,557,467	467,918	625,105	211,565	..	61,004	1,089	40,280	4,964,428
Community health	1,426,457	293,042	146,880	646,697	..	..	26,415	..	2,546,899
District nursing <sup>(h)</sup>	1,435,823	230,595	116,217	157,389	..	..	..	..	1,949,530
Pathology	2,775,401	813,045	3,909,331	515,452	..	201,083	37,036	105,877	8,357,225
Radiology and organ imaging	929,184	654,261	1,022,448	462,057	232,461	31,491	84,157	77,135	3,493,194
Other outreach	276,092	5,580	150,427	122,591	205,579	89	19,365	..	799,745
<b>Total individual occasions of service</b>	<b>18,973,920</b>	<b>6,340,640</b>	<b>9,500,077</b>	<b>4,097,524</b>	<b>1,618,687</b>	<b>630,226</b>	<b>549,782</b>	<b>369,899</b>	<b>42,080,755</b>
<b>Group sessions</b>									
Outpatient care									
Allied health	17,118	21,112	8,497	14,897	6,686	833	501	..	69,644
Dental	18	..	..	..	..	..	..	..	18
Other medical/surgical/obstetric <sup>(f)</sup>	56,917	2,870	5,779	15	6,503	151	1,138	139	73,512
<b>Total outpatient occasions of service<sup>(j)</sup></b>	<b>74,106</b>	<b>23,982</b>	<b>14,276</b>	<b>14,912</b>	<b>13,189</b>	<b>984</b>	<b>1,639</b>	<b>139</b>	<b>143,227</b>
Mental health	21,845	..	2	4,127	621	..	25	..	26,620
Alcohol and drug	1,178	..	115	..	..	..	..	..	1,293
Community health	44,240	29	2,016	32,281	..	..	..	..	78,566
District nursing	3,693	..	94	1,658	..	..	..	..	5,445
Other outreach	4,409	..	233	3,115	64,717	..	62	..	72,536
Other	168	n.a.	0	0	..	n.a.	..	n.a.	221
<b>Total group sessions</b>	<b>149,639</b>	<b>24,011</b>	<b>16,736</b>	<b>56,093</b>	<b>78,527</b>	<b>984</b>	<b>1,726</b>	<b>139</b>	<b>327,855</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.

# 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*)
- elective surgery (*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
- the type of care provided
- how patient care ended
- length of stay in hospital
- the source of funding.

Demographic information includes:

- patient age
- patient sex
- Indigenous status
- remoteness area of usual residence
- socioeconomic status of area of usual residence.

Clinical information includes:

- principal 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.

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. Client support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

**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 665 individual AR-DRGs.

In 2009–10, diagnoses and external causes of injury were recorded using the sixth edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2008). 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 6th edition of the *Australian Classification of Health Interventions* (ACHI) (NCCH 2008). 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:

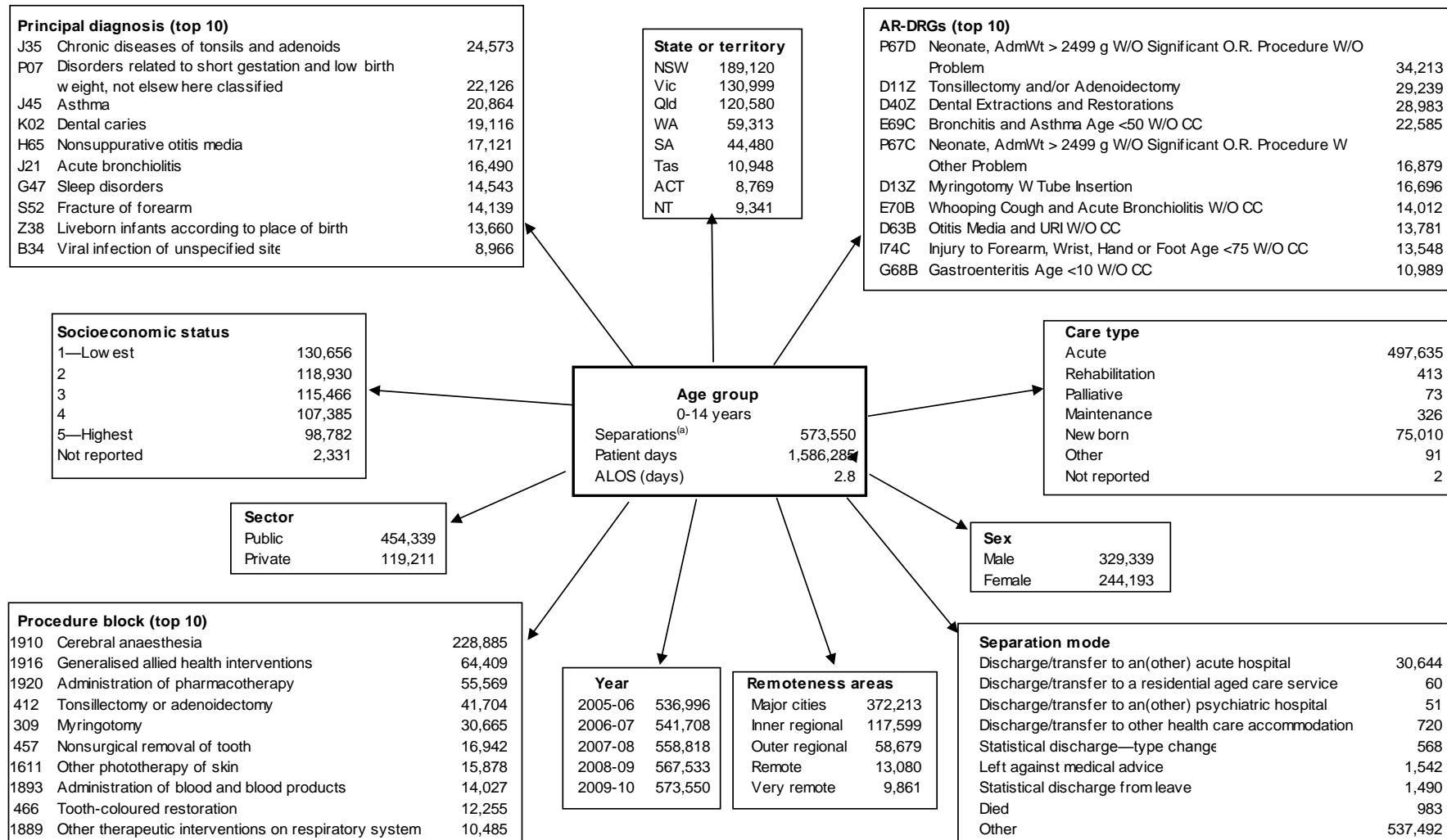
- Coverage for the NHMD is essentially complete. For 2009–10, all public hospitals were included except for a small mothercraft hospital in the Australian Capital Territory. Private hospital data were not provided for private free-standing day hospital facilities in the Australian Capital Territory and the Northern Territory, and for one private free standing day facility in Tasmania.
- 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 from one private hospital.
- Hospitals may be re-categorised as public or private between or within years (see *Appendix 2*).
- There may be variation among states and territories in the use of statistical discharges and the use of care types (see *Appendix 1*).
- The overall quality of the data provided for Indigenous status in 2009–10 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*).
- In 2009–10, there were 78 separations that did not have sex reported as male or female, and 6 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 the case for the Australian Capital Territory. In 2009–10, about 23% of separations for the Australian Capital Territory hospitals were for patients who resided in New South Wales.

**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 1*.
- 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 1*).
- 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 1*).
- 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 socioeconomic status groups (SES) contain about 20% of the total Australian population (see *Appendix 1*).

Figure 7.1 demonstrates some of the data included in the NHMD using the example of separations for admitted patients aged 0 to 14 years. These separations do not include newborns that did not require acute care, they accounted for an additional 218,000 records (see Table S7.5). In 2009–10:

- there were about 574,000 separations for people aged 0 to 14 years
- the number of separations for people aged 0 to 14 years increased by 25.7% over the period 2005–06 to 2009–10, an average annual increase of 1.6%
- 57.4% of these separations were for males
- 79.2% of these separations were in public hospitals
- the majority of separations (93.7%) had a separation mode of *Other*, suggesting that these patients went home at the end of their care
- about one in twenty had a separation mode of *Discharged/transferred to an(other) acute hospital*, indicating that they were transferred to another hospital for continuing care
- the most common principal diagnosis was *Chronic diseases of tonsils and adenoids*, followed by *Disorders related to short gestation and low birth weight*
- the most common AR-DRG was *Neonate, admission weight less than 2499g without significant operating room procedure, without problem*
- the most common procedure was *Cerebral anaesthesia*, followed by *Generalised allied health intervention*.



Abbreviations: AdmWt—admission weight; ALOS—average length of stay; AR-DRG—Australian Refined Diagnosis Related Group; Cat—catastrophic; CC—complication or comorbidity; g—gram; 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 0-14 years, all hospitals, 2009-10

## How has activity changed over time?

From 2008–09 to 2009–10, separations rose 4.7% to 8.5 million. Between 2005–06 and 2009–10, 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. For both hospital sectors, the rate and direction of change in the number of separations varied between funding sources.

**Table 7.1: Separations<sup>(a)</sup>, by principal source of funds, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public patients <sup>(a)</sup>	3,866,522	4,030,707	4,081,111	4,188,501	4,319,437	2.8	3.1
Private health insurance	350,807	382,085	415,919	451,591	501,819	9.4	11.1
Self-funded <sup>(b)</sup>	52,085	53,385	54,765	58,226	58,715	3.0	0.8
Workers compensation	22,268	22,550	23,296	22,478	21,584	-0.8	-4.0
Motor vehicle third party personal claim	21,318	21,664	21,880	23,102	24,987	4.0	8.2
Department of Veterans' Affairs	134,511	130,908	124,664	122,656	118,539	-3.1	-3.4
Other <sup>(c)</sup>	18,565	19,981	22,426	24,469	28,350	11.2	15.9
<i>Total</i>	<i>4,466,076</i>	<i>4,661,280</i>	<i>4,744,061</i>	<i>4,891,023</i>	<i>5,073,431</i>	<i>3.2</i>	<i>3.7</i>
<b>Private hospitals</b>							
Public patients <sup>(a)</sup>	100,092	49,095	76,227	100,619	102,014	0.5	1.4
Private health insurance	2,196,184	2,348,872	2,497,892	2,579,128	2,767,947	6.0	7.3
Self-funded <sup>(b)</sup>	273,530	260,940	267,179	278,086	285,850	1.1	2.8
Workers compensation	52,180	50,735	50,163	54,788	57,555	2.5	5.1
Motor vehicle third party personal claim	5,020	4,610	4,840	4,719	6,376	6.2	35.1
Department of Veterans' Affairs	201,300	207,511	199,629	198,277	199,732	-0.2	0.7
Other <sup>(c)</sup>	17,601	19,874	33,955	41,808	42,241	24.5	1.0
<i>Total</i>	<i>2,845,907</i>	<i>2,941,637</i>	<i>3,129,885</i>	<i>3,257,425</i>	<i>3,461,715</i>	<i>5.0</i>	<i>6.3</i>
<b>All hospitals</b>	<b>7,311,983</b>	<b>7,602,917</b>	<b>7,873,946</b>	<b>8,148,448</b>	<b>8,535,146</b>	<b>3.9</b>	<b>4.7</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 and 7.3 for notes on data limitations and methods.

Abbreviation: Ave—average.

## How much activity was there in 2009–10?

In 2009–10, there were almost 5.1 million public hospital separations and almost 3.5 million private hospital separations (Table 7.2). The Australian Capital Territory and the Northern Territory do not have *Public psychiatric hospitals*, and admitted patient data for *Private free standing day hospital facilities* were not available.

**Table 7.2: Separations ('000s) by hospital type, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute	1,541	1,424	923	504	381	101	88	100	5,062
Public psychiatric	6	1	0	2	2	1	..	..	11
<i>Total public hospitals</i>	<b>1,547</b>	<b>1,425</b>	<b>923</b>	<b>506</b>	<b>383</b>	<b>102</b>	<b>88</b>	<b>100</b>	<b>5,073</b>
<b>Private hospitals</b>									
Private free standing day hospital facilities	213	188	213	104	57	n.p.	n.p.	n.p.	783
Other private hospitals	748	697	632	278	213	n.p.	n.p.	n.p.	2,678
<i>Total private hospitals</i>	<b>961</b>	<b>886</b>	<b>845</b>	<b>381</b>	<b>270</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,462</b>
<b>All hospitals</b>	<b>2,508</b>	<b>2,310</b>	<b>1,768</b>	<b>887</b>	<b>653</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,535</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 S7.1 at the end of this chapter.

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

There were over 18.1 million public hospital patient days (69% of total patient days) compared with 8.3 million private hospital patient days (Table 7.3). For private hospitals, 77% of separations and 91% of patient days were in *Other private hospitals*.

**Table 7.3: Patient days ('000s) by hospital type, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute	5,816	4,547	3,030	1,647	1,495	372	296	273	17,476
Public psychiatric	281	59	98	76	97	52	..	..	663
<i>Total public hospitals</i>	<b>6,097</b>	<b>4,607</b>	<b>3,128</b>	<b>1,722</b>	<b>1,591</b>	<b>424</b>	<b>296</b>	<b>273</b>	<b>18,139</b>
<b>Private hospitals</b>									
Private free standing day hospital facilities	213	188	213	104	57	n.p.	n.p.	n.p.	783
Other private hospitals	2,012	2,047	1,850	726	560	n.p.	n.p.	n.p.	7,479
<i>Total private hospitals</i>	<b>2,225</b>	<b>2,235</b>	<b>2,063</b>	<b>829</b>	<b>617</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,262</b>
<b>All hospitals</b>	<b>8,323</b>	<b>6,842</b>	<b>5,191</b>	<b>2,552</b>	<b>2,209</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>26,401</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 S7.1 at the end of this chapter.

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

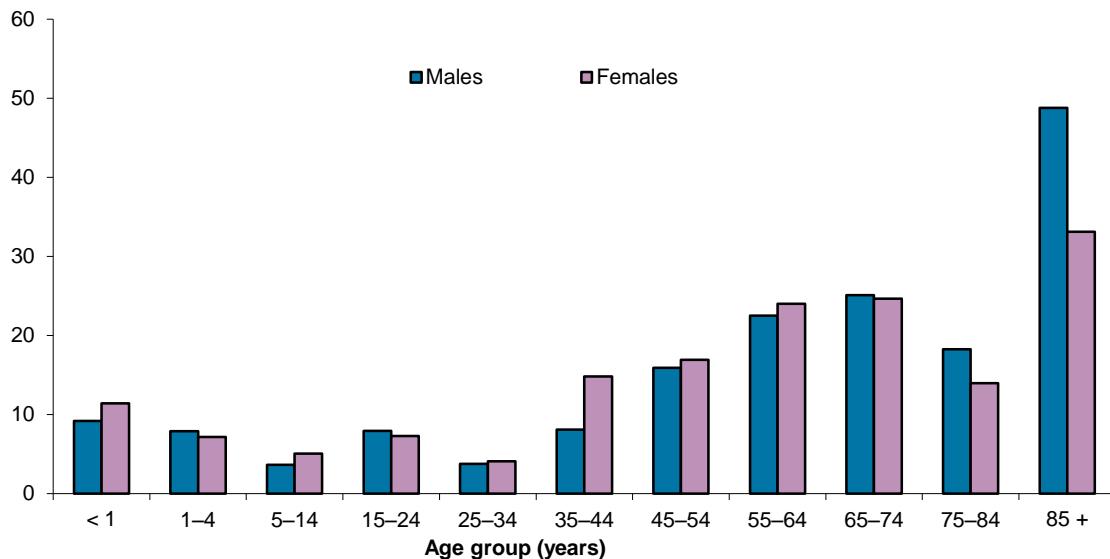
## Who used these services?

### Sex and age group

#### Changes in activity by the patients' sex and age group over time

Between 2005–06 and 2009–10, the increase in separations was more marked for males than females, particularly for males aged 85 years and over (Figure 7.2). The increase in separations was generally greater for females than males for all age groups from 25 to 64 years.

**Percentage change**

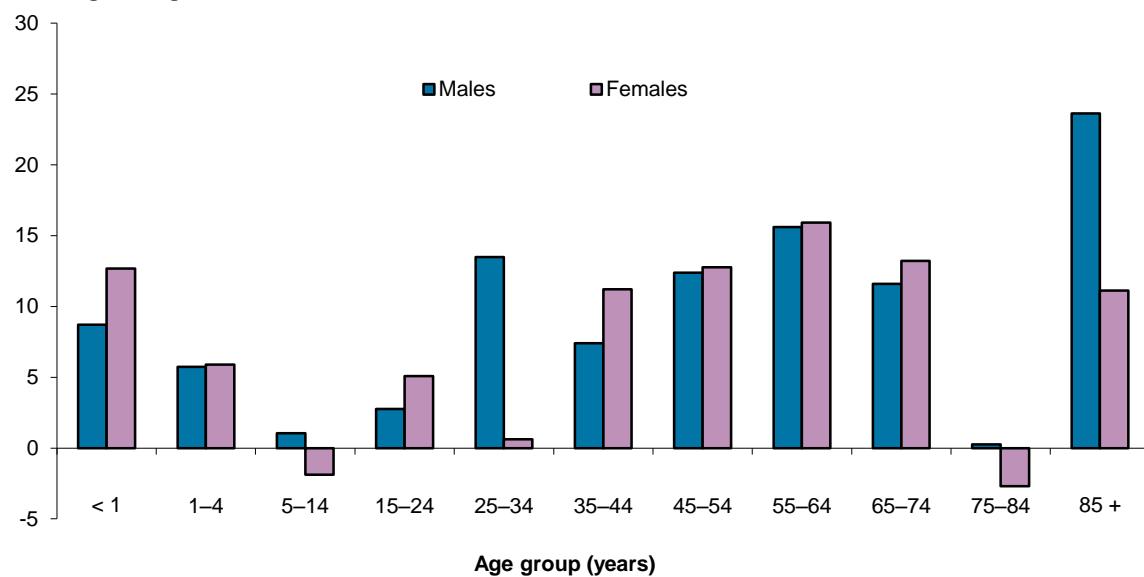


Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.2: Percentage change in separations by sex and age group, all hospitals, 2005–06 to 2009–10**

Between 2005–06 and 2009–10, patient days in all hospitals increased by 9.8% for males, and by 7.4% for females (Figure 7.3). The relative size and direction of change in patient days varied by sex and age group.

**Percentage change**

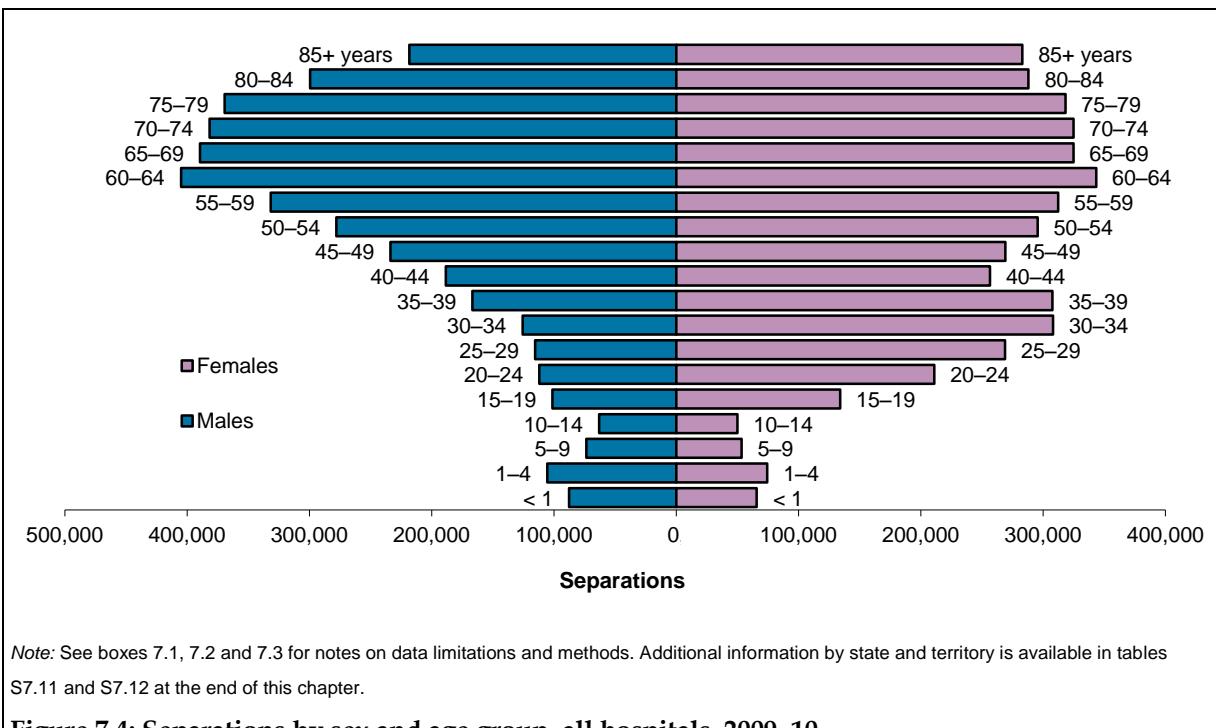


Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Figure 7.3: Percentage change in patient days by sex and age group, all hospitals, 2005–06 to 2009–10**

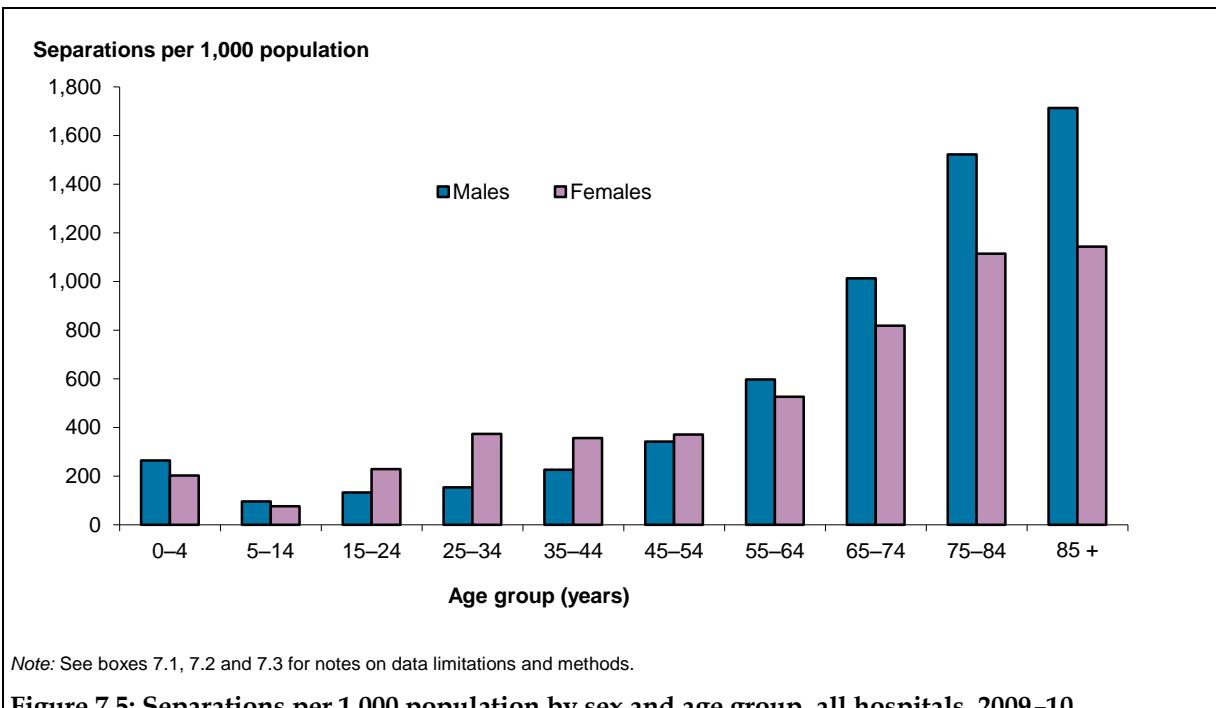
## Sex and age group profile for 2009–10

In 2009–10, there were about 4.5 million separations for females compared with 4.1 million separations for males overall. People aged 55 years and over accounted for 53.7% of separations overall (Figure 7.4).



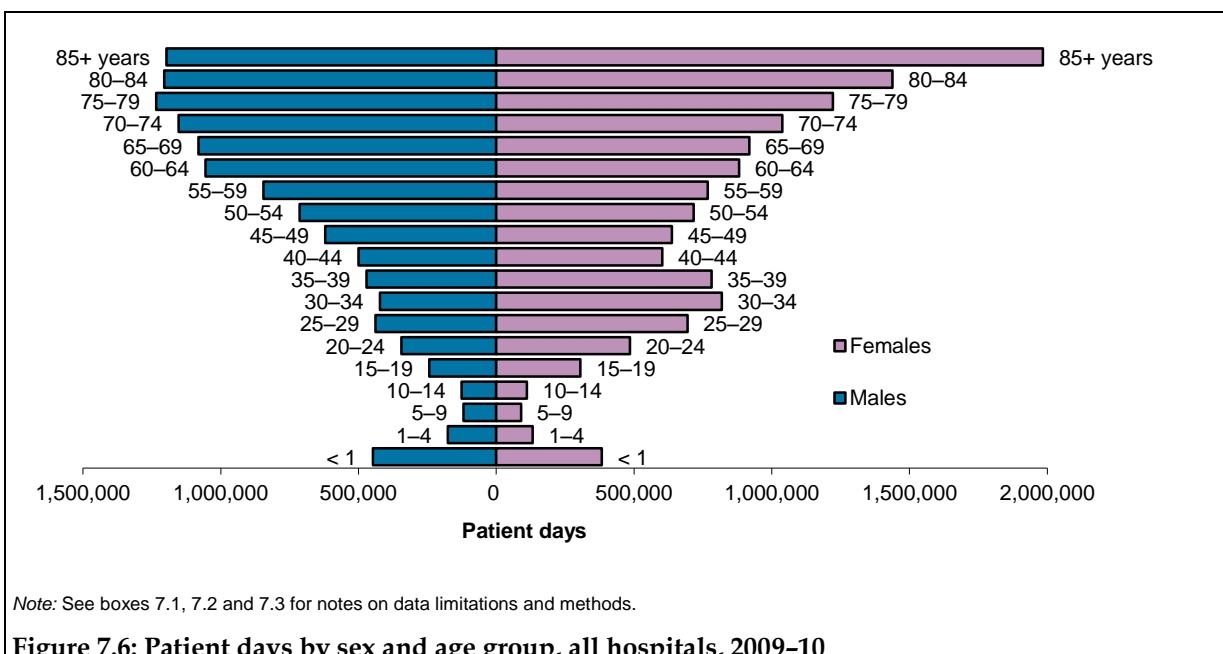
**Figure 7.4: Separations by sex and age group, all hospitals, 2009–10**

There were more separations per 1,000 population for females than for males in all age groups from 15–54 years in 2009–10 (Figure 7.5). Separation rates increased with age for both males and females from the age group 55 to 64 years and above.



**Figure 7.5: Separations per 1,000 population by sex and age group, all hospitals, 2009–10**

Females accounted for more patient days than males (Figure 7.6). People aged 55 years and over accounted for over 60% of patient days in 2009–10.



Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Figure 7.6: Patient days by sex and age group, all hospitals, 2009–10

## 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 2009–10, there were about 305,000 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 93% of separations for *Indigenous Australians* were reported as *Aboriginal but not Torres Strait Islander origin*, 4% were reported as *Torres Strait Islander but not Aboriginal origin* and 3% were reported as *Aboriginal and Torres Strait Islander origin*
- over 92% of separations for *Indigenous Australians* in 2009–10 were from the public sector (281,000), whereas 58% of separations for *Other Australians* were from the public sector.

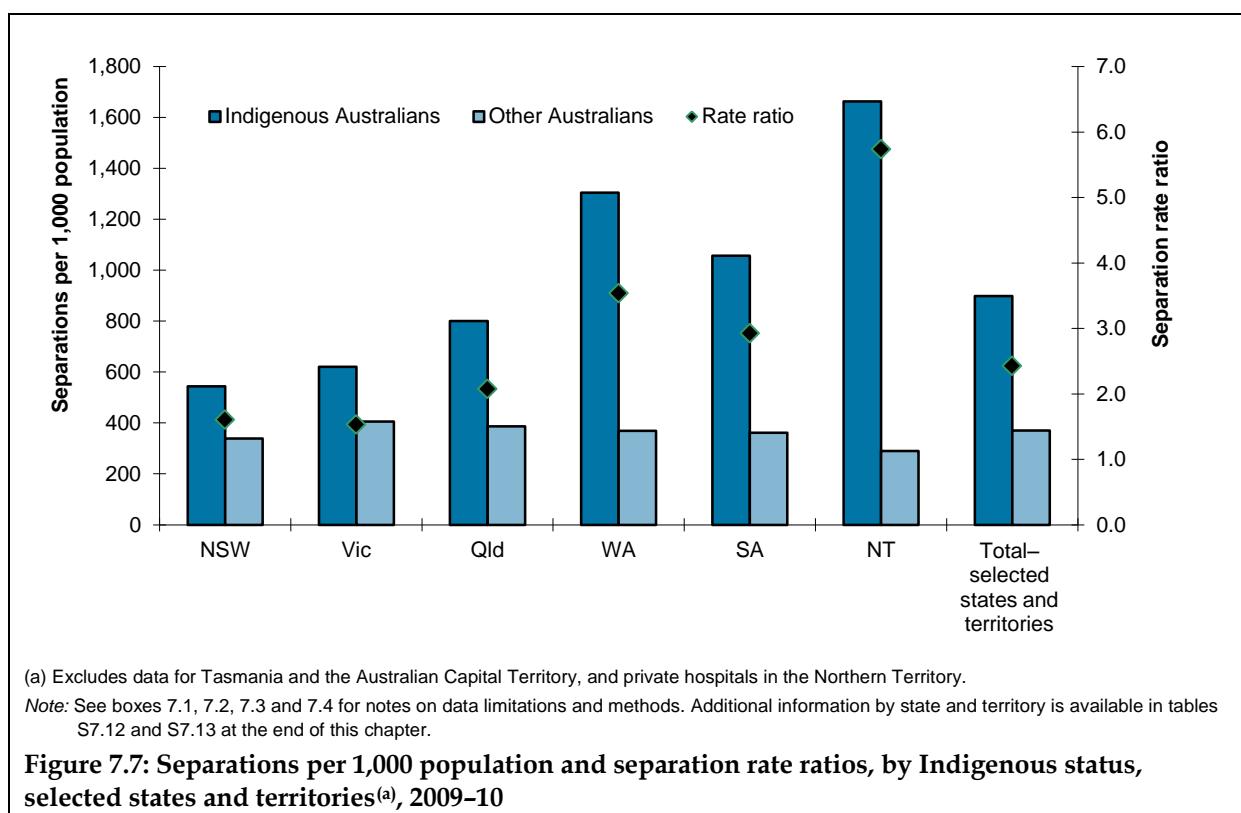
In 2009–10, there were 898 separations per 1,000 population for *Indigenous Australians* (Figure 7.7), 2.4 times the separation rate for *Other Australians*. About 80% of the difference between these rates was due to higher separation rates for *Indigenous Australians* admitted for maintenance kidney dialysis (see Chapter 8).

The Northern Territory had the highest separation rate for *Indigenous Australians* (1,664 separations per 1,000), about 5.7 times the rate for *Other Australians*.

### **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 2009–10 could be estimated at about 351,000 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 8,237,000 separations.

Using the same method, the ‘true’ separation rates for *Indigenous Australians* and *Other Australians* for 2009–10 could be estimated as about 1,009 per 1,000 population and 370 per 1,000, respectively. These rates indicate that, after adjusting for under-identification, *Indigenous Australians* were hospitalised at about 2.7 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 2009–10:

- 56% of separations for *Indigenous Australians* were for females, compared to 53% for *Other Australians*

- 11% of separations for *Indigenous Australians* were for people aged 65 years and over, compared with 38% of separations for *Other Australians*.

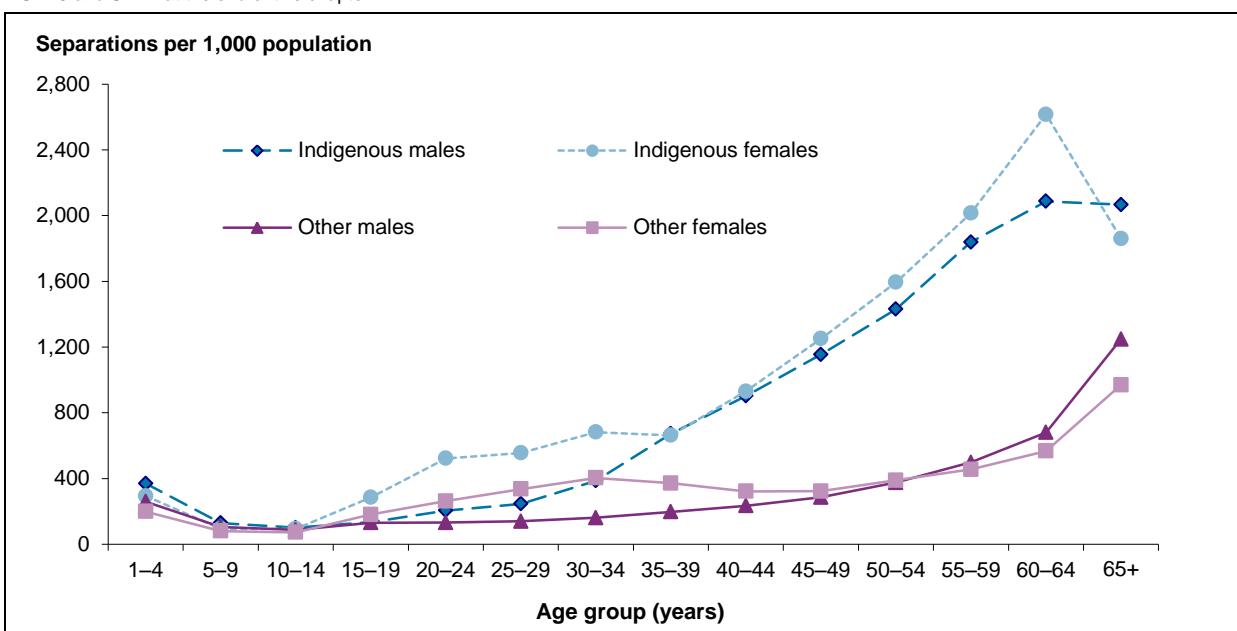
In 2009–10, separation rates for Indigenous males and females were higher than those for other males and females across all age groups (Figure 7.8). Separation rates for *Indigenous Australians* in older age groups are subject to variability because of the relatively small populations in these age groups.

**Table 7.4: Separations by Indigenous status, sex and age group, selected states and territories<sup>(a)</sup>, 2009–10**

Age group	Indigenous Australians			Other Australians		
	Males	Females	Persons	Males	Females	Persons
0–4	12,179	9,269	21,448	174,037	126,290	300,327
5–9	4,068	2,859	6,927	66,871	48,921	115,792
10–14	3,212	2,834	6,046	57,465	45,404	102,869
15–19	4,156	8,291	12,447	93,188	121,164	214,352
20–24	4,911	12,061	16,972	102,477	191,375	293,852
25–29	4,854	10,862	15,716	106,517	248,303	354,820
30–34	6,455	11,697	18,152	114,227	284,876	399,103
35–39	11,381	12,045	23,426	149,081	283,847	432,928
40–44	13,177	14,873	28,050	168,067	232,689	400,756
45–49	14,623	17,384	32,007	209,976	241,340	451,316
50–54	14,677	17,699	32,376	252,740	266,848	519,588
55–59	14,064	17,161	31,225	304,976	283,619	588,595
60–64	10,984	15,836	26,820	377,777	314,854	692,631
65+	15,184	18,212	33,396	1,585,568	1,468,647	3,054,215
<b>Total</b>	<b>133,925</b>	<b>171,083</b>	<b>305,008</b>	<b>3,762,967</b>	<b>4,158,177</b>	<b>7,921,144</b>

(a) Excludes data for Tasmania and the Australian Capital Territory, and private hospitals in the Northern Territory.

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.



(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

Note: See boxes 7.1, 7.2, 7.3 and 7.4 for notes on data limitations and methods.

**Figure 7.8: Separations per 1,000 population by sex, age group and Indigenous status, selected states and territories<sup>(a)</sup>, 2009–10**

## **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.

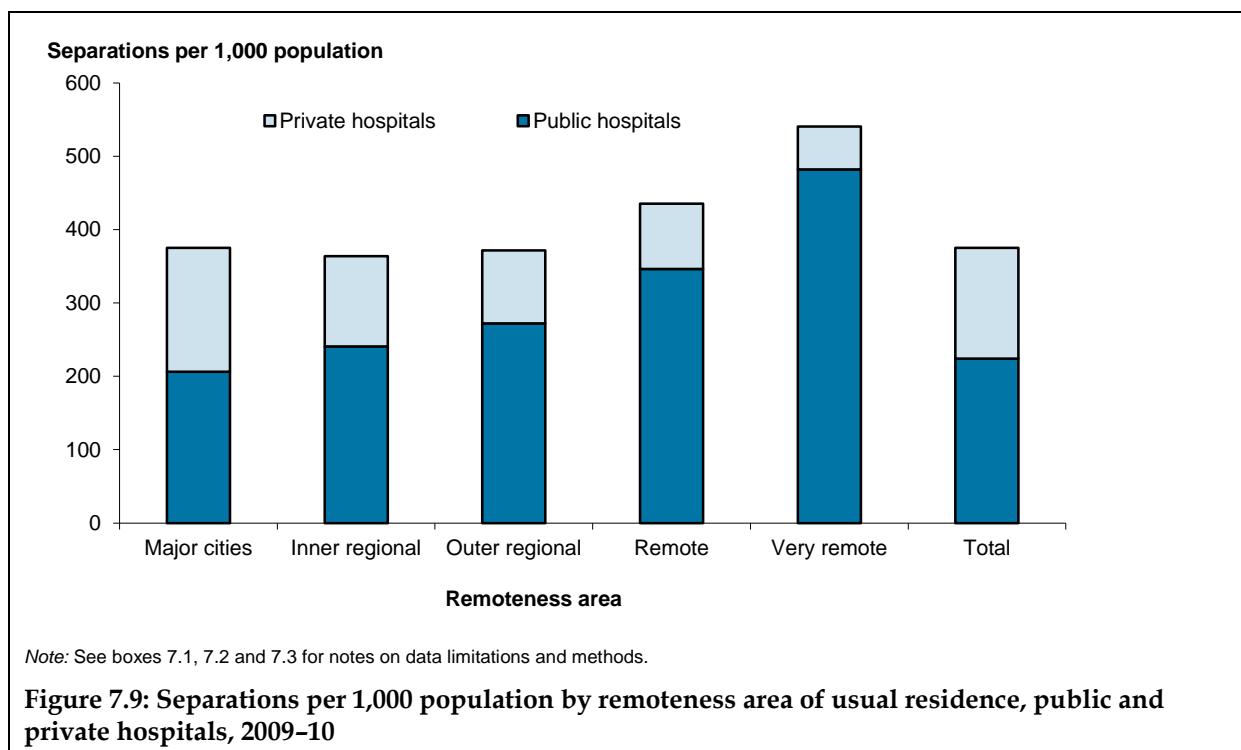
Table S7.4 (at the end of this chapter) presents separations and age standardised separation rates (per 1,000 population) by both the state or territory of hospitalisation and the state or territory of usual residence of the patient. For 2009–10, about 98% of separations (8.3 million) were for people 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.

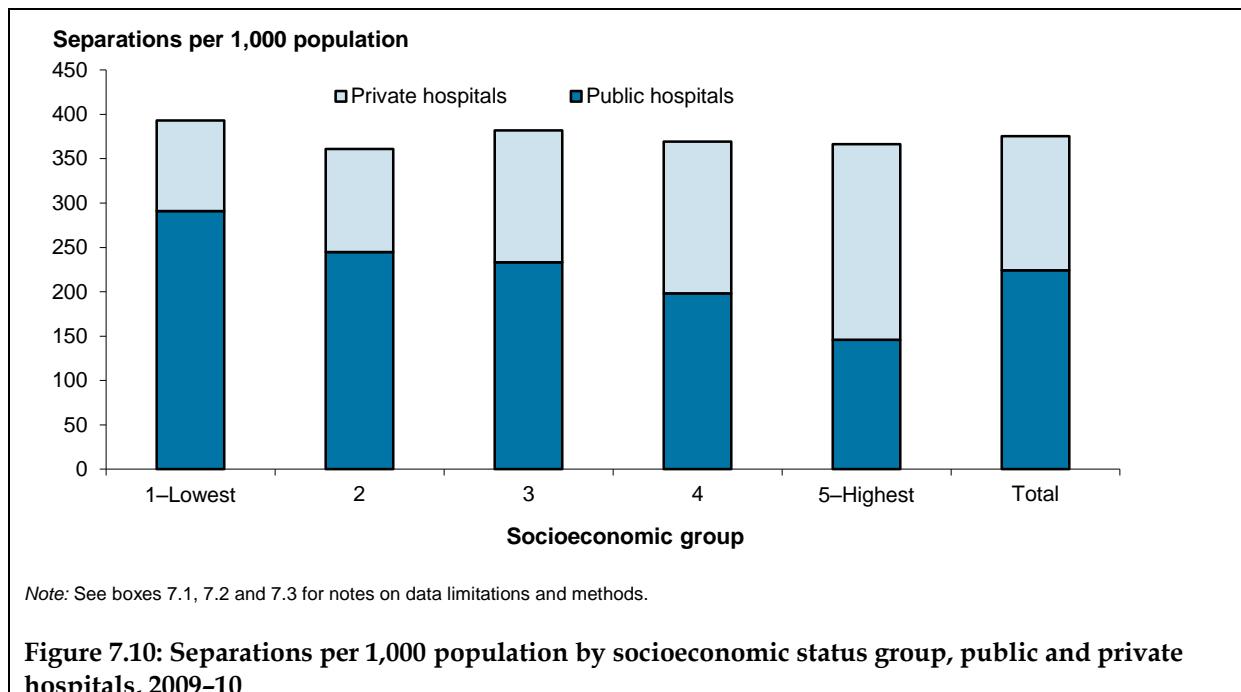
The number of separations per 1,000 population varied by remoteness area. Overall, separation rates were highest for persons residing in *Remote* and *Very remote* areas, and in both instances, the difference from the national rate was statistically significant (Figure 7.9).

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.



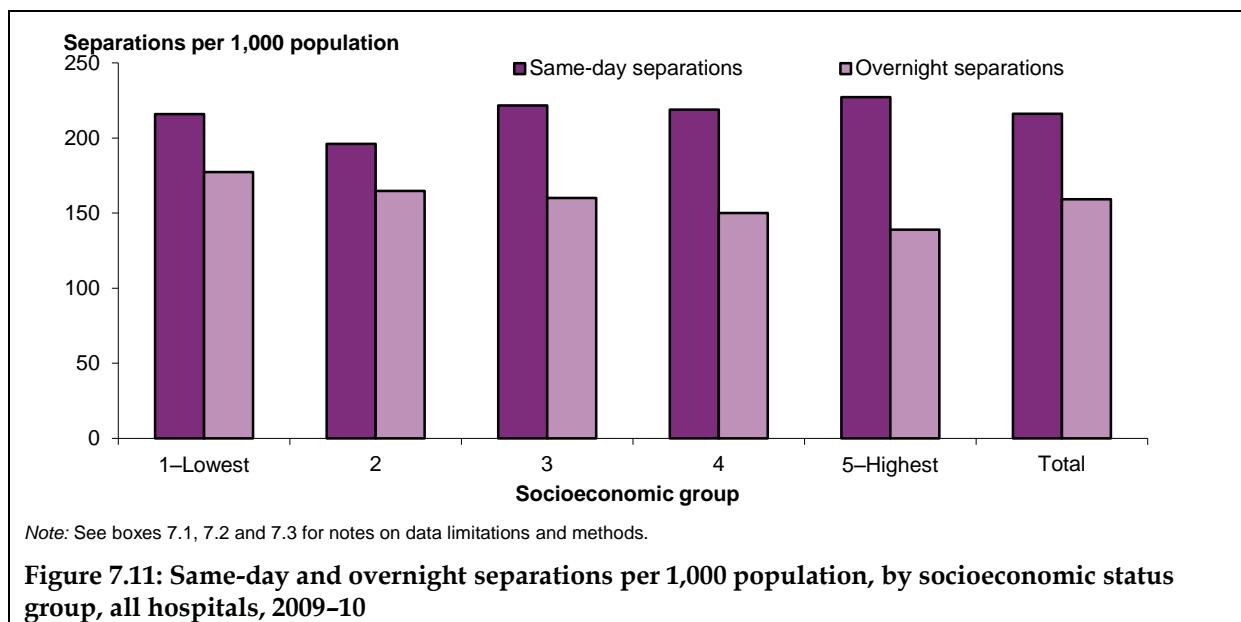
## Socioeconomic status

In 2009–10, 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.



**Figure 7.10: Separations per 1,000 population by socioeconomic status group, public and private hospitals, 2009–10**

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 highest SES group. The highest rate of overnight separations occurred for patients living in areas classified as being in the lowest SES group.



**Figure 7.11: Same-day and overnight separations per 1,000 population, by socioeconomic status group, all hospitals, 2009–10**

## 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 2009–10, most separations in both public and private hospitals had a mode of admission of *Other* (94.6%). Public hospitals had a higher proportion of transfers than private hospitals (4.7% and 2.9%, respectively). Public hospitals also reported higher proportions of *Statistical admissions* than private hospitals (1.5% and 0.6%, respectively) (Table 7.5).

**Table 7.5: Separations by mode of admission, public and private hospitals, 2009–10**

Mode of admission	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	242,900	100,480	343,380
Statistical admission: type change	74,275	18,903	93,178
Other <sup>(a)</sup>	4,732,880	3,335,158	8,068,038
Not reported	23,376	7,174	30,550
<b>Total</b>	<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</b>

(a) Other refers to all planned and unplanned admissions except transfers from other hospitals and statistical admissions.

*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 2009–10, 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 eight in ten separations for *Injury, poisoning and certain other consequences of external causes* were from public hospitals and over seven in ten 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, 2009–10**

Principal diagnosis chapter		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	107,354	20,524	127,878
C00–D48	Neoplasms	275,650	304,049	579,699
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	70,089	32,654	102,743
E00–E90	Endocrine, nutritional and metabolic diseases	103,240	64,449	167,689
F00–F99	Mental and behavioural disorders	178,407	163,174	341,581
G00–G99	Diseases of the nervous system	120,551	88,997	209,548
H00–H59	Diseases of the eye and adnexa	73,170	190,280	263,450
H60–H95	Diseases of the ear and mastoid process	29,796	26,223	56,019
I00–I99	Diseases of the circulatory system	319,639	163,220	482,859
J00–J99	Diseases of the respiratory system	287,017	88,689	375,706
K00–K93	Diseases of the digestive system	394,506	476,202	870,708
L00–L99	Diseases of the skin and subcutaneous tissue	97,203	42,334	139,537
M00–M99	Diseases of the musculoskeletal system and connective tissue	176,709	283,207	459,916
N00–N99	Diseases of the genitourinary system	223,959	171,530	395,489
O00–O99	Pregnancy, childbirth and the puerperium	330,727	151,468	482,195
P00–P96	Certain conditions originating in the perinatal period	44,134	11,681	55,815
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	24,628	10,502	35,130
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	390,241	189,337	579,578
S00–T98	Injury, poisoning and certain other consequences of external causes	456,712	100,977	557,689
Z00–Z99	Factors influencing health status and contact with health services	1,369,283	877,595	2,246,878
	Not reported	416	4,623	5,039
<b>Total</b>		<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

### Aboriginal and Torres Strait Islander people

Over 48% 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>, 2009–10**

<b>Principal diagnosis chapter</b>		<b>Indigenous Australians</b>	<b>Other Australians<sup>(b)</sup></b>	<b>Total</b>
A00–B99	Certain infectious and parasitic diseases	5,691	118,810	124,501
C00–D48	Neoplasms	4,375	554,511	558,886
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,332	97,880	99,212
E00–E90	Endocrine, nutritional and metabolic diseases	6,166	154,458	160,624
F00–F99	Mental and behavioural disorders	12,099	317,434	329,533
G00–G99	Diseases of the nervous system	3,863	198,447	202,310
H00–H59	Diseases of the eye and adnexa	1,574	250,911	252,485
H60–H95	Diseases of the ear and mastoid process	2,280	51,674	53,954
I00–I99	Diseases of the circulatory system	9,149	454,614	463,763
J00–J99	Diseases of the respiratory system	18,342	344,451	362,793
K00–K93	Diseases of the digestive system	14,687	824,973	839,660
L00–L99	Diseases of the skin and subcutaneous tissue	6,484	128,210	134,694
M00–M99	Diseases of the musculoskeletal system and connective tissue	5,270	433,380	438,650
N00–N99	Diseases of the genitourinary system	7,367	373,353	380,720
O00–O99	Pregnancy, childbirth and the puerperium	19,769	444,258	464,027
P00–P96	Certain conditions originating in the perinatal period	3,097	50,067	53,164
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,037	32,815	33,852
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	13,823	546,751	560,574
S00–T98	Injury, poisoning and certain other consequences of external causes	22,701	514,031	536,732
Z00–Z99	Factors influencing health status and contact with health services	145,881	2,025,124	2,171,005
	Not reported	21	4,992	5,013
<b>Total</b>		<b>305,008</b>	<b>7,921,144</b>	<b>8,226,152</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.

## 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 also 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 2009–10, approximately 558,000 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, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
S00-S19	Injuries to head & neck	84,557	6,922	91,479
S20-S39	Injuries to thorax, abdomen, back, spine & pelvis	41,675	5,469	47,144
S40-S99	Injuries to upper & lower limbs	199,926	51,194	251,120
T00-T19	Injuries to multi- or unspecified region; foreign body effects	9,764	1,349	11,113
T20-T35	Burns and frostbite	8,377	291	8,668
T36-T65	Poisoning and toxic effects	38,253	585	38,838
T66-T79	Other and unspecified effects of external causes	10,741	817	11,558
T80-T88	Complications of medical and surgical care	63,214	34,309	97,523
T89-T98	Other trauma complications; external cause sequelae	205	41	246
<b>Total</b>		<b>456,712</b>	<b>100,977</b>	<b>557,689</b>
<b>Separations per 1,000 population</b>		<b>20.4</b>	<b>4.4</b>	<b>24.7</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 27% 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* compared with *Indigenous Australians*.

**Table 7.9: Separations with a principal diagnosis of injury or poisoning, by Indigenous status, selected states and territories<sup>(a)</sup>, 2009–10**

Principal diagnosis	Indigenous Australians	Other Australians <sup>(b)</sup>	Total
S00-S19	Injuries to head & neck	6,070	82,776
S20-S39	Injuries to thorax, abdomen, back, spine & pelvis	1,615	44,014
S40-S99	Injuries to upper & lower limbs	9,037	232,178
T00-T19	Injuries to multi- or unspecified region; foreign body effects	487	10,256
T20-T35	Burns and frostbite	609	7,759
T36-T65	Poisoning and toxic effects	1,701	35,794
T66-T79	Other and unspecified effects of external causes	485	10,663
T80-T88	Complications of medical and surgical care	2,669	90,378
T89-T98	Other trauma complications; external cause sequelae	28	213
<b>Total</b>	<b>22,701</b>	<b>514,031</b>	<b>536,732</b>
<b>Separations per 1,000 population</b>	<b>46.4</b>	<b>24.4</b>	<b>24.9</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 2009–10, there were 979,000 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, 2009–10**

External cause		Public hospitals	Private hospitals	Total
V00–V99	Transport accidents	61,908	8,145	70,053
W00–W19	Falls	209,902	47,823	257,725
W20–W64	Exposure to mechanical forces	84,411	10,709	95,120
W65–W74	Accidental drowning and submersion	648	21	669
W75–W84	Other accidental threats to breathing	10,564	1,359	11,923
W85–W99	Exposure to electricity, radiation, extreme temperature/pressure	1,474	178	1,652
X00–X19	Exposure to smoke, fire, flames, hot substances	8,903	474	9,377
X20–X39	Exposure to venomous plants, animals, forces of nature	5,167	306	5,473
X40–X49	Accidental poisoning	12,173	714	12,887
X50–X59	Other external causes of accidental injury	39,267	36,363	75,630
X60–X84	Intentional self-harm	31,773	785	32,558
X85–Y09	Assault	26,960	533	27,493
Y10–Y34	Events of undetermined intent	7,309	453	7,762
Y35–Y36	Legal intervention and operations of war	140	8	148
Y40–Y84	Complications of medical and surgical care	266,612	116,983	383,595
Y85–Y98	Sequelae and supplementary factors	24,453	8,727	33,180
<b>Total<sup>(a)</sup></b>		<b>752,090</b>	<b>227,060</b>	<b>979,150</b>

(a) 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 and 7.3 for notes on data limitations and methods.

More information on the place of occurrence and the activity when injured are available 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 19.3% of external causes reported for *Indigenous Australians*, compared to 2.2% 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>, 2009–10**

External cause		Indigenous Australians	Other Australians <sup>(b)</sup>	Total
V00–V99	Transport accidents	2,326	64,748	67,074
W00–W19	Falls	5,354	243,355	248,709
W20–W64	Exposure to mechanical forces	4,601	87,000	91,601
W65–W74	Accidental drowning and submersion	27	627	654
W75–W84	Other accidental threats to breathing	328	11,416	11,744
W85–W99	Exposure to electricity, radiation, extreme temperature/pressure	29	1,572	1,601
X00–X19	Exposure to smoke, fire, flames, hot substances	660	8,391	9,051
X20–X39	Exposure to venomous plants, animals, forces of nature	244	5,087	5,331
X40–X49	Accidental poisoning	641	11,834	12,475
X50–X59	Other external causes of accidental injury	2,110	70,891	73,001
X60–X84	Intentional self-harm	1,824	29,606	31,430
X85–Y09	Assault	6,277	20,447	26,724
Y10–Y34	Events of undetermined intent	475	6,969	7,444
Y35–Y36	Legal intervention and operations of war	17	129	146
Y40–Y84	Complications of medical and surgical care	7,560	359,533	367,093
Y85–Y98	Sequelae and supplementary factors	1,633	29,998	31,631
<b>Total<sup>(c)</sup></b>		<b>32,460</b>	<b>908,812</b>	<b>941,272</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 and 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 an National Health 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 2009–10, almost 696,000 separations in public and private hospitals were classified as PPHs (Table 7.12). PPHs accounted for 8.1% of all hospital separations, 10.2% of public hospital separations and 5.2% of private hospital separations. Nearly three-quarters of PPHs occurred in public hospitals.

**Table 7.12: Separations for potentially preventable hospitalisations, public and private hospitals, 2009–10**

PPH category	Public hospitals	Private hospitals	Total
Vaccine preventable conditions	15,579	2,316	17,895
Acute conditions	226,092	83,772	309,864
<i>Chronic conditions<sup>(a)</sup></i>	276,439	94,687	371,126
Diabetes complications	107,698	58,428	166,126
Chronic conditions (excluding diabetes)	180,076	38,164	218,240
<b>Total</b>	<b>515,232</b>	<b>180,328</b>	<b>695,560</b>
<b>Proportion of total separations</b>	<b>10.2</b>	<b>5.2</b>	<b>8.1</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. Additional information by residence state is available in Table S7.10 at the end of this chapter.

Between 2008–09 and 2009–10, there was a 1.7% decrease in PPHs overall, mostly due to decreases in the number of hospitalisations for *Chronic conditions* (4.4%). Over that period, the rate of PPH separations in Western Australia was relatively high, influenced by the recording of diabetes as an additional diagnosis when a patient with diabetes was admitted for dialysis treatment. This was not done in all jurisdictions and because dialysis may be required several times per week, the number of separations which are included in *Diabetes complications* was markedly higher for Western Australia than in other jurisdictions.

Table 7.13 shows that the decrease in *Diabetes complications* conditions was much greater (8.6%) than for *Chronic conditions* overall. The decrease in *Chronic conditions* was most marked

in Western Australia and Tasmania (see Table S7.10). This decline was probably due to the introduction of changes in coding standards in July 2008, that additional diagnoses were only coded where they had an impact on the care given to patients.

**Table 7.13: Separations per 1,000 population (age-standardised) for potentially preventable hospitalisations, by PPH category, all hospitals, 2005–06 to 2009–10**

PPH category	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
Vaccine preventable conditions	0.7	0.6	0.7	0.7	0.8	4.2	7.2
Acute conditions	10.7	10.8	11.1	13.5	13.7	6.4	1.1
<i>Chronic conditions<sup>(a)</sup></i>	18.7	19.0	19.3	16.5	15.8	-4.2	-4.4
Diabetes complications	9.9	10.4	10.7	7.7	7.1	-8.2	-8.6
Chronic conditions (excluding diabetes)	9.9	9.7	9.7	9.4	9.3	-1.6	-1.6
<b>Total</b>	<b>32.1</b>	<b>32.5</b>	<b>33.3</b>	<b>30.6</b>	<b>30.4</b>	<b>-1.6</b>	<b>-1.7</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.

Abbreviation: Ave—average.

For 2009–10, the overall rate of PPHs was highest for residents of *Very remote* areas (68.2 per 1,000 population) and lowest for residents of *Major cities* (28.1 per 1,000 population). This pattern was also observed for the *Vaccine preventable* and *Acute conditions* (Table 7.14). For *Chronic conditions*, the highest rates were observed for those living in *Remote* and *Very Remote* areas, who had the highest rates for *Diabetes complications*.

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, 2009–10**

PPH category	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	12.9	14.6	6.4	8.8	28.1
Inner regional	0.8	14.8	17.1	7.9	9.7	32.5
Outer regional	1.0	16.0	18.2	7.8	11.0	35.0
Remote	1.8	23.0	35.2	21.4	14.8	59.6
Very remote	3.1	29.6	36.4	19.2	19.0	68.2
<b>SES group</b>						
1—Lowest	1.1	16.0	20.8	9.7	11.8	37.7
2	0.8	14.3	17.3	7.7	10.2	32.2
3	0.8	14.0	17.1	8.3	9.4	31.7
4	0.7	13.0	13.4	5.6	8.3	27.1
5—Highest	0.6	11.7	10.7	4.3	6.7	22.9
<b>Total</b>	<b>0.8</b>	<b>13.8</b>	<b>16.0</b>	<b>7.1</b>	<b>9.4</b>	<b>30.4</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: PPH—potentially preventable hospitalisations; 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 2009–10, about 68% of separations were *Non-emergency* admissions, accounting for about 87% of same-day separations and 44% of overnight separations. Private hospitals accounted for about 54% 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, 2009–10**

	Public hospitals <sup>(a)</sup>	Private hospitals	Total
<b>Same-day separations</b>			
Childbirth	6,939	151	7,090
Specialist mental health	11,153	114,838	125,991
Emergency			
Surgical	19,879	2,749	22,628
Medical	474,711	8,576	483,287
Other	4,412	1,853	6,265
Non-emergency			
Surgical	345,631	740,835	1,086,466
Medical	1,475,431	846,955	2,322,386
Other	236,008	627,608	863,606
<i>Total</i>	<b>2,574,164</b>	<b>2,343,565</b>	<b>4,917,729</b>
<b>Overnight separations</b>			
Childbirth	204,162	84,169	288,331
Specialist mental health	85,675	30,805	115,861
Emergency			
Surgical	209,499	30,062	239,561
Medical	1,219,802	125,349	1,345,151
Other	51,096	10,129	61,225
Non-emergency			
Surgical	329,371	522,542	851,913
Medical	377,057	276,143	653,200
Other	22,605	38,951	61,556
<i>Total</i>	<b>2,499,267</b>	<b>1,118,150</b>	<b>3,617,417</b>
<b>Total</b>	<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</b>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,100 separations with specialised mental health care in 2008–09.

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)
- the type of surgical or other procedure undertaken.

## Broad category of service

This section presents information describing care by the following broad categories of service:

- *Childbirth* includes separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health* includes separations for which specialised psychiatric care days were reported.
- *Surgical* includes separations for which the AR-DRG belonged to the *Surgical* partition. Excludes separations for *Childbirth* and *Specialist mental health*.
- *Medical* includes separations for which the AR-DRG belonged to the *Medical* partition. Excludes separations for *Childbirth* and *Specialist mental health*.
- *Other* includes separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions. Excludes separations for *Childbirth* and *Specialist mental health*.

In 2009–10, almost 18% of separations in public hospitals were for *Surgical* care and 58% were for *Medical* care, compared to 37% and 30% in private hospitals, respectively (Table 7.15). Over 3.5% of separations had a broad category of service reported as *Childbirth*.

There were almost 242,000 separations for *Specialist mental health care*. Private hospitals provided about 60% of these, accounting for over 91% of same-day separations and 27% 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, 95.2% of separations were classified as episodes of *Acute* care, 0.9% as *Newborn* (with qualified days) and 2.9% 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 (3.0 days) was longer than that for private hospitals (2.2 days). The average length of stay for *Rehabilitation* care was 18.3 days in public hospitals, and 5.2 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-acute and non-acute care is available in *Chapter 11*.

**Table 7.16: Selected separation statistics by care type, public and private hospitals, 2009–10**

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	4,863,351	214.9	14,590,181	637.7	3.0
Newborn total <sup>(b)</sup>	228,475	10.2	450,753	38.7	2.0
Newborn with qualified days only	47,634	2.2	414,134	19.2	8.7
Newborn with a mixture of qualified days and unqualified days <sup>(c)</sup>	9,466	0.4	36,619	1.7	3.9
Rehabilitation care	82,692	3.5	1,517,048	64.8	18.3
Other non-acute care <sup>(d)</sup>	70,288	2.9	1,580,963	65.7	22.5
<i>Total<sup>(e)</sup></i>	<i>5,073,431</i>	<i>223.9</i>	<i>18,138,945</i>	<i>789.1</i>	<i>3.6</i>
<b>Private hospitals</b>					
Acute care	3,258,854	142.4	7,109,212	307.3	2.2
Newborn total <sup>(b)</sup>	62,950	2.9	112,279	13.9	1.8
Newborn with qualified days only	16,116	0.7	104,866	4.9	6.5
Newborn with a mixture of qualified days and unqualified days <sup>(c)</sup>	1,794	0.1	7,413	0.3	4.1
Rehabilitation care	168,972	7.1	872,470	36.1	5.2
Other non-acute care <sup>(d)</sup>	15,979	0.7	168,216	6.9	10.5
<i>Total<sup>(e)</sup></i>	<i>3,461,715</i>	<i>151.1</i>	<i>8,262,177</i>	<i>355.8</i>	<i>2.4</i>
<b>Total</b>	<b>8,535,146</b>	<b>375.0</b>	<b>26,401,122</b>	<b>1,145.0</b>	<b>3.1</b>

(a) Rates are directly age-standardised to the June 2009 Australian population as detailed in *Appendix 1*.

(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.

## What was the cost of the care?

### Admitted patient expenditure—public hospitals

In 2009–10, approximately \$24 billion was spent on admitted patient services in public hospitals (Table 7.17). 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 7.17: Estimated expenditure on admitted patient care (\$'000,000), public hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>\$'000,000</b>									
Total expenditure	10,644	8,520	6,457	3,523	2,638	822	631	471	33,706
Estimated admitted patient cost proportion <sup>(a)</sup>	0.69	0.72	0.74	0.66	0.70	0.71	0.68	0.80	0.71
Estimated admitted patient expenditure <sup>(b)</sup>	7,347	6,174	4,688	2,344	1,875	563	430	377	23,799

(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 estimated 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.

## Cost weights

The cost estimates for admitted patient care are approximations of the relative costs of hospital services during 2009–10. They should be used with caution in any comparisons between the states and territories. They are not derived from, or 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 the reported AR-DRG version 5.2) compared to the average cost for all acute separations. For 2009–10, 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 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*.

The average relative cost for admitted patient care varied across the public and private sectors. In public hospitals, separations for *Public patients* generally had lower average cost weights than *Other patients* (Table 7.18). 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.

## Cost by volume

An estimate of expenditure in public and private hospitals can be made using AR-DRGs and related cost information. The NHCDC provided estimates of average costs for each separation. The average cost weight was \$4,133 in the public sector (including depreciation) and \$3,047 in the private sector (based on 2008–09 AR-DRGs version 5.2, DoHA 2010).

**Table 7.18: Average cost weight of separations, by principal source of funds, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.04	0.95	1.00	0.91	1.06	1.07	0.98	0.67	0.99
Private health insurance	1.11	1.06	0.94	1.37	1.24	0.89	1.54	0.94	1.10
Self-funded <sup>(b)</sup>	1.27	0.73	1.02	0.80	0.86	0.00	1.45	1.19	1.03
Workers compensation	1.25	1.23	1.32	1.30	1.30	1.28	1.37	1.24	1.27
Motor vehicle third party personal claim	1.81	2.20	2.25	2.74	2.31	2.29	3.89	2.28	2.18
Department of Veterans' Affairs	1.20	1.17	1.12	1.14	1.28	1.02	0.84	1.17	1.17
Other <sup>(c)</sup>	1.69	1.24	0.97	1.26	1.07	1.82	1.00	1.11	1.25
<b>Total</b>	<b>1.07</b>	<b>0.98</b>	<b>1.00</b>	<b>0.96</b>	<b>1.08</b>	<b>1.05</b>	<b>1.01</b>	<b>0.69</b>	<b>1.01</b>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	1.12	0.85	0.58	0.15	0.31	n.p.	n.p.	n.p.	0.34
Private health insurance	0.85	0.81	0.83	0.85	0.87	n.p.	n.p.	n.p.	0.84
Self-funded <sup>(b)</sup>	0.69	0.52	0.49	0.53	0.61	n.p.	n.p.	n.p.	0.58
Workers compensation	1.22	1.10	1.02	1.02	1.18	n.p.	n.p.	n.p.	1.12
Motor vehicle third party personal claim	1.00	0.98	1.99	0.94	1.40	n.p.	n.p.	n.p.	1.02
Department of Veterans' Affairs	1.19	1.15	0.94	1.07	1.12	n.p.	n.p.	n.p.	1.06
Other <sup>(c)</sup>	0.88	0.86	0.42	0.62	0.61	n.p.	n.p.	n.p.	0.77
<b>Total</b>	<b>0.86</b>	<b>0.81</b>	<b>0.80</b>	<b>0.73</b>	<b>0.87</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*.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

The cost-by-volume figures in Table 7.19 were derived for each AR-DRG version 5.2 by multiplying the estimated average cost for the AR-DRG by the number of acute separations for the AR-DRG. The cost estimates for all of the AR-DRGs within a given Major Diagnostic Category (MDC) were then summed to produce an estimated cost for the MDC. It should be noted that the estimates in Table 7.19 do not include the costs for sub-acute and non-acute separations. The cost estimates in that table do not reconcile with those presented for total admitted patient care in public hospitals due to different estimation methods.

For 2009–10, the total estimated costs for acute admitted patient care were \$20.6 billion in public hospitals and \$8.2 billion in private hospitals (Table 7.19). The highest cost-by-volume MDC in both the public and private sector was *Diseases and disorders of the musculoskeletal system and connective tissue* (over \$2,450 million and \$1,936 million, respectively); *Medical DRGs* accounted for 54% of the estimated costs in public hospitals and 26% in private hospitals. *Surgical DRGs* accounted for 42% of the estimated costs in public hospitals and about 66% in private hospitals.

**Table 7.19: Separation<sup>(a)</sup> and cost statistics, by Major Diagnostic Category version 5.2 and Medical/Surgical/Other partition, public and private hospitals, 2009–10**

	<b>Major Diagnostic Category</b>	<b>Public hospitals</b>		<b>Private hospitals</b>	
		<b>Separations</b>	<b>Cost by volume (\$'000)<sup>(b)</sup></b>	<b>Separations</b>	<b>Cost by volume (\$'000)<sup>(c)</sup></b>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	12,404	1,115,782	1,480	134,711
01	Diseases and disorders of the nervous system	243,976	1,387,636	67,596	266,143
02	Diseases and disorders of the eye	98,083	277,821	218,071	372,089
03	Diseases and disorders of the ear, nose, mouth and throat	186,857	540,080	218,458	327,749
04	Diseases and disorders of the respiratory system	275,632	1,488,959	91,326	257,224
05	Diseases and disorders of the circulatory system	409,049	2,214,749	160,720	1,124,403
06	Diseases and disorders of the digestive system	498,925	1,867,018	548,132	789,578
07	Diseases and disorders of the hepatobiliary system and pancreas	93,211	592,240	35,017	140,568
08	Diseases and disorders of the musculoskeletal system and connective tissue	369,562	2,450,381	351,774	1,936,395
09	Diseases and disorders of the skin, subcutaneous tissue and breast	185,458	721,167	180,190	387,193
10	Endocrine, nutritional and metabolic diseases and disorders	74,034	451,736	44,214	201,221
11	Diseases and disorders of the kidney and urinary tract	1,106,348	1,246,806	293,966	279,020
12	Diseases and disorders of the male reproductive system	46,244	176,048	69,678	162,307
13	Diseases and disorders of the female reproductive system	113,646	417,804	166,358	296,775
14	Pregnancy, childbirth and puerperium	345,854	1,451,454	154,534	520,794
15	Newborns and other neonates	65,964	648,246	19,802	71,133
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	80,469	212,586	36,613	53,071
17	Neoplastic disorders (haematological and solid neoplasms)	192,221	503,711	227,993	175,179
18	Infectious and parasitic diseases	60,399	406,990	13,186	72,073
19	Mental diseases and disorders	133,237	1,191,050	128,024	280,632
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	33,571	107,934	28,356	69,965
21	Injuries, poisoning and toxic effects of drugs	151,274	652,886	23,302	74,973
22	Burns	8,485	71,892	338	1,582
23	Factors influencing health status and other contacts with health services	129,995	272,156	188,706	135,648
ED	Error DRGs <sup>(d)</sup>	5,558	94,270	9,226	49,964
	Surgical DRG	967,919	8,565,575	1,332,945	5,390,598
	Medical DRG	3,633,758	11,001,402	1,260,098	2,130,490
	Other DRG	318,779	994,425	684,017	659,300
	<b>Total</b>	<b>4,920,456</b>	<b>20,561,402</b>	<b>3,277,060</b>	<b>8,180,388</b>

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

(b) Cost by volume for public hospitals is based on the 2008–09 AR-DRG version 5.2 average public hospital cost estimates applied to AR-DRG version 5.2.

(c) Cost by volume for private hospitals is based on the 2008–09 AR-DRG version 5.2 average private hospital cost estimates applied to AR-DRG version 5.2.

(d) 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.

## 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 2009–10, about 85% of separations in public hospitals were for *Public patients*, compared to about 3% in private hospitals. Almost 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, 2009–10**

	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	4,319,437	102,014	4,421,451
Private health insurance	501,819	2,767,947	3,269,766
Self-funded <sup>(b)</sup>	58,715	285,850	344,565
Workers compensation	21,584	57,555	79,139
Motor vehicle third party personal claim	24,987	6,376	31,363
Department of Veterans' Affairs	118,539	199,732	318,271
Other <sup>(c)</sup>	28,350	42,241	70,591
<b>Total</b>	<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</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 7.2 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 an 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 2009–10, there were over 75,000 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 97% (59,500 separations) of contracted care provided by private hospitals was purchased by public hospitals.

**Table 7.21: Separations, by inter-hospital contracted patient status, public and private hospitals, 2009–10**

	Public hospitals	Private hospitals	Total
Inter-hospital contracted patient from public sector	10,306	57,774	68,080
Inter-hospital contracted patient from private sector	4,853	1,745	6,598
Not inter-hospital contracted patient	4,983,654	3,361,930	8,345,584
Not reported	74,618	40,266	114,884
<b>Total</b>	<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</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). Two jurisdictions (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 2009–10, 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 3.6 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 5.9 days overall, 6.2 days in public hospitals and 5.3 days in private hospitals (Table 7.22).

**Table 7.22 Average length of stay, public and private hospitals, 2009–10**

	Separations	Same-day separations	Patient days	Average length of stay (ALOS)	ALOS (excluding same-day)
Public hospitals	5,073,431	2,574,164	18,138,945	3.6	6.2
Private hospitals	3,461,715	2,343,565	8,262,177	2.4	5.3
<b>Total</b>	<b>8,535,146</b>	<b>4,917,729</b>	<b>26,401,122</b>	<b>3.1</b>	<b>5.9</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 (7.9 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 97.2% of separations (3.4 million) were categorised as *Other*, compared with 88.9% (4.5 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)* (365,000; see Table 7.23) and the number of separations with a mode of admission of *Admitted patient transferred from another hospital* (343,000; 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, 2009–10**

	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	300,984	55,969	356,953
Discharge/transfer to residential aged care service <sup>(a)</sup>	57,252	7,365	64,617
Discharge/transfer to an (other) psychiatric hospital	7,115	203	7,318
Discharge/transfer to other health care accommodation <sup>(b)</sup>	13,559	2,229	15,788
Statistical discharge: type change	75,265	15,015	90,280
Left against medical advice/discharge at own risk	40,262	2,414	42,676
Statistical discharge from leave	5,743	66	5,809
Died	59,683	13,350	73,033
Other <sup>(c)</sup>	4,513,546	3,365,088	7,878,634
Not reported	22	16	38
<b>Total</b>	<b>5,073,431</b>	<b>3,461,715</b>	<b>8,535,146</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

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) Includes Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory.
- (b) 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 S7.7

- (a) *Other* refers to all planned and unplanned admissions except transfers from other hospitals and statistical admissions.

#### Table S7.10

- (a) These conditions are defined using ICD-10-AM codes in *Appendix 1*.
- (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. 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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Separations</b>									
<i>Public hospitals</i>	1,547,111	1,424,663	922,970	505,909	383,055	101,673	88,356	99,694	5,073,431
Public acute hospitals	1,540,833	1,424,134	922,581	504,381	381,202	101,038	88,356	99,694	5,062,219
Public psychiatric hospitals	6,278	529	389	1,528	1,853	635	..	..	11,212
<i>Private hospitals<sup>(a)</sup></i>	960,706	885,776	844,953	381,300	270,015	n.p.	n.p.	n.p.	3,461,715
Private free standing day hospital facilities	213,168	188,405	212,680	103,537	57,055	n.p.	n.p.	n.p.	783,259
Other private hospitals <sup>(a)</sup>	747,538	697,371	632,273	277,763	212,960	n.p.	n.p.	n.p.	2,678,456
<i>Public acute and private hospitals</i>	2,501,539	2,309,910	1,767,534	885,681	651,217	n.p.	n.p.	n.p.	8,523,934
<b>Total</b>	<b>2,507,817</b>	<b>2,310,439</b>	<b>1,767,923</b>	<b>887,209</b>	<b>653,070</b>	n.p.	n.p.	n.p.	<b>8,535,146</b>
<b>Overnight separations</b>									
<i>Public hospitals</i>	856,709	615,183	453,538	236,231	209,695	50,445	40,729	36,737	2,499,267
Public acute hospitals	850,668	614,655	453,155	234,792	208,195	49,826	40,729	36,737	2,488,757
Public psychiatric hospitals	6,041	528	383	1,439	1,500	619	..	..	10,510
<i>Private hospitals<sup>(a)</sup></i>	287,130	298,689	271,426	120,307	93,432	n.p.	n.p.	n.p.	1,118,150
Private free standing day hospital facilities	0	0	0	1,259	0	n.p.	n.p.	n.p.	1,259
Other private hospitals <sup>(a)</sup>	287,130	298,689	271,426	119,048	93,432	n.p.	n.p.	n.p.	1,116,891
<i>Public acute and private hospitals</i>	1,137,798	913,344	724,581	355,099	301,627	n.p.	n.p.	n.p.	3,606,907
<b>Total</b>	<b>1,143,839</b>	<b>913,872</b>	<b>724,964</b>	<b>356,538</b>	<b>303,127</b>	n.p.	n.p.	n.p.	<b>3,617,417</b>
<b>Same-day separations</b>									
<i>Public hospitals</i>	690,402	809,480	469,432	269,678	173,360	51,228	47,627	62,957	2,574,164
Public acute hospitals	690,165	809,479	469,426	269,589	173,007	51,212	47,627	62,957	2,573,462
Public psychiatric hospitals	237	1	6	89	353	16	..	..	702
<i>Private hospitals<sup>(a)</sup></i>	673,576	587,087	573,527	260,993	176,583	n.p.	n.p.	n.p.	2,343,565
Private free standing day hospital facilities	213,168	188,405	212,680	102,278	57,055	n.p.	n.p.	n.p.	782,000
Other private hospitals <sup>(a)</sup>	460,408	398,682	360,847	158,715	119,528	n.p.	n.p.	n.p.	1,561,565
<i>Public acute and private hospitals</i>	1,363,741	1,396,566	1,042,953	530,582	349,590	n.p.	n.p.	n.p.	4,917,027
<b>Total</b>	<b>1,363,978</b>	<b>1,396,567</b>	<b>1,042,959</b>	<b>530,671</b>	<b>349,943</b>	n.p.	n.p.	n.p.	<b>4,917,729</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations as a % of total</b>									
Public hospitals	44.6	56.8	50.9	53.3	45.3	50.4	53.9	63.2	50.7
Public acute hospitals	44.8	56.8	50.9	53.4	45.4	50.7	53.9	63.2	50.8
Public psychiatric hospitals	3.8	0.2	1.5	5.8	19.1	2.5	..	..	6.3
Private hospitals <sup>(a)</sup>	70.1	66.3	67.9	68.4	65.4	n.p.	n.p.	n.p.	67.7
Private free standing day hospital facilities	100.0	100.0	100.0	98.8	100.0	n.p.	n.p.	n.p.	99.8
Other private hospitals <sup>(a)</sup>	61.6	57.2	57.1	57.1	56.1	n.p.	n.p.	n.p.	58.3
Public acute and private hospitals	54.5	60.5	59.0	59.9	53.7	n.p.	n.p.	n.p.	57.7
<b>Total</b>	<b>54.4</b>	<b>60.4</b>	<b>59.0</b>	<b>59.8</b>	<b>53.6</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>57.6</b>
<b>Separations per 1,000 population<sup>(c)</sup></b>									
Public hospitals	204.8	248.8	204.8	222.8	217.3	188.0	263.6	486.8	221.6
Public acute hospitals	203.9	248.7	204.7	222.1	216.2	186.7	263.6	486.8	221.1
Public psychiatric hospitals	0.9	0.1	0.1	0.7	1.1	1.2	..	..	0.5
Private hospitals <sup>(a)</sup>	126.2	153.3	185.7	166.8	147.6	n.p.	n.p.	n.p.	149.5
Private free standing day hospital facilities	28.1	32.6	46.8	45.5	30.7	n.p.	n.p.	n.p.	33.9
Other private hospitals <sup>(a)</sup>	98.1	120.7	138.9	121.3	116.9	n.p.	n.p.	n.p.	115.5
Public acute and private hospitals	330.1	402.0	390.5	388.8	363.8	n.p.	n.p.	n.p.	370.5
<b>Total</b>	<b>331.0</b>	<b>402.1</b>	<b>390.5</b>	<b>389.5</b>	<b>364.9</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>371.0</b>
<b>Average public cost weight of separations<sup>(b)</sup></b>									
Public hospitals	1.07	0.98	1.00	0.96	1.08	1.05	1.01	0.69	1.01
Public acute hospitals	1.06	0.97	1.00	0.95	1.07	1.04	1.01	0.69	1.01
Public psychiatric hospitals	2.82	4.04	2.75	3.22	3.22	2.35	..	..	2.98
Private hospitals <sup>(a)</sup>	0.94	0.91	0.88	0.81	0.95	n.p.	n.p.	n.p.	0.91
Private free standing day hospital facilities	0.56	0.46	0.49	0.34	0.43	n.p.	n.p.	n.p.	0.48
Other private hospitals <sup>(a)</sup>	1.06	1.04	1.02	0.99	1.10	n.p.	n.p.	n.p.	1.04
Public acute and private hospitals	1.02	0.95	0.94	0.89	1.02	n.p.	n.p.	n.p.	0.97
<b>Total</b>	<b>1.02</b>	<b>0.95</b>	<b>0.94</b>	<b>0.89</b>	<b>1.03</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.97</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average private cost weight of separations<sup>(c)</sup></b>									
<i>Private hospitals<sup>(a)</sup></i>	0.86	0.81	0.80	0.73	0.87	n.p.	n.p.	n.p.	0.82
Private free standing day hospital facilities	0.43	0.30	0.34	0.25	0.31	n.p.	n.p.	n.p.	0.34
Other private hospitals <sup>(a)</sup>	1.00	0.95	0.97	0.91	1.03	n.p.	n.p.	n.p.	0.97
<b>Patient days</b>									
<i>Public hospitals</i>	6,097,367	4,606,599	3,128,097	1,722,439	1,591,333	423,915	296,483	272,712	18,138,945
Public acute hospitals	5,816,145	4,547,310	3,030,478	1,646,651	1,494,500	371,540	296,483	272,712	17,475,819
Public psychiatric hospitals	281,222	59,289	97,619	75,788	96,833	52,375	..	..	663,126
<i>Private hospitals<sup>(a)</sup></i>	2,225,185	2,235,086	2,062,543	829,497	617,179	n.p.	n.p.	n.p.	8,262,177
Private free standing day hospital facilities	213,168	188,405	212,680	103,537	57,055	n.p.	n.p.	n.p.	783,259
Other private hospitals <sup>(a)</sup>	2,012,017	2,046,681	1,849,863	725,960	560,124	n.p.	n.p.	n.p.	7,478,918
<i>Public acute and private hospitals</i>	8,041,330	6,782,396	5,093,021	2,476,148	2,111,679	n.p.	n.p.	n.p.	25,737,996
<b>Total</b>	<b>8,322,552</b>	<b>6,841,685</b>	<b>5,190,640</b>	<b>2,551,936</b>	<b>2,208,512</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>26,401,122</b>
<b>Patient days per 1,000 population</b>									
<i>Public hospitals</i>	789.4	788.2	693.0	759.5	857.0	748.2	897.0	1,478.5	779.7
Public acute hospitals	750.3	777.3	671.1	726.7	801.1	660.0	897.0	1,478.5	750.0
Public psychiatric hospitals	39.1	10.9	21.8	32.9	55.9	88.2	..	..	29.7
<i>Private hospitals<sup>(a)</sup></i>	286.3	379.3	452.5	364.4	324.2	n.p.	n.p.	n.p.	351.2
Private free standing day hospital facilities	28.1	32.6	46.8	45.5	30.7	n.p.	n.p.	n.p.	33.9
Other private hospitals <sup>(a)</sup>	258.1	346.8	405.7	318.9	293.4	n.p.	n.p.	n.p.	317.3
<i>Public acute and private hospitals</i>	1,036.5	1,156.7	1,123.7	1,091.0	1,125.3	n.p.	n.p.	n.p.	1,101.2
<b>Total</b>	<b>1,075.6</b>	<b>1,167.6</b>	<b>1,145.5</b>	<b>1,123.9</b>	<b>1,181.2</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,130.9</b>

(continued)

**Table S7.1 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average length of stay (days)</b>									
<i>Public hospitals</i>	3.9	3.2	3.4	3.4	4.2	4.2	3.4	2.7	3.6
Public acute hospitals	3.8	3.2	3.3	3.3	3.9	3.7	3.4	2.7	3.5
Public psychiatric hospitals <sup>(d)</sup>	44.8	112.1	250.9	49.6	52.3	82.5	..	..	59.1
<i>Private hospitals<sup>(a)</sup></i>	2.3	2.5	2.4	2.2	2.3	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	2.6	2.6	n.p.	n.p.	n.p.	2.8
<i>Public acute and private hospitals</i>	3.2	2.9	2.9	2.8	3.2	n.p.	n.p.	n.p.	3.0
<b>Total</b>	<b>3.3</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>3.4</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3.1</b>
<b>Average length of stay, excluding same-day separations (days)</b>									
<i>Public hospitals</i>	6.3	6.2	5.9	6.1	6.8	7.4	6.1	5.7	6.2
Public acute hospitals	6.0	6.1	5.7	5.9	6.3	6.4	6.1	5.7	6.0
Public psychiatric hospitals <sup>(d)</sup>	46.5	112.3	254.9	52.6	64.3	84.6	..	..	63.0
<i>Private hospitals<sup>(a)</sup></i>	5.4	5.5	5.5	4.7	4.7	n.p.	n.p.	n.p.	5.3
Private free standing day hospital facilities	..	..	..	1.0	..	n.p.	n.p.	n.p.	1.0
Other private hospitals <sup>(a)</sup>	5.4	5.5	5.5	4.8	4.7	n.p.	n.p.	n.p.	5.3
<i>Public acute and private hospitals</i>	5.9	5.9	5.6	5.5	5.8	n.p.	n.p.	n.p.	5.8
<b>Total</b>	<b>6.1</b>	<b>6.0</b>	<b>5.7</b>	<b>5.7</b>	<b>6.1</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5.9</b>

(a) Includes private psychiatric hospitals.

(b) 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.

(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 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.

(d) 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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1,206,405	1,222,939	842,290	456,224	335,260	82,307	77,328	96,684	4,319,437
Private health insurance	248,074	131,580	39,428	32,102	30,099	14,498	5,508	530	501,819
Self-funded <sup>(b)</sup>	23,966	16,795	15,160	658	1,663	n.a.	142	331	58,715
Workers compensation	7,162	5,567	4,524	1,722	1,373	477	384	375	21,584
Motor vehicle third party personal claim	7,195	8,452	3,271	2,949	1,714	662	242	502	24,987
Department of Veterans' Affairs	50,189	27,975	14,248	8,215	10,320	3,307	4,019	266	118,539
Other <sup>(c)</sup>	4,120	11,355	4,049	4,039	2,626	422	733	1,006	28,350
<i>Total</i>	<i>1,547,111</i>	<i>1,424,663</i>	<i>922,970</i>	<i>505,909</i>	<i>383,055</i>	<i>101,673</i>	<i>88,356</i>	<i>99,694</i>	<i>5,073,431</i>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	9,131	2,484	20,512	66,048	3,403	n.p.	n.p.	n.p.	102,014
Private health insurance	773,605	750,487	654,211	271,480	235,727	n.p.	n.p.	n.p.	2,767,947
Self-funded <sup>(b)</sup>	107,265	74,785	71,456	17,606	9,909	n.p.	n.p.	n.p.	285,850
Workers compensation	21,256	11,296	11,885	6,760	4,739	n.p.	n.p.	n.p.	57,555
Motor vehicle third party personal claim	1,059	3,718	101	730	528	n.p.	n.p.	n.p.	6,376
Department of Veterans' Affairs	47,332	38,072	77,960	16,314	13,729	n.p.	n.p.	n.p.	199,732
Other <sup>(c)</sup>	1,058	4,934	8,828	2,362	1,980	n.p.	n.p.	n.p.	42,241
<i>Total</i>	<i>960,706</i>	<i>885,776</i>	<i>844,953</i>	<i>381,300</i>	<i>270,015</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,461,715</i>
<b>All hospitals</b>	<b>2,507,817</b>	<b>2,310,439</b>	<b>1,767,923</b>	<b>887,209</b>	<b>653,070</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,535,146</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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	4,591,633	3,750,782	2,848,278	1,467,741	1,321,706	351,924	250,460	259,105	14,841,629
Private health insurance	1,006,742	514,232	125,126	161,551	157,853	45,137	26,049	1,216	2,037,906
Self-funded <sup>(b)</sup>	82,546	27,583	25,994	3,353	2,291	n.a.	751	1,424	143,942
Workers compensation	25,354	16,909	16,583	6,463	5,256	1,379	1,327	1,387	74,658
Motor vehicle third party personal claim	41,341	42,967	21,692	25,172	11,955	4,030	1,854	3,138	152,149
Department of Veterans' Affairs	289,108	163,934	76,370	41,356	83,580	18,395	13,601	2,056	688,400
Other <sup>(c)</sup>	60,643	90,192	14,054	16,803	8,692	3,050	2,441	4,386	200,261
<i>Total</i>	<i>6,097,367</i>	<i>4,606,599</i>	<i>3,128,097</i>	<i>1,722,439</i>	<i>1,591,333</i>	<i>423,915</i>	<i>296,483</i>	<i>272,712</i>	<i>18,138,945</i>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	17,575	4,248	57,096	88,794	5,222	n.p.	n.p.	n.p.	174,323
Private health insurance	1,768,338	1,874,757	1,572,319	618,239	529,640	n.p.	n.p.	n.p.	6,564,411
Self-funded <sup>(b)</sup>	172,086	120,011	80,654	20,298	11,387	n.p.	n.p.	n.p.	410,130
Workers compensation	46,965	28,591	20,656	11,307	10,490	n.p.	n.p.	n.p.	121,544
Motor vehicle third party personal claim	2,909	25,075	190	1,530	1,997	n.p.	n.p.	n.p.	33,058
Department of Veterans' Affairs	215,316	169,751	317,166	84,472	53,352	n.p.	n.p.	n.p.	867,336
Other <sup>(c)</sup>	1,996	12,653	14,462	4,857	5,091	n.p.	n.p.	n.p.	91,375
<i>Total</i>	<i>2,225,185</i>	<i>2,235,086</i>	<i>2,062,543</i>	<i>829,497</i>	<i>617,179</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,262,177</i>
<b>All hospitals</b>	<b>8,322,552</b>	<b>6,841,685</b>	<b>5,190,640</b>	<b>2,551,936</b>	<b>2,208,512</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>26,401,122</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, 2009–10**

State or territory of usual residence	State or territory of hospitalisation								Separations per 1,000 population <sup>(b)</sup>	
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
<b>Public hospitals</b>										
New South Wales	1,517,955	29,450	10,636	704	1,740	186	20,196	407	1,581,274	219.0
Victoria	3,591	1,383,314	1,929	615	2,156	231	235	357	1,392,428	245.6
Queensland	11,518	1,479	903,490	606	419	254	172	423	918,361	206.5
Western Australia	575	533	444	501,450	413	32	42	2,319	505,808	221.2
South Australia	604	1,925	451	324	375,490	108	52	2,929	381,883	217.9
Tasmania	286	1,586	271	79	92	100,328	30	33	102,705	198.7
Australian Capital Territory	2,793	222	180	43	42	4	67,545	22	70,851	214.2
Northern Territory	220	296	410	210	2,049	0	15	92,857	96,057	476.7
Other Australian territories <sup>(a)</sup>	n.p.	9	9	144	0	0	0	2	n.p.	n.p.
Not elsewhere classified <sup>(b)</sup>	n.p.	4,963	4,382	1,715	162	398	69	345	n.p.	n.p.
Not reported	0	886	768	19	491	0	0	0	2,296	0.0
<i>Total</i>	<i>1,547,111</i>	<i>1,424,663</i>	<i>922,970</i>	<i>505,909</i>	<i>383,055</i>	<i>101,673</i>	<i>88,356</i>	<i>99,694</i>	<i>5,073,431</i>	<i>226.2</i>
<b>Private hospitals</b>										
New South Wales	943,265	7,705	29,588	243	1,650	n.p.	n.p.	n.p.	990,178	131.2
Victoria	7,856	873,928	1,364	206	1,635	n.p.	n.p.	n.p.	885,271	154.9
Queensland	4,726	1,032	811,518	213	349	n.p.	n.p.	n.p.	818,038	182.2
Western Australia	322	321	257	380,097	122	n.p.	n.p.	n.p.	381,243	166.7
South Australia	270	513	316	157	264,701	n.p.	n.p.	n.p.	266,006	146.4
Tasmania	235	1,314	279	35	61	n.p.	n.p.	n.p.	68,266	139.9
Australian Capital Territory	2,577	232	178	24	58	n.p.	n.p.	n.p.	32,082	94.4
Northern Territory	371	369	728	164	1,216	n.p.	n.p.	n.p.	14,181	74.1
Other Australian territories <sup>(a)</sup>	116	0	50	43	0	n.p.	n.p.	n.p.	n.p.	n.p.
Not elsewhere classified <sup>(b)</sup>	968	329	613	117	6	n.p.	n.p.	n.p.	n.p.	n.p.
Not reported	0	0	62	0	215	n.p.	n.p.	n.p.	345	0.0
<i>Total</i>	<i>960,706</i>	<i>885,776</i>	<i>844,953</i>	<i>381,300</i>	<i>270,015</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,461,715</i>	<i>151.2</i>
<b>Total</b>	<b>2,507,817</b>	<b>2,310,439</b>	<b>1,767,923</b>	<b>887,209</b>	<b>653,070</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,535,146</b>	<b>377.4</b>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.5: Separations by care type, public and private hospitals, states and territories, 2009–10**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	1,473,067	1,377,417	880,728	489,249	366,576	97,527	81,422	97,365	4,863,351
Rehabilitation care	29,329	14,796	18,786	8,511	6,510	1,358	2,788	614	82,692
Palliative care	10,279	6,208	5,953	1,284	1,627	310	651	321	26,633
Geriatric evaluation and management	3,689	13,250	1,671	668	1,327	35	639	31	21,310
Psychogeriatric care	744	0	544	708	260	48	31	1	2,336
Maintenance care	6,936	811	5,150	1,430	2,794	479	1,640	384	19,624
Newborn—qualified days only	19,441	10,518	7,378	3,572	2,876	1,828	1,079	942	47,634
Newborn—qualified and unqualified days <sup>(b)</sup>	3,621	1,663	2,500	487	1,085	3	106	1	9,466
Newborn—unqualified days only	53,920	43,694	35,515	18,408	11,493	2,533	3,268	2,544	171,375
<i>Newborn total</i>	<i>76,982</i>	<i>55,875</i>	<i>45,393</i>	<i>22,467</i>	<i>15,454</i>	<i>4,364</i>	<i>4,453</i>	<i>3,487</i>	<i>228,475</i>
Other admitted patient care	0	0	260	0	0	85	0	35	380
Not reported	5	0	0	0	0	0	0	0	5
<i>Total</i>	<i>1,601,031</i>	<i>1,468,357</i>	<i>958,485</i>	<i>524,317</i>	<i>394,548</i>	<i>104,206</i>	<i>91,624</i>	<i>102,238</i>	<i>5,244,806</i>
<b>Private hospitals</b>									
Acute care	852,910	857,955	808,647	374,076	251,138	n.p.	n.p.	n.p.	3,258,854
Rehabilitation care	99,562	16,189	29,893	1,757	17,776	n.p.	n.p.	n.p.	168,972
Palliative care	419	594	1,696	1,998	220	n.p.	n.p.	n.p.	5,016
Geriatric evaluation and management	0	0	45	4	34	n.p.	n.p.	n.p.	88
Psychogeriatric care	0	7,177	22	902	0	n.p.	n.p.	n.p.	8,102
Maintenance care	149	62	1,831	206	22	n.p.	n.p.	n.p.	2,283
Newborn—qualified days only	7,356	3,799	2,169	1,332	825	n.p.	n.p.	n.p.	16,116
Newborn—qualified and unqualified days <sup>(b)</sup>	310	0	457	1,025	0	n.p.	n.p.	n.p.	1,794
Newborn—unqualified days only	16,959	3	16,675	8,397	846	n.p.	n.p.	n.p.	46,834
<i>Newborn total</i>	<i>24,625</i>	<i>3,802</i>	<i>19,301</i>	<i>10,754</i>	<i>1,671</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>64,744</i>
Other admitted patient care	0	0	193	0	0	n.p.	n.p.	n.p.	194
Not reported	0	0	0	0	0	n.p.	n.p.	n.p.	296
<i>Total<sup>(c)</sup></i>	<i>977,665</i>	<i>885,779</i>	<i>861,628</i>	<i>389,697</i>	<i>270,861</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,508,549</i>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.6: Patient days, by care type, public and private hospitals, states and territories, 2009–10**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	5,025,529	3,695,797	2,460,448	1,388,560	1,198,800	359,348	217,836	243,863	14,590,181
Rehabilitation care	544,278	310,667	276,360	192,086	123,707	34,117	30,318	5,515	1,517,048
Palliative care	113,995	88,371	51,996	12,570	19,568	3,440	7,450	3,372	300,762
Geriatric evaluation and management	38,414	324,852	33,543	6,329	17,247	641	9,376	603	431,005
Psychogeriatric care	67,975	0	13,658	34,986	25,613	50	925	13	143,220
Maintenance care	170,503	70,141	208,671	48,409	165,185	12,632	20,307	8,713	704,561
Newborn-qualified days	136,664	116,771	82,253	39,499	41,213	13,533	10,271	10,549	450,753
Newborn-unqualified days	146,008	111,370	81,059	48,651	31,790	6,022	7,116	6,940	438,956
Newborn total	282,672	228,141	163,312	88,150	73,003	19,555	17,387	17,489	889,709
Other admitted patient care	0	0	1,168	0	0	154	0	84	1,406
Not reported	9	0	0	0	0	0	0	0	9
<i>Total<sup>(d)</sup></i>	<i>6,097,367</i>	<i>4,606,599</i>	<i>3,128,097</i>	<i>1,722,439</i>	<i>1,591,333</i>	<i>423,915</i>	<i>296,483</i>	<i>272,712</i>	<i>18,138,945</i>
<b>Private hospitals</b>									
Acute care	1,797,792	1,930,759	1,833,992	745,177	545,306	n.p.	n.p.	n.p.	7,109,212
Rehabilitation total	380,663	231,019	139,048	31,739	63,460	n.p.	n.p.	n.p.	872,470
Palliative care	4,626	7,048	24,056	19,380	3,421	n.p.	n.p.	n.p.	59,785
Geriatric evaluation and management	0	0	290	4	74	n.p.	n.p.	n.p.	397
Psychogeriatric care	0	40,362	377	15,940	0	n.p.	n.p.	n.p.	56,709
Maintenance care	1,903	2,280	36,965	5,340	96	n.p.	n.p.	n.p.	47,155
Newborn-qualified days	40,201	23,618	27,303	11,917	4,822	n.p.	n.p.	n.p.	112,279
Newborn-unqualified days	73,845	15	66,317	41,077	3,444	n.p.	n.p.	n.p.	200,892
Newborn total	114,046	23,633	93,620	52,994	8,266	n.p.	n.p.	n.p.	313,171
Other admitted patient care	0	0	512	0	0	n.p.	n.p.	n.p.	516
Not reported	0	0	0	0	0	n.p.	n.p.	n.p.	3,654
<i>Total<sup>(d)</sup></i>	<i>2,225,185</i>	<i>2,235,086</i>	<i>2,062,543</i>	<i>829,497</i>	<i>617,179</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,262,177</i>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.7: Separations, by mode of admission, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Admitted patient transferred from another hospital	88,613	66,580	29,686	35,238	17,521	2,231	2,795	236	242,900
Statistical admission: type change	23,662	10,667	19,256	7,160	5,219	1,879	5,075	1,357	74,275
Other <sup>(a)</sup>	1,414,463	1,346,673	874,028	463,511	358,055	97,563	80,486	98,101	4,732,880
Not reported	20,373	743	0	0	2,260	0	0	0	23,376
<i>Total</i>	<b>1,547,111</b>	<b>1,424,663</b>	<b>922,970</b>	<b>505,909</b>	<b>383,055</b>	<b>101,673</b>	<b>88,356</b>	<b>99,694</b>	<b>5,073,431</b>
<b>Private hospitals</b>									
Admitted patient transferred from another hospital	38,867	29,703	17,263	6,046	5,573	n.p.	n.p.	n.p.	100,480
Statistical admission: type change	3,630	2,593	5,420	1,451	475	n.p.	n.p.	n.p.	18,903
Other <sup>(a)</sup>	917,926	853,480	822,270	373,803	263,907	n.p.	n.p.	n.p.	3,335,158
Not reported	283	0	0	0	60	n.p.	n.p.	n.p.	7,174
<i>Total</i>	<b>960,706</b>	<b>885,776</b>	<b>844,953</b>	<b>381,300</b>	<b>270,015</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,461,715</b>
<b>All hospitals</b>									
Admitted patient transferred from another hospital	127,480	96,283	46,949	41,284	23,094	n.p.	n.p.	n.p.	343,380
Statistical admission: type change	27,292	13,260	24,676	8,611	5,694	n.p.	n.p.	n.p.	93,178
Other <sup>(a)</sup>	2,332,389	2,200,153	1,696,298	837,314	621,962	n.p.	n.p.	n.p.	8,068,038
Not reported	20,656	743	0	0	2,320	n.p.	n.p.	n.p.	30,550
<i>Total</i>	<b>2,507,817</b>	<b>2,310,439</b>	<b>1,767,923</b>	<b>887,209</b>	<b>653,070</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>8,535,146</b>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.8: Same-day and overnight separations by broad category of service, public hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	2,334	1,021	1,794	666	468	155	309	192	6,939
Specialist mental health	4,390	434	4,718	582	776	16	166	71	11,153
Emergency									
Surgical	7,525	5,687	2,414	1,997	1,238	204	691	123	19,879
Medical	128,942	145,428	109,633	40,892	31,604	2,231	8,343	7,638	474,711
Other	1,867	939	555	553	186	184	106	22	4,412
Non-emergency									
Surgical	96,644	109,687	52,775	35,500	34,771	8,143	4,314	3,797	345,631
Medical	385,331	464,083	263,294	152,675	96,096	33,425	30,648	49,879	1,475,431
Other	63,369	82,201	34,249	36,813	8,221	6,870	3,050	1,235	236,008
<i>Total</i>	<i>690,402</i>	<i>809,480</i>	<i>469,432</i>	<i>269,678</i>	<i>173,360</i>	<i>51,228</i>	<i>47,627</i>	<i>62,957</i>	<i>2,574,164</i>
<b>Overnight separations</b>									
Childbirth	69,349	50,358	40,566	19,561	13,928	3,839	3,740	2,821	204,162
Specialist mental health	30,667	19,306	17,123	9,031	6,943	619	1,191	795	85,675
Emergency									
Surgical	70,281	52,069	34,513	24,027	17,436	2,287	5,085	3,801	209,499
Medical	436,693	282,606	223,399	119,018	110,609	10,319	16,405	20,753	1,219,802
Other	19,051	12,540	7,327	5,109	4,802	501	936	830	51,096
Non-emergency									
Surgical	97,917	92,884	61,491	30,427	28,656	9,862	5,496	2,638	329,371
Medical	126,317	99,073	64,351	27,680	25,212	21,903	7,696	4,825	377,057
Other	6,434	6,347	4,768	1,378	2,109	1,115	180	274	22,605
<i>Total</i>	<i>856,709</i>	<i>615,183</i>	<i>453,538</i>	<i>236,231</i>	<i>209,695</i>	<i>50,445</i>	<i>40,729</i>	<i>36,737</i>	<i>2,499,267</i>
<b>Total</b>	<b>1,547,111</b>	<b>1,424,663</b>	<b>922,970</b>	<b>505,909</b>	<b>383,055</b>	<b>101,673</b>	<b>88,356</b>	<b>99,694</b>	<b>5,073,431</b>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,100 separations with specialised mental health care in 2008–09.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.9: Same-day and overnight separations by broad category of service, private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	29	27	37	12	17	n.p.	n.p.	n.p.	151
Specialist mental health	32,966	45,448	28,614	4,342	330	n.p.	n.p.	n.p.	114,838
Emergency									
Surgical	428	320	518	414	1,033	n.p.	n.p.	n.p.	2,749
Medical	1,349	1,632	2,686	1,439	1,408	n.p.	n.p.	n.p.	8,576
Other	229	152	267	149	1,036	n.p.	n.p.	n.p.	1,853
Non-emergency									
Surgical	240,284	177,674	165,644	70,515	56,566	n.p.	n.p.	n.p.	740,835
Medical	214,495	182,075	234,473	122,058	75,490	n.p.	n.p.	n.p.	846,955
Other	183,796	179,759	141,288	62,064	40,703	n.p.	n.p.	n.p.	627,608
<i>Total</i>	<i>673,576</i>	<i>587,087</i>	<i>573,527</i>	<i>260,993</i>	<i>176,583</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,343,565</i>
<b>Overnight separations</b>									
Childbirth	23,951	21,513	18,517	10,366	5,119	n.p.	n.p.	n.p.	84,169
Specialist mental health	8,629	10,392	5,974	3,760	1,383	n.p.	n.p.	n.p.	30,805
Emergency									
Surgical	3,748	7,471	9,961	4,372	3,965	n.p.	n.p.	n.p.	30,062
Medical	13,915	30,901	49,128	13,579	15,381	n.p.	n.p.	n.p.	125,349
Other	973	3,163	3,434	1,143	1,218	n.p.	n.p.	n.p.	10,129
Non-emergency									
Surgical	151,963	128,336	110,843	61,948	44,860	n.p.	n.p.	n.p.	522,542
Medical	74,467	84,173	63,415	22,601	18,758	n.p.	n.p.	n.p.	276,143
Other	9,484	12,740	10,154	2,538	2,748	n.p.	n.p.	n.p.	38,951
<i>Total</i>	<i>287,130</i>	<i>298,689</i>	<i>271,426</i>	<i>120,307</i>	<i>93,432</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,118,150</i>
<b>Total</b>	<b>960,706</b>	<b>885,776</b>	<b>844,953</b>	<b>381,300</b>	<b>270,015</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,461,715</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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Vaccine-preventable conditions</b>									
Influenza and pneumonia	4,510	2,695	3,170	1,550	1,128	308	149	385	13,905
Other vaccine-preventable conditions	998	1,386	726	345	385	46	20	108	4,018
<i>Total vaccine-preventable conditions<sup>(c)</sup></i>	<i>5,503</i>	<i>4,076</i>	<i>3,887</i>	<i>1,891</i>	<i>1,512</i>	<i>354</i>	<i>169</i>	<i>489</i>	<i>17,895</i>
<b>Acute conditions</b>									
Appendicitis with generalised peritonitis	1,287	1,151	748	518	369	86	55	38	4,254
Cellulitis	13,400	9,776	8,916	3,158	2,930	748	452	764	40,181
Convulsions and epilepsy	10,940	7,635	6,882	3,146	2,692	642	426	797	33,241
Dehydration and gastroenteritis	20,478	19,063	13,380	5,819	5,006	1,181	654	627	66,259
Dental conditions	15,757	16,583	12,592	7,919	5,002	1,105	610	663	60,251
Ear, nose and throat infections	10,981	7,312	8,082	3,539	3,209	644	348	728	34,870
Gangrene	1,104	1,957	1,114	495	417	157	40	152	5,438
Pelvic inflammatory disease	1,307	1,149	1,082	455	349	96	67	129	4,635
Perforated/bleeding ulcer	1,680	1,389	986	543	469	115	74	21	5,279
Pyelonephritis	17,891	14,289	11,800	5,197	4,386	830	600	592	55,616
<i>Total acute conditions<sup>(c)</sup></i>	<i>94,784</i>	<i>80,263</i>	<i>65,543</i>	<i>30,771</i>	<i>24,819</i>	<i>5,600</i>	<i>3,325</i>	<i>4,505</i>	<i>309,864</i>
<b>Chronic conditions</b>									
Angina	9,435	8,533	8,435	3,102	2,672	623	275	374	33,469
Asthma	13,228	9,987	7,867	2,873	3,744	623	363	452	39,166
Chronic obstructive pulmonary disease	20,640	14,664	13,375	4,867	5,504	1,521	574	992	62,179
Congestive cardiac failure	14,277	12,977	8,672	4,140	3,821	917	550	438	45,805
Diabetes complications	40,627	34,126	41,284	34,804	9,192	2,767	1,242	2,017	166,126
Hypertension	2,243	1,364	1,640	393	563	89	60	35	6,393
Iron deficiency anaemia	7,986	9,271	4,603	2,896	2,450	732	272	170	28,385
Nutritional deficiencies	69	50	64	9	19	1	4	18	236
Rheumatic heart disease <sup>(d)</sup>	644	567	649	270	209	31	20	206	2,607
<i>Total chronic conditions<sup>(c)</sup></i>	<i>105,537</i>	<i>88,275</i>	<i>83,388</i>	<i>51,765</i>	<i>27,228</i>	<i>7,095</i>	<i>3,218</i>	<i>4,433</i>	<i>371,126</i>
<i>Total chronic conditions, excluding diabetes<sup>(c)</sup></i>	<i>68,522</i>	<i>57,413</i>	<i>45,305</i>	<i>18,550</i>	<i>18,982</i>	<i>4,537</i>	<i>2,118</i>	<i>2,685</i>	<i>218,240</i>
<b>Total selected potentially preventable hospitalisations<sup>(c)</sup></b>	<b>204,930</b>	<b>171,872</b>	<b>152,025</b>	<b>84,015</b>	<b>53,290</b>	<b>12,982</b>	<b>6,689</b>	<b>9,305</b>	<b>695,560</b>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.11: Separations, by age group and sex, public hospitals, states and territories, 2009–10**

Sex	Age group	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
<b>Males</b>	Under 1	25,929	15,597	13,480	5,995	5,229	1,591	1,216	1,589	70,626
	1–4	26,987	19,554	17,712	8,493	7,178	1,384	1,136	1,712	84,156
	5–14	34,143	25,881	22,267	10,615	7,894	1,911	1,783	1,807	106,301
	15–24	40,841	37,883	28,925	15,468	10,389	2,787	2,620	2,394	141,307
	25–34	45,236	43,109	33,991	18,314	11,575	2,822	3,144	3,292	161,483
	35–44	61,798	62,528	41,957	24,232	17,143	4,385	4,300	7,837	224,180
	45–54	84,371	86,109	58,565	32,458	21,709	6,763	5,159	9,887	305,021
	55–64	115,438	118,173	77,599	42,135	28,650	8,465	8,431	9,234	408,125
	65–74	134,809	138,196	76,269	43,268	31,589	9,145	8,045	5,072	446,393
	75–84	136,272	125,335	63,639	37,706	34,945	7,766	7,177	1,304	414,144
	85 and over	45,969	33,687	16,702	10,885	11,761	2,311	2,430	198	123,943
	<i>Total<sup>(a)</sup></i>	<b>751,793</b>	<b>706,052</b>	<b>451,106</b>	<b>249,569</b>	<b>188,062</b>	<b>49,330</b>	<b>45,441</b>	<b>44,326</b>	<b>2,485,679</b>
<b>Females</b>	Under 1	20,922	11,695	9,977	4,714	3,943	1,327	955	1,206	54,739
	1–4	19,989	13,501	12,873	6,123	4,998	955	771	1,208	60,418
	5–14	24,025	19,351	16,691	7,734	6,104	1,520	1,273	1,395	78,093
	15–24	64,156	57,626	51,667	23,630	19,113	4,758	3,554	5,152	229,656
	25–34	109,751	99,350	70,282	34,082	26,100	6,346	6,477	7,418	359,806
	35–44	84,414	84,467	55,916	30,126	22,180	5,948	5,179	9,553	297,783
	45–54	77,479	85,051	55,584	32,353	21,276	6,945	4,297	12,431	295,416
	55–64	88,667	93,741	58,245	33,655	21,206	6,978	5,558	11,674	319,724
	65–74	113,516	104,282	61,924	34,440	25,294	7,614	6,173	4,064	357,307
	75–84	124,515	102,004	53,153	33,595	29,252	6,844	5,673	942	355,978
	85 and over	67,874	47,539	25,552	15,887	15,523	3,104	3,005	325	178,809
	<i>Total<sup>(a)</sup></i>	<b>795,308</b>	<b>718,607</b>	<b>471,864</b>	<b>256,339</b>	<b>194,989</b>	<b>52,339</b>	<b>42,915</b>	<b>55,368</b>	<b>2,587,729</b>
<b>Total<sup>(a)</sup></b>		<b>1,547,111</b>	<b>1,424,663</b>	<b>922,970</b>	<b>505,909</b>	<b>383,055</b>	<b>101,673</b>	<b>88,356</b>	<b>99,694</b>	<b>5,073,431</b>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.12: Separations, by age group and sex, private hospitals, states and territories, 2009–10**

<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	5,637	3,785	3,151	2,669	1,121	n.p.	n.p.	n.p.	16,888
	1–4	6,451	4,125	5,179	2,677	1,966	n.p.	n.p.	n.p.	21,266
	5–14	9,072	6,527	7,400	3,679	2,331	n.p.	n.p.	n.p.	30,102
	15–24	20,027	18,617	15,398	9,070	5,720	n.p.	n.p.	n.p.	71,650
	25–34	22,363	20,279	17,118	10,954	5,822	n.p.	n.p.	n.p.	79,576
	35–44	35,993	34,349	29,146	17,779	8,944	n.p.	n.p.	n.p.	130,789
	45–54	56,495	52,425	49,171	25,663	15,163	n.p.	n.p.	n.p.	206,336
	55–64	88,653	79,014	85,464	37,591	25,850	n.p.	n.p.	n.p.	328,308
	65–74	90,193	77,222	83,198	36,497	27,386	n.p.	n.p.	n.p.	324,584
	75–84	70,395	63,659	63,060	26,867	23,048	n.p.	n.p.	n.p.	254,395
	85 and over	25,672	24,604	25,855	8,016	7,474	n.p.	n.p.	n.p.	94,395
	<i>Total<sup>(a)</sup></i>	<b>430,951</b>	<b>384,606</b>	<b>384,140</b>	<b>181,462</b>	<b>124,825</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1,558,289</b>
<b>Females</b>	Under 1	3,977	2,556	2,095	1,756	427	n.p.	n.p.	n.p.	11,176
	1–4	4,430	2,602	3,473	1,764	1,317	n.p.	n.p.	n.p.	14,084
	5–14	7,556	5,816	6,282	3,094	1,966	n.p.	n.p.	n.p.	25,683
	15–24	29,789	34,015	27,836	13,373	6,528	n.p.	n.p.	n.p.	115,548
	25–34	59,070	59,485	51,976	25,121	13,097	n.p.	n.p.	n.p.	217,424
	35–44	73,508	77,485	59,910	29,615	16,273	n.p.	n.p.	n.p.	266,680
	45–54	70,844	72,898	64,528	30,675	20,144	n.p.	n.p.	n.p.	269,212
	55–64	92,698	84,847	82,595	36,304	27,811	n.p.	n.p.	n.p.	336,082
	65–74	85,318	71,834	72,152	28,587	25,066	n.p.	n.p.	n.p.	292,501
	75–84	74,024	62,190	62,278	21,495	23,022	n.p.	n.p.	n.p.	250,580
	85 and over	28,541	27,389	27,688	8,054	9,527	n.p.	n.p.	n.p.	104,371
	<i>Total<sup>(a)</sup></i>	<b>529,755</b>	<b>501,117</b>	<b>460,813</b>	<b>199,838</b>	<b>145,178</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>1,903,341</b>
<b>Total<sup>(a)</sup></b>		<b>960,706</b>	<b>885,776</b>	<b>844,953</b>	<b>381,300</b>	<b>270,015</b>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<b>3,461,715</b>

Note: See boxes 7.1, 7.2, 7.3 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.13: Separations, by Indigenous status<sup>(a)</sup>, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Sub-total—selected states and territories <sup>(b)</sup>	Total
<b>Public hospitals</b>										
Aboriginal but not Torres Strait Islander origin	57,408	12,421	59,792	44,216	19,357	2,780	1,729	67,949	261,143	265,652
Torres Strait Islander but not Aboriginal origin	985	369	9,614	117	281	125	22	334	11,700	11,847
Aboriginal and Torres Strait Islander origin	1,101	1,244	4,192	864	64	113	142	1,148	8,613	8,868
<i>Indigenous people</i>	<i>59,494</i>	<i>14,034</i>	<i>73,598</i>	<i>45,197</i>	<i>19,702</i>	<i>3,018</i>	<i>1,893</i>	<i>69,431</i>	<i>281,456</i>	<i>286,367</i>
Neither Aboriginal nor Torres Strait Islander origin	1,473,532	1,401,247	834,350	460,712	344,117	96,445	84,771	30,259	4,544,217	4,725,433
Not reported	14,085	9,382	15,022	0	19,236	2,210	1,692	4	57,729	61,631
<i>Total</i>	<i>1,547,111</i>	<i>1,424,663</i>	<i>922,970</i>	<i>505,909</i>	<i>383,055</i>	<i>101,673</i>	<i>88,356</i>	<i>99,694</i>	<i>4,883,402</i>	<i>5,073,431</i>
<b>Private hospitals</b>										
Aboriginal but not Torres Strait Islander origin	973	478	2,336	15,466	641	n.p.	n.p.	n.p.	19,894	20,265
Torres Strait Islander but not Aboriginal origin	59	76	1,197	557	44	n.p.	n.p.	n.p.	1,933	1,969
Aboriginal and Torres Strait Islander origin	503	588	166	382	86	n.p.	n.p.	n.p.	1,725	1,816
<i>Indigenous people</i>	<i>1,535</i>	<i>1,142</i>	<i>3,699</i>	<i>16,405</i>	<i>771</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>23,552</i>	<i>24,050</i>
Neither Aboriginal nor Torres Strait Islander origin	936,936	871,026	764,773	364,895	239,686	n.p.	n.p.	n.p.	3,177,316	3,272,724
Not reported	22,235	13,608	76,481	0	29,558	n.p.	n.p.	n.p.	141,882	164,941
<i>Total</i>	<i>960,706</i>	<i>885,776</i>	<i>844,953</i>	<i>381,300</i>	<i>270,015</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,342,750</i>	<i>3,461,715</i>
<b>All hospitals</b>										
<i>Indigenous people</i>	<i>61,029</i>	<i>15,176</i>	<i>77,297</i>	<i>61,602</i>	<i>20,473</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>305,008</i>	<i>310,417</i>
<i>Other Australians<sup>(c)</sup></i>	<i>2,446,788</i>	<i>2,295,263</i>	<i>1,690,626</i>	<i>825,607</i>	<i>632,597</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>7,921,144</i>	<i>8,224,729</i>
<i>Total</i>	<b><i>2,507,817</i></b>	<b><i>2,310,439</i></b>	<b><i>1,767,923</i></b>	<b><i>887,209</i></b>	<b><i>653,070</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>n.p.</i></b>	<b><i>8,226,152</i></b>	<b><i>8,535,146</i></b>
Separation rate for Indigenous people per 1,000	538.2	620.6	800.2	1,313.7	1,057.2	n.p.	n.p.	1663.8	897.5	n.p.
Separation rate for Other Australians per 1,000	331.9	405.8	386.2	375.1	361.2	n.p.	n.p.	210.8	368.9	n.p.
Separation rate for all people per 1,000	335.1	406.7	394.5	393.7	368.9	n.p.	n.p.	499.7	376.9	n.p.
Rate ratio <sup>(e)</sup>	1.6	1.5	2.1	3.5	2.9	n.p.	n.p.	7.9	2.4	n.p.

Note: See boxes 7.1, 7.2, 7.3, 7.4 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.14: Overnight separations, by Indigenous status<sup>(a)</sup>, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Sub-total—selected states and territories <sup>(b)</sup>	Total
<b>Public hospitals</b>										
Aboriginal but not Torres Strait Islander origin	29,076	5,424	24,911	21,235	7,673	1,486	770	20,278	108,597	110,853
Torres Strait Islander but not Aboriginal origin	488	199	3,577	76	207	56	18	104	4,651	4,725
Aboriginal and Torres Strait Islander origin	753	576	1,860	214	44	74	71	291	3,738	3,883
<i>Indigenous people</i>	<i>30,317</i>	<i>6,199</i>	<i>30,348</i>	<i>21,525</i>	<i>7,924</i>	<i>1,616</i>	<i>859</i>	<i>20,673</i>	<i>116,986</i>	<i>119,461</i>
Neither Aboriginal nor Torres Strait Islander origin	818,156	604,171	415,515	214,706	191,803	47,400	38,818	16,063	2,260,414	2,346,632
Not reported	8,236	4,813	7,675	0	9,968	1,429	1,052	1	30,693	33,174
<i>Total</i>	<i>856,709</i>	<i>615,183</i>	<i>453,538</i>	<i>236,231</i>	<i>209,695</i>	<i>50,445</i>	<i>40,729</i>	<i>36,737</i>	<i>2,408,093</i>	<i>2,499,267</i>
<b>Private hospitals</b>										
Aboriginal but not Torres Strait Islander origin	342	200	783	123	177	n.p.	n.p.	n.p.	1,625	1,797
Torres Strait Islander but not Aboriginal origin	24	29	204	12	26	n.p.	n.p.	n.p.	295	314
Aboriginal and Torres Strait Islander origin	138	131	68	33	13	n.p.	n.p.	n.p.	383	428
<i>Indigenous people</i>	<i>504</i>	<i>360</i>	<i>1,055</i>	<i>168</i>	<i>216</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,303</i>	<i>2,539</i>
Neither Aboriginal nor Torres Strait Islander origin	281,286	292,374	253,489	120,139	87,027	n.p.	n.p.	n.p.	1,034,315	1,072,625
Not reported	5,340	5,955	16,882	0	6,189	n.p.	n.p.	n.p.	34,366	42,986
<i>Total</i>	<i>287,130</i>	<i>298,689</i>	<i>271,426</i>	<i>120,307</i>	<i>93,432</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,070,984</i>	<i>1,118,150</i>
<b>All hospitals</b>										
<i>Indigenous people</i>	<i>30,821</i>	<i>6,559</i>	<i>31,403</i>	<i>21,693</i>	<i>8,140</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>119,289</i>	<i>122,000</i>
<i>Other Australians<sup>(c)</sup></i>	<i>1,113,018</i>	<i>907,313</i>	<i>693,561</i>	<i>334,845</i>	<i>294,987</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,359,788</i>	<i>3,495,417</i>
<b>Total</b>	<b>1,143,839</b>	<b>913,872</b>	<b>724,964</b>	<b>356,538</b>	<b>303,127</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,479,077</b>	<b>3,617,417</b>
Separation rate for Indigenous people per 1,000	244.5	234.6	281.7	360.9	354.6	n.p.	n.p.	370.4	293.1	n.p.
Separation rate for Other Australians per 1,000	152.4	161.2	159.6	153.3	170.4	n.p.	n.p.	115.0	157.5	n.p.
Separation rate for all people per 1,000	154.2	161.7	162.7	159.1	173.2	n.p.	n.p.	178.6	160.3	n.p.
Rate ratio <sup>(e)</sup>	1.6	1.5	1.8	2.4	2.1	n.p.	n.p.	3.2	1.9	n.p.

Note: See boxes 7.1, 7.2, 7.3, 7.4 and 7.5 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S7.15: Separations, by mode of separation, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Discharge/transfer to an(other) acute hospital	101,367	93,534	51,560	23,382	22,204	2,866	2,928	3,143	300,984
Discharge/transfer to residential aged care service <sup>(a)</sup>	17,051	20,207	4,684	5,130	7,607	1,161	1,075	337	57,252
Discharge/transfer to an(other) psychiatric hospital	3,024	1,253	157	1,078	1,082	490	21	10	7,115
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	4,178	2,383	2,083	1,227	948	58	738	1,944	13,559
Statistical discharge: type change	23,782	11,161	19,279	7,116	5,019	2,559	5,117	1,232	75,265
Left against medical advice/discharge at own risk	15,375	6,275	8,019	4,054	2,806	403	275	3,055	40,262
Statistical discharge from leave	3,547	25	534	1,489	131	17	0	0	5,743
Died	22,644	15,389	9,760	4,066	4,936	1,570	893	425	59,683
Other <sup>(c)</sup>	1,356,125	1,274,436	826,894	458,367	338,318	92,549	77,309	89,548	4,513,546
Not reported	18	0	0	0	4	0	0	0	22
<i>Total</i>	<i>1,547,111</i>	<i>1,424,663</i>	<i>922,970</i>	<i>505,909</i>	<i>383,055</i>	<i>101,673</i>	<i>88,356</i>	<i>99,694</i>	<i>5,073,431</i>
<b>Private hospitals</b>									
Discharge/transfer to an(other) acute hospital	19,344	17,122	9,058	3,531	6,063	n.p.	n.p.	n.p.	55,969
Discharge/transfer to residential aged care service <sup>(a)</sup>	1,314	2,810	1,106	818	1,059	n.p.	n.p.	n.p.	7,365
Discharge/transfer to an(other) psychiatric hospital	68	57	15	39	24	n.p.	n.p.	n.p.	203
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	870	2	664	21	195	n.p.	n.p.	n.p.	2,229
Statistical discharge: type change	3,665	2,794	5,453	1,533	417	n.p.	n.p.	n.p.	15,015
Left against medical advice/discharge at own risk	1,012	754	358	225	52	n.p.	n.p.	n.p.	2,414
Statistical discharge from leave	7	0	42	15	0	n.p.	n.p.	n.p.	66
Died	2,114	3,193	4,566	1,909	1,143	n.p.	n.p.	n.p.	13,350
Other <sup>(c)</sup>	932,312	859,044	823,691	373,209	261,046	n.p.	n.p.	n.p.	3,365,088
Not reported	0	0	0	0	16	n.p.	n.p.	n.p.	16
<i>Total</i>	<i>960,706</i>	<i>885,776</i>	<i>844,953</i>	<i>381,300</i>	<i>270,015</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,461,715</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, 2009–10**

	NSW	Vic	Qld <sup>(a)</sup>	WA	SA <sup>(a)</sup>	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Inter-hospital contracted patient from public sector	1,670	233	0	6,482	1,916	0	0	5	10,306
Inter-hospital contracted patient from private sector	4,773	80	0	0	0	0	0	0	4,853
Not inter-hospital contracted patient	1,537,115	1,423,604	922,970	499,427	381,139	101,673	18,037	99,689	4,983,654
Not reported	3,553	746	0	0	0	0	70,319	0	74,618
<i>Total</i>	<i>1,547,111</i>	<i>1,424,663</i>	<i>922,970</i>	<i>505,909</i>	<i>383,055</i>	<i>101,673</i>	<i>88,356</i>	<i>99,694</i>	<i>5,073,431</i>
<b>Private hospitals</b>									
Inter-hospital contracted patient from public sector	4,152	1,577	8,333	37,572	3,446	n.p.	n.p.	n.p.	57,774
Inter-hospital contracted patient from private sector	0	5	1,740	0	0	n.p.	n.p.	n.p.	1,745
Not inter-hospital contracted patient	956,554	884,194	834,223	343,728	266,569	n.p.	n.p.	n.p.	3,361,930
Not reported	0	0	657	0	0	n.p.	n.p.	n.p.	40,266
<i>Total</i>	<i>960,706</i>	<i>885,776</i>	<i>844,953</i>	<i>381,300</i>	<i>270,015</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,461,715</i>
<b>All hospitals</b>									
Inter-hospital contracted patient from public sector	5,822	1,810	8,333	44,054	5,362	n.p.	n.p.	n.p.	68,080
Inter-hospital contracted patient from private sector	4,773	85	1,740	0	0	n.p.	n.p.	n.p.	6,598
Not inter-hospital contracted patient	2,493,669	2,307,798	1,757,193	843,155	647,708	n.p.	n.p.	n.p.	8,345,584
Not reported	3,553	746	657	0	0	n.p.	n.p.	n.p.	114,884
<b>Total separations</b>	<b>2,507,817</b>	<b>2,310,439</b>	<b>1,767,923</b>	<b>887,209</b>	<b>653,070</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8,535,146</b>

(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.

Abbreviation: n.p.—not published.

**Table S7.17: Separations<sup>(a)</sup> with hospital-in-the-home care, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Same day separations	n.a.	6,139	960	207	154	n.a.	10	8	7,478
Overnight separations	n.a.	22,376	3,123	7,779	6,465	n.a.	1,117	693	41,553
<i>Total patient days</i>	n.a.	288,416	41,746	128,568	83,010	n.a.	14,834	12,031	568,605
Hospital in the home days	n.a.	179,299	28,017	89,575	58,700	n.a.	10,505	7,053	373,149
Average length of stay	..	12.9	13.4	16.5	12.8	..	13.3	17.4	13.7
Average number of hospital-in-the-home days	..	8.0	9.0	11.5	9.1	..	9.4	10.2	9.0
<b>Private hospitals</b>									
Same day separations	n.a.	5,836	2,836	0	4,486	n.a.	n.p.	n.p.	13,158
Overnight separations	n.a.	4,364	171	168	18	n.a.	n.p.	n.p.	4,721
<i>Total patient days</i>	n.a.	71,409	4,307	4,221	4,561	n.a.	n.p.	n.p.	84,498
Hospital in the home days		57,192	4,307	2,387	4,561	n.a.	n.p.	n.p.	68,447
Average length of stay	..	16.4	25.2	25.1	253.4	..	n.p.	n.p.	17.9
Average number of hospital-in-the-home days	..	13.1	25.2	14.2	253.4	..	n.p.	n.p.	n.a.
<b>All hospitals</b>									
Same day separations	n.a.	11,975	3,796	207	4,640	n.a.	n.p.	n.p.	20,636
Overnight separations	n.a.	26,740	3,294	7,947	6,483	n.a.	n.p.	n.p.	46,274
<i>Total patient days</i>	n.a.	359,825	46,053	132,789	87,571	n.a.	n.p.	n.p.	653,103
Hospital in the home days	n.a.	236,491	32,324	91,962	63,261	n.a.	n.p.	n.p.	441,596
Average length of stay	..	13.5	14.0	16.7	13.5	..	n.p.	n.p.	14.1
Average number of hospital-in-the-home days	..	8.8	9.8	11.6	9.8	..	n.p.	n.p.	n.a.

(a) Separations for *Newborns* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* are excluded.

Note: See boxes 7.1, 7.2 and 7.3 for notes on definitions, limitations and methods.

Abbreviations: ..—not applicable; n.a.—not available; n.p.—not provided.

# 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* (2.5 million of the 2.6 million in the public sector and 2.2 million of the 2.3 million in the private sector).

## How has activity changed over time?

From 2008–09 to 2009–10, same-day acute separations increased by 5.4% to 4.8 million, a greater increase than the average per year between 2005–06 and 2009–10 (4.7%) (Table 8.1). The growth rate in same-day acute separations was higher in private hospitals than in public hospitals. The greatest increase in same-day acute separations occurred in private free standing day hospital facilities, increasing from 543,000 in 2005–06 to 781,000 in 2009–10.

**Table 8.1: Same-day acute separations, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change <sup>(a)</sup> (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	2,195,064	2,311,123	2,340,658	2,438,288	2,548,236	3.8	4.5
Public psychiatric hospitals	1,871	2,147	1,798	630	690	-22.1	9.5
<i>Total</i>	<i>2,196,935</i>	<i>2,313,270</i>	<i>2,342,456</i>	<i>2,438,918</i>	<i>2,548,926</i>	<i>3.8</i>	<i>4.5</i>
<b>Private hospitals</b>							
Private free standing day hospital facilities	542,948	566,190	664,151	726,572	780,690	9.5	7.4
Other private hospitals	1,225,537	1,276,154	1,319,030	1,356,396	1,436,250	4.0	5.9
<i>Total</i>	<i>1,768,485</i>	<i>1,842,344</i>	<i>1,983,181</i>	<i>2,082,968</i>	<i>2,216,940</i>	<i>5.8</i>	<i>6.4</i>
<b>All hospitals</b>	<b>3,965,420</b>	<b>4,155,614</b>	<b>4,325,637</b>	<b>4,521,886</b>	<b>4,765,866</b>	<b>4.7</b>	<b>5.4</b>

(a) Annual average change, not adjusted for changes in coverage and recategorisation of hospitals as public or private.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: Ave—average.

## How much activity was there in 2009–10?

In 2009–10, there were almost 210 same-day acute separations per 1,000 population. Over half (58.1%) of all acute separations were same-day separations and these accounted for 51.8% of public hospital separations and 67.7% of private hospital separations (Table 2.8). The same-day acute separation rate varied across states and territories, particularly in public

hospitals, ranging from 91 per 1,000 population in New South Wales to 308 per 1,000 in the Northern Territory (Table 8.2).

**Table 8.2: Same-day acute separations, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute	679,765	809,243	459,402	269,319	169,827	51,064	47,081	62,535	2,548,236
Public psychiatric	234	1	0	89	350	16	..	..	690
<i>Total</i>	<i>679,999</i>	<i>809,244</i>	<i>459,402</i>	<i>269,408</i>	<i>170,177</i>	<i>51,080</i>	<i>47,081</i>	<i>62,535</i>	<i>2,548,926</i>
Separation rate	91.0	142.9	103.1	119.9	97.5	93.9	143.6	308.3	112.5
<b>Private hospitals</b>									
Private free standing day facilities	213,168	188,405	211,370	102,278	57,055	n.p.	n.p.	n.p.	780,690
Other private hospitals	379,384	392,959	338,509	158,376	105,804	n.p.	n.p.	n.p.	1,436,250
<i>Total</i>	<i>592,552</i>	<i>581,364</i>	<i>549,879</i>	<i>260,654</i>	<i>162,859</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,216,940</i>
Separation rate	79.0	102.2	122.3	115.3	90.4	n.p.	n.p.	n.p.	97.0
<b>All hospitals</b>	<b>1,272,551</b>	<b>1,390,608</b>	<b>1,009,281</b>	<b>530,062</b>	<b>333,036</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>4,765,866</b>
<b>Separation rate</b>	<b>170.0</b>	<b>245.1</b>	<b>225.4</b>	<b>235.2</b>	<b>187.9</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>209.5</b>

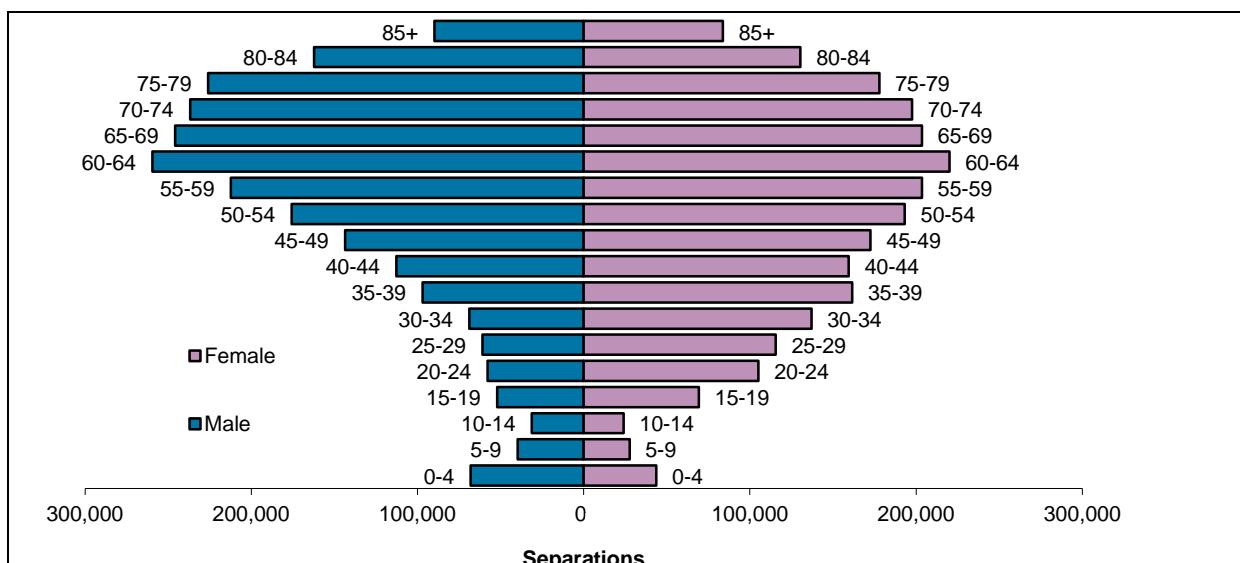
*Note:* See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

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

## Who used these services?

### Sex and age group

Just over half (50.9%) of same-day acute separations were for females (Figure 8.1). However, there were more same-day separations for males aged 0 to 14 years and aged 55 years and above. People aged 55 years and above accounted for over half of all same-day separations.



*Note:* See Box 8.1 for notes on data limitations and methods.

**Figure 8.1: Same-day acute separations, by sex and age group, all hospitals, 2009–10**

## Aboriginal and Torres Strait Islander people

### Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2009–10 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, 3.9% of all same-day acute separations were for Aboriginal or Torres Strait Islander people.

In 2009–10, the same-day acute separation rate for *Indigenous Australians* was almost three 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 admitted for dialysis about 11 times more often than *Other Australians*. Excluding separations for dialysis, *Indigenous Australians* had a lower same-day acute separation rate than *Other Australians* in all jurisdictions except the Northern Territory.

**Table 8.3: Same-day acute separations per 1,000 population, by Indigenous status, all hospitals, selected states and territories<sup>(a)</sup>, 2009–10**

	NSW	Vic	Qld	WA	SA	NT	Total
Indigenous Australians	292.5	386.0	514.8	952.4	700.5	1291.6	602.2
Excluding Care involving dialysis	160.7	142.2	119.3	130.5	118.4	120.4	119.9
Other Australians	167.7	243.6	219.2	221.7	182.1	93.6	204.2
Excluding Care involving dialysis	194.0	179.7	167.7	144.7	71.1	159.6	159.3
<b>Total</b>	<b>169.3</b>	<b>244.1</b>	<b>224.4</b>	<b>234.5</b>	<b>187.0</b>	<b>318.9</b>	<b>209.5</b>
<b>Excluding Care involving dialysis</b>	<b>129.4</b>	<b>193.8</b>	<b>179.0</b>	<b>167.0</b>	<b>144.6</b>	<b>83.0</b>	<b>161.0</b>

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

### Remoteness area

In 2009–10, people who lived in *Very remote* areas had just under 279 same-day acute separations per 1,000 population, compared with almost 210 per 1,000 nationally (Table 8.4). The standardised separation rate ratio (SRR) for *Very remote* areas was 1.33, indicating that the separation rate was 33% higher than the national separation rate.

**Table 8.4: Selected same-day acute separation statistics, by remoteness area of usual residence, all hospitals, 2009–10**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
Separations	3,300,573	924,828	420,009	70,116	43,628	4,773,852
Separation rate	215.7	194.8	191.9	216.8	279.4	209.9
Standardised separation rate ratio (SRR)	1.03	0.93	0.91	1.03	1.33	

(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 19.4% and 20.5% of total same-day acute separations. The separation rates varied from 192.1 per 1,000 population for people living in areas classified as being the second lowest SES group to 215.5 per 1,000 for the middle SES group (Table 9.5).

**Table 8.5: Selected same-day acute separation statistics, by socioeconomic status group, all hospitals, 2009–10**

	Socioeconomic group					Total <sup>(a)</sup>
	1—Lowest	2	3	4	5—Highest	
Separations	977,936	909,496	966,876	923,509	971,749	4,765,866
Separation rate	211.6	192.1	215.5	212.6	215.2	209.7
Standardised separation rate ratio (SRR)	1.01	0.92	1.03	1.01	1.03	

(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 (1.2% and 0.4%, respectively) (Table 8.6).

**Table 8.6: Same-day acute separations, by mode of admission, public and private hospitals, 2009–10**

Mode of admission	Public hospitals	Private free standing day facilities	Other private hospitals	Total
Admitted patient transferred from another hospital	29,477	4,600	4,011	38,088
Statistical admission: type change	2,821	0	2,718	5,539
Other	2,496,567	776,080	1,425,820	4,698,467
Not reported	20,061	10	3,701	23,772
<b>Total</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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

In 2009–10, almost half (47%) of same-day acute separations in public hospitals and 30% in private hospitals had a principal diagnosis in the *Factors influencing health status and contact with health services* chapter (Table 8.7), the majority being 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 65% of same-day acute separations for *Factors influencing health status and contact with health services* were from the public hospitals, while about 75% of same-day acute separations for *Diseases of the eye and adnexa* were from private hospitals.

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 (82.2%) of same-day acute separations for *Care involving dialysis*, but private hospitals provided more same-day acute separations (58.0%) for *Other medical care* (which includes chemotherapy for neoplasms), *Other cataract* (69.5%) and *Other malignant neoplasms of skin* (70.2%) (Table 8.8).

**Table 8.7: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2009–10**

Principal diagnosis chapter		Public hospitals	Private free standing day facilities	Other private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	30,763	2,102	7,195	40,060
C00–D48	Neoplasms	126,861	69,134	126,821	322,816
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	46,672	9,089	16,559	72,320
E00–E90	Endocrine, nutritional and metabolic diseases	42,308	14,188	20,446	76,942
F00–F99	Mental and behavioural disorders	43,607	199	120,580	164,386
G00–G99	Diseases of the nervous system	54,999	4,294	26,203	85,496
H00–H59	Diseases of the eye and adnexa	62,028	111,434	68,956	242,418
H60–H95	Diseases of the ear and mastoid process	17,005	3,005	17,198	37,208
I00–I99	Diseases of the circulatory system	73,676	18,329	40,345	132,350
J00–J99	Diseases of the respiratory system	47,508	3,919	13,344	64,771
K00–K93	Diseases of the digestive system	170,262	147,359	227,123	544,744
L00–L99	Diseases of the skin and subcutaneous tissue	34,584	9,892	18,823	63,299
M00–M99	Diseases of the musculoskeletal system and connective tissue	71,704	15,951	105,843	193,498
N00–N99	Diseases of the genitourinary system	103,222	15,457	83,469	202,148
O00–O99	Pregnancy, childbirth and the puerperium	71,543	40,786	15,200	127,529
P00–P96	Certain conditions originating in the perinatal period	2,252	8	465	2,725
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	12,137	1,587	4,816	18,540
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	178,349	41,153	92,509	312,011
S00–T98	Injury, poisoning and certain other consequences of external causes	151,591	4,965	24,317	180,873
Z00–Z99	Factors influencing health status and contact with health services	1,207,754	265,916	404,789	1,878,459
	Not reported	101	1,923	1,249	3,273
<b>Total</b>		<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 S8.1 and S8.2 at the end of this chapter.

**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, 2009–10**

Principal diagnosis	Public hospitals	Private free standing day facilities	Other private hospitals	Total
Z49 Care involving dialysis	924,923	116,865	83,777	1,125,565
Z51 Other medical care	143,890	56,272	142,638	342,800
H26 Other cataract	40,896	45,106	48,076	134,078
R10 Abdominal and pelvic pain	38,863	18,659	26,856	84,378
C44 Other malignant neoplasms of skin	22,675	22,933	30,474	76,082
K01 Embedded and impacted teeth	8,054	19,783	47,863	75,700
Z45 Adjustment and management of implanted device	23,535	6,545	36,963	67,043
Z31 Procreative management	5,039	30,971	23,649	59,659
K21 Gastro-oesophageal reflux disease	14,491	19,104	23,838	57,433
Z09 Follow-up examination after treatment for conditions other than malignant neoplasms	15,951	12,927	25,581	54,459
R07 Pain in throat and chest	43,631	1,313	6,811	51,755
D12 Benign neoplasm of colon, rectum, anus and anal canal	10,741	16,194	24,163	51,098
O04 Medical abortion	10,301	39,581	1,109	50,991
Z12 Special screening examination for neoplasms	9,886	15,634	24,728	50,248
K92 Other diseases of digestive system	19,389	7,589	20,985	47,963
M23 Internal derangement of knee	9,933	3,206	34,101	47,240
Z08 Follow-up examination after treatment for malignant neoplasms	19,361	5,041	22,298	46,700
R19 Other symptoms and signs involving the digestive system and abdomen	12,506	8,579	20,673	41,758
F32 Depressive episode	10,391	0	26,849	37,240
I84 Haemorrhoids	9,667	13,146	14,332	37,145
Other	1,154,803	321,242	750,486	2,226,531
<b>Total</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 S8.3 and S8.4 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 2009–10, about 20% of same day acute separations were *Emergency* admissions, with 97% of these occurring in public hospitals. Nearly 87% 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<sup>(a)</sup>, public and private hospitals, 2009–10**

	Public hospitals <sup>(a)</sup>		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	6,936	0.3	151	0.0	7,087	0.1
Specialist mental health	11,103	0.4	108,585	4.9	119,688	2.5
Emergency						
Surgical	19,875	0.8	2,749	0.1	22,624	0.5
Medical	473,982	18.6	8,431	0.4	482,413	10.1
Other	4,410	0.2	1,853	0.1	6,263	0.1
<i>Total emergency</i>	<b>498,267</b>	<b>19.5</b>	<b>13,033</b>	<b>0.5</b>	<b>511,300</b>	<b>20.1</b>
Non-emergency						
Surgical	345,591	13.6	740,811	33.4	1,086,402	22.8
Medical	1,451,086	56.9	726,788	32.8	2,177,874	45.7
Other	235,943	9.3	627,572	28.3	863,515	18.1
<i>Total Non-emergency</i>	<b>2,032,620</b>	<b>79.7</b>	<b>2,095,171</b>	<b>94.5</b>	<b>4,127,791</b>	<b>86.6</b>
<b>Total</b>	<b>2,548,926</b>	<b>100.0</b>	<b>2,216,940</b>	<b>100.0</b>	<b>4,765,866</b>	<b>100.0</b>

(a) The type of care is assigned according to broad categories of service, see the section *What care was provided?*

(b) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,100 separations with specialised mental health care in 2008–09.

*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 S8.5 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 2009–10, about 56% of same-day acute separations were reported as *Medical*, 23% were *Surgical* and 18% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 8.9). The majority of *Medical* care occurred in public hospitals (72%) and the majority of *Surgical* care occurred in private hospitals (67%). *Specialist mental health* admissions accounted for about 2.5% of same-day acute separations. For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals which accounted for about 200 same-day acute separations with specialised mental health care in 2008–09.

## **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 74% of same-day separations for *Mental diseases and disorders* and almost 72% of separations for *Diseases and disorders of the eye* were from private hospitals.

## **Most common AR-DRGs**

In 2009–10, the 20 most common AR-DRGs accounted for two-thirds of same-day acute separations. Almost one quarter of same-day separations were for *Admit for renal dialysis*, with *Chemotherapy* being the next most common (Table 8.11).

There was variation in the types of same-day admitted care by hospital sector. Public hospitals provided the majority of same-day separations for *Admit for renal dialysis*, *Antenatal and other obstetric admission – same-day* and *Chest pain*. Private hospitals provided over 80% of separations for *Mental health treatment – same-day, without electroconvulsive treatment* and *Dental extractions and restorations*.

**Table 8.10: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public and private hospitals, 2009–10**

<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)	259	12	11	282
01	Diseases and disorders of the nervous system	92,490	6,150	29,007	127,647
02	Diseases and disorders of the eye	81,050	124,590	81,434	287,074
03	Diseases and disorders of the ear, nose, mouth and throat	87,437	43,014	112,636	243,087
04	Diseases and disorders of the respiratory system	44,565	1,094	6,668	52,327
05	Diseases and disorders of the circulatory system	119,588	6,874	36,031	162,493
06	Diseases and disorders of the digestive system	238,158	182,309	256,193	676,660
07	Diseases and disorders of the hepatobiliary system and pancreas	18,501	864	4,066	23,431
08	Diseases and disorders of the musculoskeletal system and connective tissue	133,407	17,846	126,741	277,994
09	Diseases and disorders of the skin, subcutaneous tissue and breast	89,717	50,750	76,802	217,269
10	Endocrine, nutritional and metabolic diseases and disorders	21,358	4,294	11,155	36,807
11	Diseases and disorders of the kidney and urinary tract	1,003,120	122,094	131,239	1,256,453
12	Diseases and disorders of the male reproductive system	25,532	7,956	35,954	69,442
13	Diseases and disorders of the female reproductive system	70,493	42,906	81,914	195,313
14	Pregnancy, childbirth and puerperium	79,894	40,786	16,546	137,226
15	Newborns and other neonates	4,972	715	1,085	6,772
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	54,695	10,495	18,656	83,846
17	Neoplastic disorders (haematological and solid neoplasms)	172,121	62,179	154,145	388,445
18	Infectious and parasitic diseases	11,377	564	1,572	13,513
19	Mental diseases and disorders	34,404	186	98,702	133,292
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	9,229	1	21,774	31,004
21	Injuries, poisoning and toxic effects of drugs	56,571	1,981	6,197	64,749
22	Burns	3,030	56	88	3,174
23	Factors influencing health status and other contacts with health services	95,676	50,434	125,368	271,478
ED	Error DRGs	1,282	2,540	2,266	6,088
	<i>Surgical</i>	365,671	288,140	455,464	1,109,275
	<i>Medical</i>	1,938,095	258,139	580,237	2,776,471
	<i>Other</i>	245,160	234,411	400,549	880,120
	<b>Total</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 S8.6 and S8.7 at the end of this chapter.

*Abbreviations:* AR-DRG—Australian Refined Diagnosis Related Group; ECMO—Extracorporeal Membrane Oxygenation.

**Table 8.11: Separations for the top 20 AR-DRGs version 5.2 with the highest number of same-day acute separations, public and private hospitals, 2009–10**

AR-DRG		Public hospitals	Private free standing day facilities	Other private hospitals	Total
L61Z	Admit for renal dialysis	919,074	116,177	83,608	1,118,859
R63Z	Chemotherapy	138,477	54,917	141,959	335,353
G44C	Other colonoscopy, same-day	58,235	77,201	101,910	237,346
C16B	Lens procedures, same-day	57,080	75,264	61,166	193,510
Z64B	Other factors influencing health status, same-day	42,620	27,783	65,029	135,432
G45B	Other gastroscopy for non-major digestive disease, same-day	35,495	48,064	50,516	134,075
G46C	Complex gastroscopy, same-day	27,988	45,138	60,228	133,354
D40Z	Dental extractions and restorations	23,003	29,781	69,040	121,824
U60Z	Mental health treatment, same-day, W/O ECT	21,577	186	92,871	114,634
Z40Z	Follow up W endoscopy	30,874	20,262	47,159	98,295
J11Z	Other skin, subcutaneous tissue and breast procedures	33,772	21,888	32,340	88,000
O05Z	Abortion W OR procedure	22,734	39,960	9,600	72,294
I18Z	Other knee procedures	14,571	4,643	50,946	70,160
N07Z	Other uterine and adnexa procedures for non-malignancy	14,480	18,461	33,005	65,946
L41Z	Cystourethroscopy, same-day	23,469	3,528	25,389	52,386
Q61C	Red blood cell disorders W/O catastrophic or severe CC	32,205	6,502	11,956	50,663
F74Z	Chest pain	40,191	836	3,084	44,111
O66B	Antenatal and other obstetric admission, same-day	38,209	31	4,084	42,324
R61C	Lymphoma and non-acute leukaemia, same-day	23,723	5,762	9,829	39,314
I68C	Non-surgical spinal disorders, same-day	17,576	4,952	16,406	38,934
Other		933,573	179,354	466,125	1,579,052
<b>Total</b>		<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 S8.8 and S8.9 at the end of this chapter.

*Abbreviations:* CC— complications and comorbidities; ECT—electroconvulsive therapy; OR—operating room; W—with; 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 2009–10, 7.3 million procedures were reported for same-day acute separations, with nearly 4.2 million in the private sector. Public hospitals accounted for less than half (43%) of the same-day acute separations for which a procedure was reported (Table 8.12). In public hospitals, 83% of same-day acute separations involved a procedure, compared to 96% of separations in private hospitals. See Box 7.1 and *Appendix 1* for information on the classification of procedures.

**Table 8.12: Same-day acute separations, by procedure in ACHI chapters, public and private hospitals, 2009–10**

Procedure chapters		Public hospitals	Private free standing day facilities	Other private hospitals	Total
1–86	Procedures on nervous system	27,510	9,998	36,734	74,242
110–129	Procedures on endocrine system	280	6	141	427
160–256	Procedures on eye and adnexa	73,146	118,271	76,014	267,431
300–333	Procedures on ear and mastoid process	16,051	3,293	18,488	37,832
370–422	Procedures on nose, mouth and pharynx	19,079	8,307	21,464	48,850
450–490	Dental services	24,948	32,250	74,433	131,631
520–570	Procedures on respiratory system	17,567	326	6,871	24,764
600–777	Procedures on cardiovascular system	46,931	8,019	33,576	88,526
800–817	Procedures on blood and blood-forming organs	12,442	1,990	4,453	18,885
850–1011	Procedures on digestive system	221,798	229,261	345,694	796,753
1040–1129	Procedures on urinary system	986,430	124,087	151,640	1,262,157
1160–1203	Procedures on male genital organs	22,168	8,250	36,087	66,505
1240–1299	Gynaecological procedures	86,378	83,320	88,845	258,543
1330–1347	Obstetric procedures	7,623	40	1,605	9,268
1360–1579	Procedures on musculoskeletal system	75,640	15,029	114,032	204,701
1600–1718	Dermatological and plastic procedures	88,457	55,129	83,727	227,313
1740–1759	Procedures on breast	8,469	5,175	9,820	23,464
1786–1799	Radiation oncology procedures	1,648	60	639	2,347
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	974,660	515,907	1,189,481	2,680,048
1940–2016	Imaging services	87,242	3,716	42,159	133,117
	<i>Procedures reported<sup>(a)</sup></i>	3,116,420	1,429,024	2,757,099	7,302,543
	Separations with no procedure reported	436,947	3,970	78,267	519,184
<b>Total<sup>(a)</sup></b>		<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 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 S8.10 and S8.11 at the end of this chapter.

*Abbreviation:* n.e.c.—not elsewhere classified.

In 2009–10, *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 number of same-day acute separations, public and private hospitals, 2009–10**

<b>Procedure block</b>		<b>Public hospitals</b>	<b>Private free standing day facilities</b>	<b>Other private hospitals</b>	<b>Total</b>
1910	Cerebral anaesthesia	610,115	422,486	892,057	1,924,658
1060	Haemodialysis	920,957	116,233	83,684	1,120,874
1920	Administration of pharmacotherapy	205,396	63,143	170,093	438,632
905	Fibreoptic colonoscopy	67,418	88,341	121,004	276,763
1008	Panendoscopy with excision	67,341	85,123	121,575	274,039
911	Fibreoptic colonoscopy with excision	60,022	78,439	124,802	263,263
197	Extracapsular crystalline lens extraction by phacoemulsification	55,840	73,382	58,795	188,017
1909	Conduction anaesthesia	58,690	53,653	57,302	169,645
1265	Curettage of uterus	53,925	43,585	44,209	141,719
1620	Excision of lesion of skin and subcutaneous tissue	46,738	35,797	56,933	139,468
1893	Transfusion of blood and gamma globulin	73,232	15,088	23,499	111,819
458	Surgical removal of tooth	12,481	26,008	62,214	100,703
1089	Examination procedures on bladder	32,853	5,574	39,450	77,877
1005	Panendoscopy	20,788	28,966	24,027	73,781
1916	Generalised allied health interventions	33,065	431	30,204	63,700
1297	Procedures for reproductive medicine	4,908	34,651	23,361	62,920
1259	Examination procedures on uterus	25,060	3,095	28,477	56,632
1517	Arthroscopic meniscectomy of knee with repair	6,087	3,165	31,197	40,449
668	Coronary angiography	15,982	3,896	18,051	37,929
1922	Other procedures related to pharmacotherapy	10,331	5,024	21,067	36,422
	Other	735,191	242,944	725,098	1,703,233
	<i>Total procedures reported</i>	<i>3,116,420</i>	<i>1,429,024</i>	<i>2,757,099</i>	<i>7,302,543</i>
	Separations with no procedure reported	436,947	3,970	78,267	519,184
	<b>Total separations</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 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 S8.12 and S8.13 at the end of this chapter.

## Who paid for the care?

Almost nine out of ten same-day acute separations from public hospitals were *Public patients*, and almost eight in ten 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. For *Other private hospitals*, 6.5% of separations were *Self-funded*.

**Table 8.14: Same-day acute separations, by principal source of funds, public and private hospitals, 2009–10**

	Public hospitals	Private free standing day facilities	Other private hospitals	Total
Public patients <sup>(a)</sup>	2,215,258	67,793	24,481	2,307,532
Private health insurance	227,063	537,008	1,202,639	1,966,710
Self-funded <sup>(b)</sup>	34,548	140,587	93,222	268,357
Workers compensation	8,362	1,988	23,512	33,862
Motor vehicle third party personal claim	7,213	986	1,746	9,945
Department of Veterans' Affairs	45,842	23,435	73,003	142,280
Other <sup>(c)</sup>	10,640	8,893	17,647	37,180
<b>Total</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 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.

Over 97% 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 (4.5% and 0.7% respectively) (Table 8.15).

**Table 8.15: Same-day acute separations, by mode of separation, public and private hospitals, 2009–10**

Mode of separation	Public hospitals	Private free standing day facilities	Other private hospitals	Total
Discharge/transfer to an (other) acute hospital	113,329	11,459	4,866	129,654
Discharge/transfer to residential aged care service <sup>(a)</sup>	7,442	17	200	7,659
Discharge/transfer to an (other) psychiatric hospital	2,161	25	26	2,212
Discharge/transfer to other health care accommodation	2,159	45	257	2,461
Statistical discharge: type change	3,801	1	157	3,959
Left against medical advice/discharge at own risk	13,440	55	618	14,113
Statistical discharge from leave	290	0	17	307
Died	5,592	2	369	5,963
Other <sup>(b)</sup>	2,400,709	769,086	1,429,731	4,599,526
Not reported	3	0	9	12
<b>Total</b>	<b>2,548,926</b>	<b>780,690</b>	<b>1,436,250</b>	<b>4,765,866</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 for Chapter 8 supplementary tables

#### Table S8.5

- (a) The type of care is assigned according to the *Medical/Surgical/Other* partitions of the AR-DRG classification.

#### Tables S8.6 to S8.9

- (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 S8.10 to S8.13

- (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) 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.
- (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.

**Table S8.1: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2009–10**

<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	7,445	10,905	6,923	2,806	1,660	281	308	435	30,763
C00–D48	Neoplasms	30,113	42,780	24,354	14,140	10,773	2,990	1,016	695	126,861
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	11,000	17,193	6,971	5,410	4,098	874	939	187	46,672
E00–E90	Endocrine, nutritional and metabolic diseases	9,271	15,319	6,285	6,164	2,548	1,245	625	851	42,308
F00–F99	Mental and behavioural disorders	14,961	11,350	8,125	3,674	3,435	1,004	370	688	43,607
G00–G99	Diseases of the nervous system	13,000	20,056	9,381	5,229	4,357	1,552	1,086	338	54,999
H00–H59	Diseases of the eye and adnexa	19,212	17,360	7,957	8,469	6,488	1,007	962	573	62,028
H60–H95	Diseases of the ear and mastoid process	3,394	4,774	4,636	1,619	1,828	256	238	260	17,005
I00–I99	Diseases of the circulatory system	20,702	23,437	11,917	7,714	5,972	1,922	1,501	511	73,676
J00–J99	Diseases of the respiratory system	12,475	13,696	12,167	3,478	3,568	899	495	730	47,508
K00–K93	Diseases of the digestive system	47,770	54,869	30,052	21,513	7,071	4,690	2,601	1,696	170,262
L00–L99	Diseases of the skin and subcutaneous tissue	7,578	10,652	6,699	3,231	4,701	1,060	283	380	34,584
M00–M99	Diseases of the musculoskeletal system and connective tissue	17,952	21,577	12,114	8,475	7,199	2,139	1,642	606	71,704
N00–N99	Diseases of the genitourinary system	29,305	33,208	19,095	9,701	7,362	2,267	1,252	1,032	103,222
O00–O99	Pregnancy, childbirth and the puerperium	20,988	19,686	13,540	4,731	8,328	1,246	752	2,272	71,543
P00–P96	Certain conditions originating in the perinatal period	704	574	439	141	268	51	42	33	2,252
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	4,106	3,586	1,995	1,008	886	265	227	64	12,137
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	46,104	60,587	33,493	19,551	10,313	3,597	3,003	1,701	178,349
S00–T98	Injury, poisoning and certain other consequences of external causes	42,932	42,852	35,596	13,107	9,394	2,289	2,992	2,429	151,591
Z00–Z99	Factors influencing health status and contact with health services	320,888	384,783	207,663	129,247	69,928	21,444	26,747	47,054	1,207,754
	Not reported	99	0	0	0	0	2	0	0	101
<b>Total</b>		<b>679,999</b>	<b>809,244</b>	<b>459,402</b>	<b>269,408</b>	<b>170,177</b>	<b>51,080</b>	<b>47,081</b>	<b>62,535</b>	<b>2,548,926</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 S8.2: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2009–10**

<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	2,253	2,312	2,665	1,272	476	n.p.	n.p.	n.p.	9,297
C00–D48	Neoplasms	54,707	41,132	54,968	20,428	18,075	n.p.	n.p.	n.p.	195,955
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	5,580	7,077	8,769	1,611	1,845	n.p.	n.p.	n.p.	25,648
E00–E90	Endocrine, nutritional and metabolic diseases	10,120	8,409	8,771	3,603	2,130	n.p.	n.p.	n.p.	34,634
F00–F99	Mental and behavioural disorders	36,249	42,997	31,652	5,129	343	n.p.	n.p.	n.p.	120,779
G00–G99	Diseases of the nervous system	7,523	7,253	8,119	4,445	2,161	n.p.	n.p.	n.p.	30,497
H00–H59	Diseases of the eye and adnexa	66,209	37,716	41,645	14,611	11,760	n.p.	n.p.	n.p.	180,390
H60–H95	Diseases of the ear and mastoid process	5,782	4,803	3,708	2,264	2,681	n.p.	n.p.	n.p.	20,203
I00–I99	Diseases of the circulatory system	19,832	15,101	10,608	5,932	4,234	n.p.	n.p.	n.p.	58,674
J00–J99	Diseases of the respiratory system	6,041	3,544	4,459	1,422	1,216	n.p.	n.p.	n.p.	17,263
K00–K93	Diseases of the digestive system	111,497	108,605	83,963	35,324	24,442	n.p.	n.p.	n.p.	374,482
L00–L99	Diseases of the skin and subcutaneous tissue	7,652	8,047	5,833	3,229	2,993	n.p.	n.p.	n.p.	28,715
M00–M99	Diseases of the musculoskeletal system and connective tissue	32,267	30,329	23,944	15,494	13,929	n.p.	n.p.	n.p.	121,794
N00–N99	Diseases of the genitourinary system	33,801	24,168	21,355	9,194	6,316	n.p.	n.p.	n.p.	98,926
O00–O99	Pregnancy, childbirth and the puerperium	10,450	19,801	17,287	6,541	912	n.p.	n.p.	n.p.	55,986
P00–P96	Certain conditions originating in the perinatal period	42	218	68	86	29	n.p.	n.p.	n.p.	473
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	2,272	1,477	1,367	524	559	n.p.	n.p.	n.p.	6,403
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	35,670	42,638	28,723	14,445	7,453	n.p.	n.p.	n.p.	133,662
S00–T98	Injury, poisoning and certain other consequences of external causes	8,419	6,503	6,519	2,490	4,224	n.p.	n.p.	n.p.	29,282
Z00–Z99	Factors influencing health status and contact with health services	136,186	166,062	185,456	112,610	57,081	n.p.	n.p.	n.p.	670,705
	Not reported	0	3,172	0	0	0	n.p.	n.p.	n.p.	3,172
<b>Total</b>		<b>592,552</b>	<b>581,364</b>	<b>549,879</b>	<b>260,654</b>	<b>162,859</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,216,940</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 S8.3: Same-day acute separations, for the top 20 principal diagnoses, public hospitals, states and territories, 2009–10**

<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>
Z49	Care involving dialysis	284,224	259,914	148,129	87,968	60,299	15,023	24,172	45,194	924,923
Z51	Other medical care	3,892	80,061	29,349	26,037	698	2,662	878	313	143,890
R07	Pain in throat and chest	10,590	14,013	8,854	4,708	3,392	590	1,076	408	43,631
H26	Other cataract	13,130	11,809	4,877	5,220	4,137	599	762	362	40,896
R10	Abdominal and pelvic pain	10,046	13,949	7,578	4,248	1,508	668	513	353	38,863
Z45	Adjustment and management of implanted device	1,989	8,812	8,521	1,829	561	1,116	616	91	23,535
C44	Other malignant neoplasms of skin	5,021	6,359	5,852	2,296	2,273	630	128	116	22,675
K92	Other diseases of digestive system	7,020	5,320	3,095	2,743	238	739	102	132	19,389
Z08	Follow-up examination after treatment for malignant neoplasms	5,125	6,263	3,701	2,343	1,295	484	102	48	19,361
A09	Other gastroenteritis and colitis of infectious and unspecified origin	3,736	5,626	2,600	2,593	746	304	288	349	16,242
E11	Type 2 diabetes mellitus	3,925	6,590	3,072	1,500	726	128	158	142	16,241
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	4,129	5,212	3,128	2,396	500	348	171	67	15,951
K21	Gastro-oesophageal reflux disease	4,265	4,484	2,318	2,465	252	400	206	101	14,491
K02	Dental caries	3,059	4,104	2,845	954	863	482	141	240	12,688
D50	Iron deficiency anaemia	3,083	4,521	1,733	1,750	903	376	167	66	12,599
I20	Angina pectoris	3,977	3,570	1,390	2,556	41	711	130	131	12,506
R19	Other symptoms and signs involving the digestive system and abdomen	2,665	4,237	2,173	1,414	1,047	408	276	70	12,290
K29	Gastritis and duodenitis	3,797	4,198	2,041	1,530	215	127	72	169	12,149
G56	Mononeuropathies of upper limb	3,363	3,622	2,077	1,169	1,382	341	120	54	12,128
S01	Open wound of head	2,743	3,397	3,027	1,149	619	81	156	391	11,563
Other		300,220	353,183	213,042	112,540	88,482	24,863	16,847	13,738	1,122,915
<b>Total (all principal diagnoses)</b>		<b>679,999</b>	<b>809,244</b>	<b>459,402</b>	<b>269,408</b>	<b>170,177</b>	<b>51,080</b>	<b>47,081</b>	<b>62,535</b>	<b>2,548,926</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 S8.4: Same-day acute separations, for the top 20 principal diagnoses, private hospitals, states and territories, 2009–10**

<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>
Z49	Care involving dialysis	26,182	34,313	56,226	64,145	19,754	n.p.	n.p.	n.p.	200,642
Z51	Other medical care	35,591	52,562	64,500	22,523	18,182	n.p.	n.p.	n.p.	198,910
H26	Other cataract	36,516	22,135	15,759	7,262	6,792	n.p.	n.p.	n.p.	93,182
K01	Embedded and impacted teeth	17,201	19,085	13,456	10,873	4,726	n.p.	n.p.	n.p.	67,646
Z31	Procreative management	18,107	13,789	11,655	4,864	4,181	n.p.	n.p.	n.p.	54,620
C44	Other malignant neoplasms of skin	13,551	12,463	13,521	6,153	5,977	n.p.	n.p.	n.p.	53,407
R10	Abdominal and pelvic pain	10,591	17,308	10,299	4,535	1,762	n.p.	n.p.	n.p.	45,515
Z45	Adjustment and management of implanted device	5,919	17,063	11,898	4,334	3,652	n.p.	n.p.	n.p.	43,508
K21	Gastro-oesophageal reflux disease	12,645	11,562	10,913	3,907	2,680	n.p.	n.p.	n.p.	42,942
O04	Medical abortion	5,991	15,724	13,902	4,912	84	n.p.	n.p.	n.p.	40,690
Z12	Special screening examination for neoplasms	12,786	11,893	9,529	3,967	1,101	n.p.	n.p.	n.p.	40,362
D12	Benign neoplasm of colon, rectum, anus and anal canal	13,534	6,280	12,168	3,892	3,359	n.p.	n.p.	n.p.	40,357
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	11,690	11,758	8,624	3,332	2,248	n.p.	n.p.	n.p.	38,508
M23	Internal derangement of knee	11,086	8,839	7,456	3,955	4,172	n.p.	n.p.	n.p.	37,307
R19	Other symptoms and signs involving the digestive system and abdomen	9,311	7,875	5,974	2,946	1,739	n.p.	n.p.	n.p.	29,252
K92	Other diseases of digestive system	10,303	7,388	6,249	2,069	1,492	n.p.	n.p.	n.p.	28,574
H35	Other retinal disorders	12,336	5,272	5,368	2,404	831	n.p.	n.p.	n.p.	27,988
I84	Haemorrhoids	7,700	8,859	5,005	2,830	2,049	n.p.	n.p.	n.p.	27,478
Z08	Follow-up examination after treatment for malignant neoplasms	8,892	6,725	5,970	2,822	1,845	n.p.	n.p.	n.p.	27,339
F32	Depressive episode	8,747	7,921	8,275	865	18	n.p.	n.p.	n.p.	26,849
Other		303,873	282,550	253,132	98,064	76,215	n.p.	n.p.	n.p.	1,051,864
<b>Total (all principal diagnoses)</b>		<b>592,552</b>	<b>581,364</b>	<b>549,879</b>	<b>260,654</b>	<b>162,859</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,216,940</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 S8.5: Same-day acute separations, by broad categories of service<sup>(a)</sup>, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	2,334	1,021	1,792	666	468	155	309	191	6,936
Specialist mental health	4,382	432	4,707	565	769	16	161	71	11,103
Emergency									
Surgical	7,522	5,687	2,413	1,997	1,238	204	691	123	19,875
Medical	128,772	145,378	109,482	40,834	31,579	2,227	8,074	7,636	473,982
Other	1,867	939	553	553	186	184	106	22	4,410
Non-emergency									
Surgical	96,626	109,687	52,755	35,499	34,771	8,143	4,314	3,796	345,591
Medical	375,166	463,899	253,471	152,483	92,945	33,282	30,377	49,463	1,451,086
Other	63,330	82,201	34,229	36,811	8,221	6,869	3,049	1,233	235,943
<i>Total</i>	<i>679,999</i>	<i>809,244</i>	<i>459,402</i>	<i>269,408</i>	<i>170,177</i>	<i>51,080</i>	<i>47,081</i>	<i>62,535</i>	<i>2,548,926</i>
<b>Private hospitals</b>									
Childbirth	29	27	37	12	17	n.p.	n.p.	n.p.	151
Specialist mental health	32,966	39,757	28,054	4,340	330	n.p.	n.p.	n.p.	108,585
Emergency									
Surgical	428	320	518	414	1,033	n.p.	n.p.	n.p.	2,749
Medical	1,249	1,632	2,661	1,428	1,402	n.p.	n.p.	n.p.	8,431
Other	229	152	267	149	1,036	n.p.	n.p.	n.p.	1,853
Non-emergency									
Surgical	240,275	177,674	165,637	70,514	56,559	n.p.	n.p.	n.p.	740,811
Medical	133,584	182,044	211,435	121,736	61,786	n.p.	n.p.	n.p.	726,788
Other	183,792	179,758	141,270	62,061	40,696	n.p.	n.p.	n.p.	627,572
<i>Total</i>	<i>592,552</i>	<i>581,364</i>	<i>549,879</i>	<i>260,654</i>	<i>162,859</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,216,940</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 S8.6: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public hospitals, states and territories, 2009–10**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	45	104	17	71	19	3	0	0	259
01	Diseases and disorders of the nervous system	22,978	30,729	18,172	8,545	7,507	2,093	1,685	781	92,490
02	Diseases and disorders of the eye	24,148	23,421	11,277	11,208	7,510	1,316	1,329	841	81,050
03	Diseases and disorders of the ear, nose, mouth and throat	19,912	26,436	20,910	8,253	7,662	1,763	1,160	1,341	87,437
04	Diseases and disorders of the respiratory system	12,160	13,543	10,286	3,523	2,917	984	553	599	44,565
05	Diseases and disorders of the circulatory system	31,512	38,541	21,654	11,795	10,076	2,474	2,627	909	119,588
06	Diseases and disorders of the digestive system	68,929	78,145	41,239	31,586	7,212	5,789	3,301	1,957	238,158
07	Diseases and disorders of the hepatobiliary system and pancreas	4,992	6,432	3,281	1,934	774	532	347	209	18,501
08	Diseases and disorders of the musculoskeletal system and connective tissue	37,611	38,685	25,279	13,255	10,864	3,108	3,275	1,330	133,407
09	Diseases and disorders of the skin, subcutaneous tissue and breast	21,232	26,812	18,856	9,522	9,314	2,358	742	881	89,717
10	Endocrine, nutritional and metabolic diseases and disorders	4,976	6,840	3,915	2,815	1,521	580	402	309	21,358
11	Diseases and disorders of the kidney and urinary tract	305,317	286,373	161,696	96,139	65,774	16,824	25,034	45,963	1,003,120
12	Diseases and disorders of the male reproductive system	6,134	8,180	3,852	3,791	2,278	769	278	250	25,532
13	Diseases and disorders of the female reproductive system	18,597	23,429	13,910	4,940	6,490	1,553	760	814	70,493
14	Pregnancy, childbirth and puerperium	23,699	21,195	16,385	4,905	8,696	1,371	789	2,854	79,894
15	Newborns and other neonates	2,616	752	874	207	305	101	50	67	4,972
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	12,480	20,714	7,817	6,397	4,642	1,306	960	379	54,695
17	Neoplastic disorders (haematological and solid neoplasms)	8,419	92,801	34,466	28,874	4,020	2,075	1,053	413	172,121
18	Infectious and parasitic diseases	3,064	3,472	2,604	986	736	168	113	234	11,377
19	Mental diseases and disorders	12,519	9,395	6,130	2,215	2,485	924	255	481	34,404
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,321	2,294	1,910	1,434	896	66	101	207	9,229
21	Injuries, poisoning and toxic effects of drugs	14,966	16,443	13,274	5,299	3,583	1,043	957	1,006	56,571
22	Burns	976	638	927	153	229	31	23	53	3,030
23	Factors influencing health status and other contacts with health services	20,021	33,481	20,569	11,268	4,592	3,819	1,281	645	95,676
ED	Error DRGs <sup>(a)</sup>	375	389	102	293	75	30	6	12	1,282
<b>Total</b>		<b>679,999</b>	<b>809,244</b>	<b>459,402</b>	<b>269,408</b>	<b>170,177</b>	<b>51,080</b>	<b>47,081</b>	<b>62,535</b>	<b>2,548,926</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 S8.7: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 5.2, private hospitals, states and territories, 2009–10**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	11	0	10	0	2	n.p.	n.p.	n.p.	23
01	Diseases and disorders of the nervous system	8,713	8,282	10,233	4,319	2,509	n.p.	n.p.	n.p.	35,157
02	Diseases and disorders of the eye	75,302	42,678	48,138	16,819	13,377	n.p.	n.p.	n.p.	206,024
03	Diseases and disorders of the ear, nose, mouth and throat	43,336	40,976	31,575	21,444	12,939	n.p.	n.p.	n.p.	155,650
04	Diseases and disorders of the respiratory system	1,566	1,826	2,612	780	758	n.p.	n.p.	n.p.	7,762
05	Diseases and disorders of the circulatory system	15,012	9,400	7,959	4,611	3,520	n.p.	n.p.	n.p.	42,905
06	Diseases and disorders of the digestive system	133,478	127,861	103,026	35,284	26,335	n.p.	n.p.	n.p.	438,502
07	Diseases and disorders of the hepatobiliary system and pancreas	1,286	1,268	1,517	318	398	n.p.	n.p.	n.p.	4,930
08	Diseases and disorders of the musculoskeletal system and connective tissue	40,080	35,017	28,806	17,867	16,080	n.p.	n.p.	n.p.	144,587
09	Diseases and disorders of the skin, subcutaneous tissue and breast	33,211	30,897	30,588	15,051	13,707	n.p.	n.p.	n.p.	127,552
10	Endocrine, nutritional and metabolic diseases and disorders	3,485	4,069	4,061	2,143	1,149	n.p.	n.p.	n.p.	15,449
11	Diseases and disorders of the kidney and urinary tract	42,983	45,950	68,186	69,532	23,903	n.p.	n.p.	n.p.	253,333
12	Diseases and disorders of the male reproductive system	13,783	10,661	8,415	5,817	3,447	n.p.	n.p.	n.p.	43,910
13	Diseases and disorders of the female reproductive system	41,017	31,897	27,156	11,405	8,555	n.p.	n.p.	n.p.	124,820
14	Pregnancy, childbirth and puerperium	10,730	20,338	17,613	6,637	913	n.p.	n.p.	n.p.	57,332
15	Newborns and other neonates	445	460	308	162	388	n.p.	n.p.	n.p.	1,800
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	6,129	8,337	10,064	1,754	1,913	n.p.	n.p.	n.p.	29,151
17	Neoplastic disorders (haematological and solid neoplasms)	37,783	56,845	72,863	23,312	19,320	n.p.	n.p.	n.p.	216,324
18	Infectious and parasitic diseases	328	225	747	61	735	n.p.	n.p.	n.p.	2,136
19	Mental diseases and disorders	28,380	34,890	27,025	4,181	338	n.p.	n.p.	n.p.	98,888
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	7,814	7,827	4,518	1,282	5	n.p.	n.p.	n.p.	21,775
21	Injuries, poisoning and toxic effects of drugs	2,006	2,171	1,973	739	993	n.p.	n.p.	n.p.	8,178
22	Burns	22	41	59	7	10	n.p.	n.p.	n.p.	144
23	Factors influencing health status and other contacts with health services	45,092	55,816	42,149	16,976	11,432	n.p.	n.p.	n.p.	175,802
ED	Error DRGs <sup>(a)</sup>	560	3,632	278	153	133	n.p.	n.p.	n.p.	4,806
<b>Total</b>		<b>592,552</b>	<b>581,364</b>	<b>549,879</b>	<b>260,654</b>	<b>162,859</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,216,940</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 S8.8: Same-day acute separations, for the top 20 AR-DRGs version 5.2, public hospitals, states and territories, 2009–10**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
L61Z	Admit for renal dialysis	281,761	259,265	145,902	87,870	60,078	14,999	24,037	45,162	919,074
R63Z	Chemotherapy	2,913	78,571	28,676	25,544	80	1,532	867	294	138,477
G44C	Other colonoscopy, same-day	16,876	18,737	8,427	11,325	107	1,846	568	349	58,235
C16B	Lens procedures, same-day	18,056	16,664	6,488	8,449	5,208	789	968	458	57,080
Z64B	Other factors influencing health status, same-day	6,413	15,735	10,849	4,902	1,864	1,593	836	428	42,620
F74Z	Chest pain	9,866	12,953	8,434	4,220	2,874	515	922	407	40,191
O66B	Antenatal and other obstetric admission, same-day	12,788	9,369	10,028	1,765	2,100	679	184	1,296	38,209
G45B	Other gastroscopy for non-major digestive disease, same-day	9,076	12,880	5,289	6,433	342	933	362	180	35,495
J11Z	Other skin, subcutaneous tissue and breast procedures	6,827	11,995	6,992	3,836	2,869	855	195	203	33,772
G67B	Oesophagitis, gastroent & misc digestive systm disorders age>9 W/O catastrophic or severe CC	7,684	12,184	7,586	2,048	1,995	379	405	316	32,597
Q61C	Red blood cell disorders W/O catastrophic or severe CC	7,302	13,725	3,495	3,640	2,496	990	274	283	32,205
Z40Z	Follow up w endoscopy	7,848	10,481	5,838	4,308	1,367	717	226	89	30,874
G46C	Complex gastroscopy, same-day	10,784	8,339	3,050	4,657	73	596	312	177	27,988
R61C	Lymphoma and non-acute leukaemia, same-day	3,731	9,867	4,136	2,498	2,933	341	121	96	23,723
L41Z	Cystourethroscopy, same-day	5,750	7,993	3,379	3,449	1,957	606	236	99	23,469
D40Z	Dental extractions and restorations	4,910	8,066	4,590	2,145	2,078	590	330	294	23,003
O05Z	Abortion w or procedure	5,042	7,081	2,036	1,781	5,294	351	166	983	22,734
G66B	Mental health treatment, same-day, W/O ECT	11,143	3,616	3,075	1,410	1,530	215	159	429	21,577
X60C	Injuries age <65	5,938	5,605	5,909	1,431	1,057	167	263	642	21,012
Other		239,708	278,563	180,031	86,333	72,709	22,121	15,312	10,137	904,914
<b>Total</b>		<b>679,999</b>	<b>809,244</b>	<b>459,402</b>	<b>269,408</b>	<b>170,177</b>	<b>51,080</b>	<b>47,081</b>	<b>62,535</b>	<b>2,548,926</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 S8.9: Same-day acute separations, for the top 20 AR-DRGs version 5.2, private hospitals, states and territories, 2009–10**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
L61Z	Admit for renal dialysis	26,169	34,275	56,153	63,445	19,743	n.p.	n.p.	n.p.	199,785
R63Z	Chemotherapy	35,273	52,365	63,131	22,491	18,096	n.p.	n.p.	n.p.	196,876
G44C	Other colonoscopy, same-day	48,808	52,971	43,133	16,388	11,941	n.p.	n.p.	n.p.	179,111
C16B	Lens procedures, same-day	48,986	29,072	32,469	10,834	9,123	n.p.	n.p.	n.p.	136,430
G46C	Complex gastroscopy, same-day	39,910	25,933	23,259	8,778	5,451	n.p.	n.p.	n.p.	105,366
D40Z	Dental extractions and restorations	25,371	28,050	19,789	15,018	7,320	n.p.	n.p.	n.p.	98,821
G45B	Other gastroscopy for non-major digestive disease, same-day	24,586	35,790	23,332	6,698	5,714	n.p.	n.p.	n.p.	98,580
U60Z	Mental health treatment, same-day, W/O ECT	27,306	33,478	24,632	3,699	32	n.p.	n.p.	n.p.	93,057
Z64B	Other factors influencing health status, same-day	19,830	33,029	24,297	8,844	5,014	n.p.	n.p.	n.p.	92,812
Z40Z	Follow up W endoscopy	20,214	19,438	14,752	6,202	4,914	n.p.	n.p.	n.p.	67,421
I18Z	Other knee procedures	15,207	14,453	10,431	5,491	7,221	n.p.	n.p.	n.p.	55,589
J11Z	Other skin, subcutaneous tissue and breast procedures	13,080	14,039	11,007	8,290	5,853	n.p.	n.p.	n.p.	54,228
N07Z	Other uterine and adnexa procedures for non-malignancy	17,123	13,559	10,845	4,492	3,648	n.p.	n.p.	n.p.	51,466
O05Z	Abortion w or procedure	8,877	17,868	15,885	5,813	679	n.p.	n.p.	n.p.	49,560
C03Z	Retinal procedures	13,495	6,038	6,685	2,521	1,050	n.p.	n.p.	n.p.	31,956
L41Z	Cystourethroscopy, same-day	8,559	6,737	5,504	3,898	2,599	n.p.	n.p.	n.p.	28,917
N11B	Other female reproductive system or procs age <65 W/O malignancy W/O CC	11,250	5,677	4,879	2,013	1,640	n.p.	n.p.	n.p.	26,553
J08B	Other skin graft and/or debridement procedures W/O catastrophic or severe CC	7,008	5,792	6,094	1,828	3,134	n.p.	n.p.	n.p.	24,496
G11B	Anal and stomal procedures W/O catastrophic or severe CC	10,250	4,289	4,184	1,103	1,168	n.p.	n.p.	n.p.	22,016
I68C	Non-surgical spinal disorders, same-day	3,913	5,268	4,559	4,414	2,247	n.p.	n.p.	n.p.	21,358
	Other	167,337	143,243	144,859	58,394	46,272	n.p.	n.p.	n.p.	582,542
<b>Total</b>		<b>592,552</b>	<b>581,364</b>	<b>549,879</b>	<b>260,654</b>	<b>162,859</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,216,940</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 S8.10: Same-day acute separations, by procedure in ACHI chapters, public hospitals, states and territories, 2009–10**

<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	6,435	8,803	4,413	3,307	3,614	524	241	173	27,510
110–129	Procedures on endocrine system	58	134	58	11	9	8	0	2	280
160–256	Procedures on eye and adnexa	21,779	21,507	9,508	10,348	6,966	1,164	1,202	672	73,146
300–333	Procedures on ear and mastoid process	2,875	4,231	4,818	1,628	1,775	253	216	255	16,051
370–422	Procedures on nose, mouth and pharynx	4,002	5,606	6,035	1,574	1,323	183	166	190	19,079
450–490	Dental services	5,294	8,633	5,027	2,424	2,255	624	378	313	24,948
520–570	Procedures on respiratory system	5,035	5,923	3,471	1,704	606	481	214	133	17,567
600–777	Procedures on cardiovascular system	11,397	16,716	6,077	5,273	4,139	1,794	1,228	307	46,931
800–817	Procedures on blood and blood-forming organs	1,978	5,364	2,094	1,265	1,438	187	44	72	12,442
850–1011	Procedures on digestive system	67,198	74,511	30,800	36,017	3,130	6,411	2,404	1,327	221,798
1040–1129	Procedures on urinary system	302,311	279,881	157,064	94,477	65,567	16,415	24,809	45,906	986,430
1160–1203	Procedures on male genital organs	5,243	7,311	3,216	3,214	2,067	711	212	194	22,168
1240–1299	Gynaecological procedures	21,671	28,562	14,378	6,277	11,392	1,691	796	1,611	86,378
1330–1347	Obstetric procedures	2,041	2,175	1,313	877	745	132	211	129	7,623
1360–1579	Procedures on musculoskeletal system	21,954	23,698	12,596	7,444	5,972	1,669	1,678	629	75,640
1600–1718	Dermatological and plastic procedures	20,176	28,622	18,391	9,247	8,249	1,962	924	886	88,457
1740–1759	Procedures on breast	2,473	2,297	1,093	1,856	489	177	46	38	8,469
1786–1799	Radiation oncology procedures	341	429	607	208	54	5	4	0	1,648
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	228,424	357,564	157,424	123,793	60,692	25,216	14,258	7,289	974,660
1940–2016	Imaging services	24,669	28,632	15,120	9,021	5,846	1,900	1,338	716	87,242
	<i>Procedures reported<sup>b)</sup></i>	755,354	910,599	453,503	319,965	186,328	61,507	50,369	60,842	2,798,467
	Separations with no procedure reported	129,833	122,549	104,611	30,174	29,899	6,164	5,856	7,861	436,947
<b>Total separations</b>		<b>679,999</b>	<b>809,244</b>	<b>459,402</b>	<b>269,408</b>	<b>170,177</b>	<b>51,080</b>	<b>47,081</b>	<b>62,535</b>	<b>2,548,926</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 S8.11: Same-day acute separations, by procedure in ACHI chapters, private hospitals, states and territories, 2009–10**

<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	11,670	11,800	9,612	7,494	4,273	n.p.	n.p.	n.p.	46,732
110–129	Procedures on endocrine system	61	46	16	12	4	n.p.	n.p.	n.p.	147
160–256	Procedures on eye and adnexa	71,403	40,522	45,180	15,588	12,344	n.p.	n.p.	n.p.	194,285
300–333	Procedures on ear and mastoid process	6,508	5,016	4,015	2,591	2,646	n.p.	n.p.	n.p.	21,781
370–422	Procedures on nose, mouth and pharynx	10,502	6,303	6,206	3,534	2,287	n.p.	n.p.	n.p.	29,771
450–490	Dental services	28,050	29,650	21,161	16,189	8,095	n.p.	n.p.	n.p.	106,683
520–570	Procedures on respiratory system	1,508	1,917	2,183	660	671	n.p.	n.p.	n.p.	7,197
600–777	Procedures on cardiovascular system	14,319	9,823	8,832	3,360	2,645	n.p.	n.p.	n.p.	41,595
800–817	Procedures on blood and blood-forming organs	963	1,671	2,572	443	448	n.p.	n.p.	n.p.	6,443
850–1011	Procedures on digestive system	174,191	168,542	133,531	47,962	34,476	n.p.	n.p.	n.p.	574,955
1040–1129	Procedures on urinary system	50,555	50,924	72,625	72,434	25,320	n.p.	n.p.	n.p.	275,727
1160–1203	Procedures on male genital organs	14,494	11,154	8,085	5,126	3,659	n.p.	n.p.	n.p.	44,337
1240–1299	Gynaecological procedures	49,723	49,572	41,780	17,076	8,871	n.p.	n.p.	n.p.	172,165
1330–1347	Obstetric procedures	370	216	773	134	72	n.p.	n.p.	n.p.	1,645
1360–1579	Procedures on musculoskeletal system	39,787	32,035	24,918	12,741	13,485	n.p.	n.p.	n.p.	129,061
1600–1718	Dermatological and plastic procedures	37,174	33,852	30,658	16,321	16,149	n.p.	n.p.	n.p.	138,856
1740–1759	Procedures on breast	4,231	2,985	5,037	1,235	1,068	n.p.	n.p.	n.p.	14,995
1786–1799	Radiation oncology procedures	255	225	61	45	103	n.p.	n.p.	n.p.	699
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	503,356	436,896	435,941	154,745	120,237	n.p.	n.p.	n.p.	1,705,388
1940–2016	Imaging services	12,842	13,897	8,617	4,780	3,514	n.p.	n.p.	n.p.	45,875
	<i>Procedures reported<sup>b)</sup></i>	1,031,962	907,046	861,803	382,470	260,367	n.p.	n.p.	n.p.	3,558,337
	Separations with no procedure reported	5,493	42,728	19,029	7,436	1,900	n.p.	n.p.	n.p.	82,237
<b>Total separations</b>		<b>592,552</b>	<b>581,364</b>	<b>549,879</b>	<b>260,654</b>	<b>162,859</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,216,940</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 S8.12: Procedure statistics for the top 20 ACHI procedure blocks for same-day acute separations, public hospitals, states and territories, 2009–10**

<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>
1060	Haemodialysis	284,279	259,285	145,847	86,819	60,105	15,009	24,050	45,563	920,957
1910	Cerebral anaesthesia	181,794	200,468	87,371	72,142	39,085	15,653	8,534	5,068	610,115
1920	Administration of pharmacotherapy	16,168	103,832	38,270	33,706	5,148	4,279	3,452	541	205,396
1893	Transfusion of blood and gamma globulin	16,198	28,374	11,630	7,534	7,207	1,076	1,000	213	73,232
905	Fibreoptic colonoscopy	22,735	22,327	8,200	10,784	304	2,056	620	392	67,418
1008	Panendoscopy with excision	21,296	22,418	8,618	11,888	359	1,623	824	315	67,341
911	Fibreoptic colonoscopy with excision	18,562	18,587	8,036	11,978	183	1,678	675	323	60,022
1909	Conduction anaesthesia	17,832	21,505	6,448	4,492	5,894	727	1,114	678	58,690
197	Extracapsular crystalline lens extraction by phacoemulsification	17,305	16,173	6,410	8,452	5,247	806	982	465	55,840
1265	Curettage of uterus	14,580	18,143	6,811	3,974	7,771	885	520	1,241	53,925
1620	Excision of lesion of skin and subcutaneous tissue	10,619	15,474	9,488	4,881	4,467	1,215	319	275	46,738
1916	Generalised allied health interventions	6,354	9,115	8,239	5,185	2,697	374	646	455	33,065
1089	Examination procedures on bladder	7,109	11,216	5,158	5,024	3,135	775	315	121	32,853
1952	Computerised tomography of brain	8,576	9,149	5,550	2,314	1,497	330	469	246	28,131
1259	Examination procedures on uterus	6,975	8,590	4,338	1,679	2,487	481	273	237	25,060
1005	Panendoscopy	5,495	7,600	3,266	3,656	87	524	49	111	20,788
668	Coronary angiography	4,300	4,891	1,593	1,892	1,870	658	778	0	15,982
1260	Insertion or removal of intrauterine device	2,524	4,671	2,818	1,057	1,780	237	128	155	13,370
1907	Electroconvulsive therapy	1,381	5,780	3,061	805	959	738	96	52	12,872
1963	Computerised tomography of abdomen and pelvis	3,888	4,210	2,578	1,056	542	160	205	103	12,742
Other		87,384	118,791	79,773	40,647	35,504	12,223	5,320	4,288	383,930
Separations with no procedure reported		129,833	122,549	104,611	30,174	29,899	6,164	5,856	7,861	436,947
<b>Total<sup>(b)</sup></b>		<b>755,354</b>	<b>910,599</b>	<b>453,503</b>	<b>319,965</b>	<b>186,328</b>	<b>61,507</b>	<b>50,369</b>	<b>60,842</b>	<b>2,798,467</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 S8.13: Procedure statistics for the top 20 ACHI procedure blocks for same-day acute separations, private hospitals, states and territories, 2009–10**

<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		412,525	339,955	308,367	116,206	91,028	n.p	n.p	n.p	1,314,543
1920 Administration of pharmacotherapy		42,883	60,252	72,462	29,321	22,236	n.p	n.p	n.p	233,236
905 Fibroscopic colonoscopy		67,341	63,636	44,392	14,261	13,206	n.p	n.p	n.p	209,345
1008 Panendoscopy with excision		68,384	54,605	50,426	17,741	10,759	n.p	n.p	n.p	206,698
911 Fibroscopic colonoscopy with excision		64,147	52,410	48,376	21,786	11,374	n.p	n.p	n.p	203,241
1060 Haemodialysis		26,209	34,270	56,195	63,500	19,743	n.p	n.p	n.p	199,917
197 Extracapsular crystalline lens extraction by phacoemulsification		48,272	26,605	31,761	10,461	9,098	n.p	n.p	n.p	132,177
1909 Conduction anaesthesia		47,219	21,910	24,234	4,772	8,646	n.p	n.p	n.p	110,955
1620 Excision of lesion of skin and subcutaneous tissue		23,352	23,404	22,213	10,522	9,894	n.p	n.p	n.p	92,730
458 Surgical removal of tooth		24,058	24,786	17,507	13,018	6,054	n.p	n.p	n.p	88,222
1265 Curettage of uterus		20,105	29,767	23,818	9,192	2,799	n.p	n.p	n.p	87,794
1297 Procedures for reproductive medicine		21,997	13,750	11,230	4,984	4,045	n.p	n.p	n.p	58,012
1005 Panendoscopy		13,295	23,113	9,149	2,418	4,142	n.p	n.p	n.p	52,993
1089 Examination procedures on bladder		11,595	10,859	10,133	6,458	3,717	n.p	n.p	n.p	45,024
1893 Transfusion of blood and gamma globulin		5,119	7,737	20,826	2,028	2,010	n.p	n.p	n.p	38,587
1517 Arthroscopic meniscectomy of knee with repair		8,776	8,349	6,989	3,703	4,857	n.p	n.p	n.p	34,362
1873 Psychological/psychosocial therapies		20,570	3,756	9,120	644	2	n.p	n.p	n.p	34,092
1259 Examination procedures on uterus		8,742	9,244	7,116	2,859	2,245	n.p	n.p	n.p	31,572
1916 Generalised allied health interventions		9,885	9,256	4,627	911	5,567	n.p	n.p	n.p	30,635
209 Application, insertion or removal procedures on retina, choroid or posterior chamber		12,854	3,737	5,238	2,483	736	n.p	n.p	n.p	26,948
Other		74,634	85,645	77,624	45,202	28,209	n.p	n.p	n.p	327,254
Separations with no procedure reported		5,493	42,728	19,029	7,436	1,900	n.p	n.p	n.p	82,237
<b>Total<sup>(c)</sup></b>		<b>1,031,962</b>	<b>907,046</b>	<b>861,803</b>	<b>382,470</b>	<b>260,367</b>	<b>n.p</b>	<b>n.p</b>	<b>n.p</b>	<b>3,558,337</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, 91.6% were reported as *Acute* (2.3 million of the 2.5 million in the public sector and 1.0 million of the 1.1 million in the private sector).

## How has activity care changed over time?

Between 2005–06 and 2009–10, 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 2.7% in public hospitals and 3.7% in private hospitals (Table 9.1).

**Table 9.1: Overnight acute separations, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent) <sup>(a)</sup>	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Public acute hospitals	2,130,287	2,204,943	2,254,140	2,299,960	2,362,371	2.6	2.7
Public psychiatric hospitals	12,278	11,686	11,405	9,197	9,159	-7.1	-0.4
<i>Total</i>	<i>2,142,565</i>	<i>2,216,629</i>	<i>2,265,545</i>	<i>2,309,157</i>	<i>2,371,530</i>	<i>2.6</i>	<i>2.7</i>
<b>Private hospitals</b>							
Private free standing day hospital facilities	2,440	2,423	2,341	1,247	1,259	-15.2	1.0
Other private hospitals	971,076	984,954	1,014,107	1,021,094	1,058,861	2.2	3.7
<i>Total</i>	<i>973,516</i>	<i>987,377</i>	<i>1,016,448</i>	<i>1,022,341</i>	<i>1,060,120</i>	<i>2.2</i>	<i>3.7</i>
<b>All hospitals</b>	<b>3,116,081</b>	<b>3,204,006</b>	<b>3,281,993</b>	<b>3,331,498</b>	<b>3,431,650</b>	<b>2.4</b>	<b>3.0</b>

(a) Average annual change, not adjusted for changes in coverage and recategorisation.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

Abbreviation: Ave—average.

## How much activity was there in 2009–10?

In 2009–10 there were almost 3.5 million overnight acute separations, accounting for 40.5% of all separations (Table 9.2) and 42% of all acute separations. The overnight acute separation rate varied across states and territories, particularly in public hospitals, ranging from 92 per 1,000 population in Tasmania to 177 per 1,000 in the Northern Territory.

**Table 9.2: Overnight acute separations, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute hospitals	810,908	579,826	431,203	222,472	198,999	47,664	35,526	35,773	2,362,371
Public psychiatric hospitals	5,227	528	1	1,428	1,361	614	..	..	9,159
<i>Total</i>	<i>816,135</i>	<i>580,354</i>	<i>431,204</i>	<i>223,900</i>	<i>200,360</i>	<i>48,278</i>	<i>35,526</i>	<i>35,773</i>	<i>2,371,530</i>
Separation rate	109.6	102.7	97.0	99.9	115.1	91.5	105.3	177.0	105.0
<b>Private hospitals</b>									
Private free standing day hospital facilities	0	0	0	1,259	0	n.p.	n.p.	n.p.	1,259
Other private hospitals	268,024	280,390	261,394	114,520	89,104	n.p.	n.p.	n.p.	1,058,861
<i>Total</i>	<i>268,024</i>	<i>280,390</i>	<i>261,394</i>	<i>115,779</i>	<i>89,104</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,060,120</i>
Separation rate	35.8	48.7	58.4	51.4	49.1	n.p.	n.p.	n.p.	46.3
<b>All hospitals</b>	<b>1,084,159</b>	<b>860,744</b>	<b>692,598</b>	<b>339,679</b>	<b>289,464</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,431,650</b>
<b>Separation rate</b>	<b>145.4</b>	<b>151.4</b>	<b>155.4</b>	<b>151.4</b>	<b>164.3</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>151.3</b>

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 (45%) of overnight acute separations (Figure 9.1). There were, however, more overnight separations for males than females in the age groups 0 to 14 years and 50 to 79 years. People aged 55 years and over accounted for half of all overnight separations.

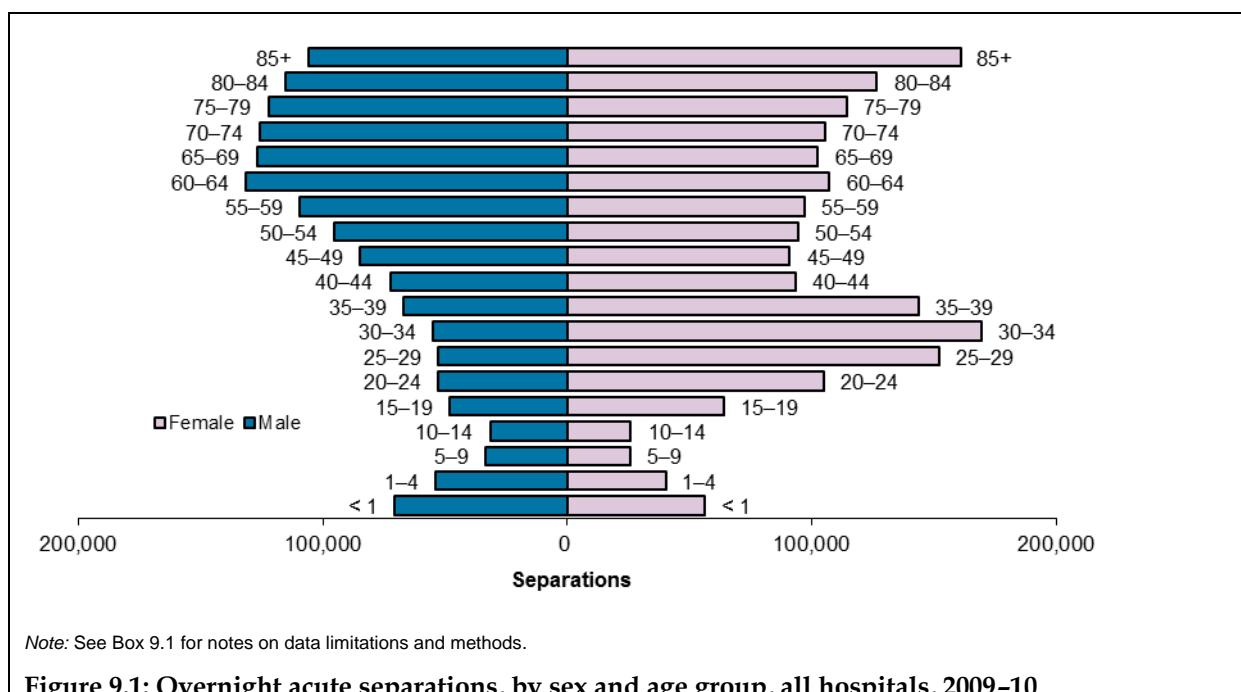
### Aboriginal and Torres Strait Islander people

#### Quality of Indigenous status data

The quality of the data provided for Indigenous status in 2009–10 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, 3.5% of overnight acute separations were for Aboriginal or Torres Strait Islander people. In 2009–10, the overnight acute separation rate for *Indigenous Australians* was almost twice the rate for *Other Australians*. The Northern Territory had the highest rate of overnight acute separations involving *Indigenous Australians* and Victoria recorded the lowest rate (Table 9.3).



Note: See Box 9.1 for notes on data limitations and methods.

**Figure 9.1: Overnight acute separations, by sex and age group, all hospitals, 2009–10**

The separation rates presented in Table 9.3 differ from those presented in Table 9.2 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, all hospitals, selected states and territories<sup>(a)</sup>, 2009–10**

	NSW	Vic	Qld	WA	SA	NT	Total <sup>(a)</sup>
Indigenous Australians	237.5	222.4	268.1	348.7	347.3	358.4	282.3
Other Australians	144.8	152.3	152.4	145.8	163.6	109.8	149.7
<b>Total</b>	<b>146.5</b>	<b>152.8</b>	<b>155.4</b>	<b>151.5</b>	<b>166.4</b>	<b>172.0</b>	<b>152.4</b>

(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Remoteness area

In 2009–10, people usually resident in *Very remote* areas had 252.8 overnight acute separations per 1,000 population, compared with 151.4 per 1,000 nationwide (Table 9.4). The separation rate ratio (SRR) of 1.67 for this area indicates that the separation rate was 67% higher than the national separation rate.

**Table 9.4: Overnight acute separation statistics, by remoteness area of residence, all hospitals, 2009–10**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
Separations	2,197,068	740,121	368,439	65,994	40,512	3,431,650
Separation rate	142.3	161.0	173.0	212.0	252.8	151.4
Standardised separation rate ratio (SRR)	0.94	1.06	1.14	1.40	1.67	

(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 1* for details.

Each SES group accounted for between 17.2% and 22.7% of total overnight acute separations. Separation rates varied from 130.2 per 1,000 population for patients living in areas classified as being the highest SES group to 170.2 per 1,000 for the lowest (Table 9.5).

**Table 9.5: Selected overnight acute separation statistics, by socioeconomic status group, all hospitals, 2009–10**

	Socioeconomic 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	779,726	736,892	684,570	620,620	589,652	3,431,650
Separation rate <sup>(d)</sup>	170.2	157.7	152.2	142.1	130.2	151.4
Standardised separation rate ratio (SRR)	1.1	1.0	1.0	0.9	0.9	

(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, 2009–10**

<b>Mode of admission</b>	<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
Admitted patient transferred from another hospital	166,730	52,534	219,264
Statistical admission: type change	8,966	3,938	12,904
Other	2,192,652	1,000,197	3,192,849
Not reported	3,182	3,451	6,633
<b>Total</b>	<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 2009–10 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).

The most common principal diagnosis (at the 3-character level) reported for overnight separations was *Pain in throat and chest*, which accounted for 2.4% of overnight acute separations in public hospitals and 1.3% in private hospitals. The 20 most common principal diagnoses included several childbirth-related and heart-related conditions, as well as chronic conditions such as *Type 2 diabetes mellitus* and *Other chronic obstructive pulmonary disease* (Table 9.8).

Comparing this table 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 9.7: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2009–10**

Principal diagnosis chapter		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	75,714	11,186	86,900
C00–D48	Neoplasms	129,057	104,181	233,238
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	23,166	6,986	30,152
E00–E90	Endocrine, nutritional and metabolic diseases	59,941	29,703	89,644
F00–F99	Mental and behavioural disorders	130,267	35,943	166,210
G00–G99	Diseases of the nervous system	63,214	57,080	120,294
H00–H59	Diseases of the eye and adnexa	11,120	9,886	21,006
H60–H95	Diseases of the ear and mastoid process	12,729	6,017	18,746
I00–I99	Diseases of the circulatory system	241,421	104,016	345,437
J00–J99	Diseases of the respiratory system	236,400	70,987	307,387
K00–K93	Diseases of the digestive system	222,578	101,524	324,102
L00–L99	Diseases of the skin and subcutaneous tissue	62,123	13,584	75,707
M00–M99	Diseases of the musculoskeletal system and connective tissue	103,356	161,275	264,631
N00–N99	Diseases of the genitourinary system	119,428	72,488	191,916
O00–O99	Pregnancy, childbirth and the puerperium	259,027	95,480	354,507
P00–P96	Certain conditions originating in the perinatal period	41,795	11,208	53,003
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	12,472	4,098	16,570
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	209,573	55,420	264,993
S00–T98	Injury, poisoning and certain other consequences of external causes	303,559	71,955	375,514
Z00–Z99	Factors influencing health status and contact with health services	54,340	35,709	90,049
	Not reported	250	1,394	1,644
<b>Total</b>		<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 S9.1 and S9.2 at the end of this chapter.

**Table 9.8: Separations for the top 20 principal diagnoses in 3-character ICD-10-AM groupings with the highest number of overnight acute separations, public and private hospitals, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
R07	Pain in throat and chest	57,611	13,377	70,988
G47	Sleep disorders	15,178	44,138	59,316
K80	Cholelithiasis	35,037	18,517	53,554
J18	Pneumonia, organism unspecified	44,798	8,691	53,489
J44	Other chronic obstructive pulmonary disease	44,642	6,762	51,404
I20	Angina pectoris	33,562	14,924	48,486
I21	Acute myocardial infarction	38,621	7,971	46,592
Z38	Liveborn infants according to place of birth	32,197	12,639	44,836
O70	Perineal laceration during delivery	34,452	7,826	42,278
R10	Abdominal and pelvic pain	14,459	27,761	42,220
M17	Gonarthrosis [arthrosis of knee]	31,132	8,927	40,059
I50	Heart failure	30,052	8,908	38,960
N39	Other disorders of urinary system	31,804	6,070	37,874
L03	Cellulitis	15,265	20,520	35,785
K40	Inguinal hernia	24,025	11,308	35,333
I48	Atrial fibrillation and flutter	19,994	14,329	34,323
O34	Maternal care for known or suspected abnormality of pelvic organs	13,470	19,095	32,565
J35	Chronic diseases of tonsils and adenoids	24,849	7,596	32,445
E11	Type 2 diabetes mellitus	20,959	9,749	30,708
T81	Complications of procedures, not elsewhere classified	24,015	5,684	29,699
	Other	1,785,408	785,328	2,570,736
<b>Total</b>		<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 S9.3 and S9.4 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 2009–10, about 48% of overnight acute separations were *Emergency* admissions, with about 90% of these occurring in public hospitals. Nearly 41% 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, 2009–10**

	Public hospitals <sup>(a)</sup>		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	204,089	8.6	84,167	7.9	288,256	8.4
Specialist mental health	81,610	3.4	29,230	2.8	110,840	3.2
Emergency						
Surgical	209,423	8.8	29,999	2.8	239,422	7.0
Medical	1,208,842	51.0	123,875	11.7	1,332,717	38.8
Other	51,062	2.2	10,120	1.0	61,182	1.8
Non-emergency						
Surgical	328,407	13.8	522,273	49.3	850,680	24.8
Medical	265,575	11.2	221,520	20.9	487,095	14.2
Other	22,522	0.9	38,936	3.7	61,458	1.8
<b>Total</b>	<b>2,371,530</b>	<b>100</b>	<b>1,060,120</b>	<b>100</b>	<b>3,431,650</b>	<b>100</b>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,000 overnight acute separations with specialised mental health care in 2008–09.

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 S9.5 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 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 2009–10, about 53% of same-day acute separations were reported as *Medical*, 32% were *Surgical* and 4% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 9.9). The majority of *Medical* care occurred in public hospitals (81%), as did the majority of *Surgical* care (60%). *Childbirth* admissions accounted for about 8% of overnight acute separations and *Specialist mental health* accounted for about 3%. For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals which accounted for about 1,900 same-day acute separations with specialised mental health care in 2008–09.

### 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 almost 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 *Diseases and disorders of the kidney and urinary tract*, almost 72% of the separations were in public hospitals.

**Table 9.10: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public and private hospitals, 2009–10**

Major Diagnostic Category		Public hospitals	Private hospitals	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	12,145	1,457	13,602
01	Diseases and disorders of the nervous system	151,486	32,439	183,925
02	Diseases and disorders of the eye	17,033	12,047	29,080
03	Diseases and disorders of the ear, nose, mouth and throat	99,420	62,808	162,228
04	Diseases and disorders of the respiratory system	231,067	83,564	314,631
05	Diseases and disorders of the circulatory system	289,461	117,815	407,276
06	Diseases and disorders of the digestive system	260,767	109,630	370,397
07	Diseases and disorders of the hepatobiliary system and pancreas	74,710	30,087	104,797
08	Diseases and disorders of the musculoskeletal system and connective tissue	236,155	207,187	443,342
09	Diseases and disorders of the skin, subcutaneous tissue and breast	95,741	52,638	148,379
10	Endocrine, nutritional and metabolic diseases and disorders	52,676	28,765	81,441
11	Diseases and disorders of the kidney and urinary tract	103,228	40,633	143,861
12	Diseases and disorders of the male reproductive system	20,712	25,768	46,480
13	Diseases and disorders of the female reproductive system	43,153	41,538	84,691
14	Pregnancy, childbirth and puerperium	265,960	97,202	363,162
15	Newborns and other neonates	60,992	18,002	78,994
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	25,774	7,462	33,236
17	Neoplastic disorders (haematological and solid neoplasms)	20,100	11,669	31,769
18	Infectious and parasitic diseases	49,022	11,050	60,072
19	Mental diseases and disorders	98,833	29,136	127,969
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	24,342	6,581	30,923
21	Injuries, poisoning and toxic effects of drugs	94,703	15,124	109,827
22	Burns	5,455	194	5,649
23	Factors influencing health status and other contacts with health services	34,319	12,904	47,223
ED	Error DRGs <sup>(b)</sup>	4,276	4,420	8,696
	<i>Surgical</i>	602,248	589,341	1,191,589
	<i>Medical</i>	1,695,663	421,722	2,117,385
	<i>Other</i>	73,619	49,057	122,676
	<b>Total</b>	<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 S9.6 and S9.7 at the end of this chapter.

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

## Most common AR-DRGs

In 2009–10, the 20 most common AR-DRGs accounted for about one quarter of overnight acute separations. Childbirth-related AR-DRGs were the three 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*, *Knee replacement and reattachment* and *Other shoulder procedures*.

**Table 9.11: Separations for the top 20 AR-DRGs version 5.2 with the highest number of overnight acute separations, public and private hospitals, 2009–10**

AR-DRG		Public hospitals	Private hospitals	Total
O60B	Vaginal delivery W/O catastrophic or severe CC	101,791	37,778	139,569
P67D	Neonate, admwt >2499 g W/O significant or procedure w/o problem	44,393	30,014	74,407
O01C	Caesarean delivery W/O catastrophic or severe CC	54,457	8,777	63,234
F74Z	Chest pain	46,109	9,425	55,534
G67B	Oesophagitis, gastroent & misc digestive systm disorders age>9 W/O catastrophic or severe CC	6,776	39,072	45,848
E63Z	Sleep apnoea	39,413	5,781	45,194
J64B	Cellulitis (age >59 W/O catastrophic or severe CC) or age <60	31,729	6,888	38,617
O66A	Antenatal and other obstetric admission	13,162	25,282	38,444
I04Z	Knee replacement and reattachment	20,357	17,098	37,455
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O catastrophic or severe CC	6,208	29,860	36,068
I16Z	Other shoulder procedures	14,820	19,026	33,846
D11Z	Tonsillectomy and/or adenoidectomy	17,906	13,458	31,364
U63B	Major affective disorders age <70 W/O catastrophic or severe CC	12,440	18,723	31,163
G09Z	Inguinal and femoral hernia procedures age >0	26,185	4,109	30,294
G66B	Abdominal pain or mesenteric adenitis W/O CC	21,423	8,858	30,281
O60C	Vaginal delivery single uncomplicated W/O other condition	23,988	5,682	29,670
F71B	Non-major arrhythmia and conduction disorders W/O catastrophic or severe CC	21,849	6,929	28,778
E62C	Respiratory infections/inflammations W/O CC	24,160	4,296	28,456
E65B	Chronic obstructive airways disease W/O catastrophic or severe CC	23,842	4,185	28,027
I68B	Non-surgical spinal disorders W/O CC	18,494	8,807	27,301
Other		1,802,028	756,072	2,558,100
<b>Total</b>		<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 S9.8 and S9.9 at the end of this chapter.

Abbreviations: admwt—admission weight; CC—complications and comorbidities; CDE—common duct exploration; g—grams; W—with; 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 2009–10, nearly 7.3 million procedures were reported for overnight acute separations, about 4.4 million in the public sector and 2.9 million in the private sector. Public hospitals accounted for 61% of the overnight acute separations for which a procedure was reported,

although they accounted for 69% of the separations overall (Table 9.12). In public hospitals, 70% of overnight acute separations involved a procedure (1.6 million). In contrast, 89% of overnight acute separations in private hospitals involved a procedure (0.9 million).

**Table 9.12: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public and private hospitals, 2009–10**

Procedure chapters		Public hospitals	Private hospitals	Total
1–86	Procedures on nervous system	45,731	43,805	89,536
110–129	Procedures on endocrine system	6,800	7,297	14,097
160–256	Procedures on eye and adnexa	12,288	10,845	23,133
300–333	Procedures on ear and mastoid process	9,296	8,127	17,423
370–422	Procedures on nose, mouth and pharynx	40,925	49,666	90,591
450–490	Dental services	5,663	3,431	9,094
520–570	Procedures on respiratory system	83,224	26,314	109,538
600–777	Procedures on cardiovascular system	141,711	93,645	235,356
800–817	Procedures on blood and blood-forming organs	21,421	15,944	37,365
850–1011	Procedures on digestive system	204,142	145,210	349,352
1040–1129	Procedures on urinary system	77,235	50,482	127,717
1160–1203	Procedures on male genital organs	18,090	27,625	45,715
1240–1299	Gynaecological procedures	47,455	42,022	89,477
1330–1347	Obstetric procedures	182,034	82,252	264,286
1360–1579	Procedures on musculoskeletal system	177,577	182,002	359,579
1600–1718	Dermatological and plastic procedures	99,646	50,376	150,022
1740–1759	Procedures on breast	11,484	20,686	32,170
1786–1799	Radiation oncology procedures	7,912	2,710	10,622
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	1,396,282	852,527	2,248,809
1940–2016	Imaging services	422,701	112,723	535,424
	<i>Procedures reported</i>	<b>4,418,944</b>	<b>2,869,329</b>	<b>7,288,273</b>
	Separations with no procedure reported	709,219	120,909	830,128
<b>Total overnight separations</b>		<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 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 S9.10 and S9.11 at the end of this chapter.

*Abbreviation:* n.e.c.—not elsewhere classified.

In 2009–10, *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: Procedure statistics for the top 20 ACHI procedure blocks with the highest number of overnight acute separations, public and private hospitals, 2009–10**

Procedure block	Public hospitals	Private hospitals	Total <sup>(a)</sup>
1910 Generalised allied health interventions	908,088	345,604	1,253,692
1916 Cerebral anaesthesia	635,672	603,732	1,239,404
1909 Conduction anaesthesia	116,020	123,978	239,998
1893 Transfusion of blood and gamma globulin	130,919	57,487	188,406
1952 Computerised tomography of brain	157,169	19,360	176,529
1912 Postprocedural analgesia	49,788	58,071	107,859
1920 Administration of pharmacotherapy	74,034	28,340	102,374
1963 Computerised tomography of abdomen and pelvis	83,527	17,095	100,622
1340 Caesarean section	58,410	35,787	94,197
1344 Postpartum suture	65,135	24,425	89,560
668 Coronary angiography	41,423	37,481	78,904
1333 Analgesia and anaesthesia during labour and delivery procedure	47,906	29,196	77,102
1334 Medical or surgical induction of labour	49,720	23,657	73,377
1966 Other computerised tomography	54,050	13,139	67,189
2015 Magnetic resonance imaging	49,049	15,205	64,254
1335 Medical or surgical augmentation of labour	46,493	16,329	62,822
738 Venous catheterisation	48,054	12,332	60,386
607 Examination procedures on ventricle	22,923	28,048	50,971
1828 Sleep study	7,237	42,270	49,507
965 Cholecystectomy	28,061	20,735	48,796
Other	1,745,266	1,317,058	3,062,324
<i>Procedures reported</i>	<i>4,418,944</i>	<i>2,869,329</i>	<i>7,288,273</i>
Separations with no procedure reported	709,219	120,909	830,128
<b>Total separations</b>	<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</b>

(a) As more than one procedure may be reported within each ACHI block, the total number of procedures may not sum to the total of 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 S9.12 and S9.13 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). For 2009–10, Tasmania was unable to fully indentify specialised psychiatric care days in public acute hospitals which accounted for about 2,000 overnight acute separations and 30,000 patient days with specialised mental health care in 2008–09. This will have resulted in those separations being included in another category (such as *Non-emergency Medical*) and may overestimate the average length of stay for that category.

**Table 9.14: Patient days and average length of stay, for overnight acute separations, by broad category of service, public and private hospitals, 2009–10**

Broad category of service	Public hospitals <sup>(a)</sup>		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Childbirth	663,119	3.2	395,268	4.7	1,058,387	3.7
Specialist mental health	1,504,453	18.4	579,188	19.8	2,083,641	18.8
Emergency						
Surgical	1,780,781	8.5	252,190	8.4	2,032,971	8.5
Medical	5,142,971	4.3	718,380	5.8	5,861,351	4.4
Other	332,926	6.5	57,327	5.7	390,253	6.4
Non-emergency						
Surgical	1,400,560	4.3	1,775,058	3.4	3,175,618	3.7
Medical	1,590,444	6.0	1,134,409	5.1	2,724,853	5.6
Other	76,763	3.4	96,385	2.5	173,148	2.8
<b>Total</b>	<b>12,492,017</b>	<b>5.3</b>	<b>5,008,205</b>	<b>4.7</b>	<b>17,500,222</b>	<b>5.1</b>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,000 overnight acute separations with specialised mental health care in 2008–09, which accounted for about 30,000 patient days.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Who paid for the care?

Almost 84% of overnight acute separations from public hospitals were for *Public patients* (Medicare eligible persons who elected to be treated as public patient) and over 83% of overnight acute separations from private hospitals were funded by *Private health insurance* (Table 9.15). The *Department of Veterans' Affairs* funded about 3% of overnight acute separations in public hospitals and 8% in private hospitals.

**Table 9.15: Overnight acute separations, by principal source of funds, public and private hospitals, 2009–10**

Funding source	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	1,986,617	6,220	1,992,837
Private health insurance	252,416	884,173	1,136,589
Self-funded <sup>(b)</sup>	23,227	45,649	68,876
Workers compensation	12,636	27,243	39,879
Motor vehicle third party personal claim	16,557	2,296	18,853
Department of Veterans' Affairs	63,400	81,809	145,209
Other <sup>(c)</sup>	16,677	12,730	29,407
<b>Total</b>	<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</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 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 94% 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, 2009–10**

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	174,012	36,573	210,585
Discharge/transfer to residential aged care service	34,673	5,391	40,064
Discharge/transfer to an (other) psychiatric hospital	4,779	136	4,915
Discharge/transfer to other health care accommodation	8,355	1,602	9,957
Statistical discharge: type change	56,411	12,621	69,032
Left against medical advice/discharge at own risk	25,796	1,573	27,369
Statistical discharge from leave	4,338	36	4,374
Died	37,172	9,692	46,864
Other	2,025,981	992,490	3,018,471
Not reported	13	6	19
<b>Total</b>	<b>2,371,530</b>	<b>1,060,120</b>	<b>3,431,650</b>

Note: See Box 9.1 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 S9.5

- (a) This section 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 S9.6 to S9.9

- (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 S9.10 to S9.13

- (a) 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) For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation.
- (c) 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.

**Table S9.1: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2009–10**

<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	28,760	17,264	12,965	6,912	5,917	1,089	949	1,858	75,714
C00–D48	Neoplasms	41,953	35,749	22,643	11,320	11,281	3,161	2,207	743	129,057
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	7,841	6,226	3,843	1,935	2,385	422	293	221	23,166
E00–E90	Endocrine, nutritional and metabolic diseases	18,331	15,522	11,406	5,927	5,265	1,254	810	1,426	59,941
F00–F99	Mental and behavioural disorders	45,988	29,466	21,174	14,431	13,262	3,066	1,713	1,167	130,267
G00–G99	Diseases of the nervous system	18,935	19,662	11,081	5,442	5,577	1,270	678	569	63,214
H00–H59	Diseases of the eye and adnexa	3,985	3,027	1,755	1,210	767	83	136	157	11,120
H60–H95	Diseases of the ear and mastoid process	4,147	3,022	2,185	1,336	1,173	203	165	498	12,729
I00–I99	Diseases of the circulatory system	84,761	59,619	44,076	20,267	20,717	5,333	4,163	2,485	241,421
J00–J99	Diseases of the respiratory system	82,900	55,621	41,422	22,115	21,982	4,754	3,022	4,584	236,400
K00–K93	Diseases of the digestive system	75,349	56,092	39,866	21,703	18,591	4,738	3,448	2,791	222,578
L00–L99	Diseases of the skin and subcutaneous tissue	20,747	13,194	12,959	6,158	4,856	1,057	875	2,277	62,123
M00–M99	Diseases of the musculoskeletal system and connective tissue	35,065	26,022	17,762	10,787	8,847	2,247	1,608	1,018	103,356
N00–N99	Diseases of the genitourinary system	40,438	30,170	22,063	11,217	10,343	1,952	1,690	1,555	119,428
O00–O99	Pregnancy, childbirth and the puerperium	88,040	61,301	52,259	25,770	17,721	4,955	4,733	4,248	259,027
P00–P96	Certain conditions originating in the perinatal period	12,685	10,899	8,153	3,735	3,391	1,046	1,091	795	41,795
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	4,071	3,407	2,251	1,192	966	243	209	133	12,472
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	75,957	51,700	37,450	17,210	19,159	3,477	2,137	2,483	209,573
S00–T98	Injury, poisoning and certain other consequences of external causes	103,007	70,068	56,150	31,388	23,241	6,216	5,133	5,635	300,838
Z00–Z99	Factors influencing health status and contact with health services	22,950	12,322	9,741	3,845	4,919	1,688	466	1,130	57,061
	Not reported	225	1	0	0	0	24	0	0	250
<b>Total</b>		<b>816,135</b>	<b>580,354</b>	<b>431,204</b>	<b>223,900</b>	<b>200,360</b>	<b>48,278</b>	<b>35,526</b>	<b>35,773</b>	<b>2,371,530</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.2: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2009–10**

<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	1,609	3,311	4,103	947	825	n.p.	n.p.	n.p.	11,186
C00–D48	Neoplasms	25,517	29,869	25,479	10,262	9,044	n.p.	n.p.	n.p.	104,181
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,117	2,153	1,977	777	738	n.p.	n.p.	n.p.	6,986
E00–E90	Endocrine, nutritional and metabolic diseases	7,290	7,156	6,592	4,275	2,928	n.p.	n.p.	n.p.	29,703
F00–F99	Mental and behavioural disorders	10,392	10,376	7,922	4,171	1,675	n.p.	n.p.	n.p.	35,943
G00–G99	Diseases of the nervous system	14,507	15,365	15,990	5,149	4,501	n.p.	n.p.	n.p.	57,080
H00–H59	Diseases of the eye and adnexa	2,970	1,973	1,262	2,323	1,033	n.p.	n.p.	n.p.	9,886
H60–H95	Diseases of the ear and mastoid process	1,800	1,302	1,385	637	660	n.p.	n.p.	n.p.	6,017
I00–I99	Diseases of the circulatory system	24,089	30,756	29,112	8,765	8,311	n.p.	n.p.	n.p.	104,016
J00–J99	Diseases of the respiratory system	17,746	17,787	18,897	6,646	6,902	n.p.	n.p.	n.p.	70,987
K00–K93	Diseases of the digestive system	24,776	25,810	27,153	10,207	8,741	n.p.	n.p.	n.p.	101,524
L00–L99	Diseases of the skin and subcutaneous tissue	2,901	3,667	4,062	1,274	1,115	n.p.	n.p.	n.p.	13,584
M00–M99	Diseases of the musculoskeletal system and connective tissue	42,780	41,754	33,852	21,143	14,016	n.p.	n.p.	n.p.	161,275
N00–N99	Diseases of the genitourinary system	19,829	17,279	17,504	7,577	6,863	n.p.	n.p.	n.p.	72,488
O00–O99	Pregnancy, childbirth and the puerperium	26,990	23,904	21,751	11,693	5,712	n.p.	n.p.	n.p.	95,480
P00–P96	Certain conditions originating in the perinatal period	2,427	3,276	2,470	1,953	734	n.p.	n.p.	n.p.	11,208
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,440	1,016	869	335	310	n.p.	n.p.	n.p.	4,098
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	8,573	17,830	15,750	5,601	5,744	n.p.	n.p.	n.p.	55,420
S00–T98	Injury, poisoning and certain other consequences of external causes	16,501	17,016	19,716	8,368	6,903	n.p.	n.p.	n.p.	71,503
Z00–Z99	Factors influencing health status and contact with health services	14,770	7,396	5,548	3,676	2,349	n.p.	n.p.	n.p.	36,161
	Not reported	0	1,394	0	0	0	n.p.	n.p.	n.p.	1,394
<b>Total</b>		<b>268,024</b>	<b>280,390</b>	<b>261,394</b>	<b>115,779</b>	<b>89,104</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,060,120</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 S9.3: Overnight acute separations, for the top 20 principal diagnoses, public hospitals, states and territories, 2009–10**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
R07	Pain in throat and chest	20,534	12,648	12,159	4,651	5,782	691	470	676	57,611
J18	Pneumonia, organism unspecified	15,580	11,460	6,983	4,226	3,837	1,002	631	1,079	44,798
J44	Other chronic obstructive pulmonary disease	16,684	10,010	8,441	3,416	3,940	1,098	465	588	44,642
Z38	Liveborn infants according to place of birth	12,923	9,477	7,872	3,184	2,916	979	797	473	38,621
I21	Acute myocardial infarction	11,507	9,173	6,605	3,123	2,950	849	462	368	35,037
K80	Cholelithiasis	11,943	9,231	5,878	3,154	2,874	560	414	398	34,452
R10	Abdominal and pelvic pain	11,163	7,873	6,916	2,970	2,995	836	412	397	33,562
I20	Angina pectoris	14,154	6,433	5,892	2,301	1,731	515	778	393	32,197
O70	Perineal laceration during delivery	11,420	7,165	6,540	2,695	2,276	531	435	742	31,804
L03	Cellulitis	10,930	8,220	5,137	2,820	2,604	631	407	383	31,132
I50	Heart failure	11,494	6,707	5,636	2,611	2,539	387	345	333	30,052
N39	Other disorders of urinary system	8,936	7,085	4,287	2,095	2,745	382	273	348	26,151
J45	Asthma	7,300	6,446	4,732	2,860	2,141	429	352	589	24,849
E11	Type 2 diabetes mellitus	9,473	5,445	4,067	1,843	2,226	443	300	228	24,025
I48	Atrial fibrillation and flutter	8,435	4,347	6,122	2,074	1,511	637	453	436	24,015
O80	Single spontaneous delivery	8,743	5,340	3,810	2,011	2,057	317	231	450	22,959
A09	Other gastroenteritis and colitis of infectious and unspecified origin	7,933	5,437	3,714	2,175	1,561	491	567	444	22,322
S52	Fracture of forearm	7,120	5,291	4,145	2,423	1,450	406	509	250	21,594
K35	Acute appendicitis	6,758	5,467	4,066	2,035	1,962	555	246	251	21,340
F20	Schizophrenia	8,022	5,086	3,306	2,049	1,493	482	443	133	21,014
Other		595,083	432,013	314,896	169,184	148,770	36,057	26,536	26,814	1,749,353
<b>Total (all principal diagnoses)</b>		<b>816,135</b>	<b>580,354</b>	<b>431,204</b>	<b>223,900</b>	<b>200,360</b>	<b>48,278</b>	<b>35,526</b>	<b>35,773</b>	<b>2,371,530</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.4: Overnight acute separations, for the top 20 principal diagnoses, private hospitals, states and territories, 2009–10**

<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>
G47	Sleep disorders	11,459	12,024	12,199	3,778	3,552	n.p.	n.p.	n.p.	44,138
M17	Gonarthrosis [arthrosis of knee]	8,333	6,152	6,127	3,057	2,759	n.p.	n.p.	n.p.	27,761
M75	Shoulder lesions	4,974	5,972	4,386	3,824	2,016	n.p.	n.p.	n.p.	22,138
K40	Inguinal hernia	6,519	4,801	4,405	2,103	1,644	n.p.	n.p.	n.p.	20,520
J35	Chronic diseases of tonsils and adenoids	6,799	3,646	3,800	2,157	1,745	n.p.	n.p.	n.p.	19,095
K80	Cholelithiasis	5,226	4,553	4,352	1,946	1,559	n.p.	n.p.	n.p.	18,517
M16	Coxarthrosis [arthrosis of hip]	4,569	4,311	2,585	1,631	1,526	n.p.	n.p.	n.p.	15,540
I20	Angina pectoris	3,122	4,720	4,424	1,208	950	n.p.	n.p.	n.p.	14,924
O34	Maternal care for known or suspected abnormality of pelvic organs	3,876	3,274	3,680	2,048	818	n.p.	n.p.	n.p.	14,329
R07	Pain in throat and chest	1,347	4,490	4,156	1,099	1,994	n.p.	n.p.	n.p.	13,377
O70	Perineal laceration during delivery	4,547	3,013	2,765	1,000	755	n.p.	n.p.	n.p.	12,639
I25	Chronic ischaemic heart disease	4,140	3,621	2,829	733	887	n.p.	n.p.	n.p.	12,468
I48	Atrial fibrillation and flutter	1,839	3,246	3,807	994	1,158	n.p.	n.p.	n.p.	11,308
J34	Other disorders of nose and nasal sinuses	3,994	2,949	1,682	979	1,072	n.p.	n.p.	n.p.	11,291
M23	Internal derangement of knee	2,370	2,978	2,616	1,555	1,256	n.p.	n.p.	n.p.	11,281
M51	Other intervertebral disc disorders	2,979	2,331	3,207	1,469	804	n.p.	n.p.	n.p.	11,219
C61	Malignant neoplasm of prostate	3,359	3,143	2,416	1,055	651	n.p.	n.p.	n.p.	11,192
E66	Obesity	2,754	2,231	2,033	2,124	1,223	n.p.	n.p.	n.p.	11,076
C50	Malignant neoplasm of breast	2,565	3,471	2,357	780	926	n.p.	n.p.	n.p.	10,602
N40	Hyperplasia of prostate	3,371	2,884	1,992	841	791	n.p.	n.p.	n.p.	10,339
Other		179,882	196,580	185,576	81,398	61,018	n.p.	n.p.	n.p.	736,366
<b>Total (all principal diagnoses)</b>		<b>268,024</b>	<b>280,390</b>	<b>261,394</b>	<b>115,779</b>	<b>89,104</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,060,120</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 S9.5: Overnight acute separations, by broad category of service<sup>(a)</sup>, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	69,341	50,358	40,526	19,560	13,927	3,833	3,734	2,810	204,089
Specialist mental health	29,314	19,171	15,833	8,198	6,522	614	1,164	794	81,610
Emergency									
Surgical	70,256	52,044	34,508	24,017	17,426	2,287	5,085	3,800	209,423
Medical	433,357	279,313	221,813	117,183	109,848	10,259	16,333	20,736	1,208,842
Other	19,039	12,535	7,318	5,106	4,798	501	936	829	51,062
Non-emergency									
Surgical	97,777	92,340	61,398	30,336	28,593	9,856	5,489	2,618	328,407
Medical	90,641	68,254	45,059	18,130	17,151	19,813	2,613	3,914	265,575
Other	6,410	6,339	4,749	1,370	2,095	1,115	172	272	22,522
<i>Total</i>	<i>816,135</i>	<i>580,354</i>	<i>431,204</i>	<i>223,900</i>	<i>200,360</i>	<i>48,278</i>	<i>35,526</i>	<i>35,773</i>	<i>2,371,530</i>
<b>Private hospitals</b>									
Childbirth	23,950	21,513	18,517	10,366	5,118	n.p.	n.p.	n.p.	84,167
Specialist mental health	8,629	8,906	5,955	3,691	1,383	n.p.	n.p.	n.p.	29,230
Emergency						n.p.	n.p.	n.p.	
Surgical	3,748	7,471	9,954	4,320	3,962	n.p.	n.p.	n.p.	29,999
Medical	13,847	30,889	48,863	12,670	15,213	n.p.	n.p.	n.p.	123,875
Other	973	3,163	3,428	1,140	1,218	n.p.	n.p.	n.p.	10,120
Non-emergency									
Surgical	151,920	128,311	110,803	61,809	44,848	n.p.	n.p.	n.p.	522,273
Medical	55,475	67,397	53,727	19,249	14,616	n.p.	n.p.	n.p.	221,520
Other	9,482	12,740	10,147	2,534	2,746	n.p.	n.p.	n.p.	38,936
<i>Total</i>	<i>268,024</i>	<i>280,390</i>	<i>261,394</i>	<i>115,779</i>	<i>89,104</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,060,120</i>

(a) For 2009–10, Tasmania was unable to fully identify specialised psychiatric care days in public acute hospitals due to the implementation of a new information system. Tasmanian public acute hospitals accounted for about 2,000 overnight acute separations and 30,000 patient days with specialised mental health care in 2008–09.

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 S9.6: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, public hospitals, states and territories, 2009–10**

<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)	4,100	3,123	2,295	1,093	944	239	205	146	12,145
01	Diseases and disorders of the nervous system	52,575	38,621	26,025	14,003	12,790	3,432	2,205	1,835	151,486
02	Diseases and disorders of the eye	5,832	4,485	2,829	2,007	1,242	157	214	267	17,033
03	Diseases and disorders of the ear, nose, mouth and throat	29,969	25,569	18,177	10,492	9,547	2,051	1,554	2,061	99,420
04	Diseases and disorders of the respiratory system	81,553	56,182	40,149	20,364	21,276	4,606	2,756	4,181	231,067
05	Diseases and disorders of the circulatory system	101,470	69,027	56,043	23,715	26,296	5,480	4,302	3,128	289,461
06	Diseases and disorders of the digestive system	91,059	65,620	45,518	24,657	22,041	5,099	3,751	3,022	260,767
07	Diseases and disorders of the hepatobiliary system and pancreas	25,333	19,377	13,311	6,779	6,066	1,679	1,075	1,090	74,710
08	Diseases and disorders of the musculoskeletal system and connective tissue	81,809	57,598	41,561	24,173	18,341	5,252	4,338	3,083	236,155
09	Diseases and disorders of the skin, subcutaneous tissue and breast	31,994	21,261	19,245	9,591	7,953	1,652	1,348	2,697	95,741
10	Endocrine, nutritional and metabolic diseases and disorders	17,303	13,251	9,780	4,964	4,624	1,152	686	916	52,676
11	Diseases and disorders of the kidney and urinary tract	34,868	25,479	19,666	9,438	8,938	1,490	1,559	1,790	103,228
12	Diseases and disorders of the male reproductive system	6,570	5,605	3,482	2,062	1,969	409	332	283	20,712
13	Diseases and disorders of the female reproductive system	13,499	11,799	8,026	3,874	3,780	1,021	582	572	43,153
14	Pregnancy, childbirth and puerperium	90,327	63,017	53,332	26,547	18,220	5,127	4,819	4,571	265,960
15	Newborns and other neonates	23,271	13,501	10,841	4,744	4,377	1,878	1,298	1,082	60,992
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	8,708	6,780	4,400	2,208	2,520	468	361	329	25,774
17	Neoplastic disorders (haematological and solid neoplasms)	6,689	5,891	3,002	1,805	1,668	575	363	107	20,100
18	Infectious and parasitic diseases	18,410	11,802	8,522	4,449	3,414	800	649	976	49,022
19	Mental diseases and disorders	31,435	24,592	17,431	10,587	10,480	2,343	1,107	858	98,833
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	10,412	3,837	3,855	3,042	1,970	456	533	237	24,342
21	Injuries, poisoning and toxic effects of drugs	32,440	22,070	17,634	9,964	7,699	1,912	1,242	1,742	94,703
22	Burns	1,406	1,117	1,078	584	690	179	59	342	5,455
23	Factors influencing health status and other contacts with health services	13,862	9,623	4,460	1,973	3,144	722	156	379	34,319
ED	Error DRGs <sup>(a)</sup>	1,241	1,127	542	785	371	99	32	79	4,276
<b>Total</b>		<b>816,135</b>	<b>580,354</b>	<b>431,204</b>	<b>223,900</b>	<b>200,360</b>	<b>48,278</b>	<b>35,526</b>	<b>35,773</b>	<b>2,371,530</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.7: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 5.2, private hospitals, states and territories, 2009–10**

<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)	257	358	560	88	165	n.p.	n.p.	n.p.	1,457
01	Diseases and disorders of the nervous system	7,507	8,957	9,463	3,042	2,460	n.p.	n.p.	n.p.	32,439
02	Diseases and disorders of the eye	3,577	2,445	1,672	2,734	1,220	n.p.	n.p.	n.p.	12,047
03	Diseases and disorders of the ear, nose, mouth and throat	19,193	14,178	12,860	7,115	6,429	n.p.	n.p.	n.p.	62,808
04	Diseases and disorders of the respiratory system	17,149	24,189	25,902	6,857	7,157	n.p.	n.p.	n.p.	83,564
05	Diseases and disorders of the circulatory system	25,701	35,838	32,921	9,648	10,595	n.p.	n.p.	n.p.	117,815
06	Diseases and disorders of the digestive system	24,084	29,384	30,840	11,028	9,425	n.p.	n.p.	n.p.	109,630
07	Diseases and disorders of the hepatobiliary system and pancreas	7,680	7,939	7,648	2,918	2,527	n.p.	n.p.	n.p.	30,087
08	Diseases and disorders of the musculoskeletal system and connective tissue	54,216	52,252	45,830	26,433	18,861	n.p.	n.p.	n.p.	207,187
09	Diseases and disorders of the skin, subcutaneous tissue and breast	13,153	14,308	12,731	5,782	4,171	n.p.	n.p.	n.p.	52,638
10	Endocrine, nutritional and metabolic diseases and disorders	7,301	6,708	6,496	4,038	2,697	n.p.	n.p.	n.p.	28,765
11	Diseases and disorders of the kidney and urinary tract	8,982	11,708	10,403	3,872	3,771	n.p.	n.p.	n.p.	40,633
12	Diseases and disorders of the male reproductive system	7,909	7,027	5,335	2,439	1,792	n.p.	n.p.	n.p.	25,768
13	Diseases and disorders of the female reproductive system	12,674	8,628	9,678	4,643	3,986	n.p.	n.p.	n.p.	41,538
14	Pregnancy, childbirth and puerperium	27,827	24,242	21,898	11,785	5,749	n.p.	n.p.	n.p.	97,202
15	Newborns and other neonates	7,707	3,656	2,792	2,369	811	n.p.	n.p.	n.p.	18,002
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	1,216	2,294	2,115	824	773	n.p.	n.p.	n.p.	7,462
17	Neoplastic disorders (haematological and solid neoplasms)	1,711	3,574	3,482	1,411	1,193	n.p.	n.p.	n.p.	11,669
18	Infectious and parasitic diseases	2,016	3,008	3,550	1,117	857	n.p.	n.p.	n.p.	11,050
19	Mental diseases and disorders	8,118	8,522	6,154	3,605	1,460	n.p.	n.p.	n.p.	29,136
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,324	1,821	1,520	604	202	n.p.	n.p.	n.p.	6,581
21	Injuries, poisoning and toxic effects of drugs	3,002	3,843	4,495	1,954	1,161	n.p.	n.p.	n.p.	15,124
22	Burns	35	71	51	15	15	n.p.	n.p.	n.p.	194
23	Factors influencing health status and other contacts with health services	4,124	3,280	2,164	1,068	1,196	n.p.	n.p.	n.p.	12,904
ED	Error DRGs <sup>(a)</sup>	561	2,160	834	390	431	n.p.	n.p.	n.p.	4,420
<b>Total</b>		<b>268,024</b>	<b>280,390</b>	<b>261,394</b>	<b>115,779</b>	<b>89,104</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,060,120</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 S9.8: Overnight acute separations, for the top 20 AR-DRGs version 5.2, public hospitals, states and territories, 2009–10**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
O60B	Vaginal delivery W/O catastrophic or severe CC	34,718	26,587	19,496	9,643	6,595	1,739	1,858	1,155	101,791
P67D	Neonate, admwt >2499 g W/O significant or procedure W/O problem	19,356	12,014	11,662	4,251	5,475	643	413	643	54,457
F74Z	Chest pain	17,289	10,149	8,341	4,435	4,217	763	488	427	46,109
G67B	Oesophagitis, gastroent & misc digestive systm disorders age>9 W/O catastrophic or severe CC	15,299	10,951	8,834	4,010	3,072	900	764	563	44,393
O01C	Caesarean delivery W/O catastrophic or severe CC	13,029	7,935	8,727	4,035	2,861	632	533	1,661	39,413
J64B	Cellulitis (age >59 W/O catastrophic or severe CC) or age <60	11,162	5,977	6,809	3,463	2,232	707	510	869	31,729
O66A	Antenatal and other obstetric admission	9,261	6,823	4,506	2,392	2,220	414	314	255	26,185
G66B	Abdominal pain or mesenteric adenitis W/O CC	8,752	5,093	4,010	2,669	2,165	588	330	553	24,160
E62C	Respiratory infections/inflammations W/O CC	8,422	4,345	6,114	2,073	1,510	635	453	436	23,988
O60C	Vaginal delivery single uncomplicated W/O other condition	9,031	4,605	4,643	2,071	2,122	676	223	471	23,842
E65B	Chronic obstructive airways disease W/O catastrophic or severe CC	8,633	5,494	3,435	1,696	2,330	324	203	238	22,353
E69C	Bronchitis and asthma age <50 W/O CC	8,896	4,594	4,006	1,568	1,861	453	282	189	21,849
F71B	Non-major arrhythmia and conduction disorders W/O catastrophic or severe CC	11,808	3,195	2,921	1,003	1,023	931	293	249	21,423
D63B	Otitis media and URI W/O CC	7,465	3,737	4,470	2,372	1,904	432	258	385	21,023
F62B	Heart failure and shock W/O catastrophic CC	6,968	4,915	3,760	2,418	1,335	405	490	196	20,487
G07B	Appendectomy W/O catastrophic or severe CC	7,453	4,731	3,467	1,986	1,804	508	275	250	20,474
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O catastrophic or severe CC	6,589	5,435	3,803	1,894	1,707	475	279	175	20,357
U67Z	Personality disorders and acute reactions	6,643	3,831	3,643	2,951	2,095	552	204	195	20,114
E62B	Respiratory infections/inflammations W severe or moderate CC	6,558	4,794	3,070	1,818	1,634	438	268	616	19,196
E65A	Chronic obstructive airways disease W catastrophic or severe CC	6,829	4,654	3,570	1,274	1,643	399	197	360	18,926
Other		591,974	440,495	311,917	165,878	150,555	35,664	26,891	25,887	1,749,261
<b>Total</b>		<b>816,135</b>	<b>580,354</b>	<b>431,204</b>	<b>223,900</b>	<b>200,360</b>	<b>48,278</b>	<b>35,526</b>	<b>35,773</b>	<b>2,371,530</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.9: Overnight acute separations, for the top 20 AR-DRGs version 5.2, private hospitals, states and territories, 2009–10**

AR-DRG		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
E63Z	Sleep apnoea	10,325	10,904	11,169	2,647	3,031	n.p.	n.p.	n.p.	39,072
O60B	Vaginal delivery W/O catastrophic or severe CC	11,404	10,117	7,405	4,355	2,405	n.p.	n.p.	n.p.	37,778
O01C	Caesarean delivery W/O catastrophic or severe CC	8,299	7,151	7,337	4,008	1,717	n.p.	n.p.	n.p.	30,014
I16Z	Other shoulder procedures	7,371	7,533	6,266	4,820	2,593	n.p.	n.p.	n.p.	29,860
I04Z	Knee replacement and reattachment	7,846	5,559	5,704	2,535	2,464	n.p.	n.p.	n.p.	25,282
D11Z	Tonsillectomy and/or adenoidectomy	6,630	3,831	3,920	1,978	1,809	n.p.	n.p.	n.p.	19,026
G09Z	Inguinal and femoral hernia procedures age>0	5,940	4,421	3,880	1,938	1,541	n.p.	n.p.	n.p.	18,723
H08B	Laparoscopic cholecystectomy W/O closed CDE W/O catastrophic or severe CC	5,174	3,985	4,038	1,784	1,294	n.p.	n.p.	n.p.	17,098
F42B	Circulatory disorders W/O AMI W invasive cardiac inves proc W/O complex Dx/Pr	3,779	6,180	4,101	924	971	n.p.	n.p.	n.p.	16,261
I03C	Hip replacement w/o catastrophic or severe CC	4,163	3,761	2,531	1,473	1,479	n.p.	n.p.	n.p.	14,195
N04Z	Hysterectomy for non-malignancy	4,319	2,689	3,432	1,699	1,134	n.p.	n.p.	n.p.	14,056
U63B	Major affective disorders age <70 W/O catastrophic or severe CC	3,682	4,004	2,705	1,801	695	n.p.	n.p.	n.p.	13,458
I10B	Other back and neck procedures W/O catastrophic or severe CC	4,059	2,632	2,631	1,650	999	n.p.	n.p.	n.p.	12,381
M02B	Transurethral prostatectomy W/O catastrophic or severe CC	3,681	3,345	2,312	983	891	n.p.	n.p.	n.p.	11,721
K04Z	Major procedures for obesity	2,940	2,448	1,799	2,174	1,071	n.p.	n.p.	n.p.	11,188
I20Z	Other foot procedures	3,092	3,278	1,628	1,581	929	n.p.	n.p.	n.p.	11,120
I18Z	Other knee procedures	2,112	2,866	2,233	1,688	1,578	n.p.	n.p.	n.p.	11,013
D10Z	Nasal procedures	3,753	2,770	1,478	1,376	904	n.p.	n.p.	n.p.	10,871
D06Z	Sinus, mastoid and complex middle ear procedures	3,270	2,211	1,952	1,091	1,347	n.p.	n.p.	n.p.	10,510
F15Z	Percutaneous coronary intervention W/O AMI W stent implantation	2,766	3,248	2,300	1,007	715	n.p.	n.p.	n.p.	10,347
Other		139,025	167,633	161,762	63,299	51,719	n.p.	n.p.	n.p.	696,146
<b>Total</b>		<b>268,024</b>	<b>280,390</b>	<b>261,394</b>	<b>115,779</b>	<b>89,104</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,060,120</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 S9.10: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public hospitals, states and territories, 2009–10**

<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	15,212	12,470	7,406	4,794	3,304	1,053	898	594	45,731
110–129	Procedures on endocrine system	2,450	1,868	1,164	576	451	141	106	44	6,800
160–256	Procedures on eye and adnexa	3,981	3,609	1,940	1,498	887	97	135	141	12,288
300–333	Procedures on ear and mastoid process	2,290	2,398	1,795	1,177	884	172	137	443	9,296
370–422	Procedures on nose, mouth and pharynx	10,216	13,354	6,767	4,493	4,164	833	695	403	40,925
450–490	Dental services	1,352	1,216	1,331	644	529	121	187	283	5,663
520–570	Procedures on respiratory system	26,891	23,290	14,769	7,480	6,484	1,652	1,599	1,059	83,224
600–777	Procedures on cardiovascular system	47,065	35,413	26,449	12,497	11,966	2,793	3,606	1,922	141,711
800–817	Procedures on blood and blood-forming organs	7,198	5,634	3,913	2,010	1,621	433	453	159	21,421
850–1011	Procedures on digestive system	66,986	54,393	36,082	19,553	17,289	4,501	3,349	1,989	204,142
1040–1129	Procedures on urinary system	23,222	19,752	14,478	8,194	6,926	1,231	1,290	2,142	77,235
1160–1203	Procedures on male genital organs	5,504	5,378	2,909	1,637	1,770	375	296	221	18,090
1240–1299	Gynaecological procedures	14,849	12,643	8,922	4,622	3,960	1,162	688	609	47,455
1330–1347	Obstetric procedures	61,159	43,982	35,390	19,986	12,679	3,213	3,328	2,297	182,034
1360–1579	Procedures on musculoskeletal system	58,133	43,764	32,247	18,987	13,499	4,445	3,682	2,820	177,577
1600–1718	Dermatological and plastic procedures	27,899	25,618	19,431	11,543	8,722	1,811	1,514	3,108	99,646
1740–1759	Procedures on breast	3,260	3,013	2,303	1,246	1,179	191	195	97	11,484
1786–1799	Radiation oncology procedures	2,685	2,095	1,610	582	593	157	179	11	7,912
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	467,407	358,978	244,035	134,743	119,608	29,828	23,148	18,535	1,396,282
1940–2016	Imaging services	173,527	100,409	63,793	32,139	30,940	8,949	7,885	5,059	422,701
	<i>Procedures reported<sup>(b)</sup></i>	1,021,286	769,277	526,734	288,401	247,455	63,158	53,370	41,936	3,011,617
	Separations with no procedure reported	248,720	157,705	141,367	64,119	62,871	14,096	7,486	12,855	709,219
<b>Total<sup>(c)</sup></b>		<b>816,135</b>	<b>580,354</b>	<b>431,204</b>	<b>223,900</b>	<b>200,360</b>	<b>48,278</b>	<b>35,526</b>	<b>35,773</b>	<b>2,371,530</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.11: Overnight acute separations<sup>(a)</sup>, by procedure in ACHI chapters, private hospitals, states and territories, 2009–10**

Procedure chapters		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	12,666	10,615	9,886	6,128	2,880	n.p.	n.p.	n.p.	43,791
110–129	Procedures on endocrine system	2,537	1,579	1,533	856	533	n.p.	n.p.	n.p.	7,301
160–256	Procedures on eye and adnexa	3,221	2,158	1,442	2,539	1,131	n.p.	n.p.	n.p.	10,843
300–333	Procedures on ear and mastoid process	2,757	1,424	1,686	1,063	856	n.p.	n.p.	n.p.	8,130
370–422	Procedures on nose, mouth and pharynx	15,930	10,705	9,470	6,081	4,963	n.p.	n.p.	n.p.	49,648
450–490	Dental services	1,131	717	667	374	385	n.p.	n.p.	n.p.	3,435
520–570	Procedures on respiratory system	5,019	6,803	9,661	1,691	2,709	n.p.	n.p.	n.p.	26,414
600–777	Procedures on cardiovascular system	22,909	29,214	23,860	8,056	7,191	n.p.	n.p.	n.p.	93,648
800–817	Procedures on blood and blood-forming organs	4,456	3,630	4,325	1,331	1,478	n.p.	n.p.	n.p.	15,945
850–1011	Procedures on digestive system	36,162	36,325	37,393	15,687	12,748	n.p.	n.p.	n.p.	145,511
1040–1129	Procedures on urinary system	13,229	12,385	12,525	5,070	4,799	n.p.	n.p.	n.p.	50,436
1160–1203	Procedures on male genital organs	8,811	7,417	5,351	2,626	1,928	n.p.	n.p.	n.p.	27,583
1240–1299	Gynaecological procedures	12,808	8,586	10,033	4,510	4,026	n.p.	n.p.	n.p.	42,054
1330–1347	Obstetric procedures	23,571	20,658	18,145	10,283	5,038	n.p.	n.p.	n.p.	82,436
1360–1579	Procedures on musculoskeletal system	47,670	46,114	39,179	23,298	16,866	n.p.	n.p.	n.p.	181,821
1600–1718	Dermatological and plastic procedures	13,296	13,456	10,850	6,438	4,104	n.p.	n.p.	n.p.	50,415
1740–1759	Procedures on breast	5,794	4,569	4,334	2,842	1,919	n.p.	n.p.	n.p.	20,685
1786–1799	Radiation oncology procedures	789	815	688	103	262	n.p.	n.p.	n.p.	2,710
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	222,626	221,184	205,117	94,374	72,892	n.p.	n.p.	n.p.	853,851
1940–2016	Imaging services	22,482	34,028	32,013	10,265	10,453	n.p.	n.p.	n.p.	113,409
	<i>Procedures reported<sup>(b)</sup></i>	<i>477,864</i>	<i>472,382</i>	<i>438,158</i>	<i>203,615</i>	<i>157,161</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,830,066</i>
	Separations with no procedure reported	24,570	33,165	36,354	10,052	10,580	n.p.	n.p.	n.p.	121,902
<b>Total<sup>(c)</sup></b>		<b>268,024</b>	<b>280,390</b>	<b>261,394</b>	<b>115,779</b>	<b>89,104</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,060,120</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 S9.12: Procedure statistics<sup>(a)</sup> for the top 20 ACHI procedure blocks for overnight acute separations<sup>(b)</sup>, public hospitals, states and territories, 2009–10**

Procedure block		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1916	Generalised allied health interventions	302,837	234,240	157,287	87,915	79,674	19,284	14,889	11,962	908,088
1910	Cerebral anaesthesia	204,413	165,742	114,429	62,364	53,839	14,170	12,215	8,500	635,672
1952	Computerised tomography of brain	66,787	38,743	21,952	11,282	10,743	3,275	2,664	1,723	157,169
1893	Transfusion of blood and gamma globulin	44,989	36,566	21,161	11,605	10,810	2,678	2,016	1,094	130,919
1909	Conduction anaesthesia	35,857	33,982	19,578	12,506	8,374	2,467	1,449	1,807	116,020
1963	Computerised tomography of abdomen and pelvis	36,681	21,206	11,433	4,628	5,190	1,837	1,462	1,090	83,527
1920	Administration of pharmacotherapy	26,776	21,227	11,656	5,828	4,973	1,438	1,289	847	74,034
1344	Postpartum suture	24,202	15,718	11,759	5,846	4,328	975	1,526	781	65,135
1340	Caesarean section	19,803	14,493	11,352	5,606	4,185	1,125	1,026	820	58,410
1966	Other computerised tomography	20,720	12,661	9,592	4,274	4,280	1,013	1,027	483	54,050
1912	Postprocedural analgesia	18,685	10,738	6,871	6,024	5,445	1,583	288	154	49,788
1334	Medical or surgical induction of labour	16,498	11,979	9,108	5,557	4,270	904	796	608	49,720
2015	Magnetic resonance imaging	19,408	12,188	7,806	3,340	3,761	1,213	837	496	49,049
738	Venous catheterisation	15,768	10,842	10,753	3,996	3,615	691	1,376	1,013	48,054
1333	Analgesia and anaesthesia during labour and delivery procedure	15,177	10,475	9,067	6,747	4,321	844	915	360	47,906
1335	Medical or surgical augmentation of labour	15,491	10,641	10,164	4,631	3,209	843	914	600	46,493
668	Coronary angiography	14,298	10,052	6,938	3,832	3,852	1,081	972	398	41,423
569	Continuous ventilatory support	10,317	8,548	5,888	2,899	2,608	656	637	472	32,025
1959	Computerised tomography of spine	12,294	8,587	3,999	2,200	1,559	683	522	480	30,324
570	Continuous ventilatory support	9,600	9,282	4,175	2,717	1,870	493	493	328	28,958
	Other	567,026	443,479	302,356	170,365	140,392	36,215	30,176	22,171	1,712,180
	Separations with no procedure reported	248,720	157,705	141,367	64,119	62,871	14,096	7,486	12,855	709,219
<b>Total<sup>(c)</sup></b>		<b>1,497,627</b>	<b>1,141,389</b>	<b>767,324</b>	<b>424,162</b>	<b>361,298</b>	<b>93,468</b>	<b>77,489</b>	<b>56,187</b>	<b>4,418,944</b>

Note: See boxes 7.1, 7.2, 7.3 and 9.1 for notes on data limitations and methods.

**Table S9.13: Procedure statistics<sup>(a)</sup> for the top 20 ACHI procedure blocks for overnight acute separations<sup>(b)</sup>, private hospitals, states and territories, 2009–10**

Procedure block		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1910	Cerebral anaesthesia	166,372	151,198	136,102	70,189	52,923	n.p.	n.p.	n.p.	603,732
1916	Generalised allied health interventions	88,002	91,518	90,225	31,429	31,833	n.p.	n.p.	n.p.	345,604
1909	Conduction anaesthesia	35,082	35,451	22,256	16,108	10,370	n.p.	n.p.	n.p.	123,978
1912	Postprocedural analgesia	23,389	10,956	12,788	5,472	5,139	n.p.	n.p.	n.p.	58,071
1893	Transfusion of blood and gamma globulin	13,016	17,031	14,616	4,971	5,950	n.p.	n.p.	n.p.	57,487
1828	Sleep study	11,304	11,750	11,483	2,963	3,635	n.p.	n.p.	n.p.	42,270
668	Coronary angiography	8,803	13,164	9,831	2,418	2,369	n.p.	n.p.	n.p.	37,481
1340	Caesarean section	9,821	8,619	8,780	4,710	2,070	n.p.	n.p.	n.p.	35,787
1333	Analgesia and anaesthesia during labour and delivery procedure	9,296	6,559	5,357	4,725	2,235	n.p.	n.p.	n.p.	29,196
1920	Administration of pharmacotherapy	3,868	10,503	7,761	3,544	1,989	n.p.	n.p.	n.p.	28,340
607	Examination procedures on ventricle	5,283	11,002	7,700	1,873	1,658	n.p.	n.p.	n.p.	28,048
412	Tonsillectomy or adenoidectomy	8,347	4,939	5,104	3,226	2,236	n.p.	n.p.	n.p.	25,054
1344	Postpartum suture	7,702	6,176	4,851	2,788	1,625	n.p.	n.p.	n.p.	24,425
1334	Medical or surgical induction of labour	6,701	5,637	4,817	3,276	1,791	n.p.	n.p.	n.p.	23,657
1518	Arthroplasty of knee	7,664	4,867	5,510	2,442	1,954	n.p.	n.p.	n.p.	23,604
986	Division of abdominal adhesions	5,818	5,334	5,366	2,125	1,756	n.p.	n.p.	n.p.	21,318
965	Cholecystectomy	6,152	4,887	4,975	2,156	1,605	n.p.	n.p.	n.p.	20,735
990	Repair of inguinal hernia	6,601	4,757	4,417	2,125	1,605	n.p.	n.p.	n.p.	20,544
1952	Computerised tomography of brain	3,321	6,162	6,120	1,495	1,748	n.p.	n.p.	n.p.	19,360
1489	Arthroplasty of hip	5,023	4,818	3,149	1,760	1,863	n.p.	n.p.	n.p.	17,596
	Other	346,691	324,259	295,601	149,513	112,853	n.p.	n.p.	n.p.	1,283,042
	Separations with no procedure reported	24,570	33,165	36,354	10,245	10,580	n.p.	n.p.	n.p.	120,909
<b>Total<sup>(c)</sup></b>		<b>778,256</b>	<b>739,587</b>	<b>666,809</b>	<b>319,308</b>	<b>249,207</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,869,329</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 Elective surgery

This chapter presents information related to access to elective surgery.

The chapter first presents an overview of elective surgery in public and private hospitals, based on information about close to 1.9 million elective surgery separations, sourced from the National Hospital Morbidity Database (NHMD). See Box 10.1 for more information about the definition of elective surgery as used in the NHMD.

The chapter then presents information on 'elective surgery' as defined in the *National health data dictionary version 14* (HDSC 2008), based on :

- data for over 609,000 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 about 661,000 records (Table 10.1 and figures 10.8 to 10.15 and 10.19). 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 this information to be reported in *Australian hospital statistics 2009–10: emergency department care and elective surgery waiting times* (AHS: EDES, AIHW 2010c) in November 2010. 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.

The AHS: EDES online report will include updates for the tables included in the report presenting coverage estimates based on data from the Admitted patient care NMDS and the Public hospital establishments NMDS , as well as updates due to data resupplies.

## What data are reported?

### Box 10.1: How is elective surgery defined in this chapter?

The use of the term **Elective surgery** using the 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).

For the NHMD elective surgery was defined as separations:

- with an urgency of admission of *Elective* (admission could be delayed by at least 24 hours) and
- with a 'surgical procedure' reported, based on the procedures used to define 'surgical' DRGs in Australian Refined Diagnosis Related Groups (AR-DRG), version 5.2 (DoHA 2006). Separations for cosmetic surgery or with childbirth-related AR-DRGs were excluded.

Elective surgery separations were also categorised as *Public elective surgery* or *Other elective surgery* as follows:

(continued)

### **Box 10.1 (continued)**

- *Public elective surgery* refers to separations for elective surgery in public hospitals and includes elective surgery separations for *Public patients* in private hospitals.
- *Other elective surgery* refers to separations for elective surgery for patients who were not *Public patients*, in private hospitals.

The procedures defined as surgical differ between those used to define the scope of the NESWTDC and those used to define elective surgery 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).

## **Admitted patient care data for elective surgery**

Information on admitted patient care for elective 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.

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). Rates are calculated for elective surgery for public and private hospitals and for various demographic groups.

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).

## **Waiting times data for elective surgery**

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 waiting times data presented in this chapter 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.

## **Linked admitted patient care and elective surgery waiting times data**

For 2009–10, 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 linkage was not possible for Tasmania.

The linked elective surgery and admitted patient data allowed analysis of waiting times for public elective surgery for Indigenous and non-Indigenous Australians, by remoteness area of usual residence of the patient, and by socioeconomic status (SES) groups. Included are estimates of the separation rates for indicator procedures (see Box 10.2 and *Appendix 1*) and for neoplasm-related diagnoses.

### An example: urology surgery

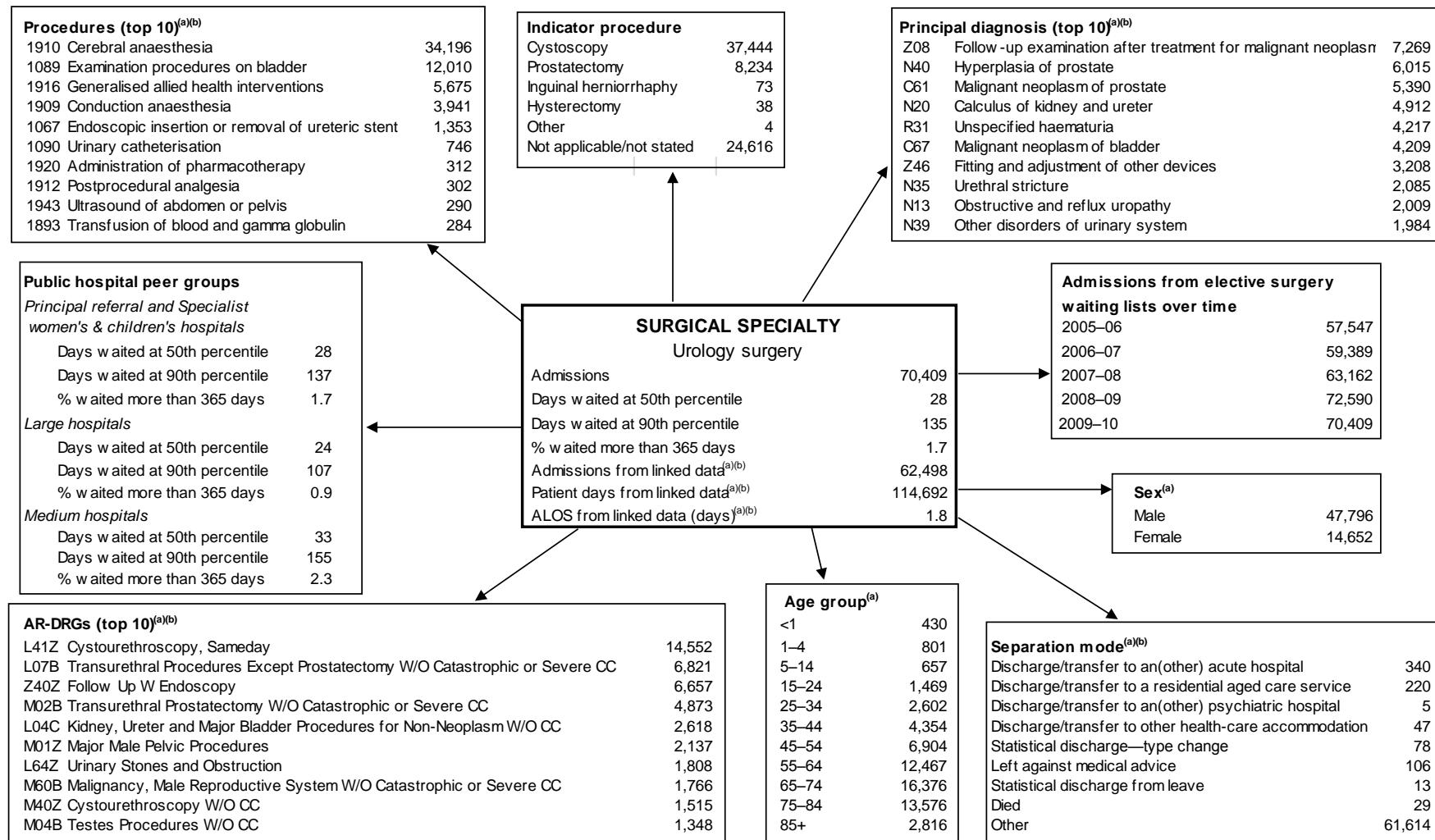
Figure 10.1 presents data on patients admitted to hospital from elective surgery waiting lists for surgery performed by a doctor whose surgical specialty was *Urology surgery*. The information presented by indicator procedure and public hospital peer groups is sourced from the NESWTDC. The other information was available for records where the data for elective surgery waiting times could be linked to the NHMD (89% of records with a surgical specialty of *Urology surgery*).

In 2009–10:

- there were 70,000 admissions from elective surgery waiting lists for surgery performed by a doctor whose surgical specialty was *Urology surgery*
- the median waiting time for these patients was 28 days
- 1.7% waited more than 365 days for admission
- the most common indicator procedure was cystoscopy.

The linked NESWTDC and NHMD records show that for the 89% of records linked:

- these separations accounted for almost 115,000 patient days
- the average length of stay was 1.8 days
- the most common procedure (other than *Cerebral anaesthesia*) was *Examination procedures on bladder* (Block 1089)
- the most common principal diagnosis reported was *Follow up examination after treatment for malignant neoplasm* (Z08), followed by *Hyperplasia of prostate* (N40)
- the most common AR-DRG reported was *Cystourethroscopy, sameday* (L41Z)
- the most common age group was 65–74 years and there were more separations for males than females
- 99% of these episodes had a separation mode of *Other*, suggesting that these patients went home after separation from hospital
- Admissions for Urology had increased by 22% between 2005–06 and 2009–10.



(a) These data are supplied to the National Hospital Morbidity Database.

(b) 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.

Abbreviations: ALOS—average length of stay; Cat—catastrophic; CC—complications and comorbidities; OR—operating room; W/O—without.

Figure 10.1: Interrelationships of a specialty of surgeon (*Urology surgery*) with other data elements, elective surgery, public hospitals, 2009–10

## **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*.

### **Limitations of the elective surgery waiting times data**

#### *Coverage*

- The data collection covered most public hospitals that undertake elective surgery (see *Appendix 2*). 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 2009–10, about 91% of public elective surgery admissions were performed by hospitals that also reported to the NESWTDC. This proportion varied by state and territory and also by hospital peer group. It ranged from 100% for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 69% in South Australia (see Table 3.3 of *Australian hospital statistics 2009–10: emergency department care and elective surgery waiting times (AHS: EDES)*, AIHW 2010c).
- 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 1*)
- From 2009–10, the data for the Albury Base Hospital 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 now included in statistics for Victoria whereas they were formerly reported by and included in statistics for New South Wales.
- In 2009–10 for patients who were admitted after being transferred from another hospital’s waiting list, New South Wales, Queensland, 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. Queensland has indicated that it is uncommon for patients to be transferred from a waiting list managed by one public hospital to that managed by another.

*(continued)*

**Box 10.2 (continued)****Limitations of the linked admitted patient care and elective surgery waiting times data**

For Tasmania, the linkage of admitted patient data with elective surgery waiting times data was not possible due to the implementation of a new information system in public hospitals.

Coverage of the linked data by remoteness area ranged from 62% in *Very remote* areas to 96% in *Major cities*. Coverage by socioeconomic status (SES) group ranged from 77% for the most disadvantaged group (1-Lowest) to 96% for the least disadvantaged group (5-Highest). These variations in coverage should be considered when interpreting the age-standardised rates presented below.

**Box 10.3: What methods were used?****Analyses of the NHMD and linked NHMD and NESWTDC data**

- Elective surgery separations, including *Public* and *Other elective surgery*, were defined as stated in Box 10.1.
- Separations for which the care type was reported as *Newborns* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.
- Separation rates are age standardised to the estimated resident population 30 June 2001 (see *Appendix 1*).
- Separation rate ratios are calculated as outlined in *Appendix 1*.

**Analyses of NESWTDC**

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 waiting greater than 365 days, and the number of patients admitted is presented by public hospital peer group. Information is also included by the specialty of the surgeon who was to perform the elective surgery and by indicator procedure.

## Admitted patient care data for elective surgery

### How has elective surgery activity changed over time?

Between 2005–06 and 2009–10, total elective surgery separations increased from 1.6 million to nearly 1.9 million (Table 10.1). Over that period, there was a 3.6% average annual increase in overall elective surgery separations. While the number of separations per 1,000 population for *Public elective surgery* was relatively stable between 2005–06 and 2009–10, the rate for *Other elective surgery* rose by an average of 2.9% per year.

**Table 10.1: Separations for public and other elective surgery, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public Elective surgery</b>							
Separations	622,686	622,458	627,924	649,837	660,552	1.5	1.6
Separations per 1000 population	30.3	29.8	29.6	30.0	29.8	-0.4	-0.7
<b>Other Elective surgery</b>							
Separations	1,002,432	1,046,268	1,112,104	1,140,726	1,214,346	4.9	6.5
Separations per 1000 population	48.8	50.1	52.4	52.7	54.8	2.9	4.0
<b>All Elective surgery</b>							
<b>Separations</b>	<b>1,625,118</b>	<b>1,668,726</b>	<b>1,740,028</b>	<b>1,790,563</b>	<b>1,874,898</b>	<b>3.6</b>	<b>4.7</b>
<b>Separations per 1000 population</b>	<b>79.1</b>	<b>79.9</b>	<b>81.9</b>	<b>82.7</b>	<b>84.6</b>	<b>1.7</b>	<b>2.3</b>

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

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Abbreviation: Ave—average.

Source: National Hospital Morbidity Database.

## How much activity was there in 2009–10?

In 2009–10, the separation rate for *Public elective surgery* varied from 25.5 per 1,000 population in the Northern Territory to 39.0 per 1,000 in South Australia (Table 10.2). The separation rate for *Other elective surgery* ranged from 24.3 per 1,000 in the Northern Territory to 60.2 per 1,000 in South Australia.

**Table 10.2: Separation statistics for public and other elective surgery, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public Elective surgery</b>									
Separations	186,305	200,697	115,797	64,467	63,656	14,323	9,498	5,809	660,552
Separations per 1000 population	25.9	36.5	25.9	28.4	39.0	28.3	26.8	25.5	29.8
<b>Other Elective surgery</b>									
Separations	373,595	299,390	260,507	129,580	98,422	30,035	17,294	5,523	1,214,346
Separations per 1000 population	51.9	54.5	58.2	57.1	60.2	59.4	48.7	24.3	54.8
<b>All Elective surgery</b>									
<b>Separations</b>	<b>559,900</b>	<b>500,087</b>	<b>376,304</b>	<b>194,047</b>	<b>162,078</b>	<b>44,358</b>	<b>26,792</b>	<b>11,332</b>	<b>1,874,898</b>
<b>Separations per 1000 population</b>	<b>77.9</b>	<b>91.0</b>	<b>84.1</b>	<b>85.5</b>	<b>99.2</b>	<b>87.8</b>	<b>75.5</b>	<b>49.8</b>	<b>84.6</b>

(a) Separation rates were age-standardised to the estimated resident population as at 30 June 2001, as detailed in Appendix 1.

Note: See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

Source: National Hospital Morbidity Database.

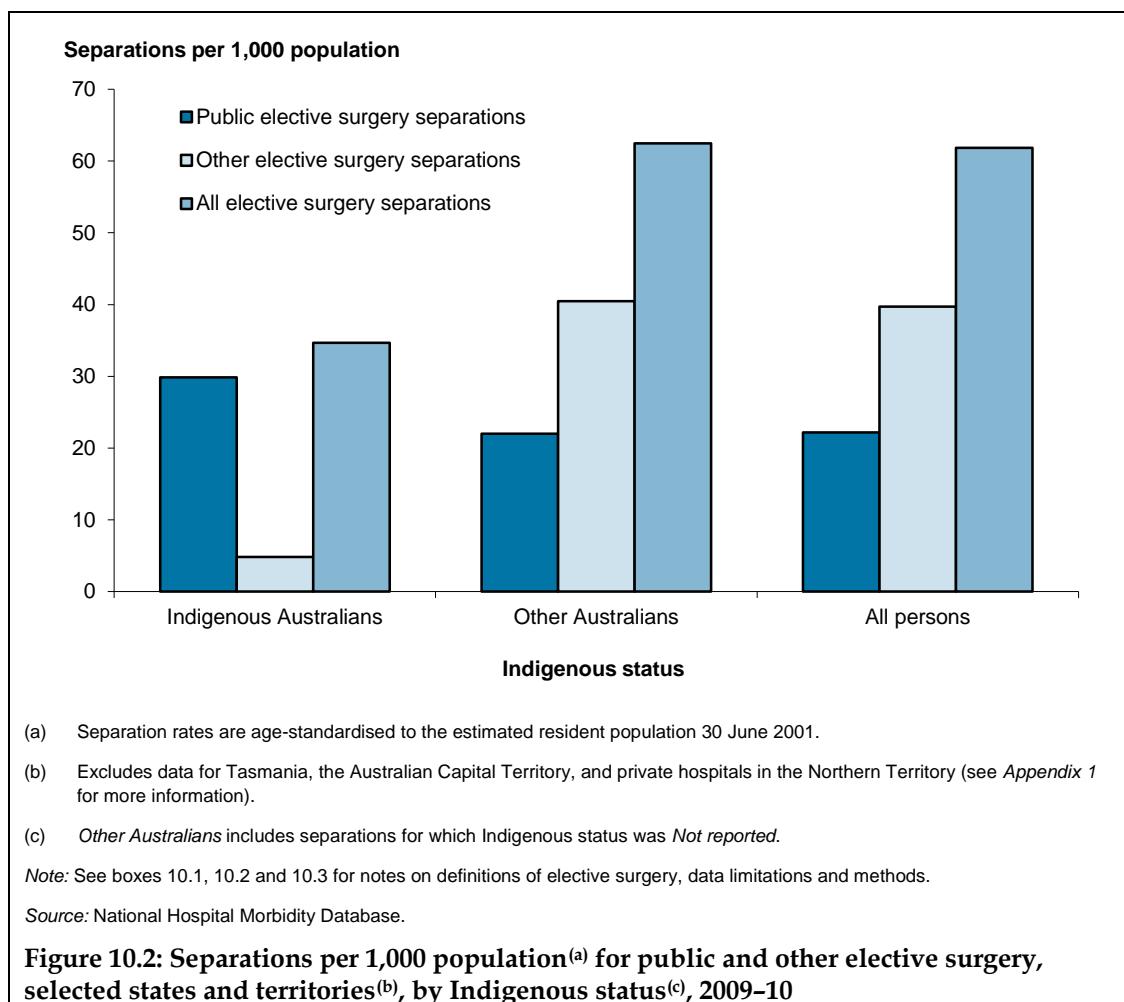
## Who used these services?

Separation rates for elective surgery are one measure of access to elective surgery and can provide indications of whether access is equitable for different population sub-groups. In this section, the rates are presented by the remoteness area of usual residence, by socioeconomic status (SES) group and Indigenous status.

### Aboriginal and Torres Strait Islander people

Excluding data for Tasmania, the Australian Capital Territory, and private hospitals in the Northern Territory, there were nearly 18,000 separations for elective surgery in 2009–10 for *Indigenous Australians*. Over 86% of these separations were for *Public elective surgery*. The overall rate of separations for elective surgery for *Indigenous Australians* was 35 per 1,000 population, about 55% of the rate for *Other Australians* (63 per 1,000).

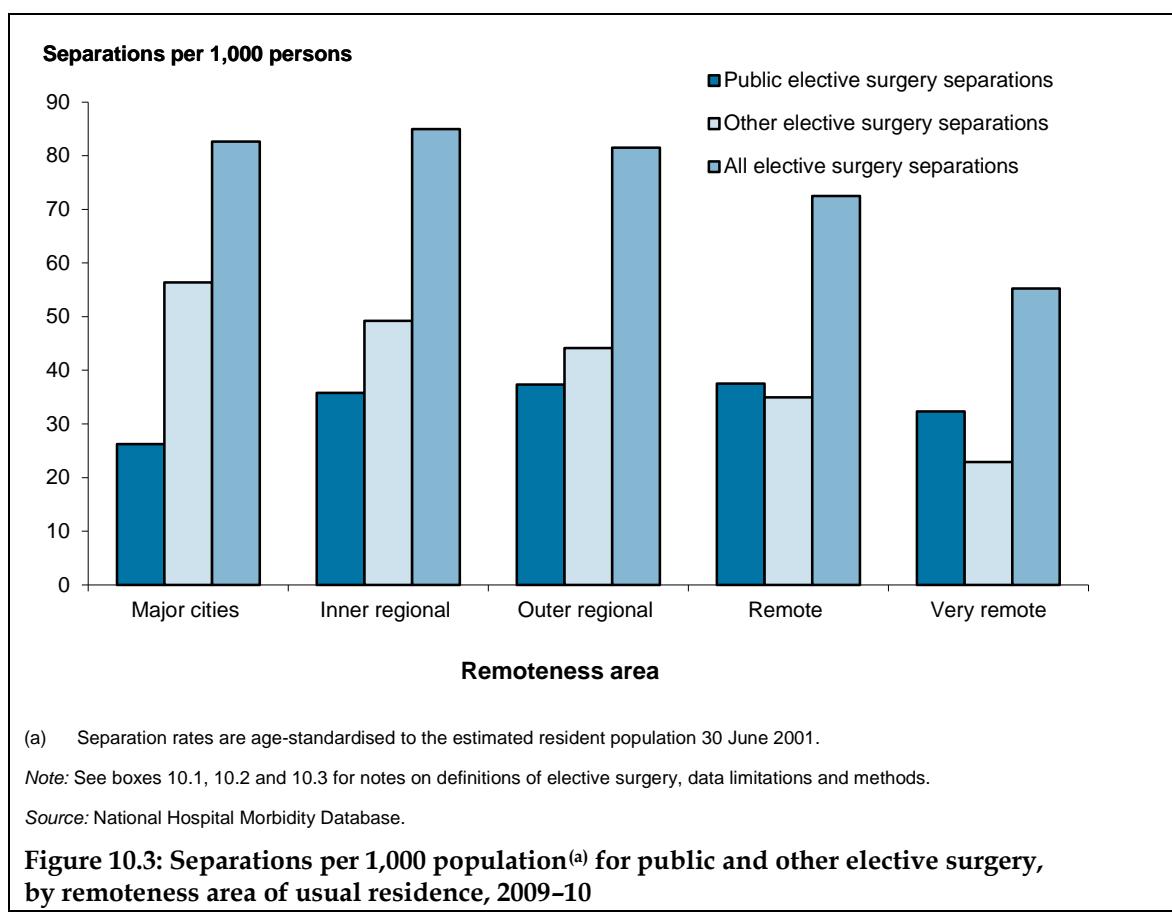
The separation rate for *Public elective surgery* for *Indigenous Australians* (30 per 1,000 population) was about 35% higher than the rate for *Other Australians* (22 per 1,000). The separation rate for *Other elective surgery* for *Other Australians* (41 per 1,000) was markedly higher than the rate for *Indigenous Australians* (5 per 1,000) (Figure 10.2).



## Remoteness area of usual residence

The overall separation rate for elective surgery was highest for those living in *Inner regional* areas (85 per 1,000 population) and decreased with increased remoteness to 55 per 1,000 in *Very remote* areas (Figure 10.3).

The rate of *Public elective surgery* separations was lowest for those living in *Major cities* (26 per 1,000) and highest for those living in *Remote areas* (38 per 1,000). The separation rate for *Other elective surgery* was highest for those living in *Major cities* (56 per 1,000 population) and decreased with increasing remoteness to 23 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.



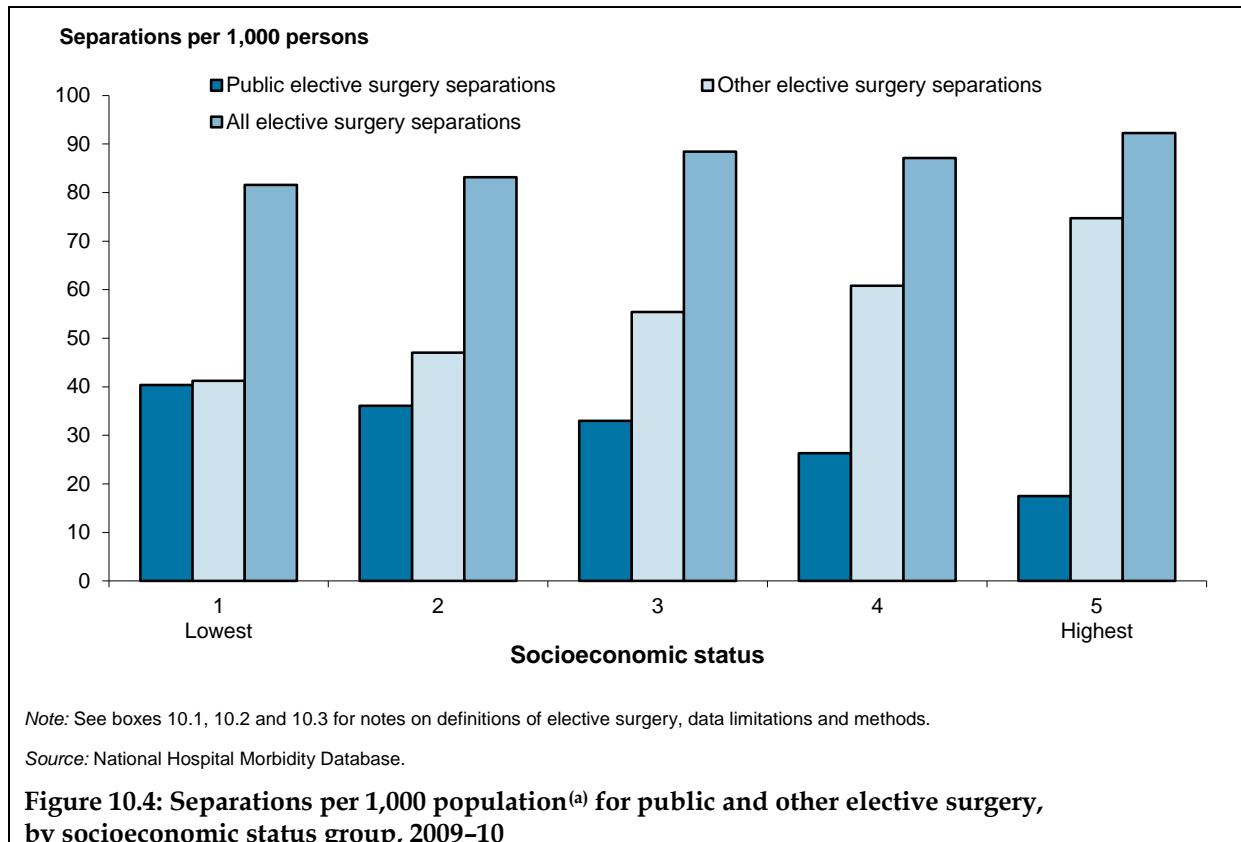
## Socioeconomic status

Figure 10.4 presents separation rates per 1,000 population for elective surgery by SES group (see Appendix 1). There was some variation in both public and other elective surgery separations rates.

In 2009–10, the elective surgery separation rate was highest for people living in areas classified as being in the highest SES group (92 per 1,000 population) and tended to decrease with increasing disadvantage to 82 per 1,000 population for people living in areas classified in the lowest SES group.

The separation rate for *Public elective surgery* separations was lowest for people living in areas classified as being in the highest SES group (18 per 1,000 population) and highest for those classified to the lowest SES group (40 per 1,000). The separation rate for *Other elective surgery*

was highest for the highest SES group (75 per 1,000) and decreased to 41 per 1,000 for the lowest SES group.



## Waiting times data for elective surgery

This section includes information sourced from the NESWTDC and the linked data sourced from the NHMD. The linked data does not include data for Tasmania.

### How has activity changed over time?

Between 2005–06 and 2009–10, the number of admissions for elective surgery from waiting lists increased by an annual average of 2.0% (Table 10.3). However, there was also a rise in the proportion of public elective surgery reported in the NESWTDC over that period, from 88% to 91%, 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 69% to 73% of admissions from elective surgery waiting lists.

The period from 2007–08 to 2009–10 includes the period in which the Elective Surgery Waiting List Reduction Plan was implemented by the Australian Government and the states and territories.

**Table 10.3: Estimated coverage statistics for patients admitted from waiting lists for elective surgery, by public hospital peer group, states and territories, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Principal referral and Specialist women's and children's hospitals</b>							
Number of reporting hospitals	78	81	82	84	85	1.8	1.2
Estimated proportion of surgical separations (%)	100	100	100	100	100	0.0	0.0
Number of admissions	386,203	394,831	401,518	431,675	445,239	3.6	3.1
<b>Large hospitals</b>							
Number of reporting hospitals	34	30	35	32	36	1.4	12.5
Estimated proportion of surgical separations (%)	83	81	84	87	87	1.1	-0.5
Number of admissions	97,816	88,433	96,468	91,766	98,015	0.1	6.8
<b>Medium hospitals</b>							
Number of reporting hospitals	51	50	51	51	46	-2.5	-9.8
Estimated proportion of surgical separations (%)	64	63	62	62	58	-2.0	-6.3
Number of admissions	63,641	63,658	59,083	62,815	56,936	-2.7	-9.4
<b>Total</b>							
<b>Number of reporting hospitals</b>	<b>192</b>	<b>191</b>	<b>192</b>	<b>193</b>	<b>192</b>	<b>0.0</b>	<b>-0.5</b>
<b>Estimated proportion of surgical separations (%)</b>	<b>89</b>	<b>88</b>	<b>89</b>	<b>90</b>	<b>91</b>	<b>0.5</b>	<b>1.4</b>
<b>Number of admissions</b>	<b>556,951</b>	<b>556,770</b>	<b>565,501</b>	<b>595,009</b>	<b>609,089</b>	<b>2.3</b>	<b>2.4</b>
<b>Admissions per 1,000 population</b>	<b>27.1</b>	<b>26.7</b>	<b>26.6</b>	<b>27.5</b>	<b>27.5</b>	<b>0.4</b>	<b>0.0</b>

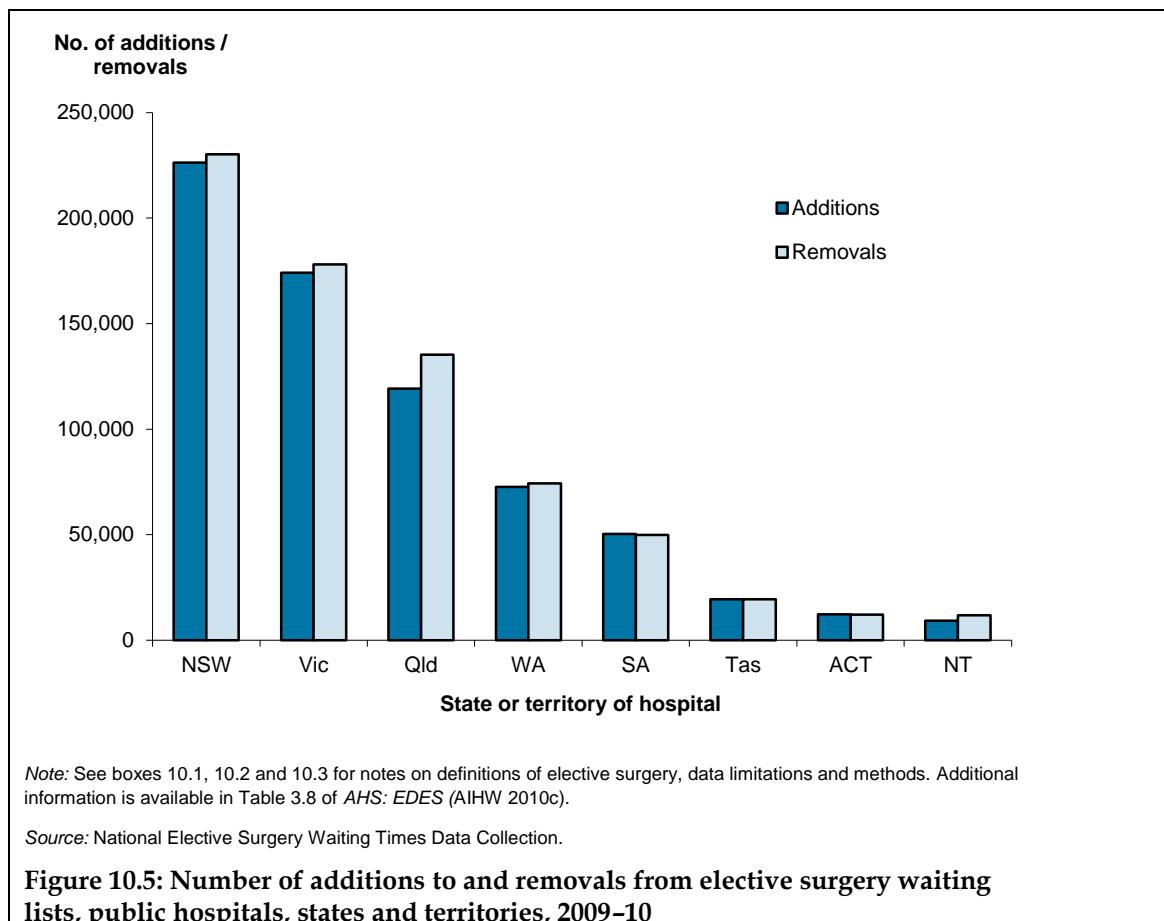
*Note:* See boxes 10.1, 10.2 and 10.3 for notes on definitions of elective surgery, data limitations and methods.

*Abbreviation:* Ave—average.

*Source:* National Elective Surgery Waiting Times Data Collection.

## How much activity was there in 2009–10?

Figure 10.5 shows the movement of patients on and off waiting lists in 2009–10. In 2009–10, there were almost 684,000 additions to elective surgery waiting lists and 711,000 removals from elective surgery waiting lists. Removals included patients who were admitted for the procedure they were waiting for, or were removed for other reasons. For more information, see Table 3.8 in *AHS: EDES* (AIHW 2010c).



## Who used these services?

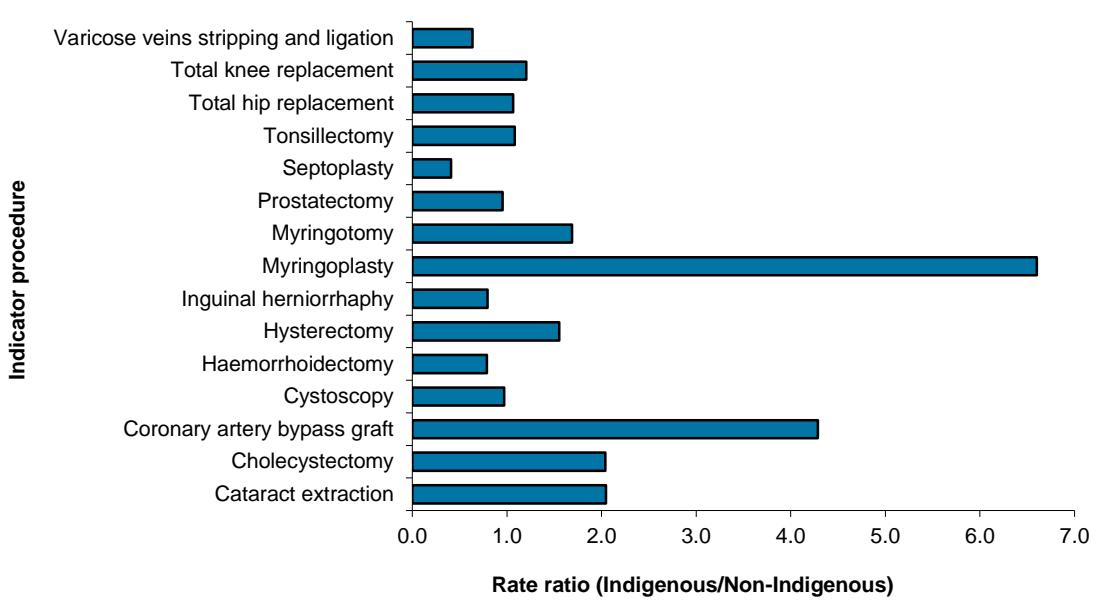
Analysis of the linked NHMD and ESWTDC data provides an opportunity to understand how elective surgery activity for people admitted from waiting lists varied across population groups. The data in this section are presented by indicator procedure.

### Aboriginal and Torres Strait Islander people

The SRRs presented in Figure 10.6 compare the standardised 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 rates for *Indigenous Australians* were markedly different from the rates for *Other Australians*. The rates were not significantly different for *Haemorrhoidectomy*, *Inguinal herniorrhaphy*, *Prostatectomy*, *Total hip replacement* and *Varicose vein stripping and ligation*.

The highest SRRs were reported for *Myringoplasty* (6.6) and *Coronary artery bypass graft* (4.3). *Indigenous Australians* had lower SRRs for *Septoplasty* and *Varicose veins stripping and ligation*.



(a) Excludes data for Tasmania and the Australian Capital Territory and private hospitals in the Northern Territory.  
See Appendix 1 for more information.

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.

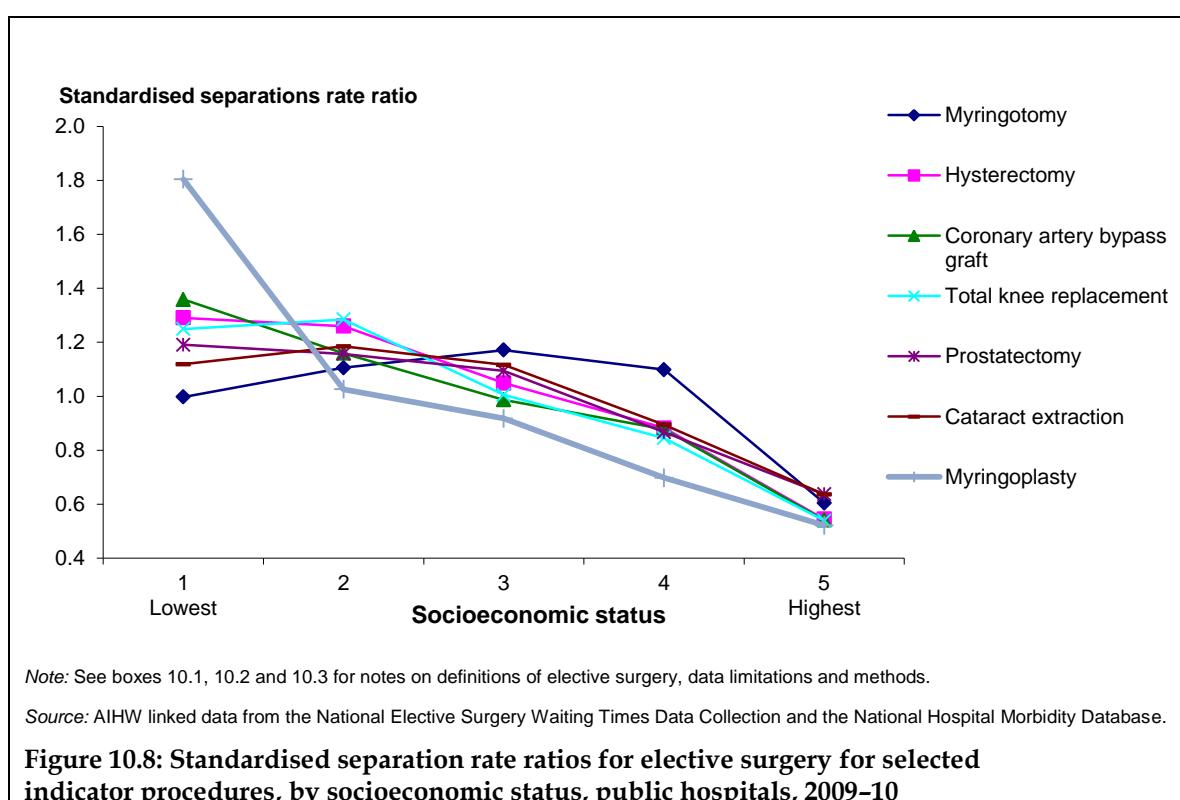
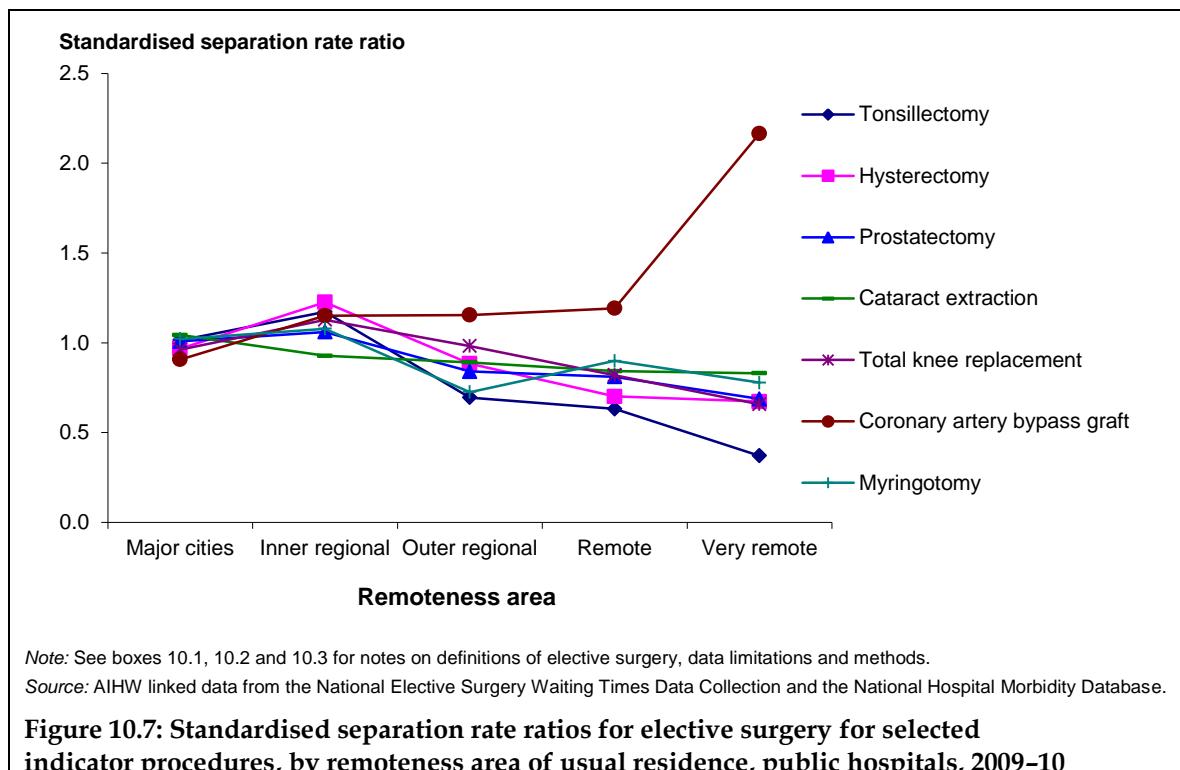
**Figure 10.6: Standardised separation rate<sup>(a)</sup> ratios for elective surgery by indicator procedure and Indigenous status, public hospitals, selected states and territories<sup>(b)</sup>, 2009–10**

## Remoteness area

Figure 10.7 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 about 3 times the national rate.

## Socioeconomic status

The greatest variation in SRRs by socioeconomic status were for *Myringoplasty*, with the SRRs ranging from 1.8 for people living in areas classified as being in the lowest SES group (about 80% 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 socioeconomic groups, with people living in areas classified as being in the lowest SES group having separation rates about 10% higher than the overall rate, and those in the highest SES group having separation rates about 40% lower than the overall rate (Figure 10.8).



## **How long did people wait for care?**

Table 3.3 of *AHS: EDES* (AIHW 2010c) 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 3.9 and 3.10, *AHS: EDES* (AIHW 2010c)).

## **How did waiting times for care change over time?**

Overall the median waiting times for elective surgery increased from 32 days in 2005–06 to 36 days in 2009–10. The days waited at the 90th percentile increased from 237 days to 247 days during the same period. In contrast, the proportion of patients who waited greater than 365 days to be admitted decreased from 4.6% in 2005–06 to 3.6% in 2009–10.

Waiting time statistics for patients admitted from waiting lists, by public hospital peer group, 2005–06 to 2009–10, are published in Tables 3.1 and 3.2 of *AHS: EDES* (AIHW 2010c).

## **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 3.8 of *AHS: EDES* (AIHW 2010c).

Overall, the reason for removal with the shortest median waiting time in 2009–10 was *Emergency admission* (3 days) and the longest median waiting time was for *Not contactable/died* (175 days).

As was the case with median waiting times, the reason for removal with the shortest waiting time by which 90% of patients were removed was *Emergency admission* (80 days) and the reason for removal with the longest waiting time was *Not contactable/died* (464 days). The length of time by which 90% of patients were removed from waiting lists varied substantially between states and territories in most categories.

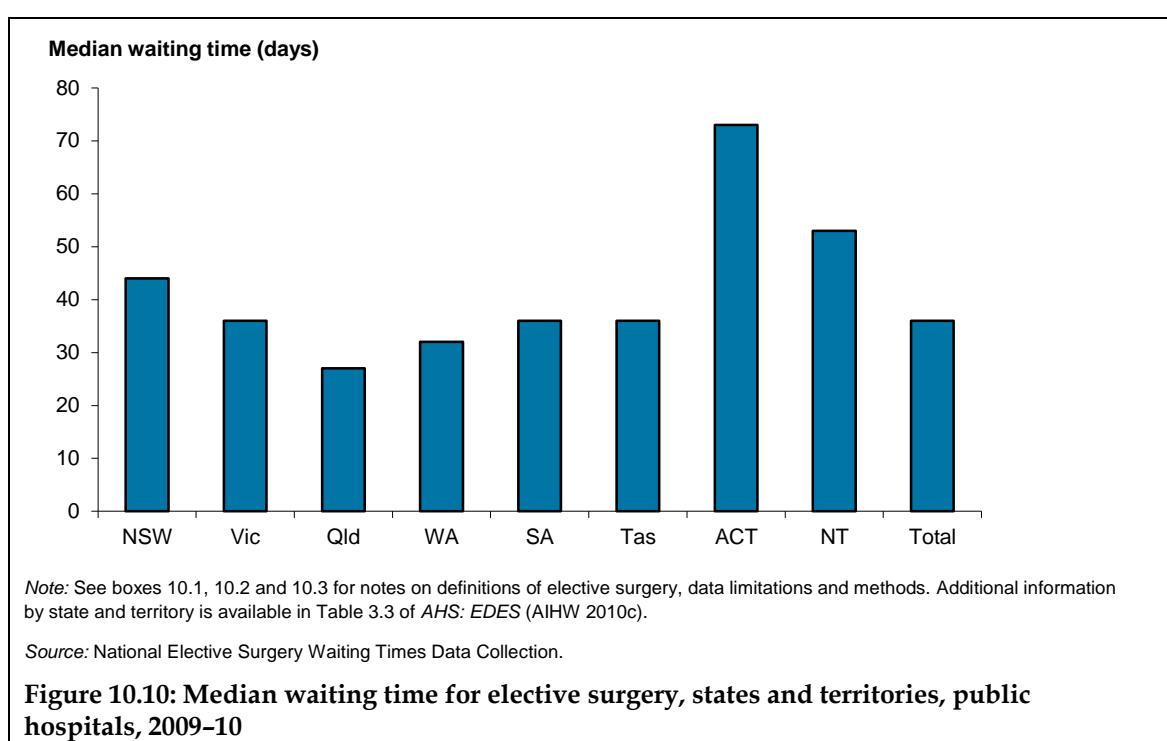
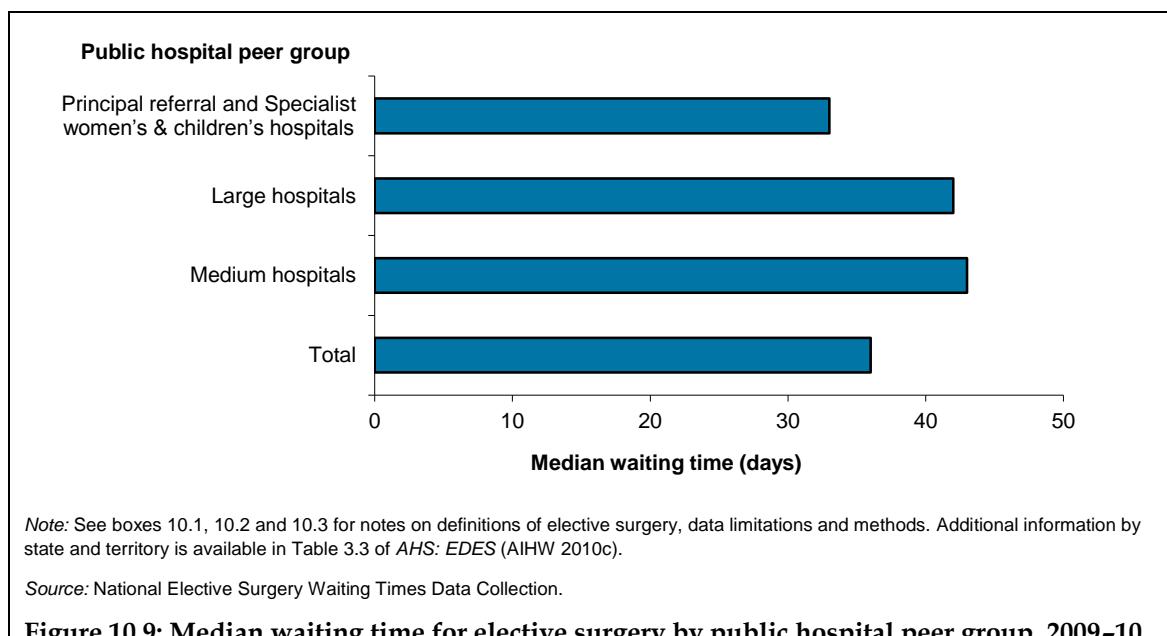
In 2009–10, the reason for removal with the lowest proportion of patients who waited more than 365 days before removal was *Emergency admission* (1.0%) and the category with the highest proportion was *Not contactable/died* (18.8%).

## **How did waiting times vary across public hospital peer groups?**

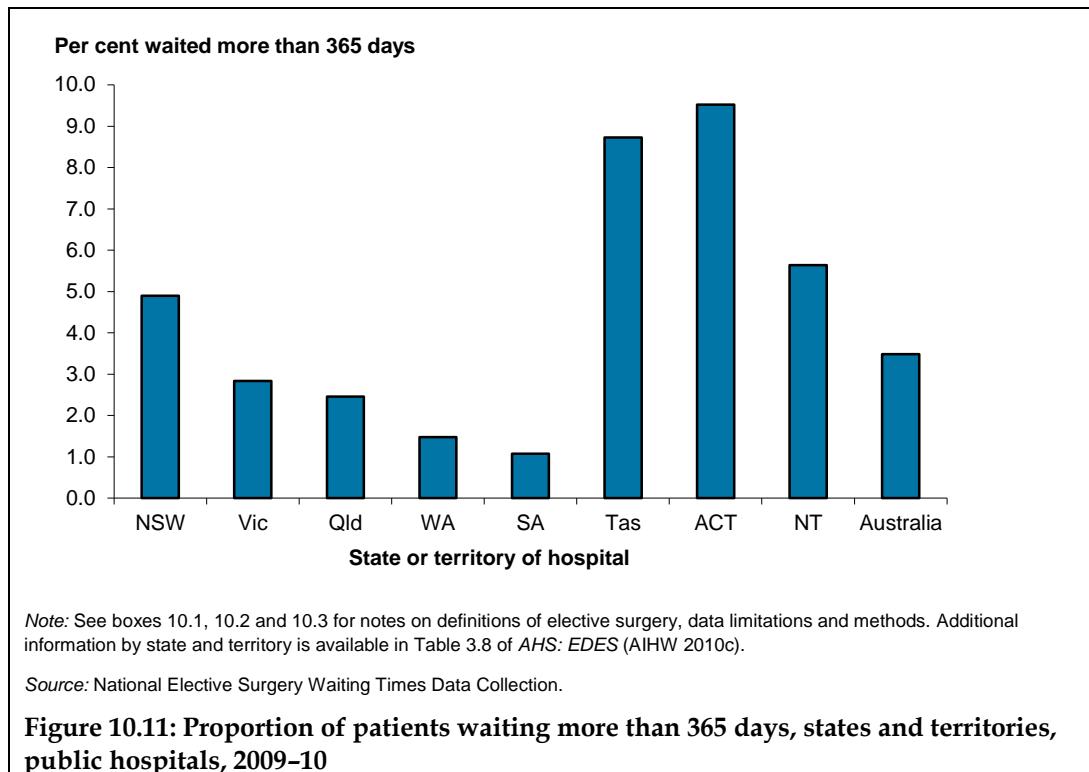
Overall, the median waiting time for patients who were admitted from waiting lists was 36 days in 2009–10. In 2009–10, the median waiting time for patients admitted from waiting lists for hospitals in the *Principal referral and specialist women's and children's hospitals* peer group (33 days) was shorter than for the *Large hospitals* (42 days) and *Medium hospitals* peer groups (43 days) (Figure 10.9).

## **How did waiting times vary across states and territories?**

In 2009–10, the median waiting time ranged from 27 days in Queensland to 73 days in the Australian Capital Territory (Figure 10.10). More information on elective surgery waiting times by peer group for states and territories is published in Table 3.3 of *AHS: EDES* (AIHW 2010c).



The proportion of patients waiting more than 365 days differed substantially among states and territories in 2009–10. Overall, it ranged from 1.1% in South Australia to 9.5% in the Australian Capital Territory (Figure 10.11).



*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 3.8 of *AHS: EDES* (AIHW 2010c).

*Source:* National Elective Surgery Waiting Times Data Collection.

**Figure 10.11: Proportion of patients waiting more than 365 days, states and territories, public hospitals, 2009–10**

### 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.

Table 10.4 shows the number of admissions from waiting lists, the distribution of days waited and the proportion of admissions for people who waited more than 365 days in 2009–10. These data are presented by the specialty of the surgeon who performed the surgery.

*Ophthalmology; Ear, nose and throat surgery* and *Orthopaedic surgery* were the surgical specialties with the longest median waiting times in 2009–10 (70 days, 63 days and 62 days, respectively). *Cardio-thoracic surgery* had the shortest median waiting time (14 days) (Table 10.4).

*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 (7.9% and 6.8%, respectively). *Cardio-thoracic surgery* had the lowest proportion of patients who waited more than 365 days (0.4%).

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 3.10 (AIHW 2010c).

**Table 10.4: Waiting time statistics for patients admitted from waiting lists for elective surgery, by specialty of surgeon, public hospitals, 2009–10**

Surgical specialty	Admissions	Days waited at 50th percentile	Days waited at 90th percentile	% waited more than 365 days
Cardio-thoracic surgery	11,773	14	71	0.4
Ear, nose & throat surgery	53,314	63	340	6.8
General surgery	143,124	31	173	2.2
Gynaecology	78,765	30	136	1.0
Neurosurgery	10,259	30	197	2.3
Ophthalmology	71,048	70	329	4.1
Orthopaedic surgery	92,225	62	352	7.9
Plastic surgery	44,150	22	164	2.7
Urology	71,269	28	134	1.7
Vascular surgery	14,003	20	183	3.9
Other	19,159	22	103	1.1
<b>Total</b>	<b>609,089</b>	<b>36</b>	<b>247</b>	<b>3.6</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 2010c).

Source: National Elective Surgery Waiting Times Data Collection.

## 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, 33.8% of patients admitted for elective surgery had been waiting for one of the 15 indicator procedures (Table 10.5). There was some variation among the states and territories—New South Wales had the highest proportion of admissions for the indicator procedures (36.1%) and Tasmania had the lowest proportion (27.9%). *Cataract extraction* was the highest volume indicator procedure in all jurisdictions.

Nationally, the indicator procedure with the lowest median waiting time in 2009–10 was *Coronary artery bypass graft* (15 days) and the one with the highest median waiting time was *Total knee replacement* (180 days) (Table 10.5).

The length of time by which 90% of patients had been admitted also varied by indicator procedure, from 80 days for *Coronary artery bypass graft* to 416 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 3.9 (AIHW 2010c).

**Table 10.5: Waiting time statistics for patients admitted from waiting lists for elective surgery, by Indicator procedure, public hospitals, 2009–10**

Indicator procedure	Admissions	Days waited at 50th percentile	Days waited at 90th percentile	% waited more than 365 days
Cataract extraction	52,284	86	336	4.3
Cholecystectomy	18,043	51	188	2.2
Coronary artery bypass graft	3,899	15	80	0.7
Cystoscopy	39,946	25	127	1.3
Haemorrhoidectomy	3,456	66	260	3.4
Hysterectomy	9,897	50	196	1.9
Inguinal herniorrhaphy	14,788	57	251	3.1
Myringoplasty	1,935	105	382	12.4
Myringotomy	6,085	48	151	1.2
Prostatectomy	8,397	47	189	2.9
Septoplasty	4,519	144	416	16.4
Tonsillectomy	16,878	91	357	8.4
Total hip replacement	8,580	116	373	11.1
Total knee replacement	12,538	180	414	18.1
Varicose veins stripping & ligation	4,439	97	390	12.8
Not applicable/not stated	403,405	28	185	2.7
<b>Total</b>	<b>609,089</b>	<b>36</b>	<b>247</b>	<b>3.6</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).

*Source:* National Elective Surgery Waiting Times Data Collection.

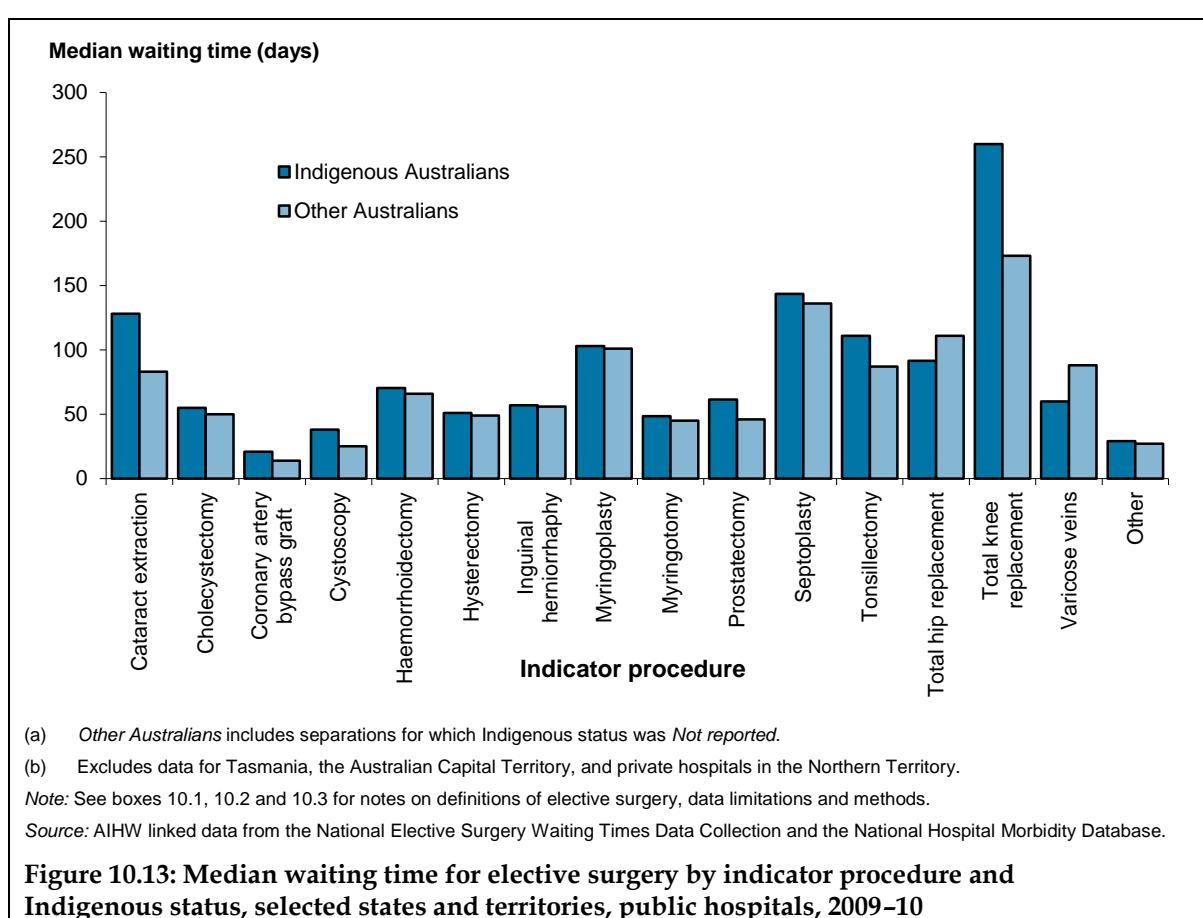
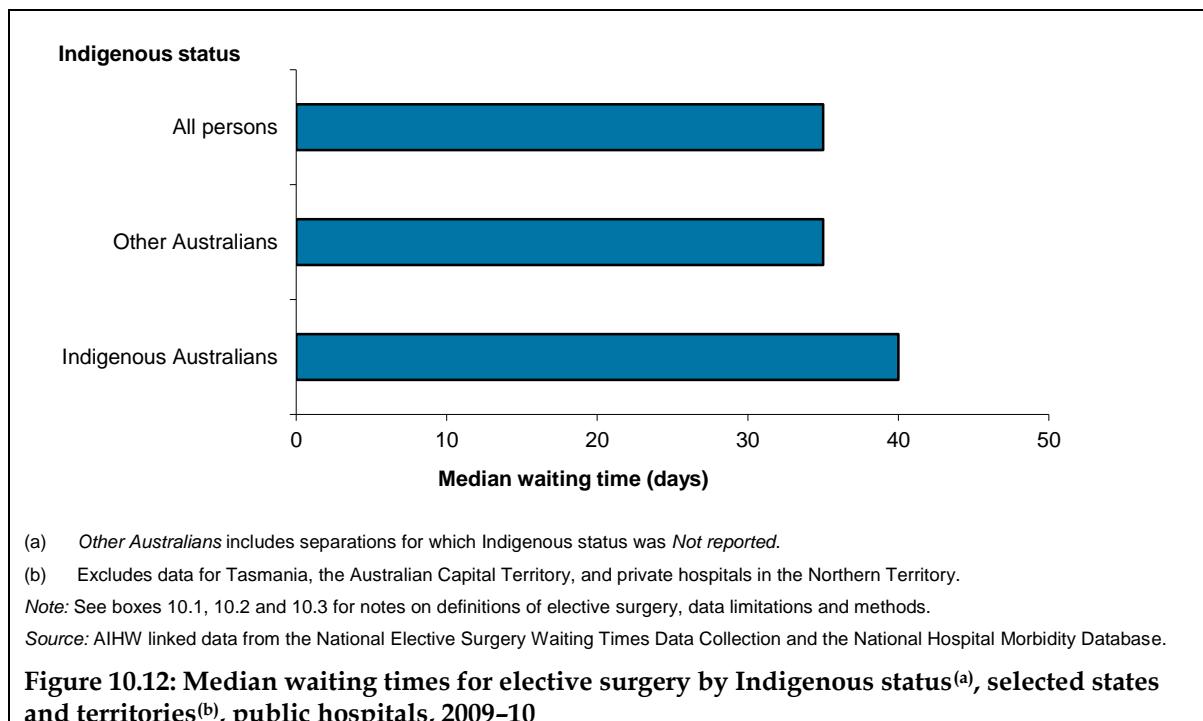
## How did waiting times vary for Indigenous and non-Indigenous Australians?

For 2009–10, there were over 12,300 admissions from waiting lists for elective surgery for patients identified as Aboriginal and/or Torres Strait Islander people in New South Wales, Victoria, Queensland, Western Australia and the Northern Territory.

Overall, the median waiting time for *Indigenous Australians* was greater than the median waiting time for *Other Australians* (40 days and 35 days respectively, Figure 10.12).

### Indicator procedures

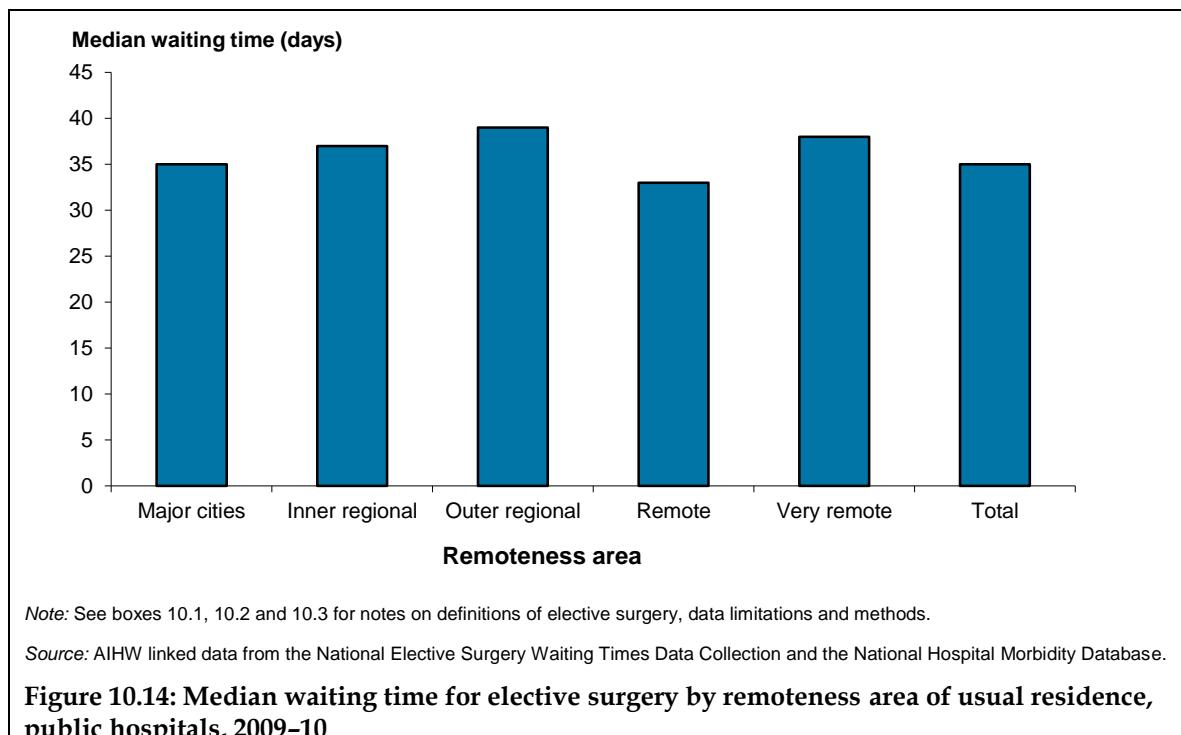
*Indigenous Australians* had higher median waiting times for ten of the eleven procedures for which there were at least 100 separations for *Indigenous Australians*. The greatest difference in median waiting times was for *Total knee replacement*, for which *Indigenous Australians* waited longer than *Other Australians* (260 and 173 days, respectively). *Hysterectomy*, *Myringoplasty*, *Myringotomy* and *Cholecystectomy* had the least variation in median waiting times by Indigenous status (Figure 10.13).



## How did waiting times vary by remoteness area?

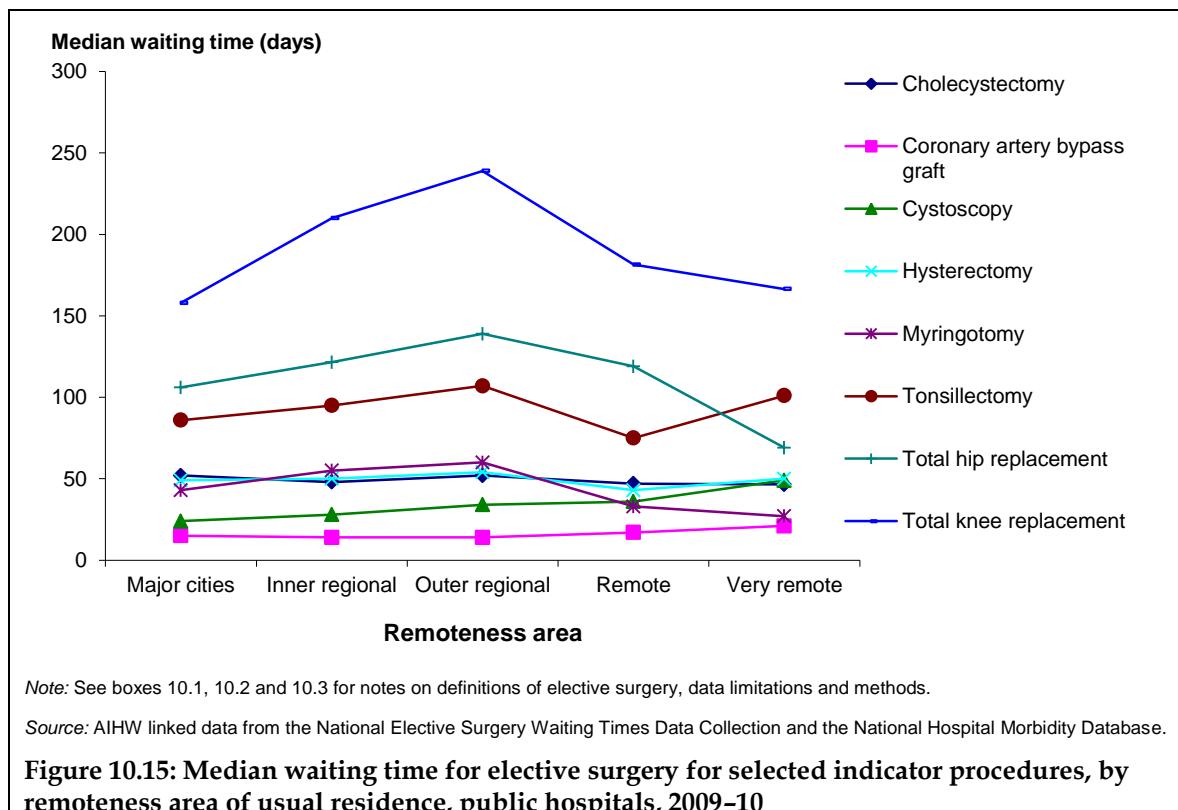
Overall, about 68% of admissions from waiting lists for elective surgery were for patients residing in *Major cities*, 22% were in *Inner regional* areas and 8% in *Outer regional* areas.

The median waiting time varied somewhat by remoteness, ranging from 33 days for people living in *Remote* areas to 39 days for people living in *Outer regional* areas (Figure 10.14).



### Indicator procedures

There was some variation in the median waiting time for remoteness areas by indicator procedure. For indicator procedures (having 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 *Outer regional* areas had the highest median waiting time of 239 days, and people from *Major cities* had the lowest (158 days), followed by those from *Very remote* areas (167 days) (Figure 10.15). *Coronary artery bypass graft* had the least variation by remoteness area.



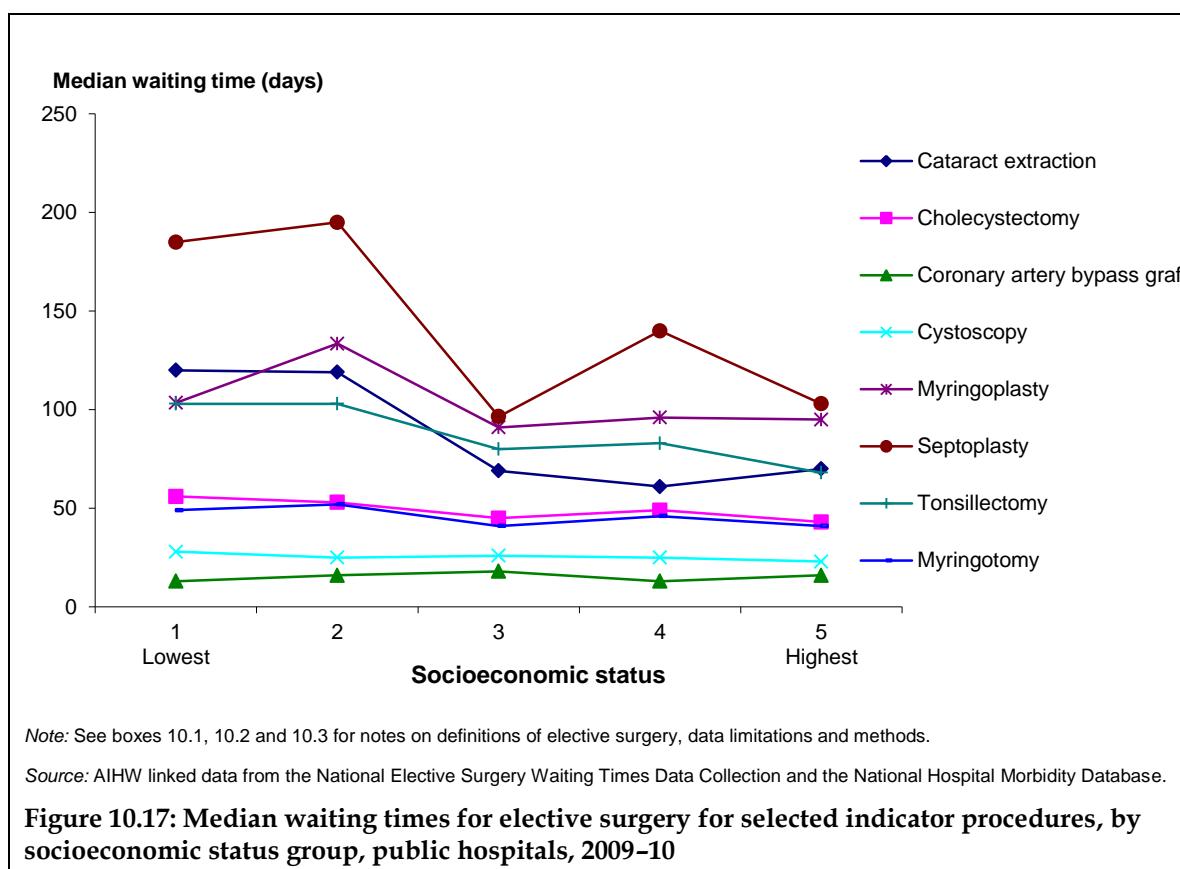
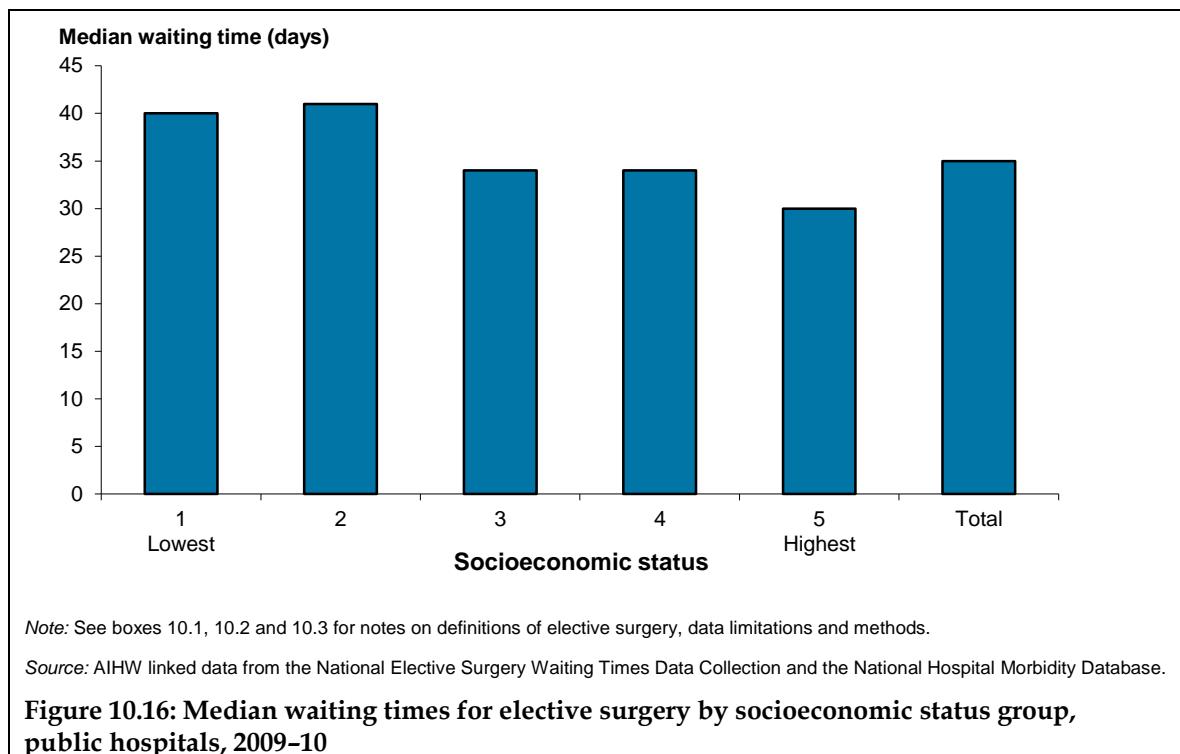
## How did waiting vary by socioeconomic status?

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 second lowest SES group (Figure 10.16).

## Indicator procedures

*Septoplasty* was the indicator procedure with the greatest variation in waiting times by socioeconomic status, ranging from 195 days for people living in areas classified as being in the second lowest SES group to 97 days for people in the middle SES group. *Cholecystectomy*, *Coronary artery bypass graft* and *Cystoscopy* had the least variation by socioeconomic status group (Figure 10.17).

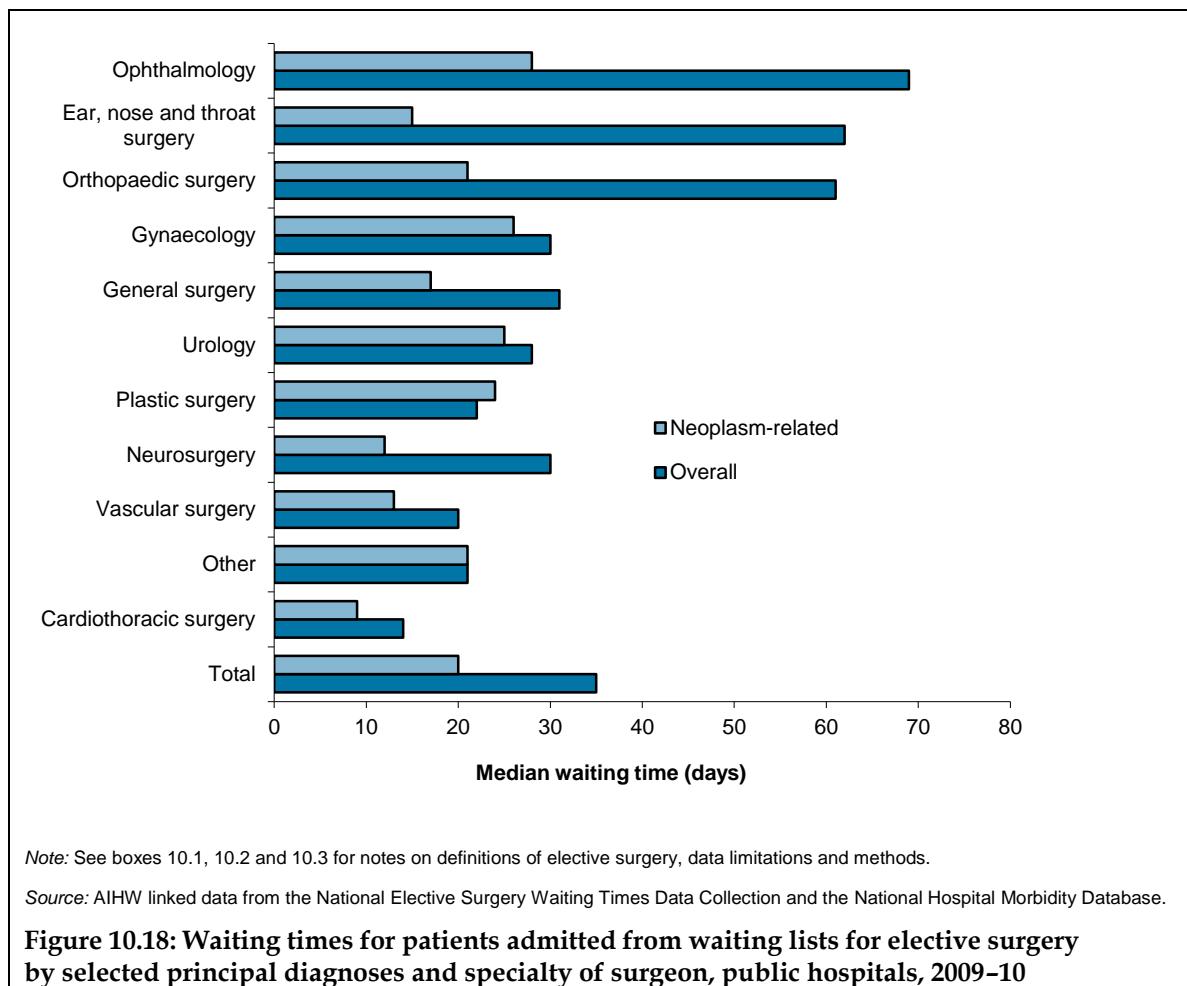


## How did waiting times vary by diagnosis?

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 with neoplasms (malignant or benign tumours), for example, can be compared to the waiting times for patients awaiting the same surgery for other conditions.

Figure 10.18 shows that there are shorter overall waiting times for admissions with a principal diagnosis of a neoplasm compared with other admissions, and for most surgical specialties. Neoplasm-related principal diagnoses were defined by ICD-10-AM diagnosis codes included in Chapter 2 Neoplasms (C00–D48) (NCCH 2008).

Overall, the median waiting times for patients with neoplasm-related principal diagnoses were 15 days shorter than the median waiting times for patients with other conditions (median 20 days, compared with 35 days). The largest variation in median waiting time by surgical specialty was for *Ear, nose and throat surgery* for which patients with a neoplasm waited 15 days, compared with 62 days overall. The only specialty which did not have shorter median waiting times for neoplasms than for other diagnoses was *Plastic surgery* (22 days overall, compared to 24 days for neoplasms).



There is also some variation in the waiting times for elective surgery for other principal diagnoses. For example, for *Orthopaedic surgery* waiting times were higher for patients with a principal diagnosis of *Gonarthrosis of the knee*, with a median waiting time of 160 days, compared with a median waiting time of 62 days overall.

## **Additional information**

Further detailed information by reason for removal, indicator procedure and specialty of surgeon is provided in tables 3.8 to 3.10 of *AHS: EDES* (AIHW 2010c) 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.

The term 'non-acute' is used throughout the text to refer to both sub-acute and non-acute care.

### 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.

In addition, it should be noted that 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?**

Readers should note the following:

- (a) In this chapter, separations are included if the care type was reported as *Rehabilitation, Palliative, Geriatric evaluation and management, Psychogeriatric* or *Maintenance* care.
- (b) In some tables in this chapter, the category *Other non-acute care* includes the care types: *Geriatric evaluation and management, Psychogeriatric* and *Maintenance* care.
- (c) The overall quality of the data provided for Indigenous status in 2009–10 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*).

For details of other methods used in this chapter, see *Chapter 7*.

## **How has activity changed over time?**

Between 2005–06 and 2009–10, the number of separations for non-acute care in all hospitals increased by 10.1% per year. Over this period, the average rate of increase was higher in private hospitals (15.6%) than in public hospitals (4.8%). In particular, *Rehabilitation* care in private hospitals doubled, increasing by an average of 19.1% per year between 2005–06 and 2009–10 (Table 11.1).

**Table 11.1: Non-acute separations<sup>(a)</sup> by care type, public and private hospitals, 2005–06 to 2009–10**

	2005–06	2006–07	2007–08	2008–09	2009–10	Change (per cent)	
						Ave since 2005–06	Since 2008–09
<b>Public hospitals</b>							
Rehabilitation	67,685	70,822	75,446	77,875	82,692	5.1	6.2
Palliative care	20,342	21,785	21,598	24,262	26,633	7.0	9.8
Geriatric evaluation and management	13,915	14,670	14,813	18,307	21,310	11.2	16.4
Psychogeriatric care	4,583	4,695	4,494	2,393	2,336	-15.5	-2.4
Maintenance care	19,750	19,093	19,211	19,763	19,624	-0.2	-0.7
<i>Total</i>	<b>126,275</b>	<b>131,065</b>	<b>135,562</b>	<b>142,600</b>	<b>152,595</b>	<b>4.8</b>	<b>7.0</b>
<b>Private hospitals</b>							
Rehabilitation	83,842	96,401	115,659	137,946	168,972	19.1	22.5
Palliative care	5,399	6,488	5,766	5,281	5,016	-1.8	-5.0
Geriatric evaluation and management	766	780	87	113	88	-41.8	-22.1
Psychogeriatric care	10,831	6,138	6,857	6,579	8,102	-7.0	23.1
Maintenance care	2,305	1,636	1,699	2,004	2,283	-0.2	13.9
<i>Total</i>	<b>103,143</b>	<b>111,443</b>	<b>130,068</b>	<b>151,923</b>	<b>184,461</b>	<b>15.6</b>	<b>21.4</b>
<b>Total</b>	<b>229,418</b>	<b>242,508</b>	<b>265,630</b>	<b>294,523</b>	<b>337,056</b>	<b>10.1</b>	<b>14.4</b>

(a) Annual average change, not adjusted for changes in coverage and recategorisation 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)>.

Abbreviation: Ave—average.

## How much activity was there in 2009–10?

Overall, 3.9% of separations in 2009–10 were non-acute separations (Table 11.2). However, there was some variation between states and territories in the proportion of separations that were for non-acute care, ranging from 1.2 per 1,000 population in Northern Territory to 7.0 per 1,000 in the Australian Capital Territory.

**Table 11.2: Non-acute separations, by care type, all hospitals, states and territories, 2009–10**

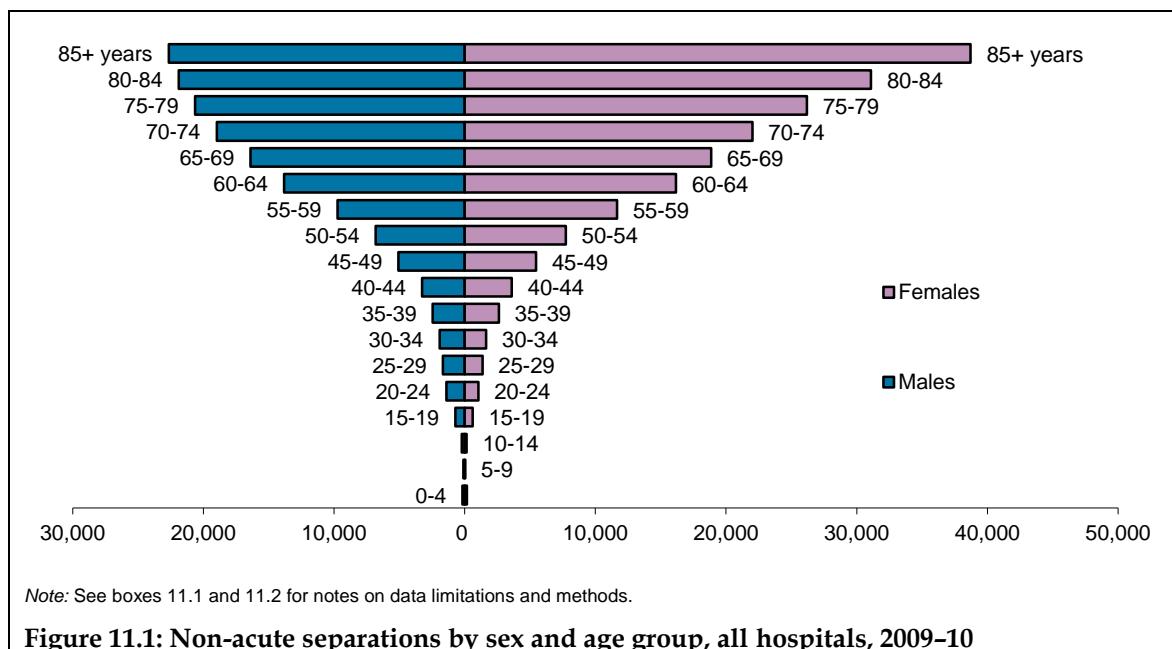
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Rehabilitation	128,891	30,985	48,679	10,268	24,286	2,177	5,764	614	251,664
Palliative care	10,698	6,802	7,649	3,282	1,847	399	651	321	31,649
Geriatric evaluation and management	3,689	13,250	1,716	672	1,361	35	644	31	21,398
Psychogeriatric care	744	7,177	566	1,610	260	48	32	1	10,438
Maintenance care	7,085	873	6,981	1,636	2,816	492	1,640	384	21,907
All hospitals	<b>151,107</b>	<b>59,087</b>	<b>65,591</b>	<b>17,468</b>	<b>30,570</b>	<b>3,151</b>	<b>8,731</b>	<b>1,351</b>	<b>337,056</b>
Non-acute as a proportion of all hospital separations	<b>6.0</b>	<b>2.6</b>	<b>3.7</b>	<b>2.0</b>	<b>4.7</b>	<b>1.8</b>	<b>7.0</b>	<b>1.2</b>	<b>3.9</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Who used these services?

### Sex and age group

Females accounted for more than half (56.1%) of non-acute separations (Figure 11.1). There were more non-acute separations for males than females in the age groups from 0 to 34 years. However, females accounted for more separations than males in all other age groups. Persons aged 60 years and over accounted for more than three-quarters of all non-acute separations.



## 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 occasion 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 do not include separations for *Maintenance* care.

There was some variation between states and territories in the rate of sub-acute separations for persons aged 65 years or over. For public hospitals, the separation rate ranged from 16 per 1,000 persons in Tasmania to 73 per 1,000 persons in the Australian Capital Territory (Table 11.3).

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 11.3: 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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Separations	33,390	27,394	16,243	8,540	6,792	1,228	2,596	270	96,453
Separations per 1,000 population	32.4	35.5	30.1	31.6	25.8	15.8	72.9	26.4	32.1
<b>Private hospitals</b>									
Separations	66,310	20,297	18,169	3,924	11,967	n.p	n.p	n.p	123,409
Separations per 1,000 population	66.3	26.8	33.2	14.4	46.7	n.p	n.p	n.p	41.8
<b>Total</b>									
<b>Separations</b>	<b>99,700</b>	<b>47,691</b>	<b>34,412</b>	<b>12,464</b>	<b>18,759</b>	n.p	n.p	n.p	<b>219,862</b>
<b>Separations per 1,000 population</b>	<b>98.6</b>	<b>62.3</b>	<b>63.3</b>	<b>46.0</b>	<b>72.4</b>	n.p	n.p	n.p	<b>73.9</b>

(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 2009–10 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, 0.9% of all 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 11.4).

In 2009–10, there were 12 non-acute separations per 1,000 population for *Indigenous Australians*, about 84% of the rate for *Other Australians* (15 per 1,000). *Indigenous Australians* had lower separation rates for *Rehabilitation* care than *Other Australians* (6 per 1,000 and 11 per 1,000, respectively). *Indigenous Australians* had higher separation rates for *Palliative* care and *Maintenance* care than *Other Australians*.

**Table 11.4: Non-acute separations, by Indigenous status, all hospitals, selected states and territories<sup>(a)</sup>, 2009–10**

	NSW	Vic	Qld	WA	SA	NT	Total	Separations per 1,000 population
<b>Indigenous Australians</b>								
Rehabilitation	383	112	646	236	102	199	1,678	6.4
Palliative care	124	22	145	109	15	47	462	1.9
Geriatric evaluation and management	25	27	31	5	3	25	116	0.6
Psychogeriatric care	5	2	4	8	1	1	21	0.1
Maintenance care	84	10	275	132	23	214	738	3.2
<i>Total</i>	<i>621</i>	<i>173</i>	<i>1,101</i>	<i>490</i>	<i>144</i>	<i>486</i>	<i>3,015</i>	<i>12.2</i>
<b>Other Australians<sup>(b)</sup></b>								
Rehabilitation	128,508	30,873	48,033	10,032	24,184	415	242,045	10.9
Palliative care	10,574	6,780	7,504	3,173	1,832	274	30,137	1.3
Geriatric evaluation and management	3,664	13,223	1,685	667	1,358	6	20,603	0.9
Psychogeriatric care	739	7,175	562	1,602	259	0	10,337	0.5
Maintenance care	7,001	863	6,706	1,504	2,793	170	19,037	0.9
<i>Total</i>	<i>150,486</i>	<i>58,914</i>	<i>64,490</i>	<i>16,978</i>	<i>30,426</i>	<i>865</i>	<i>322,159</i>	<i>14.4</i>
<b>Total</b>	<b>151,107</b>	<b>59,087</b>	<b>65,591</b>	<b>17,468</b>	<b>30,570</b>	<b>1,351</b>	<b>325,174</b>	<b>14.5</b>

(a) Excludes data for Tasmania, the Australian Capital Territory and private hospitals in the Northern 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.

## Remoteness area

There was marked variation in the separation rates for 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 (13 separations per 1,000 population, compared with 11 per 1,000 nationwide) (Tables 11.5 and 11.6). 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 2.3 per 1,000 population for people residing in *Remote* areas to 3.9 per 1,000 for people residing in *Major cities* (Table 11.5). There were more marked variations for private hospitals, with the rate of *Rehabilitation* care ranging from 1.0 per 1,000 in *Very remote* areas to 9.3 per 1,000 in *Major cities* (Table 11.6).

**Table 11.5: Selected non-acute separation statistics, by remoteness area of usual residence, public hospitals, 2009–10**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
<b>Rehabilitation</b>						
Separations	62,095	13,905	5,377	650	309	82,692
Separation rate	3.9	2.7	2.4	2.3	2.4	3.5
SRR	1.12	0.78	0.68	0.65	0.68	
<b>Palliative care</b>						
Separations	18,140	5,361	2,697	227	160	26,633
Separation rate	1.2	1.0	1.2	0.8	1.3	1.1
SRR	1.03	0.90	1.03	0.71	1.12	
<b>Geriatric evaluation and management</b>						
Separations	17,186	3,273	750	44	21	21,310
Separation rate	1.0	0.6	0.3	0.2	0.2	0.9
SRR	1.20	0.70	0.38	0.22	0.22	
<b>Psychogeriatric care</b>						
Separations	1,934	286	85	11	3	2,336
Separation rate	0.1	0.1	0.0	0.0	0.0	0.1
SRR	1.26	0.55	0.38	0.41	0.34	
<b>Maintenance care</b>						
Separations	10,711	4,615	3,245	525	442	19,624
Separation rate	0.6	0.9	1.4	2.1	4.3	0.8
SRR	0.80	1.09	1.79	2.61	5.38	
<b>Total</b>						
<b>Separations</b>	<b>110,066</b>	<b>27,440</b>	<b>12,154</b>	<b>1,457</b>	<b>935</b>	<b>152,595</b>
<b>Separation rate</b>	<b>6.9</b>	<b>5.3</b>	<b>5.4</b>	<b>5.4</b>	<b>8.2</b>	<b>6.4</b>
<b>SRR</b>	<b>1.08</b>	<b>0.83</b>	<b>0.84</b>	<b>0.85</b>	<b>1.29</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 11.6: Selected non-acute separation statistics, by remoteness area of usual residence, private hospitals, 2009–10**

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total <sup>(a)</sup>
<b>Rehabilitation</b>						
Separations	145,534	19,475	3,408	360	56	168,972
Separation rate	9.3	3.8	1.6	1.8	1.0	7.2
SRR	1.29	0.52	0.22	0.25	0.14	
<b>Palliative care</b>						
Separations	3,248	1,362	377	20	4	5,016
Separation rate	0.2	0.3	0.2	0.1	0.0	0.2
SRR	0.97	1.21	0.80	0.42	0.19	
<b>Other non-acute care</b>						
Separations	9,272	1,010	175	12	1	10,473
Separation rate	0.6	0.2	0.1	0.1	0.0	0.4
SRR	1.34	0.47	0.19	0.12	0.02	
<b>Total</b>						
<b>Separations</b>	<b>158,054</b>	<b>21,847</b>	<b>3,960</b>	<b>392</b>	<b>61</b>	<b>184,461</b>
<b>Separation rate</b>	<b>10.1</b>	<b>4.2</b>	<b>1.8</b>	<b>1.9</b>	<b>1.1</b>	<b>7.8</b>
<b>SRR</b>	<b>1.28</b>	<b>0.54</b>	<b>0.23</b>	<b>0.24</b>	<b>0.14</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.

## 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 socioeconomic status group accounted for between 16.5% and 28.8% of total non-acute separations. The separation rates varied from 20.8 per 1,000 population for patients living in areas classified as being the highest SES group to 11.0 per 1,000 for the second lowest SES group (Table 11.7). The separation rate ratios (SRR) indicate notable differences in the separation rates across socioeconomic status groups for some categories.

**Table 11.7: Selected non-acute separation statistics, by socioeconomic status, all hospitals, 2009–10**

	Socioeconomic status group					Total <sup>(a)</sup>
	1— Lowest	2	3	4	5— Highest	
<b>Rehabilitation</b>						
Separations	37,774	40,691	47,284	46,267	79,146	251,664
Separation rate	7.7	8.0	10.3	10.7	17.0	10.6
SRR	0.73	0.75	0.97	1.01	1.60	
<b>Palliative care</b>						
Separations	7,674	5,903	6,595	5,573	5,849	31,649
Separation rate	1.5	1.1	1.4	1.3	1.2	1.3
SRR	1.16	0.86	1.08	0.97	0.93	
<b>Geriatric evaluation and management</b>						
Separations	3,814	4,106	4,772	4,284	4,386	21,398
Separation rate	0.7	0.8	1.0	1.0	0.9	0.9
SRR	0.85	0.88	1.16	1.12	1.02	
<b>Psychogeriatric care</b>						
Separations	792	993	1,562	2,532	4,542	10,438
Separation rate	0.2	0.2	0.3	0.6	1.0	0.4
SRR	0.36	0.43	0.77	1.38	2.29	
<b>Maintenance care</b>						
Separations	5,469	5,155	4,140	3,795	3,255	21,907
Separation rate	1.1	1.0	0.9	0.9	0.7	0.9
SRR	1.21	1.09	0.98	0.95	0.73	
<b>Total</b>						
<b>Separations</b>	<b>55,523</b>	<b>56,848</b>	<b>64,353</b>	<b>62,451</b>	<b>97,178</b>	<b>337,056</b>
<b>Separation rate</b>	<b>11.2</b>	<b>11.0</b>	<b>14.0</b>	<b>14.4</b>	<b>20.8</b>	<b>14.2</b>
<b>SRR</b>	<b>0.79</b>	<b>0.78</b>	<b>0.99</b>	<b>1.02</b>	<b>1.47</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 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 11.8). *Statistical admission: care type change* was the most common admission mode for 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 also recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals.

**Table 11.8: Non-acute separations, by mode of admission, public and private hospitals, 2009–10**

	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	46,675	39,333	86,008
Statistical admission: care type change	62,474	12,227	74,701
Other	43,313	132,890	176,203
Not reported	133	11	144
<b>Total</b>	<b>152,595</b>	<b>184,461</b>	<b>337,056</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 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 93% of non-acute separations in private hospitals and 68% in public hospitals (Table 11.9).

*Care involving use of rehabilitation procedures* accounted for 73% of principal diagnoses reported for 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 non-acute separations was *Neoplasms*, which includes both benign and malignant tumours, and was particularly associated with separations for *Palliative care* (see below).

**Table 11.9: Non-acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2009–10**

Principal diagnosis chapter		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	873	40	913
C00–D48	Neoplasms	19,716	3,906	23,622
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	246	17	263
E00–E90	Endocrine, nutritional and metabolic diseases	984	112	1,096
F00–F99	Mental and behavioural disorders	4,517	6,449	10,966
G00–G99	Diseases of the nervous system	2,329	1,291	3,620
H00–H59	Diseases of the eye and adnexa	21	4	25
H60–H95	Diseases of the ear and mastoid process	43	1	44
I00–I99	Diseases of the circulatory system	4,526	527	5,053
J00–J99	Diseases of the respiratory system	3,098	434	3,532
K00–K93	Diseases of the digestive system	1,650	194	1,844
L00–L99	Diseases of the skin and subcutaneous tissue	491	35	526
M00–M99	Diseases of the musculoskeletal system and connective tissue	1,643	138	1,781
N00–N99	Diseases of the genitourinary system	1,304	114	1,418
O00–O99	Pregnancy, childbirth and the puerperium	73	2	75
P00–P96	Certain conditions originating in the perinatal period	86	0	86
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	17	0	17
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	2,300	252	2,552
S00–T98	Injury, poisoning and certain other consequences of external causes	4,269	189	4,458
Z00–Z99	Factors influencing health status and contact with health services	104,344	170,699	275,043
	Not reported	65	57	122
<b>Total non-acute separations</b>		<b>152,595</b>	<b>184,461</b>	<b>337,056</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

For *Palliative care*, 9 of the top 10 principal diagnoses were for malignant neoplasms, and these accounted for 46% of principal diagnoses for *Palliative care* separations (Table 11.10). The top 5 neoplasm-related principal diagnoses are presented, 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 11.11).

**Table 11.10: Separations for the top 5 neoplasm related and other principal diagnoses in 3-character ICD-10-AM groupings for *Palliative* care separations, public and private hospitals, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
<b>Neoplasm-related</b>				
C34	Malignant neoplasm of bronchus and lung	3,449	590	4,039
C79	Secondary malignant neoplasm of other sites	2,083	540	2,623
C78	Secondary malignant neoplasm of respiratory and digestive organs	1,492	473	1,965
C61	Malignant neoplasm of prostate	1,038	221	1,259
C25	Malignant neoplasm of pancreas	985	198	1,183
<b>Other</b>				
I50	Heart failure	540	90	630
J44	Other chronic obstructive pulmonary disease	460	72	532
J18	Pneumonia, organism unspecified	376	38	414
G12	Spinal muscular atrophy and related syndromes	257	102	359
I63	Cerebral infarction	302	23	325
Other (includes neoplasm-related not listed above)		15,651	2,669	18,320
<b>Total Palliative care separations</b>		<b>26,633</b>	<b>5,016</b>	<b>31,649</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.11: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for *Geriatric evaluation and management* separations, public and private hospitals, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
Z50	Care involving use of rehabilitation procedures	2,916	0	2,916
S72	Fracture of femur	1,039	0	1,039
I50	Heart failure	641	4	645
F05	Delirium, not induced by alcohol and other psychoactive substances	615	0	615
Z75	Problems related to medical facilities and other health care	561	0	561
J18	Pneumonia, organism unspecified	557	1	558
S32	Fracture of lumbar spine and pelvis	515	0	515
J44	Other chronic obstructive pulmonary disease	507	0	507
N39	Other disorders of urinary system	503	1	504
R29	Other symptoms and signs involving the nervous and musculoskeletal systems	458	0	458
Other		12,998	82	13,080
<b>Total Geriatric evaluation and management separations</b>		<b>21,310</b>	<b>88</b>	<b>21,398</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

For *Psychogeriatric* care, the top 10 principal diagnoses made up 80% of all separations within this care type. They included depressive disorders, Alzheimer's disease and dementia (Table 11.12).

**Table 11.12: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for Psychogeriatric care separations, public and private hospitals, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
F33	Recurrent depressive disorder	147	1,916	2,063
F32	Depressive episode	466	1,438	1,904
G30	Alzheimer's disease	291	1,095	1,386
F10	Mental and behavioural disorders due to use of alcohol	31	661	692
F31	Bipolar affective disorder	202	453	655
F41	Other anxiety disorders	40	568	608
F20	Schizophrenia	211	128	339
F43	Reaction to severe stress, and adjustment disorders	53	195	248
F25	Schizoaffective disorders	85	129	214
F03	Unspecified dementia	186	20	206
Other		624	1,499	2,123
<b>Total Psychogeriatric care separations</b>		<b>2,336</b>	<b>8,102</b>	<b>10,438</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

For *Maintenance* care, the top 10 principal diagnoses made up over 92% of all separations within this care type, with *Problems related to medical facilities and other health care* being the most common principal diagnosis (Table 11.13).

**Table 11.13: Separations for the top 10 principal diagnoses in 3-character ICD-10-AM groupings for Maintenance care separations, public and private hospitals, 2009–10**

Principal diagnosis		Public hospitals	Private hospitals	Total
Z75	Problems related to medical facilities and other health care	15,097	1,036	16,133
Z54	Convalescence	1,079	581	1,660
Z74	Problems related to care-provider dependency	1,326	17	1,343
F33	Recurrent depressive disorder	4	399	403
F20	Schizophrenia	189	0	189
Z51	Other medical care	81	6	87
I50	Heart failure	65	2	67
F03	Unspecified dementia	65	0	65
Z48	Other surgical follow-up care	52	3	55
J44	Other chronic obstructive pulmonary disease	47	4	51
Other		1,619	235	1,854
<b>Total Maintenance care separations</b>		<b>19,624</b>	<b>2,283</b>	<b>21,907</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 musculoskeletal conditions and injuries (Table 11.14). Over half of rehabilitation separations in private hospitals and about one quarter of rehabilitation separations in public hospitals reported these 10 first additional diagnoses. These figures may indicate that public hospitals provided rehabilitation care for a greater variety of conditions than private hospitals.

**Table 11.14: Separations for the top 10 first additional diagnoses in 3-character ICD-10-AM groupings for *Rehabilitation* care separations, public and private hospitals, 2009–10**

First additional diagnosis	Public hospitals	Private hospitals	Total
M17 Gonarthrosis [arthritis of knee]	2,467	34,340	36,807
M16 Coxarthrosis [arthritis of hip]	1,560	15,942	17,502
S72 Fracture of femur	7,121	7,875	14,996
I63 Cerebral infarction	5,701	4,399	10,100
Z96 Presence of other functional implants	763	5,428	6,191
M54 Dorsalgia	637	5,184	5,821
M25 Other joint disorders, not elsewhere classified	378	5,398	5,776
S32 Fracture of lumbar spine and pelvis	2,088	3,444	5,532
M48 Other spondylopathies	456	4,372	4,828
S82 Fracture of lower leg, including ankle	1,658	2,484	4,142
Other	59,863	80,106	139,969
<b>Total Rehabilitation separations</b>	<b>82,692</b>	<b>168,972</b>	<b>251,664</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 2009–10, 66% of 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 88% of non-acute separations in private hospitals and 25% in public hospitals. Just fewer than 30% of non-acute separations had a *Not assigned* urgency of admission (Table 11.15).

**Table 11.15: Non-acute separations, by urgency of admission and care type, public and private hospitals, 2009–10**

	Rehabilitation	Palliative	Geriatric evaluation and management	Psychogeriatric	Maintenance	Total
<b>Public hospitals</b>						
Emergency	4,189	5,662	1,427	656	836	12,770
Elective	34,814	9,935	9,155	561	1,823	56,288
Not assigned	43,629	10,797	10,725	1,119	16,933	83,203
<i>Total</i>	<i>82,692</i>	<i>26,633</i>	<i>21,310</i>	<i>2,336</i>	<i>19,624</i>	<i>152,595</i>
<b>Private hospitals</b>						
Emergency	343	695	8	630	18	1,694
Elective	153,659	3,432	80	7,449	1,559	166,179
Not assigned	14,970	889	0	23	706	16,588
<i>Total</i>	<i>168,972</i>	<i>5,016</i>	<i>88</i>	<i>8,102</i>	<i>2,283</i>	<i>184,461</i>
<b>Total</b>	<b>251,664</b>	<b>31,649</b>	<b>21,398</b>	<b>10,438</b>	<b>21,907</b>	<b>337,056</b>

(a) The total includes 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:

- care type – describes the overall nature of a clinical service provided to an admitted patient during an episode of care.
- the type of surgical or other procedure undertaken.

### Medical, surgical or other care

*Acute* care activity can be classified as *Medical*, *Surgical* and *Other* care, based on the *Medical*, *Surgical* and *Other* partitions of the AR-DRG classifications (see Box 7.1).

As the AR-DRG classification relates to *Acute* care, the *Medical/Surgical/Other* categories have not been applied to non-acute care.

### Care type

For public and private sectors combined, about 75% of non-acute separations were for *Rehabilitation* care (see Table 11.1); therefore, most of the data in this chapter relates to *Rehabilitation* care.

Although almost 32,000 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 11.16). 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 11.16: Palliative care separations as identified by care type and/or additional diagnosis of Z51.5, all hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Number of separations</b>									
Care type	10,698	6,802	7,649	3,209	1,847	399	651	321	31,576
Diagnosis	19,956	16,640	7,649	3,210	3,952	1,493	745	674	54,319
Care type and/or diagnosis	20,769	16,724	7,649	3,210	4,534	1,563	764	702	55,915

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 classified to the ACHI procedure chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 99.5% of non-acute separations for which a procedure was reported (Table 11.17). This chapter includes anaesthesia, allied health interventions (which includes physiotherapy and other rehabilitation-related procedures), dialysis and chemotherapy.

In public hospitals, about 19% of non-acute separations did not report a procedure, while in private hospitals about 8% did not report a procedure.

The 10 most frequently reported procedures for each of the non-acute care types are presented in tables 11.18 to 11.22.

In 2009–10, 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 11.18). Allied health interventions reported included physiotherapy, occupational therapy, social work and other rehabilitation procedures or interventions.

For *Palliative* care, 9 of the top 10 reported procedures were allied health interventions and included physiotherapy and pastoral care (Table 11.19). About 16% of *Palliative* care separations had no procedures reported.

For *Geriatric evaluation and management*, 9 of the top 10 reported procedures were allied health interventions and included physiotherapy, occupational therapy and social work (Table 11.20).

For *Psychogeriatric* care, about 43% had no procedures reported. The top 10 reported procedures included social work, occupational therapy, general anaesthesia and electroconvulsive therapy (Table 11.21).

For *Maintenance* care, about 22% had no procedures reported. The top 10 reported procedures included physiotherapy, social work, occupational therapy and ageing assessment (Table 11.22).

**Table 11.17: Non-acute separations<sup>(a)</sup>, by procedure in ACHI chapters, public and private hospitals, 2009–10**

<b>Procedure chapter</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
1–86	Procedures on nervous system	316	229	545
110–129	Procedures on endocrine system	13	2	15
160–256	Procedures on eye and adnexa	44	12	56
300–333	Procedures on ear and mastoid process	106	15	121
370–422	Procedures on nose, mouth and pharynx	62	12	74
450–490	Dental services	174	13	187
520–569	Procedures on respiratory system	690	141	831
600–767	Procedures on cardiovascular system	723	223	946
800–817	Procedures on blood and blood-forming organs	68	26	94
850–1011	Procedures on digestive system	1,169	366	1,535
1040–1129	Procedures on urinary system	2,342	441	2,783
1160–1203	Procedures on male genital organs	11	5	16
1240–1299	Gynaecological procedures	15	20	35
1330–1347	Obstetric procedures	15	2	17
1360–1579	Procedures on musculoskeletal system	835	317	1,152
1600–1718	Dermatological and plastic procedures	1,340	221	1,561
1740–1759	Procedures on breast	20	4	24
1786–1799	Radiation oncology procedures	495	27	522
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	122,457	169,414	291,871
1940–2016	Imaging services	12,007	2,586	14,593
	Total procedures	142,902	174,076	316,978
	No procedure or not reported	29,003	14,806	43,809
<b>Total non-acute separations</b>		<b>152,595</b>	<b>184,461</b>	<b>337,056</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 11.18: Procedure statistics for the top 10 ACHI procedures for *Rehabilitation* care separations<sup>(a)</sup>, public and private hospitals, 2009–10**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
95550-03	Allied health intervention, physiotherapy	64,144	149,601	213,745
95550-02	Allied health intervention, occupational therapy	50,223	76,764	126,987
95550-01	Allied health intervention, social work	34,276	18,349	52,625
96153-00	Hydrotherapy	966	50,165	51,131
95550-00	Allied health intervention, dietetics	21,709	10,707	32,416
95550-05	Allied health intervention, speech pathology	15,819	10,524	26,343
95550-11	Allied health intervention, other	2,608	17,820	20,428
95550-09	Allied health intervention, pharmacy	5,690	4,637	10,327
96129-00	Exercise therapy, total body	0	9,955	9,955
95550-10	Allied health intervention, psychology	4,689	4,327	9,016
Separations with no procedure reported		12,231	6,589	18,820
<b>Total procedures</b>		<b>231,959</b>	<b>369,000</b>	<b>600,959</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 11.19: Procedure statistics for the top 10 ACHI procedures for *Palliative* care separations<sup>(a)</sup>, public and private hospitals, 2009–10**

<b>Procedure code and description</b>		<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
95550-03	Allied health intervention, physiotherapy	9,784	1,174	10,958
95550-01	Allied health intervention, social work	9,946	740	10,686
95550-12	Allied health intervention, pastoral care	5,285	995	6,280
95550-02	Allied health intervention, occupational therapy	5,519	340	5,859
95550-00	Allied health intervention, dietetics	4,356	527	4,883
95550-05	Allied health intervention, speech pathology	2,924	193	3,117
95550-11	Allied health intervention, other	1,973	79	2,052
13706-02	Administration of packed cells	1,146	346	1,492
95550-13	Allied health intervention, music therapy	792	192	984
95550-09	Allied health intervention, pharmacy	791	86	877
Separations with no procedure reported		7,271	1,948	9,219
<b>Total procedures</b>		<b>51,795</b>	<b>7,114</b>	<b>58,909</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: Procedure statistics for the top 10 ACHI procedures for *Geriatric evaluation and management separations*<sup>(a)</sup>, public and private hospitals, 2009–10**

Procedure code and description	Public hospitals	Private hospitals	Total
95550-03 Allied health intervention, physiotherapy	17,122	22	17,144
95550-02 Allied health intervention, occupational therapy	14,244	6	14,250
95550-01 Allied health intervention, social work	13,360	1	13,361
95550-00 Allied health intervention, dietetics	9,079	4	9,083
95550-05 Allied health intervention, speech pathology	5,394	0	5,394
95550-09 Allied health intervention, pharmacy	3,151	1	3,152
95550-04 Allied health intervention, podiatry	2,400	0	2,400
56001-00 Computerised tomography of brain	1,219	1	1,220
95550-12 Allied health intervention, pastoral care	1,046	1	1,047
95550-10 Allied health intervention, psychology	820	0	820
Separations with no procedure reported	2,279	4	2,283
<b>Total procedures</b>	<b>75,542</b>	<b>207</b>	<b>75,749</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: Procedure statistics for the top 10 ACHI procedures for *Psychogeriatric care separations*<sup>(a)</sup>, public and private hospitals, 2009–10**

Procedure code and description	Public hospitals	Private hospitals	Total
95550-01 Allied health intervention, social work	1,140	505	1,645
95550-02 Allied health intervention, occupational therapy	866	706	1,572
92514-99 General anaesthesia, ASA 99	476	968	1,444
95550-03 Allied health intervention, physiotherapy	751	644	1,395
92514-39 General anaesthesia, ASA 39	251	476	727
93341-01 Electroconvulsive therapy [ECT], 1 treatment	79	449	528
95550-00 Allied health intervention, dietetics	398	99	497
95550-09 Allied health intervention, pharmacy	341	122	463
95550-10 Allied health intervention, psychology	272	184	456
95550-05 Allied health intervention, speech pathology	307	97	404
Separations with no procedure reported	419	5,486	5,905
<b>Total procedures</b>	<b>6,538</b>	<b>7,227</b>	<b>13,765</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: Procedure statistics for the top 10 ACHI procedures for *Maintenance* care separations<sup>(a)</sup>, public and private hospitals, 2009–10**

Procedure code and description	Public hospitals	Private hospitals	Total
95550-03 Allied health intervention, physiotherapy	7,718	687	8,405
95550-01 Allied health intervention, social work	7,545	477	8,022
95550-02 Allied health intervention, occupational therapy	4,172	149	4,321
95550-00 Allied health intervention, dietetics	3,620	156	3,776
95550-05 Allied health intervention, speech pathology	2,389	90	2,479
95550-09 Allied health intervention, pharmacy	861	21	882
95550-11 Allied health intervention, other	534	27	561
95550-04 Allied health intervention, podiatry	405	122	527
96023-00 Ageing assessment	403	12	415
56001-00 Computerised tomography of brain	384	10	394
Separtions with no procedure reported	6,814	779	7,593
<b>Total procedures</b>	<b>32,086</b>	<b>2,704</b>	<b>34,790</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?

Non-acute separations may involve same-day or overnight episodes. Overall, the average length of stay for 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 11.23). For example, the average length of stay for *Rehabilitation* care was 18.3 days in public hospitals, compared to 5.2 days in private hospitals.

**Table 11.23: Patient days and average length of stay for non-acute separations, by care type, public and private hospitals, 2009–10**

Care type	Public hospitals		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Rehabilitation	1,517,048	18.3	872,470	5.2	2,389,518	9.5
Palliative care	300,762	11.3	59,785	11.9	360,547	11.4
Geriatric evaluation and management	431,005	20.2	397	4.5	431,402	20.2
Psychogeriatric care	143,220	61.3	56,709	7.0	199,929	19.2
Maintenance care	704,561	35.9	47,155	20.7	751,716	34.3
<b>Total</b>	<b>3,096,596</b>	<b>20.3</b>	<b>1,036,516</b>	<b>5.6</b>	<b>4,133,112</b>	<b>12.3</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Who paid for the care?

Almost 77% of non-acute separations from public hospitals were for *Public patients*, with just over 78% of non-acute separations from private hospitals funded by *Private health insurance* (Table 11.24). The *Department of Veterans' Affairs* funded over 7% of non-acute separations in public hospitals and just under 13% in private hospitals.

There was some variation by type of non-acute care. For private hospitals, about 39% of *Palliative* care and 20% of *Maintenance* care were *Public patients*.

**Table 11.24: Non-acute separations, by principal source of funds and type of non-acute care, public and private hospitals, 2009–10**

Funding source	Rehabilitation	Palliative	Geriatric evaluation and management	Psycho-geriatric	Maintenance	Total
<b>Public hospitals</b>						
Public patients <sup>(a)</sup>	63,677	20,369	15,778	2,060	15,344	117,228
Private health insurance	12,181	4,437	3,375	142	2,171	22,306
Self-funded <sup>(b)</sup>	640	146	82	6	64	938
Workers compensation	510	40	5	0	31	586
Motor vehicle third party personal claim	1,071	4	59	0	81	1,215
Department of Veterans' Affairs	4,278	1,591	1,971	125	1,884	9,849
Other <sup>(c)</sup>	335	46	40	3	49	473
<i>Total</i>	<b>82,692</b>	<b>26,633</b>	<b>21,310</b>	<b>2,336</b>	<b>19,624</b>	<b>152,595</b>
<b>Private hospitals</b>						
Public patients <sup>(a)</sup>	1,027	1,969	0	70	453	3,519
Private health insurance	133,991	2,267	64	6,598	1,043	143,963
Self-funded <sup>(b)</sup>	6,222	16	4	125	22	6,389
Workers compensation	4,764	2	2	25	19	4,812
Motor vehicle third party personal claim	1,272	74	0	1	1	1,348
Department of Veterans' Affairs	21,070	534	18	1,280	736	23,638
Other <sup>(c)</sup>	626	154	0	3	9	792
<i>Total</i>	<b>168,972</b>	<b>5,016</b>	<b>88</b>	<b>8,102</b>	<b>2,283</b>	<b>184,461</b>
<b>Total</b>	<b>251,664</b>	<b>31,649</b>	<b>21,398</b>	<b>10,438</b>	<b>21,907</b>	<b>337,056</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 Schedule.

(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 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 2009–10, the most common mode of separation for non-acute separations was *Other* (77%), which includes discharge to usual residence/own accommodation/welfare institution. Over 5% of separations ended with *Discharged or transferred to a residential aged care service* (Table 11.25).

**Table 11.25: Non-acute separations, by mode of separation, public and private hospitals, 2009–10**

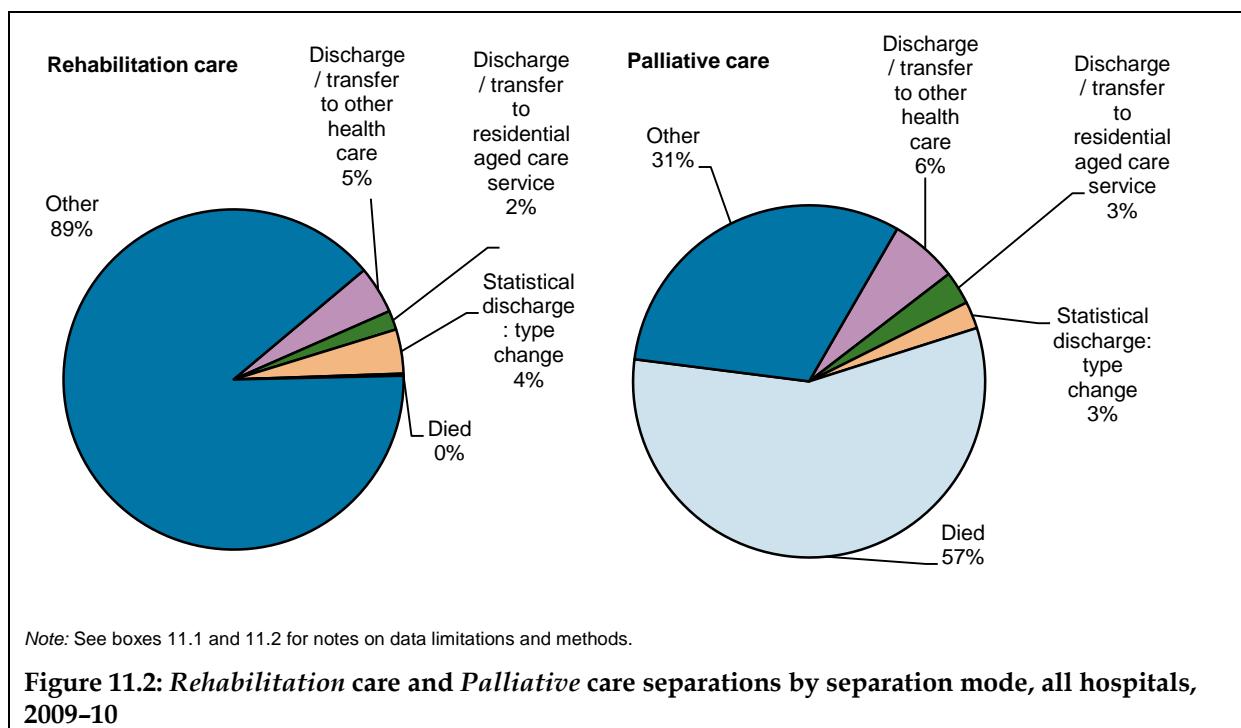
Separations mode	Public hospitals	Private hospitals	Total
Discharge/transfer to an(other) acute hospital	13,626	3,069	16,695
Discharge/transfer to residential aged care service <sup>(a)</sup>	15,132	1,757	16,889
Discharge/transfer to an(other) psychiatric hospital	171	16	187
Discharge/transfer to other health-care accommodation	3,040	324	3,364
Statistical discharge: type change	15,046	2,227	17,273
Left against medical advice/discharge at own risk	1,022	168	1,190
Statistical discharge from leave	1,115	13	1,128
Died	16,917	3,285	20,202
Other <sup>(b)</sup>	86,520	173,601	260,121
Not reported	6	1	7
<b>Total</b>	<b>152,595</b>	<b>184,461</b>	<b>337,056</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 non-acute care. For example, for *Rehabilitation* care, 89% of separations reported a mode of separation of *Other*, compared with 31% of separations for *Palliative* care. Nearly 57% 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 for 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.
- (b) For data on the number of procedures, all procedures within a group are counted, even if more than one is reported for a separation.
- (c) 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 S11.1: Non-acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2009–10**

<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	251	343	132	50	44	4	36	13	873
C00–D48	Neoplasms	7,879	4,814	4,191	746	1,171	227	497	191	19,716
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	75	80	44	15	21	2	9	0	246
E00–E90	Endocrine, nutritional and metabolic diseases	216	417	145	60	68	4	63	11	984
F00–F99	Mental and behavioural disorders	1,727	971	861	553	325	19	54	7	4,517
G00–G99	Diseases of the nervous system	407	1,062	350	232	192	20	57	9	2,329
H00–H59	Diseases of the eye and adnexa	8	4	2	1	2	0	3	1	21
H60–H95	Diseases of the ear and mastoid process	8	11	2	4	12	0	4	2	43
I00–I99	Diseases of the circulatory system	1,131	1,894	750	293	218	37	185	18	4,526
J00–J99	Diseases of the respiratory system	782	1,236	522	187	197	17	125	32	3,098
K00–K93	Diseases of the digestive system	463	606	287	104	89	19	63	19	1,650
L00–L99	Diseases of the skin and subcutaneous tissue	119	201	75	19	35	6	34	2	491
M00–M99	Diseases of the musculoskeletal system and connective tissue	391	809	124	57	186	7	60	9	1,643
N00–N99	Diseases of the genitourinary system	367	534	195	51	76	10	66	5	1,304
O00–O99	Pregnancy, childbirth and the puerperium	22	0	4	1	1	6	38	1	73
P00–P96	Certain conditions originating in the perinatal period	1	0	0	42	0	0	43	0	86
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	3	6	5	1	0	0	2	0	17
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	463	1,090	297	80	231	30	102	7	2,300
S00–T98	Injury, poisoning and certain other consequences of external causes	1,052	2,309	356	166	177	27	169	13	4,269
Z00–Z99	Factors influencing health status and contact with health services	35,547	18,678	23,762	9,939	9,473	1,795	4,139	1,011	104,344
	Not reported	65	0	0	0	0	0	0	0	65
<b>Total non-acute separations</b>		<b>50,977</b>	<b>35,065</b>	<b>32,104</b>	<b>12,601</b>	<b>12,518</b>	<b>2,230</b>	<b>5,749</b>	<b>1,351</b>	<b>152,595</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table S11.2: Non-acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2009–10**

Principal diagnosis chapter		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	4	4	14	16	2	n.p.	n.p.	n.p.	40
C00–D48	Neoplasms	309	471	1,293	1,579	194	n.p.	n.p.	n.p.	3,906
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	3	3	3	5	1	n.p.	n.p.	n.p.	17
E00–E90	Endocrine, nutritional and metabolic diseases	3	8	26	71	3	n.p.	n.p.	n.p.	112
F00–F99	Mental and behavioural disorders	0	5,942	442	63	0	n.p.	n.p.	n.p.	6,449
G00–G99	Diseases of the nervous system	14	1,089	59	111	7	n.p.	n.p.	n.p.	1,291
H00–H59	Diseases of the eye and adnexa	1	0	0	0	3	n.p.	n.p.	n.p.	4
H60–H95	Diseases of the ear and mastoid process	0	0	0	0	0	n.p.	n.p.	n.p.	1
I00–I99	Diseases of the circulatory system	18	21	112	362	11	n.p.	n.p.	n.p.	527
J00–J99	Diseases of the respiratory system	16	22	74	304	8	n.p.	n.p.	n.p.	434
K00–K93	Diseases of the digestive system	36	20	69	59	9	n.p.	n.p.	n.p.	194
L00–L99	Diseases of the skin and subcutaneous tissue	3	2	7	19	2	n.p.	n.p.	n.p.	35
M00–M99	Diseases of the musculoskeletal system and connective tissue	13	7	15	95	6	n.p.	n.p.	n.p.	138
N00–N99	Diseases of the genitourinary system	14	12	32	43	10	n.p.	n.p.	n.p.	114
O00–O99	Pregnancy, childbirth and the puerperium	1	0	0	0	1	n.p.	n.p.	n.p.	2
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	51	146	21	29	2	n.p.	n.p.	n.p.	252
S00–T98	Injury, poisoning and certain other consequences of external causes	11	6	28	139	2	n.p.	n.p.	n.p.	189
Z00–Z99	Factors influencing health status and contact with health services	99,633	16,212	31,292	1,972	17,791	n.p.	n.p.	n.p.	170,699
	Not reported	0	57	0	0	0	n.p.	n.p.	n.p.	57
<b>Total non-acute separations</b>		<b>100,130</b>	<b>24,022</b>	<b>33,487</b>	<b>4,867</b>	<b>18,052</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>184,461</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Abbreviation: n.p.—not published.

**Table S11.3: Non-acute separations, by procedure in ACHI chapters, public hospitals, states and territories, 2009–10**

<b>Procedure 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>
1–86	Procedures on nervous system	79	63	45	42	36	6	40	5	316
110–129	Procedures on endocrine system	2	2	2	5	1	0	1	0	13
160–256	Procedures on eye and adnexa	26	6	2	4	1	0	0	5	44
300–333	Procedures on ear and mastoid process	30	16	39	8	8	1	3	1	106
370–422	Procedures on nose, mouth and pharynx	25	10	13	7	4	1	2	0	62
450–490	Dental services	37	15	109	3	7	0	1	2	174
520–570	Procedures on respiratory system	210	125	134	98	63	6	47	7	690
600–777	Procedures on cardiovascular system	267	109	134	78	53	3	73	6	723
800–817	Procedures on blood and blood-forming organs	21	16	14	8	3	0	6	0	68
850–1011	Procedures on digestive system	419	160	253	118	131	8	66	14	1,169
1040–1129	Procedures on urinary system	790	508	370	306	160	78	103	27	2,342
1160–1203	Procedures on male genital organs	8	1	0	1	1	0	0	0	11
1240–1299	Gynaecological procedures	10	0	2	2	0	0	1	0	15
1330–1347	Obstetric procedures	5	0	2	1	1	1	5	0	15
1360–1579	Procedures on musculoskeletal system	222	205	113	166	71	16	30	12	835
1600–1718	Dermatological and plastic procedures	211	652	244	117	74	12	23	7	1,340
1740–1759	Procedures on breast	6	4	3	4	1	0	2	0	20
1786–1799	Radiation oncology procedures	196	119	84	25	8	6	51	6	495
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	44,899	29,511	19,775	10,815	10,277	1,623	4,896	661	122,457
1940–2016	Imaging services	4,502	2,513	1,922	1,038	1,069	173	720	70	12,007
	Total procedures	51,965	34,035	23,260	12,846	11,969	1,934	6,070	823	142,902
	Separations with no procedure reported	5,619	5,433	12,120	1,686	2,153	540	780	672	29,003
	<b>Total non-acute separations</b>	<b>50,977</b>	<b>35,065</b>	<b>32,104</b>	<b>12,601</b>	<b>12,518</b>	<b>2,230</b>	<b>5,749</b>	<b>1,351</b>	<b>152,595</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

**Table S11.4: Non-acute separations, by procedure in ACHI chapters, private hospitals, states and territories, 2009–10**

<b>Procedure 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>
1–86	Procedures on nervous system	67	43	56	47	11	n.p.	n.p.	n.p.	229
110–129	Procedures on endocrine system	1	0	1	0	0	n.p.	n.p.	n.p.	2
160–256	Procedures on eye and adnexa	3	0	1	1	5	n.p.	n.p.	n.p.	12
300–333	Procedures on ear and mastoid process	7	3	2	3	0	n.p.	n.p.	n.p.	15
370–422	Procedures on nose, mouth and pharynx	2	2	3	5	0	n.p.	n.p.	n.p.	12
450–490	Dental services	4	3	2	2	1	n.p.	n.p.	n.p.	13
520–570	Procedures on respiratory system	19	17	41	45	13	n.p.	n.p.	n.p.	141
600–777	Procedures on cardiovascular system	28	30	49	96	12	n.p.	n.p.	n.p.	223
800–817	Procedures on blood and blood-forming organs	4	3	7	12	0	n.p.	n.p.	n.p.	26
850–1011	Procedures on digestive system	74	50	103	98	24	n.p.	n.p.	n.p.	366
1040–1129	Procedures on urinary system	77	46	131	144	19	n.p.	n.p.	n.p.	441
1160–1203	Procedures on male genital organs	3	0	0	2	0	n.p.	n.p.	n.p.	5
1240–1299	Gynaecological procedures	3	1	2	11	3	n.p.	n.p.	n.p.	20
1330–1347	Obstetric procedures	1	0	0	0	1	n.p.	n.p.	n.p.	2
1360–1579	Procedures on musculoskeletal system	75	56	52	100	20	n.p.	n.p.	n.p.	317
1600–1718	Dermatological and plastic procedures	62	17	32	86	16	n.p.	n.p.	n.p.	221
1740–1759	Procedures on breast	0	2	0	1	1	n.p.	n.p.	n.p.	4
1786–1799	Radiation oncology procedures	2	6	18	1	0	n.p.	n.p.	n.p.	27
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	97,420	18,303	28,059	3,830	17,957	n.p.	n.p.	n.p.	169,414
1940–2016	Imaging services	516	356	777	632	178	n.p.	n.p.	n.p.	2,586
	Total procedures	98,368	18,938	29,336	5,116	18,261	n.p.	n.p.	n.p.	174,076
	Separations with no procedure reported	2,674	5,677	5,358	959	82	n.p.	n.p.	n.p.	14,806
<b>Total non-acute separations</b>		<b>100,130</b>	<b>24,022</b>	<b>33,487</b>	<b>4,867</b>	<b>18,052</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>184,461</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.p.—not published.

# Appendix 1: Technical appendix

This appendix covers:

- definitions and classifications used
- the presentation of data in this report
- information on the quality of the data (where this may affect interpretation)
- analysis methods.

## Definitions

If not otherwise indicated, data elements were defined according to the 2009–10 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 2009 and for 31 December 2009 (see tables A1.1, A1.2 and A1.3 accompanying this report online) were used for the observed rates as detailed below:

- Standard separation rates (by hospital state and by residence state) were directly age standardised, using the estimated resident populations as at 30 June 2009. The estimated resident populations use a highest age group of 85 years and over.
- Separation rates by Indigenous status were directly age-standardised, using the projected Indigenous population (low series) as at 30 June 2009 and the estimated resident populations as at 30 June 2009. As the projected estimates use a highest age group of 65 years and over and population data for June 2009, 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 2009. The estimated resident populations use a highest age group of 85 years 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 2009.

### **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 A1.4):

- 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 A1.4: Numbers of public hospitals reported in this report, states and territories, 2009–10**

Hospitals	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(a)</sup>	NT	Total
Chapter 3 (expenditure data)	226	95	170	95	80	24	3	5	698
Chapter 4	226	150	170	95	80	24	3	5	753

(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 2009–10 is calculated as the number of presentations reported to the Non-admitted Patient Emergency Department Care Database (NNAPECD) divided by the number of accident and emergency occasions of service reported to the National Public Hospital Establishments Database (NPHED) as a percentage. This may underestimate the NNAPECD proportion because some accident and emergency occasions of service are for other than emergency presentations. As accident and 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 accident and 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* (or *Not reported* for South Australia).

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 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 Australasian 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.

## **Limitations of the emergency department care data**

When interpreting the data presented, the reader should note the following:

- The proportion of accident and emergency occasions of service for which detailed episode-level data were available was 100% for *Principal referral and Specialist women's and children's hospitals* and *Large hospitals* (peer group A and B hospitals), but only about 81% for all hospitals.

- Certain issues of definition have not been resolved, so comparability across jurisdictions may be limited. Development and implementation of standard data definitions is ongoing.
- There is variation between jurisdictions in the point at which the emergency department presentation is recorded as completed for those patients subsequently admitted within the emergency department and/or elsewhere in the hospital. This will affect the comparability of presentation length statistics across jurisdictions.
- For Victoria and Tasmania, the conclusion of the non-admitted patient episode is reported as the time of physical departure for patients admitted to short stay wards within the emergency department.

## **Admitted patient care data analyses**

Records for 2009–10 are for hospital separations (discharges, transfers, deaths or changes in care type) in the period 1 July 2009 to 30 June 2010. Data on patients who were admitted on any date before 1 July 2009 are included, provided that they also separated between 1 July 2009 and 30 June 2010. 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).

### **Limitations of the admitted patient care data**

- Coverage for the NHMD is essentially complete. For 2009–10, all public hospitals were included except for a small mothercraft hospital in the Australian Capital Territory. Private hospital data were not provided for private freestanding day facilities in the Australian Capital Territory and the Northern Territory, and for one private freestanding day facility in Tasmania.
- For 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 from one private hospital.
- Hospitals may be re-categorised as public or private between or within years. *Appendix 2* presents information on coverage, hospital amalgamations, and re-categorisation as public and/or public.
- In 2009–10, there were 39 separations that did not have sex reported as male or female, and 78 separations for which date of birth was not reported (age could not be calculated).
- There is apparent variation between states and territories in the use of statistical discharges and associated assignment of care types. There was also variation in whether or not they reported separations for *Newborns* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement*.
- 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 2009–10, about 22% of separations for Australian Capital Territory hospitals were for patients who resided in New South Wales.

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 2009 to 30 June 2010), 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 2009–10, but who were

admitted before 1 July 2009, will be counterbalanced overall by the patient days for patients in hospital on 30 June 2010 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.

For 2009–10, private hospitals in Victoria did not report most *Newborn* episodes without qualified days, therefore the count of newborns 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.

Information on reporting practices for *Newborn* episodes before 2009–10 is available in previous *Australian hospital statistics* publications (AIHW 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010a).

## 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.

## Standard admitted patient care data analyses

For *chapters 7, 8, 9, 10 and 11* and relevant tables in *Chapter 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 7, 8 and 9*, and for tables in the report that include cost weight information, separations are included only for *Acute care, Newborns* (with qualified days) and 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.

#### **Broad categories of service**

Separations have been categorised as *Childbirth, Specialist mental health, Medical, Surgical* or *Other* based on the AR-DRG recorded for the separation:

- *Childbirth* includes separations for which the Australian Refined Diagnosis Related Group (AR-DRG) was associated with childbirth (does not include newborn care).
- *Specialist mental health* includes separations for which specialised psychiatric care days were reported.
- *Surgical* includes separations for which the AR-DRG belonged to the *Surgical* partition and excludes separations for *Childbirth* and *Specialist mental health*.
- *Medical* includes separations for which the AR-DRG belonged to the *Medical* partition and excludes separations for *Childbirth* and *Specialist mental health*.
- *Other* includes separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions and excludes separations for *Childbirth* and *Specialist mental health*.

#### **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 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 2009–10, the funding source for the separation is presented alone.

Throughout the report, the category *Public patients* includes separations for which the funding source was reported as:

- *Australian Health Care Agreements*
- *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 2009–10, the Australian Health Care Agreements expired on 30 June 2009. This value is interpreted as the patient being Medicare eligible patients, 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*
- *Not reported*.

### **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 A1.5 (accompanying this report online) and relate to:

- statistics on selected procedures (*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 for elective 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 elective surgery 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).

- For the NHMD, separations have been classified as elective surgery separations according to the following:
  - Separations were included if they had an *Elective* urgency of admission (admission could be delayed by at least 24 hours) and a surgical procedure was reported, based on the procedures used to define surgical AR-DRGs in *Australian Refined Diagnosis Related Groups*, version 5.2 (DoHA 2006).
  - Separations for cosmetic surgery and separations with childbirth-related *Surgical AR-DRGs* were excluded.
- Elective surgery separations were also categorised as *Public* or *Other*:
  - *Public elective surgery* refers to separations for elective surgery in public hospitals and includes elective surgery separations for public patients (as defined above) in private hospitals.
  - *Other elective surgery* separations refers to separations for elective surgery for private patients in private hospitals.

## **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**

### **Average available beds**

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.

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 could not distinguish between the number of beds available in overnight wards and the number of 'chairs' used for day procedures. The comparability of the data was therefore affected by the range and types of patients treated by the hospital (including the proportion of services provided as same-day admitted services and variation in admission practices).

Separate data on same-day and overnight beds is expected to be more comparable, particularly for overnight beds. The comparability of the data will, however, continue to be affected by hospital casemix and the different proportions of beds available for special and more general purposes.

### **Provision of Average available beds data for 2009–10**

All states and territories provided counts of available beds for same-day/overnight admitted patients for some of the hospitals in their jurisdiction (Table A1.6). The majority of states and territories reported approximately 15% of average available beds as for same-day admitted patients. However, the proportion of same-day beds for New South Wales and the Northern

Territory was 7% and 5% respectively, and South Australia reported only 2% of average available beds for same-day admitted patients. The magnitude of this range indicates non-comparability of the data, despite possible differences in admission practices.

The provision of counts of average available beds, disaggregated by same-day/overnight basis also varied with the size of the hospital. By public hospital peer group, average available beds split on a same-day/overnight basis were provided by:

- 73 of the 75 *Principal referral* hospitals, all of which reported same-day separations
- 10 of the 11 *Specialist women's and children's* hospitals, all of which reported same-day separations
- 40 of the 43 *Large* hospitals, all but one of which reported same-day separations
- 66 of the 92 *Medium* hospitals, all of which reported same-day separations.

**Table A1.6: Provision of data for average available beds, states and territories, 2009–10**

Hospitals	Total beds	Beds for same-day admitted patients (%)	Number of hospitals that may be missing same-day beds <sup>(a)</sup>	Total beds reported for those hospitals <sup>(a)</sup>	Beds that may not have been disaggregated <sup>(a)</sup> (%)
New South Wales	226	19,608	7%	54	1,743
Victoria <sup>(b)</sup>	150	13,186	15%	22	334
Queensland	170	10,911	16%	38	745
Western Australia	95	5,376	12%	17	331
South Australia	81	4,859	2%	45	3,210
Tasmania	24	1,359	14%	4	46
Australian Capital Territory	2	907	17%	0	0
Northern Territory	5	694	5%	2	80
<b>Total</b>	<b>753</b>	<b>56,900</b>	<b>11%</b>	<b>182</b>	<b>6,489</b>
					<b>11%</b>

(a) This is the number of hospitals that reported same-day separations but did not report available beds for same-day admitted patients.

(b) The number of hospitals in Victoria is reported as a count of the campuses that reported data separately to the National Hospital Morbidity Database in 2009–10.

Source: National Public Hospital Establishments Database.

There were 182 hospitals that reported same-day separations but did not report separate counts for *Average available beds for overnight-stay patients* and *Average available beds for same-day patients*. This will overestimate the number of hospitals for which the disaggregated data was missing, as some hospitals did not have same-day beds for admitted patients. The proportion of beds estimated not to have been disaggregated varied markedly among the states and territories, from none (0%) in the Australian Capital Territory to 66% in South Australia.

For these reasons, the quality of the average available beds data for 2009–10 was not considered to be sufficient for analytical purposes and presentation in the body of this report.

## 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 2009–10 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 A1.7. Details of the derivation of the peer groups are in *Appendix 11* of *Australian hospital statistics 1998–99* (AIHW 2000). From 2001–02, the method was adjusted slightly, replacing the rural, remote and metropolitan area (RRMA) classification with the 2001 ASGC remoteness area classification for the geographical component of the peer grouping.

A flow chart can be found in *Australian hospital statistics 2002–03* (Figure A4.1 in that report) (AIHW 2004a) 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 2* for the NMDSS for Non-admitted patient emergency department care and Outpatient care.

The peer group to which each public hospital was assigned for 2009–10 is included in Table A2.2 (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 A2.2.

**Table A1.7: 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.

## 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.

The ASGC's remoteness structure 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.*

### Geographical location of hospital

The remoteness area of each public hospital was determined on the basis of its SLA. For 2009–10, the geographical location was updated to align 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 2009 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 2008 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 2009 SLA codes. For the remaining 0.5% of records, about 53% were for overseas residents, 8% 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 98.6% of records assigned 2009 SLA codes. For the remaining 2% of records, about 23% 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 2009–10, the patients' area of residence data was mapped to the ABS's ASGC Remoteness Structure 2006. For 2001–02 to 2006–07, the AIHW mapped the patients' area of residence data to the ABS's ASGC Remoteness Structure 2001.

The data presented by remoteness areas using the ABS's ASGC Remoteness Structure 2006 in this report and the 2007–08, 2008–09 reports 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 2006–07 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 by using the SEIFA Index of Relative Advantage and Disadvantage 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

## **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 2007–2008. 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 2009–10**

Overall, the quality of the Indigenous status data provided for admitted patients in 2009–10 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 quality of the Indigenous status data provided for 2009–10 for emergency department presentations also 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 presented on Indigenous status in *chapters 3, 5, 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 both the NHMD and the NNAPECD.

### **New South Wales**

In 2010, the New South Wales Health Department (NSW Health) repeated the survey conducted in 2007, to ascertain whether or not there had been an improvement following the 2007 survey of admitted patient data. In 2010, NSW Health used the same methodology used in 2007, a similar number of patients and the same hospitals. The only variation was that 3 of the 20 hospitals involved in the 2007 survey, declined to participate in the 2010 survey.

The analysis of the 2010 survey on the completeness of Aboriginal identification in the admitted patient data collection has been completed and the result shows an improvement on the 2007 survey. Some 2,400 patients were interviewed in 2010. The same weighting methodology was used as in 2007, so that the results could be compared. 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%). The slight drop in outer regional could be due to the fact that

Wagga Wagga, Bourke and Griffith Hospitals did not participate this time. The outer regional result could be due to a greater volatility of the figures brought about by the reduced number of patients interviewed in that region. The combined result for 2010 was 90.1%, an improvement on the 2007 result of 88.2%.

An article about the 2010 New South Wales survey, and its results, is currently being prepared for publication.

Indigenous status is a mandatory data item collected at all facilities that provide data for the NSW Health Emergency Department Data Collection. NSW Health noted that for 2009–10, approximately 10% of emergency department records were missing Indigenous status data, despite the information being recorded on the patient administration system. The high level of non-reporting resulted from difficulties in the implementation of new systems. NSW Health is working to correct the information. NSW Health considers that Indigenous status identification in its emergency department data is acceptable.

### **Victoria**

The Victorian Department of Health reports Indigenous status as a mandatory field in both the Admitted and Emergency Department collections. The quality of Indigenous data has continued to improve in both collections, although there is still a small under-count of Aboriginal and Torres Strait Islander patients. Unknown Indigenous status is reported through the fields 'Patient refused to answer' and 'Question unable to be asked'. These fields are monitored carefully to ensure they are used appropriately. Other quality improvement activities are undertaken through the ICAP (Improving Care for Aboriginal and Torres Strait Islander Patients) program.

### **Queensland**

Queensland Health noted that for 2009–10, Indigenous status was reported as 'not stated' for 5.2% of admitted patient separations (1.6% of public hospital separations and 9.1% of private hospital separations). The level of non-reporting of Indigenous status had decreased slightly for both public and private hospitals compared to the previous financial year.

Queensland Health also noted that the available evidence continued to suggest that the number of Indigenous separations is significantly understated in the Queensland hospital morbidity data due to non-reporting as well as mis-reporting 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 is now a key performance indicator for Queensland Health Service Districts.

Queensland Health noted that, for 2009–10 emergency department data, Indigenous status was not reported in 1.5% of cases. This is a slight improvement from the 1.6% level of non-reporting that existed in the 2008–09 data. 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 admitted patient Indigenous status data 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**

The South Australian Department of Health (SA Health) considers its admitted patient data on Indigenous status for 2009–10 to be suitable for inclusion in national statistical reports. It is known that standards of identification are better in country hospitals than metropolitan hospitals. The department conducts annual training programs on the collection of admitted patient data, and the programs include instructions on the correct way to ask and record the response to the Indigenous status question.

At SA Health's request, the Australian Bureau of Statistics developed a training package on the collection of the Indigenous identifier for frontline staff in hospitals and other health care units. Specialised training was delivered to frontline staff working in country hospitals between October and December 2010. Equivalent training will be provided to metropolitan hospital staff before the end of June 2011.

A 30% loading has been applied to casemix payments for Indigenous separations in public hospitals for a number of years, which acts as an incentive for improved identification.

SA Health advised that the quality of Indigenous status data is higher for admitted patients than non-admitted emergency department patients, as evidenced by the higher proportion of emergency department episodes for which Indigenous status was not reported. However, there had been an improvement in data quality. In 2009–10 Indigenous status was not reported in 8.3% of emergency department presentations (Table 5.4), compared with 17.7% in 2005–06. Further improvements are expected in 2010–11.

## **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. The department is continuing to monitor and implement actions to improve the coverage and quality of Indigenous data in the private sector.

## **Australian Capital Territory**

The Australian Capital Territory Health Department (ACT Health) commenced collection of the Aboriginal and Torres Strait identifier within the Patient Master Index Hub, which will enable the identification status of a person to be shared throughout ACT Health IT systems. Development of reporting outputs is progressing. The Aboriginal and Torres Strait Islander Health Unit of ACT Health is working to ensure adherence to standards is maintained and is ensuring ethical and privacy considerations are taken into account. This initiative will lead to future improvements in the quality of Indigenous data.

## **Northern Territory**

The Northern Territory Department of Health reported that the quality of its 2009–10 Indigenous status data for both admitted patients and emergency department patients is considered to be acceptable. The department retains historical reporting of Indigenous status and individual client systems receive a report (for follow up) of individuals who have reported their Indigenous status as Aboriginal on one occasion and as Torres Strait Islander on another. All management and statistical reporting, however, is based on a person's most recently reported Indigenous status.

## **ICD-10-AM/ACHI**

Diagnosis, procedure and external cause data for 2009–10 were reported to the NHMD by all states and territories using the sixth edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2008), 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 2008).

### **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- 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 – 2,067 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 373 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 1,598 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 6,200 individual procedures. *Chapter 11* presents information for the 10 procedures with the highest number of non-acute care separations.

## **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, by the numbers of diagnosis and procedure codes reported 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.

## **Victoria**

As part of a comprehensive health data integrity audit program, the Victorian Department of Health continues to conduct state-wide external audits 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.

## **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.

A corporate run program of clinical coding audits continued during 2009–10. Results from this audit program show a change in AR-DRGs of less than 10%. In addition, a state-wide audit of 30 public hospitals covering 3,300 medical records was undertaken in May to June 2010 to determine coding accuracy against national standards. It was estimated that the change in AR-DRGs for this round of coding audits was also less than 10%.

A number of hospitals also validated their coded data using Performance Indicators for Coding Quality (PICQ™) 2008.

## **Western Australia**

The Western Australian Department of Health conducts regular audits of hospital medical records and inpatient data-reporting processes. This 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. The results of these audits for 2009–10 admitted patient cases from teaching and non-teaching hospitals indicate that the quality of the coded data is very good. The National Centre for Classification in Health's PICQ™ software and in-house quality activities were also applied to all cases received by the department.

## **South Australia**

The South Australian Department of Health (SA Health) performed a major audit of coding practices in major metropolitan hospitals on random samples of 2004–05 data. The purpose of the audit was to ascertain the level of coding accuracy and the impact on AR-DRG assignment. The audit found that coding practices in major metropolitan hospitals had improved significantly since the last major audit (conducted in 2002), with almost all hospitals reporting a reduction in their AR-DRG error rate. In addition, the department conducts regular targeted desktop audits of coded data. Results are reported to all South Australian Coders in a quarterly newsletter, and individual hospitals are notified if a problem exists, and where coding needs to be corrected.

SA Health is in the process of conducting another major audit of coding practices, covering both major metropolitan and country hospitals.

## **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 continues to code medical records to a high standard. Coded data is analysed for quality using the PICQ™ tool. Also internal coding audits are performed on a six monthly basis by some hospitals.

## **Northern Territory**

The Northern Territory is committed to the continual improvement of clinical coding across the Northern Territory Hospitals Network, conducting regular internal audits to promote confidence in the system's health information. Recent audit activities have enabled the implementation of Key Performance Indicators and Benchmarking across the network with mentoring of the coding team provided through the Coders' Forum. Recent audit activities have shown the quality of coded data is good with a consistent improvement in AR-DRG assignment across the network.

## **Number of procedure codes**

Table A1.8 presents information on the number of procedure codes reported to the NHMD. Ideally, the number of procedures recorded for a patient should reflect the procedures undertaken and not be restricted by administrative or technical limitations.

There were marked differences between the states and territories in the maximum number of procedures reported, ranging from 25 for South Australia to over 50 for Western Australia. However, with the exception of the Northern Territory, the average number of procedure codes per separation in the public sector varied little among the jurisdictions, as was the case in the private sector. The AIHW requested a maximum of 50 codes, so this may have restricted the number of codes reported by New South Wales, Queensland, Tasmania and the Australian Capital Territory. The proportion of separations for which no procedures were reported was higher in the public sector (24%) than in the private sector (6%). However, this may reflect casemix differences between public and private hospitals.

In recent years, the proportion of records for which five or more procedures were reported has increased in both sectors. In the public sector, 8.1% of records had five or more procedure codes in 2009–10, compared with 7.2% in 2003–04 (AIHW 2005). In the private sector, 7.2% of records had five or more procedure codes in 2009–10, compared with 8.2% in 2003–04.

**Table A1.8: Proportion of separations<sup>(a)</sup>, by number of procedure codes<sup>(b)</sup> reported, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Per cent</b>									
<b>Public hospitals</b>									
No procedure reported	27.1	20.1	28.0	18.9	24.8	18.3	16.0	21.5	23.8
One procedure code only	31.4	37.6	34.0	37.2	33.5	39.4	43.0	55.1	35.1
Two procedure codes only	17.0	18.3	16.9	20.0	17.0	19.1	17.1	10.6	17.6
Three procedure codes only	11.0	10.3	9.2	11.2	10.8	10.3	10.5	5.5	10.3
Four procedure codes only	5.6	5.2	4.8	5.5	5.6	4.8	5.4	2.8	5.2
Five or more procedure codes	8.1	8.6	7.2	7.4	8.2	8.2	8.0	4.5	7.9
<b>Private hospitals</b>									
No procedure reported	3.4	9.2	7.2	4.9	4.7	n.p.	n.p.	n.p.	6.3
One procedure code only	21.5	23.4	27.6	34.8	25.2	n.p.	n.p.	n.p.	25.0
Two procedure codes only	35.0	34.6	34.3	30.1	33.2	n.p.	n.p.	n.p.	34.1
Three procedure codes only	24.4	19.2	18.0	16.2	20.8	n.p.	n.p.	n.p.	20.2
Four procedure codes only	8.0	6.5	6.2	6.9	7.9	n.p.	n.p.	n.p.	7.1
Five or more procedure codes	7.7	7.0	6.8	7.1	8.3	n.p.	n.p.	n.p.	7.3

(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) Includes separations for which no procedure codes were reported.

### Number of diagnosis codes

The NHMD contains data on principal diagnoses and additional diagnoses. Additional diagnoses include comorbidities (coexisting conditions) and/or complications which may contribute to longer lengths of stay, more intensive treatment or the use of greater resources. Ideally, the number of additional diagnoses recorded for a patient should be related to the person's clinical condition and not be restricted by administrative or technical limitations.

The AIHW requested that the states and territories report a maximum of 50 diagnosis codes, but some report more. Table A1.9 presents information on the number of diagnosis codes (principal and additional) reported to the NHMD. There are differences between the states and territories in the maximum number of diagnoses reported. For example, in the public sector, South Australia reported a maximum of 25 diagnoses and Queensland a maximum of 66. For both public and private sectors, the average number of diagnosis codes per separation varied little among the jurisdictions.

Overall, the average number of codes reported for the public sector was slightly higher than for the private sector. In the public sector, 17% of records had five or more diagnosis codes, but in the private sector less than 10% of records fell into this category. It may be that more complicated cases were treated in public hospitals, or there may have been differences in coding practices.

**Table A1.9: Proportion of separations<sup>(a)</sup>, by number of diagnosis codes<sup>(b)(c)</sup> reported, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Per cent</b>									
<b>Public hospitals</b>									
One diagnosis code only	40.6	39.0	35.0	39.0	37.4	46.5	47.9	38.6	39.0
Two diagnosis codes only	21.6	25.0	23.7	22.3	25.6	22.0	18.0	32.6	23.5
Three diagnosis codes only	12.4	12.8	14.2	13.9	12.9	12.3	11.1	8.9	12.9
Four diagnosis codes only	7.9	7.4	8.5	8.1	7.6	7.0	7.1	5.8	7.8
Five or more diagnosis codes	17.4	15.8	18.6	16.7	16.5	12.2	15.8	14.1	16.8
<b>Private hospitals</b>									
One diagnosis code only	35.5	38.3	34.1	35.7	31.7	n.p.	n.p.	n.p.	35.5
Two diagnosis codes only	26.4	30.7	30.0	30.7	32.4	n.p.	n.p.	n.p.	29.6
Three diagnosis codes only	18.3	15.1	16.4	17.4	16.3	n.p.	n.p.	n.p.	16.7
Four diagnosis codes only	9.0	7.2	8.8	7.2	8.4	n.p.	n.p.	n.p.	8.2
Five or more diagnosis codes	10.8	8.2	10.7	9.0	11.2	n.p.	n.p.	n.p.	9.9

(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) Codes reporting external causes of injury and poisoning are not included.

(c) For 2009–10, there were 390 records in public hospitals and 4,623 records in private hospitals for which no diagnosis codes were reported.

## 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 A1.10 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.

For the Northern Territory, data for some measures were suppressed because of limitations with direct standardisation for groups that report a limited range of AR-DRGs (see the discussion of relative stay indexes below).

## 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 A1.10: Standardised proportion in lowest resource level AR-DRG<sup>(a)</sup> for selected adjacent AR-DRG version 5.2, public and private hospitals, states and territories, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>All adjacent AR-DRGs where the lowest split was <i>Without complication or comorbidity</i></b>									
Public hospitals	0.78	0.76	0.76	0.79	0.77	0.76	0.74	0.77	0.77
Private hospitals	0.69	0.69	0.71	0.72	0.71	n.p.	n.p.	n.p.	0.70
<b>Adjacent AR-DRGs where the lowest split was <i>With a moderate complication</i></b>									
Public hospitals	0.58	0.56	0.60	0.58	0.57	0.64	0.59	0.55	0.58
Private hospitals	0.58	0.57	0.57	0.57	0.56	n.p.	n.p.	n.p.	0.57
<b>Adjacent DRGs where the lowest split was <i>Without a severe or catastrophic complication</i></b>									
Public hospitals	0.74	0.72	0.74	0.75	0.73	0.80	0.73	0.70	0.73
Private hospitals	0.81	0.80	0.79	0.80	0.80	n.p.	n.p.	n.p.	0.80
<b>Adjacent AR-DRGs classified as <i>Major medical conditions</i></b>									
Public hospitals	0.61	0.54	0.60	0.64	0.61	0.70	0.61	0.58	0.59
Private hospitals	0.62	0.65	0.61	0.61	0.67	n.p.	n.p.	n.p.	0.63
<b>Adjacent AR-DRGs for <i>Vaginal and caesarean delivery</i></b>									
Public hospitals	0.39	0.35	0.42	0.35	0.37	0.43	0.39	0.41	0.38
Private hospitals	0.35	0.36	0.38	0.36	0.34	n.p.	n.p.	n.p.	0.37

(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 five groups of adjacent AR-DRGs:

1. all applicable adjacent AR-DRGs (that is, excluding adjacent AR-DRGs with other factors affecting partitioning)
2. adjacent DRGs where the lowest split was without CCs
3. adjacent DRGs where the lowest split was without severe or catastrophic CCs
4. major medical conditions: adjacent AR-DRGs E61 *Pulmonary embolism*, F62 *Heart failure and shock*, T60 *Septicaemia*—these adjacent AR-DRGs are selected because admission for these conditions is seen to be relatively non-discretionary and less likely than for other AR-DRGs to be influenced by variation in admission practices
5. vaginal and caesarean deliveries.

The above categories overlap; in particular, Vaginal and caesarean deliveries is a subset of the second category, and Major medical conditions is a subset of the third category.

See Table A1.11 (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 2009–10

The quality of the Condition onset flag data for 2009–10 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, Tasmania, the Australian Capital Territory 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.

The data were considered to be of insufficient quality for analytical purposes for these reasons.

## Coverage

For public hospitals, Condition onset flag was provided for over 90% of separations for all states and territories except New South Wales (Table A1.12).

For New South Wales, Condition onset flag was provided for about 28% of separations in public hospitals. Only some of the New South Wales Area Health Services provided data.

For private hospitals, Condition onset flag was provided for over 99% of separations for Victoria, Queensland, Western Australia and South Australia.

**Table A1.12: Proportion of separations<sup>(a)</sup> with Condition onset flag reported<sup>(b)</sup> (%), public and private hospitals, states and territories, 2009–10**

	Public hospitals	Private hospitals
New South Wales <sup>(c)</sup>	28.3	0.0
Victoria	100.0	100.0
Queensland	100.0	100.0
Western Australia	100.0	100.0
South Australia	100.0	99.8
Tasmania	91.9	10.8
Australian Capital Territory	100.0	57.2
Northern Territory	100.0	0.0
<b>Total</b>	<b>78.0</b>	<b>69.4</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.

(c) For New South Wales, Condition onset flag data were only reported for public hospitals for three NSW Area Health Services.

### Proportion of separations for which there was a report of a condition with onset during the episode of care

For separations for which Condition onset flag was provided, about 6.5% of public hospital separations and about 3.3% of private hospital separations reported at least one condition that arose during the episode of care (tables A1.13 and A1.14).

#### *Public hospitals*

About 6.5% of public hospital separations reported at least one condition that arose during the episode of care (Table A1.13). There was marked variation between states and territories, with the overall proportion ranging from 0.9% to 10.0%. 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 0.7%, with state/territory proportions ranging from 0.1% to 1.1% (Table A1.13).

About 12.4% of public hospital overnight separations recorded a diagnosis with onset during the episode of care. There was variation by jurisdiction, ranging from 1.6% to 22.2%. For overnight separations with an *Elective* urgency of admission, the proportion reported with a condition with onset during the episode ranged from 1.7% to 23.6%.

#### *Private hospitals*

For private hospitals, data are not presented for New South Wales, Tasmania and Northern Territory. For the Australian Capital Territory, data are presented for the hospitals that provided Condition onset flag data.

About 3.3% of private hospital separations reported at least one condition that arose during the episode of care (Table A1.14). There was marked variation between states and territories, with the overall proportion ranging from 3.3% to 5.9%. As for public hospitals, this variation may indicate that there are differences in the allocation of Condition onset flags.

**Table A1.13: Proportion of separations<sup>(a)</sup> with condition onset during episode of care, by same-day/overnight status and Urgency of admission, public hospitals, 2009–10**

	State 1	State 2	State 3	State 4	State 5	State 6	State 7	State 8	Total
<b>Same-day separations</b>									
Emergency	1.4	0.6	0.6	1.5	0.2	1.5	0.9	0.9	0.9
Elective	1.9	0.6	0.6	2.9	0.1	1.1	0.7	0.5	0.7
Not assigned	0.5	0.2	0.2	0.2	0.2	0.1	2.3	0.4	0.4
Not reported	..	..	..	..	..	..	0.0	0.6	0.6
<i>Total</i>	1.1	0.4	0.4	1.6	0.1	0.6	0.8	0.5	0.7
<b>Overnight separations</b>									
Emergency	12.5	9.2	9.7	13.8	1.1	14.7	18.1	13.8	9.6
Elective	17.7	12.5	23.2	17.9	1.7	19.9	23.6	15.6	16.2
Not assigned	29.5	23.5	19.6	32.0	2.9	23.9	38.2	17.2	19.0
Not reported	..	..	..	..	..	..	0.0	10.4	10.1
<i>Total</i>	16.3	12.7	14.0	16.5	1.6	17.4	22.2	13.4	12.4
<b>Total</b>	<b>0.9</b>	<b>8.6</b>	<b>4.9</b>	<b>6.8</b>	<b>9.8</b>	<b>0.9</b>	<b>8.4</b>	<b>10.0</b>	<b>6.5</b>

(a) Proportion of separations is calculated for separations for which the Condition onset flag was reported only. States and territories have been presented in random order, and this is not necessarily the same as in Table A1.14.

Abbreviation: ..—not applicable.

The proportion of same-day separations that recorded a condition with onset during the episode was 0.3%, with state/territory proportions ranging from 0.2% to 1.1% (Table A1.14).

About 9.8% of private hospital overnight separations recorded a diagnosis with onset during the episode of care. There was variation by jurisdiction, ranging from 4.7% to 18.4%. For overnight separations with an *Elective* urgency of admission, the proportion reported with a condition with onset during the episode ranged from 3.4% to 15.2%.

**Table A1.14: 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, 2009–10**

	State A	State B	State C	State D	State E	Total
<b>Same-day separations</b>						
Emergency	1.3	16.7	1.0	0.8	0.8	0.8
Elective	0.4	0.3	0.3	0.3	1.2	0.3
Not assigned	0.1	0.0	0.1	0.1	0.8	0.2
Not reported	..	..	..	..	..	..
<i>Total</i>	0.4	0.3	0.3	0.2	1.1	0.3
<b>Overnight separations</b>						
Emergency	42.4	7.8	9.9	12.7	14.4	11.8
Elective	15.2	3.4	8.4	12.9	14.4	8.7
Not assigned	27.0	14.4	18.7	17.5	30.6	16.1
Not reported	..	..	..	..	..	..
<i>Total</i>	18.4	4.7	9.6	13.0	14.9	9.8
<b>Total</b>	<b>5.7</b>	<b>2.2</b>	<b>3.3</b>	<b>4.3</b>	<b>5.9</b>	<b>3.3</b>

(a) Proportion of separations is calculated for separations for which the Condition onset flag was reported only. States and territories have been presented in random order, and this is not necessarily the same as in Table A1.13.

Abbreviation: ..—not applicable.

### **Diagnoses reported with onset during the episode of care**

Table A1.15 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 establishments 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* (36.2%), *Certain conditions originating in the perinatal period* (21.8%), *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (21.3%) and *Diseases of the skin and subcutaneous tissues* (17.9%).

For private hospitals, the disease chapters with the highest proportions of additional diagnoses that arose during the episode of care were *Pregnancy, childbirth and the puerperium* (28.3%), *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (27.3%), and *Injury, poisoning and certain other consequences of external causes* (27.1%).

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*. Therefore it is not expected that additional diagnoses would be reported with onset during the episode of care for these chapters. 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 A1.16 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.

Five of the top 20 diagnoses were related to childbirth episodes, including perineal lacerations and postpartum haemorrhage. Four were categorised as signs or symptoms, such as nausea, retention of urine, pain, headache and fever. Four were for infectious diseases and two were for complications of medical or surgical care.

**Table A1.15: 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>, 2009–10**

Diagnosis chapter		Public hospitals		Private hospitals			% with onset during episode <sup>(b)</sup>
		Condition with onset during episode	Total additional diagnoses	% with onset during episode	Condition with onset during episode	Total additional diagnoses	
A00–B99	Certain infectious and parasitic diseases	48,467	298,505	16.2	14,368	75,389	19.1
C00–D48	Neoplasms	629	581,220	0.1	687	494,569	0.1
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	31,126	169,837	18.3	7,795	49,620	15.7
E00–E90	Endocrine, nutritional and metabolic diseases	74,974	683,278	11.0	13,707	148,864	9.2
F00–F99	Mental and behavioural disorders	12,903	333,758	3.9	2,754	92,847	3.0
G00–G99	Diseases of the nervous system	9,273	176,953	5.2	2,539	56,116	4.5
H00–H59	Diseases of the eye and adnexa	4,507	105,046	4.3	1,152	26,116	4.4
H60–H95	Diseases of the ear and mastoid process	1,330	27,393	4.9	336	7,185	4.7
I00–I99	Diseases of the circulatory system	79,551	792,556	10.0	28,479	268,082	10.6
J00–J99	Diseases of the respiratory system	41,557	261,372	15.9	11,302	65,233	17.3
K00–K93	Diseases of the digestive system	41,451	460,223	9.0	14,871	359,061	4.1
L00–L99	Diseases of the skin and subcutaneous tissue	25,507	142,650	17.9	6,537	47,286	13.8
M00–M99	Diseases of the musculoskeletal system and connective tissue	12,799	217,636	5.9	5,398	165,312	3.3
N00–N99	Diseases of the genitourinary system	33,520	532,061	6.3	10,734	238,730	4.5
O00–O99	Pregnancy, childbirth and the puerperium	116,297	320,883	36.2	32,140	113,508	28.3
P00–P96	Certain conditions originating in the perinatal period	17,174	78,914	21.8	2,578	12,514	20.6
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	200	36,274	0.6	65	7,055	0.9
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, n.e.c.	147,026	690,767	21.3	57,835	211,813	27.3
S00–T98	Injury, poisoning and certain other consequences of external causes	69,422	518,186	13.4	23,609	87,208	27.1
Z00–Z99	Factors influencing health status and contact with health services	27,750	2,064,982	1.3	5,299	870,030	0.6
<b>Total</b>		<b>795,463</b>	<b>8,492,495</b>	<b>9.4</b>	<b>242,185</b>	<b>3,396,538</b>	<b>7.1</b>

(a) For public hospitals, data are included for all states and territories. For private hospitals, data are included for the five jurisdictions that provided Condition onset flag information.

(b) Proportions are of separations for which the Condition onset flag was reported.

**Table A1.16: The 20 most common diagnoses with onset during the episode of care, selected states and territories<sup>(a)</sup>, public and private hospitals, 2009–10**

3-character ICD-10-AM diagnosis code	Public hospitals <sup>(b)</sup>	Private hospitals <sup>(b)</sup>	Total <sup>(b)</sup>
E87 Other disorders of fluid, electrolyte and acid-base balance	41,476	7,780	49,256
I95 Hypotension	29,910	9,943	39,853
T81 Complications of procedures, not elsewhere classified	24,890	11,041	35,931
R11 Nausea and vomiting	16,072	11,332	27,404
K59 Other functional intestinal disorders	17,416	6,198	23,614
O70 Perineal laceration during delivery	18,184	5,317	23,501
N39 Other disorders of urinary system	16,711	5,289	22,000
B96 Other bacterial agents as the cause of diseases classified to other chapters	15,580	5,192	20,772
O92 Other disorders of breast and lactation associated with childbirth	13,810	2,907	16,717
R00 Abnormalities of heart beat	13,151	3,415	16,566
O92 Other disorders of breast and lactation associated with childbirth	10,430	5,713	16,143
I48 Atrial fibrillation and flutter	10,271	4,883	15,154
O72 Postpartum haemorrhage	12,240	1,909	14,149
R33 Retention of urine	9,950	4,011	13,961
D64 Other anaemias	10,019	3,929	13,948
R07 Pain in throat and chest	10,278	3,366	13,644
O68 Labour and delivery complicated by fetal stress [distress]	10,298	2,699	12,997
E86 Volume depletion	10,692	1,617	12,309
R50 Fever of unknown origin	8,770	3,115	11,885
A09 Diarrhoea and gastroenteritis of presumed infectious origin	8,890	2,949	11,839

(a) For public hospitals, data are included for all states and territories. For private hospitals, data are included for the five jurisdictions that provided Condition onset flag information.

## 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 5.2 (DoHA 2006) 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 665 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 901Z–903Z 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 and 9* is presented using the three levels of the AR-DRG classification:

- Separations have been categorised as *Childbirth*, *Specialist mental health*, *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 2009–10, each separation in the NHMD was classified to AR-DRG version 5.2 (DoHA 2006) on the basis of demographic and clinical characteristics of the patient. AR-DRG version 5.2 has been used throughout this report as cost weights for AR-DRG version 6.0 are designated as interim and are not available for both public and private hospitals.

Each AR-DRG version is based on a specific edition of the ICD-10-AM/ACHI (Table A1.17). However, AR-DRGs can be mapped from other ICD-10-AM/ACHI editions.

**Table A1.17: ICD-10-AM and AR-DRG versions, 2004–05 to 2009–10**

Year	ICD-10-AM edition	Relevant AR-DRG version	AR-DRG version reported in Australian hospital statistics
2002–03	Third edition	Version 5.0	Version 5.0
2003–04	Third edition	Version 5.0	Version 5.0
2004–05	Fourth edition	Version 5.1	Version 5.1
2005–06	Fourth edition	Version 5.1	Version 5.1
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

For AR-DRG-based time series comparisons, AR-DRG version 5.1 was used for the years 2005–06 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 2005–06 were mapped forwards to the fourth edition of the ICD-10-AM and then grouped to AR-DRG version 5.1 and the ICD coded data for 2006–07 and 2007–08 were mapped backward to the fourth edition of the ICD-10-AM and then grouped to AR-DRG version 5.1. Due to the mapping necessary to generate the AR-DRG versions, the data presented in these tables may not be comparable 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 2009–10 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)>.

The cost by volume estimates presented in the supplementary *APC-DRG Additional Tables (Part 2)* (accompanying this report online) are calculated by applying the AR-DRG version 5.2 2008–09 national public and private sector estimated average costs to the AR-DRG version 5.2 data for 2009–10.

### 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 A1.18, 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 2009–10, 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 A1.17). 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 2009–10 analysis excluded 35 hospitals for New South Wales, 2 hospitals for Victoria and 8 hospitals for Western Australia.

The estimated cost per acute care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

- \$4,636 in New South Wales, \$2 more than the cost per casemix-adjusted separation for all separations
- \$3,975 in Victoria, 13.4% less than for all separations
- \$4,411 in Western Australia, 6.4% less than for all separations (Figure A1.1 and Table A1.19).

The estimated cost per non-psychiatric acute care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

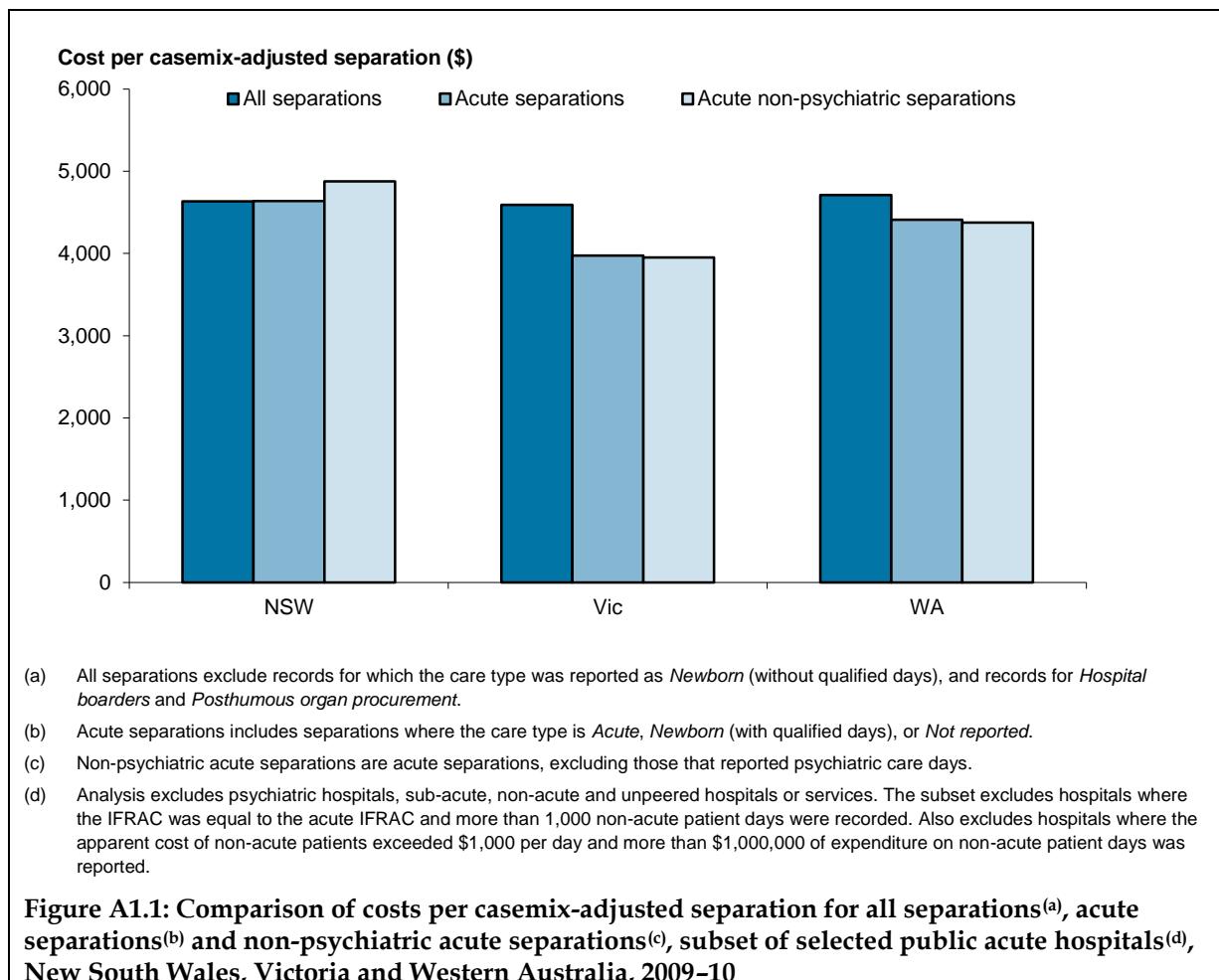
- \$4,876 in New South Wales, 5.2% greater than the cost per casemix-adjusted separation for all separations
- \$3,951 in Victoria, 13.9% less than for all separations
- \$4,375 in Western Australia, 7.2% less than for all separations.

**Table A1.19: 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, 2009–10**

	NSW	Vic	WA
<b>Cost per casemix-adjusted separation excluding depreciation</b>	<b>4,634</b>	<b>4,591</b>	<b>4,712</b>
Cost per casemix-adjusted acute separation excluding depreciation <sup>(b)</sup>	4,636	3,975	4,411
Percentage that exceeds cost per casemix-adjusted separation for subset hospitals	<0.1%	-13.4%	-6.4%
<b>Cost per casemix-adjusted acute non-psychiatric separation excluding depreciation<sup>(c)</sup></b>	<b>4,876</b>	<b>3,951</b>	<b>4,375</b>
Percentage that exceeds cost per casemix-adjusted separation for subset hospitals	5.2%	-13.9%	-7.2%
<b>Cost per casemix-adjusted separation including depreciation</b>	<b>4,800</b>	<b>4,909</b>	<b>4,830</b>
Cost per casemix-adjusted acute separation including depreciation <sup>(b)</sup>	4,802	4,251	4,521
Percentage that exceeds cost per casemix-adjusted separation for subset hospitals	<0.1%	-13.4%	-6.4%
Cost per casemix-adjusted acute non-psychiatric separation including depreciation <sup>(c)</sup>	5,050	4,224	4,224
Percentage that exceeds cost per casemix-adjusted separation for subset hospitals	5.2%	-14.0%	-12.5%

- (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 A1.17.
- (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.

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 A1.20 accompanying this report online.



## Cost per casemix-adjusted separation, including capital

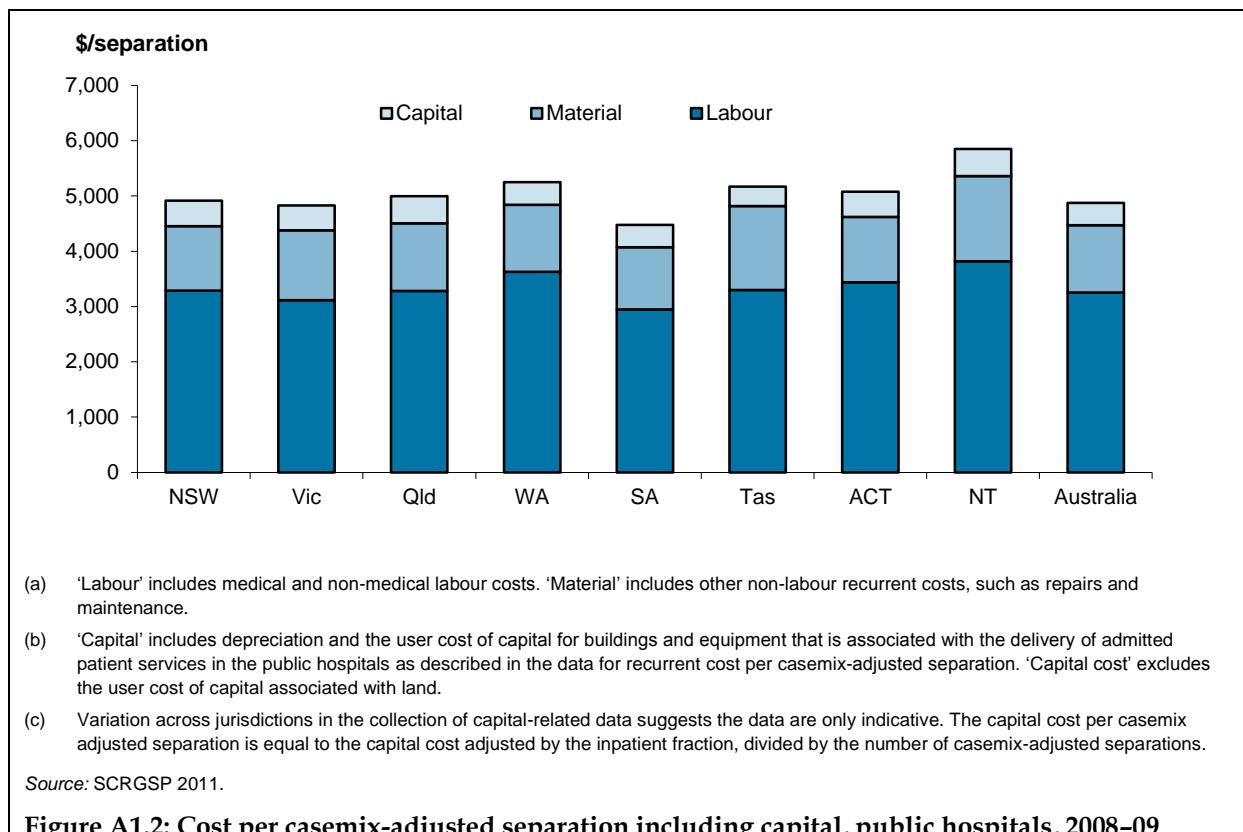
The cost per casemix-adjusted separation analysis includes recurrent expenditure and depreciation for those states that reported it (see *Chapter 3*).

The Steering Committee for the Review of Government Service Provision (SCRGSP) reported ‘total costs per casemix-adjusted separation’ by state and territory for 2008–09 (SCRGSP 2011). 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 2011).

Excluding the user cost of capital for land, the total cost per casemix-adjusted separation ranged from \$4,477 in South Australia to \$5,852 in the Northern Territory (SCRGSP 2011) (Figure A1.2).

Further details about the SCRGSP calculation of total cost per casemix-adjusted separation are available in the *Report on government services 2011* (SCRGSP 2011).



## 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 5.2 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 A1.19 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 after 2003–04, 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 (version 5.0/5.1/5.2) 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 3.17, 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 635 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 A1.21, accompanying this report online, shows the number of AR-DRGs represented in each cell in Table 3.17, 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 569 and 634 AR-DRGs represented, meaning that ALOS data was estimated for up to 96 AR-DRGs.

## Appendix 2: Hospitals databases—characteristics and coverage

This appendix includes information on the:

- National Hospital Morbidity Database
- National Public Hospital Establishments Database
- National Elective Surgery Waiting Times Data Collection
- National Non-admitted Patient Emergency Department Care Database
- National Outpatient Care Database.

Also included is information on the hospitals contributing to each of the databases.

### 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 A2.1 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 in *The state of our public hospitals, June 2005 report* (DoHA 2005) and *Australian hospital statistics 2002–03* (AIHW 2004). It has, however, been categorised as a public hospital in AIHW reports since 2003–04.

**Table A2.1: Selected hospitals included in this report that predominantly provide public hospital services that were privately owned and/or operated, 2009–10**

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

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.

## **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 2010. 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 2010; 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) 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 now included in statistics for Victoria whereas they were formerly reported by and included in statistics for New South Wales.

## **The 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 database contains data relating to admitted patients in almost all hospitals, including public acute hospitals, public psychiatric hospitals, private acute hospitals, private psychiatric hospitals and private free standing day hospital facilities. Public sector hospitals that are not included are those not within the jurisdiction of a state or territory health authority (for example, hospitals operated by the Department of Defence or correctional authorities and hospitals located in offshore territories).

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.

Information on the quality of the diagnosis, procedure and external cause data, classified using the sixth edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2008) is presented in Appendix 1.

## NHMD data for this report

The data presented in this report are for patients treated between 1 July 2009 and 30 June 2010. Almost all public hospitals were included for 2009–10. The exception was a *Mothercraft* hospital in the Australian Capital Territory. Western Australia was not able to provide about 2,400 separations for one public hospital. A summary of the coverage of the NHMD by state and territory is presented in Table A2.2, accompanying this report online.

The great majority of private hospitals were also included. Most of the private facilities that did not report to the NHMD were free standing day hospital facilities. For 2009–10, data were not provided for private day hospital facilities in the Australian Capital Territory and the Northern Territory, and for a small private hospital in Victoria. In addition, Western Australia was not able to provide about 10,600 separations for one private hospital.

Counts of public and private hospital separations presented in this report are therefore likely to be underestimates of the actual counts.

Tables A2.3 and A2.4 (accompanying this report online) list the public and private hospitals that contributed to the NHMD for 2009–10. For public hospitals, also included in the online tables is information on their average available bed numbers, their peer group (see Appendix 1) and the statistical local area and remoteness area of their location. The list of private hospitals includes information on whether each was a private free standing day hospital facility.

There is some variation between states in what is regarded as a hospital, how facilities are licensed and how this affects the collection. For example, between 2001 and 2002–03, the coverage of the Queensland and Victorian collections expanded to include private facilities providing same-day services. The apparent increase for some types of separations in the private sector was affected by the registration of relevant facilities as hospitals for the first time in Queensland in 2001 and in Victoria in 2002–03. These facilities had previously been categorised as non-hospital facilities and were therefore out of scope for the NHMD.

## Coverage estimates for private hospital separations

As noted above, not all private hospital separations are included in the NHMD, so the counts of private hospital separations presented in this report may be slight underestimates.

Over recent years, at the national level there have been slightly fewer separations reported to the NHMD than to the Australian Bureau of Statistics (ABS) Private Health Establishments Collection (ABS 2010), particularly for private free standing day hospital facilities (Table A2.5). The latter collection includes all private acute and psychiatric hospitals licensed by state and territory health authorities and all private free standing day hospital facilities approved by the Department of Health and Ageing. In 2008–09, the difference was 107,563 separations (3.3%).

For individual states, the patterns of differences between the number of separations reported to the NHMD and to the ABS Private Health Establishments Collection varied (data for each year are presented in tables A2.6a to A2.6o, accompanying this report online). This reflects the omission of some private hospitals from the NHMD. However, there are differences even when both collections are reported to be complete. The discrepancies may have been due to the use of differing definitions or different interpretations of definitions (for example, differing counting rules for *Newborn* episodes of care or differing definitions of what a hospital is), or differences in the quality of the data provided for different purposes.

**Table A2.5: Differences between private hospital separations on the NHMD and reported to the ABS Private Health Establishments Collection, 2005–06 to 2008–09**

Year	Private free standing day facilities		Other private hospitals		Total	
	Separations	Per cent	Separations	Per cent	Separations	Per cent
2005–06	32,437	5.9	46,457	2.0	78,894	2.8
2006–07	60,852	10.7	48,316	2.0	109,168	3.7
2008–09	17,770	2.3	82,759	3.1	84,147	2.5

Note: Private Health Establishments Collection data were not collected for 2007–08.

Source: ABS Private Health Establishments Collection data (PHEC) and National Hospital Morbidity Database (NHMD).

## The National Public Hospital Establishments Database

The National Public Hospital Establishments Database (NPHED) 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. The collection covers hospitals within the jurisdiction of the state and territory health authorities only. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by the Department of Health and Ageing, Department of Defence or correctional authorities, for example, and hospitals located in offshore territories) are not included. Public hospitals are categorised by the AIHW into peer groups, as described in *Appendix 1*.

The collection is based on the NMDS for Public hospital establishments. Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure (including depreciation), non-appropriation revenue and services to non-admitted patients. Summary information on data quality and comparability is presented in *Chapter 4*.

### NPHED data for this report

Essentially all public hospitals were included for 2009–10. Table A2.2 (which accompanies this report online) lists the public hospitals that contributed to the NPHED for 2009–10. Also included is information on their average available bed numbers, peer group and the statistical local area and remoteness area of their location.

# The National Non-admitted Patient Emergency Department Care Database

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 NMDS for Non-admitted patient emergency department care, as defined in the *National health data dictionary version 14* (HDSC 2008). It includes data on the type and length of emergency department visit, triage category, waiting times, patient demographics, arrival mode and episode end status.

The NNAPECD covers public hospitals that were classified as peer groups A (*Principal referral and Specialist women's and children's hospitals*) and B (*Large hospitals*) in *Australian hospital statistics 2008–09* (AIHW 2010a). The peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see *Appendix 1*). The use of this classification as an interim measure to define the scope of this collection is under review. Data were also provided by some states and territories for hospitals in peer groups other than A and B, as described below.

## NNAPECD data for this report

The data presented in this report are for patients completing an episode in an emergency department between 1 July 2009 and 30 June 2010.

For 2009–10, all states and territories were able to provide data for all public hospitals in peer groups A and B that have emergency departments.

Some states and territories also provided episode-level 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
- 3 *Small remote acute hospitals* in the Northern Territory.
- 1 *Medium hospital* in Tasmania

The estimated overall coverage was 81% of all public hospitals' accident and emergency occasions of service, including the Mersey Community Hospital.

Summary information on the quality and comparability of the data is included in *Chapter 5*.

The list of public hospitals that contributed to the NPHED (Table A2.4, which accompanies this report online) includes information on which hospitals were also included in the NNAPECD for 2009–10.

All states and territories provided hospital-level data on accident and emergency occasions of service for the NPHED. These data have wider coverage than data provided for the NNAPECD, as detailed in *Chapter 5*.

# The National Elective Surgery Waiting Times Data Collection

The National Elective Surgery Waiting Times Data Collection (NESWTDC) provides episode-level data on patients waiting for elective surgery on waiting lists managed by public acute hospitals.

The data supplied are based on the NMDS for Elective surgery waiting times (removals and census), as defined in the *National health data dictionary version 14* (HDSC 2008). Included is information on the length of time waited, the surgical specialty and indicator procedures. For some states and territories, the data are provided linked to the NHMD data on the admitted patient episode of care for which the patient was waiting. Apart from the total number of additions, elective surgery census data are not reported in *Australian hospital statistics*.

## NESWTDC data for this report

The data presented in this report are for patients removed from elective surgery waiting lists between 1 July 2009 and 30 June 2010.

As noted above, the data collection covers public acute hospitals. However, some *Public patients* treated under contract in private hospitals in Victoria and Tasmania were also included.

Public hospitals that undertake elective surgery are generally included, but some are not. Based on the proportions of elective surgery admissions that were covered by the NESWTDC, national coverage was about 91%, ranging from 100% in New South Wales, Queensland, Tasmania and the Northern Territory to 68% in South Australia. Coverage was highest for *Principal referral* and *Specialist women's and children's hospitals* at 100% and progressively lower for the *Large hospitals* and *Medium hospitals* groups (see Table 10.3).

The list of public hospitals that contributed to the NPHED (Table A2.4, which accompanies this report online) includes information on which hospitals were also included in the NESWTDC for 2009–10.

# The National Outpatient Care Database

The National Outpatient Care Database (NOCD) includes counts of individual occasions of service and group sessions, by outpatient clinic type for selected public hospitals.

The data supplied are based on the NMDS for Outpatient care, as defined in the *National health data dictionary version 14* (HDSC 2008). They include data on the number of individual occasions of service and group sessions, by clinic type and establishment.

The scope for the Outpatient care NMDS for 2009–10 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 2008–09* (AIHW 2010a).

## **NOCD data for this report**

The data presented in this report are for occasions of service provided between 1 July 2009 and 30 June 2010. Summary information on the quality and comparability of the data is included in *Chapter 6*.

For 2009–10, all 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. Tasmania were not able to provide outpatient care data for one *Principal referral hospital*, which reported about 140,000 occasions of service to the NOCD in 2008–09. 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 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*

The proportion of individual outpatient occasions of service and group sessions for which NOCD data were available was 95% for peer groups A and B. Coverage for all public hospitals was about 78% for individual occasions of service and 80% for group sessions (see Table S6.1).

The list of public hospitals that contributed to the NPHED (Table A2.4, which accompanies this report online) includes information on which hospitals were also included in the NOCD for 2009–10.

All states and territories also provided hospital-level data on outpatient clinic occasions of service for the NPHED. These data have wider coverage than data provided for the NOCD, as detailed in *Chapter 6*.

# **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 is 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).

The NHCDC involves arrangements whereby the hospital data are 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 follow extensive quality assurance procedures undertaken by the department and endorsement of the results by the states and territories.

The participating hospitals include 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 from *Australian hospital statistics* 2005–06 to the current report (AIHW 2007, 2008, 2009, 2010a), 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). 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* (see *APC\_DRGs additional tables* which accompany this report online).

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 50 SRGs as 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), 81 hospitals provided more than 50 separations a year and 259 hospitals provided more than 360 patient days, while for *Gastroenterology* (SRG 15) these measures were 349 and 205 hospitals respectively. *Cardiothoracic surgery* (SRG 42) showed no difference between the two different measures, with 30 units under both measures.

*Cardiology* (SRG 11) and *Surgery, no definitive subspecialty* (SRG 54) had the greatest number of establishments, with more than 50 separations at 380 hospitals each. *Respiratory medicine* (SRG 24) and *Orthopaedics* (SRG 49) had the greatest number of establishments with more than 360 patient days a year, with 305 and 260 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 920,000. This was followed by *Obstetrics* (SRG 72) with almost 308,000. In the private sector, *Diagnostic gastrointestinal endoscopy* (SRG 16) recorded the highest number of separations with over 340,000, followed by *Orthopaedics* (SRG 49) with 296,000.

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 1,530,000, followed by *Acute psychiatry* (SRG 82) with 1,520,000. For private hospitals, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 877,000 days, followed by *Orthopaedics* (SRG 49) with 822,000.

# 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 A1.5, 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 1 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 696,000 selected PPHs in Australia in 2009–10 (Table A5.1), 8.1% of all separations, which translates to a rate of 30.4 per 1,000 population. The rates ranged from 20.7 per 1,000 population in the Australian Capital Territory to 49.0 per 1,000 population in the Northern Territory. The separation rate for *Vaccine-preventable* PPHs in the Northern Territory was 3.2 times the national rate and the separation rate for the Australian Capital Territory was 0.7 times the national rate.

Table A5.2 highlights that separation rates were higher for more remote areas for most PPHs. For example, the rate for *Diabetes complications* per 1,000 separations was 0.9 in *Major cities*, 1.1 in both *Inner regional* and *Outer regional* areas and 3.0 and 2.7 for *Remote* and *Very remote* areas, respectively.

Table A5.3 presents these data by socioeconomic status (SES) group (see Appendix 1). Overall, total PPHs had higher SRRs for patients living in areas classified as being in the lowest SES group, with a rate of 1.2 compared to 0.7 in the highest SES group.

The PPH category with highest variation between SES groups was *Diabetes complications* with SRRs ranging from 0.6 for patients living in areas classified as being in the highest SES group to 1.4 for the lowest SES group.

# 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. However, it is also possible that these rates may overestimate

as it is not currently possible to identify falls specifically in hospitals – the current data identifies falls occurring in any health service area.

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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
Private	1.5	1.1	1.3	1.1	1.1	n.p.	n.p.	n.p.	1.3
Public	4.0	2.8	2.7	2.8	3.0	n.p.	n.p.	n.p.	3.1
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	1.2	1.3	1.1	0.9	0.7	n.p.	n.p.	0.6	0.9
Other Australians	3.1	2.1	2.1	2.2	2.3	n.p.	n.p.	2.3	2.5
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	3.2	1.9	2.0	2.1	2.2	..	2.3	..	2.4
Inner regional	2.7	2.6	2.0	2.3	2.4	2.8	1.4	..	2.5
Outer regional	2.6	2.9	2.2	2.1	2.1	2.2	..	1.4	2.3
Remote	1.3	2.0	2.1	1.6	2.2	2.4	..	0.8	1.7
Very remote	n.p.	..	1.6	1.3	1.4	0.0	..	0.8	1.2
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	3.0	2.3	2.3	2.1	2.5	2.4	n.p.	0.9	2.5
2	3.2	2.3	2.1	2.1	2.3	2.6	1.8	1.5	2.6
3	3.4	2.4	1.9	2.1	2.4	3.2	2.8	1.1	2.5
4	2.8	1.9	2.0	1.9	1.8	2.6	2.3	1.6	2.1
5—Highest	2.8	1.9	1.6	2.2	1.9	..	2.1	0.8	2.2
<b>Total<sup>(d)</sup></b>	<b>3.0</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>	<b>2.2</b>	<b>2.6</b>	<b>2.2</b>	<b>1.1</b>	<b>2.4</b>
									<b>20,371</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.

## 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. However, 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.

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, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<b>Hospital sector</b>									
Private	0.1	0.2	0.2	0.2	<0.1	n.p.	n.p.	n.p.	0.1
Public	0.1	0.1	0.2	0.5	0.2	0.2	0.2	0.1	0.2
<b>Indigenous status<sup>(a)</sup></b>									
Indigenous	0.2	0.1	0.2	0.1	0.1	n.p.	n.p.	0.1	0.1
Other Australians	0.1	<0.1	0.2	0.4	0.1	n.p.	n.p.	0.2	0.2
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	0.1	0.1	0.2	0.4	0.1	..	0.2	..	0.2
Inner regional	0.1	0.1	0.1	0.3	0.2	0.1	0.0	..	0.1
Outer regional	0.1	0.1	0.2	0.6	0.1	<0.1	..	0.1	0.2
Remote	0.2	0.0	0.1	0.2	0.1	0.0	..	0.1	0.1
Very remote	0.0	..	0.0	0.1	0.0	0.0	..	0.1	0.1
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1—Lowest	0.1	0.1	0.2	0.6	0.1	0.1	0.0	<0.1	0.1
2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.3	0.2
3	0.1	0.1	0.2	0.3	0.1	0.1	0.0	0.1	0.2
4	0.2	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.2
5—Highest	0.1	0.1	0.2	0.6	0.1	..	0.1	0.1	0.2
<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>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</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 area of 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>, states and territories<sup>(b)</sup>, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Aust	
	Per 1,000 population							Number		
Allied health	96.9	199.9	145.2	487.7	108.5	220.8	85.4	52.0	175.2	3,848,123
Dental	68.0	65.4	0.0	5.6	5.5	2.7	0.0	0.0	39.4	864,430
Dialysis	7.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	2.3	50,045
Drug and alcohol	197.5	15.8	24.4	0.0	0.0	0.0	0.0	0.0	73.0	1,602,611
Endoscopy	2.4	0.0	2.5	0.0	14.5	1.2	7.4	0.0	2.5	54,723
Mental health	97.3	127.8	17.3	35.5	16.9	3.2	5.0	0.0	71.8	1,577,636
Other medical/ surgical/obstetric	730.0	302.6	607.9	353.1	570.9	440.9	984.8	596.2	545.0	11,972,166
<b>Total outpatient care<sup>(d)(e)(f)</sup></b>	<b>1199.1</b>	<b>711.5</b>	<b>797.3</b>	<b>881.8</b>	<b>716.3</b>	<b>668.7</b>	<b>1082.6</b>	<b>648.2</b>	<b>909.1</b>	<b>19,969,734</b>

(a) Crude rate based on the ABS Estimated Resident Population at 30 June 2009.

(b) Public psychiatric hospitals are excluded.

(c) Tasmania was not able to provide data for one hospital that reported about 280,000 occasions of service to the NPHED in 2008–09.

(d) 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.

(e) 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.

(f) 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>, 2009–10**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<b>Indigenous status<sup>(b)</sup></b>									
Indigenous	2.0	1.6	18.5	10.9	4.7	<0.1	5.4	16.5	11.1
Other Australians	7.8	3.8	24.9	13.2	26.8	16.9	12.7	26.0	12.4
<b>Remoteness of residence<sup>(c)(d)</sup></b>									
Major cities	4.6	0.2	15.8	5.1	17.5	..	15.1	..	6.7
Inner regional	13.5	10.1	17.8	6.1	12.0	11.0	0.3	..	12.7
Outer regional	22.2	24.2	61.6	50.3	45.3	10.3	..	27.5	38.3
Remote	2.8	n.p.	87.4	81.4	n.p.	n.p.	..	17.8	76.0
Very remote	n.p.	..	32.2	6.4	n.p.	n.p.	..	15.8	27.4
<b>Socioeconomic status of area of residence<sup>(c)(d)</sup></b>									
1—Lowest	10.0	5.0	34.9	9.5	23.1	22.3	2.3	17.6	17.5
2	7.3	6.5	26.7	29.2	36.0	8.7	1.7	13.0	14.8
3	13.3	5.9	18.7	9.6	38.7	10.0	9.0	35.7	13.6
4	4.3	1.5	21.5	9.4	14.3	6.7	12.1	16.6	9.2
5—Highest	3.1	0.3	15.8	7.0	15.1	..	16.0	18.4	5.8
<b>Total</b>	<b>7.7</b>	<b>3.8</b>	<b>24.6</b>	<b>13.0</b>	<b>26.2</b>	<b>16.6</b>	<b>12.6</b>	<b>20.6</b>	<b>12.5</b>

(a) Includes patient days for overnight separations with a care type of *Maintenance*, whose 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. Data not published for some remoteness areas due to small numbers.

(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>Accident and 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>Activity when injured</b>	The type of activity being undertaken by a person at the time of injury. METeOR identifier: 361025
<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: 356587
<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
<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 includes:</p> <ul style="list-style-type: none"> <li>• <i>Posthumous organ procurement</i></li> <li>• <i>Hospital boarder</i>.</li> </ul> <p>METeOR identifier: 270174</p>
<b>Casemix</b>	<p>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.</p>
<b>Chronic</b>	<p>Persistent and long-lasting.</p>
<b>Clinical urgency</b>	<p>A clinical assessment of the urgency with which a patient requires elective hospital care.</p> <p>METeOR identifier: 270008</p>
<b>Compensable patient</b>	<p>An individual who is entitled to receive or has received a compensation payment with respect to an injury or disease.</p> <p>METeOR identifier: 270100</p>
<b>Condition onset flag</b>	<p>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.</p> <p>METeOR identifier: 354816</p>

<b>Cost weight</b>	<p>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.</p> <p>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 2004–05 to 2009–10 reference years.</p>
<b>Department of Veterans' Affairs patient</b>	<p>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.</p> <p>METeOR identifier: 270092</p>
<b>Diagnosis related group (DRG)</b>	<p>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.</p> <p>METeOR identifier: 391295</p>
<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>	The cost of all drugs, including the cost of containers. METeOR identifier: 270282
<b>Elective care</b>	Care that, in the opinion of the treating clinician, is necessary and for which admission can be delayed for at least 24 hours. METeOR identifier: 335036
<b>Elective surgery</b>	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. METeOR identifier: 335048
<b>Elective surgical separation</b>	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> ).
<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>Enrolled nurses</b>	Enrolled nurses are second-level nurses who are enrolled in all states except Victoria, where they are registered by the state registration board to practise in this capacity. 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>	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: <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>	Expected principal source of funds for an admitted patient episode or non-admitted patient service event.
	METeOR identifier: 339080
<b>Geriatric evaluation and management</b>	See <i>Care type</i> .
<b>Group session</b>	A service provided to two or more patients, but excluding services provided to two or more family members (which are treated as services provided to an individual).
	METeOR identifier: 269119

<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 <i>Appendix 1</i> ).
<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 <i>Appendix 1</i> ).
<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>	<p>Accommodation chargeable status elected by patient on admission. The categories are:</p> <p><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.</p> <p><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.</p> <p>METeOR identifier: 326619</p>
<b>Patient presentation at emergency department</b>	<p>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.</p> <p>METeOR identifier: 270393</p>
<b>Patient revenue</b>	<p>Revenue received by, and due to, an establishment in respect of individual patient liability for accommodation and other establishment charges.</p> <p>METeOR identifier: 364797</p>
<b>Patient transport</b>	<p>The direct cost of transporting patients, excluding salaries and wages of transport staff.</p> <p>METeOR identifier: 270048</p>
<b>Payments to visiting medical officers</b>	<p>All payments made to visiting medical officers for medical services provided to hospital (public) patients on a sessionally paid or fee-for-service basis.</p> <p>METeOR identifier: 270049</p>
<b>Peer group</b>	<p>Groupings of hospitals into broadly similar groups in terms of their volume of admitted patient activity and their geographical location.</p>
<b>Percentile</b>	<p>Any one of 99 values that divide the range of probability distribution or sample into 100 intervals of equal probability or frequency.</p>
<b>Performance indicator</b>	<p>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.</p>
<b>Place of occurrence of external cause</b>	<p>The place where the external cause of injury, poisoning or adverse effect occurred.</p> <p>METeOR identifier: 391334</p>
<b>Posthumous organ procurement</b>	<p>See <i>Care type</i>.</p>
<b>Potentially preventable hospitalisation (selected)</b>	<p>Those conditions where hospitalisation is thought to be avoidable if timely and adequate non-hospital care is provided.</p>

<b>Pre-MDC (Pre-Major Diagnostic Category)</b>	Twelve AR-DRGs to which separations are grouped, regardless of their principal diagnoses, if they involve procedures that are particularly resource-intensive (transplants, tracheostomies or extra-corporeal 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>	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: <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> METeOR identifier: 268957 ( <i>Admitted patient</i> ) METeOR identifier: 270033 ( <i>Newborn qualification status</i> )

<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>	Registered nurses include persons with at least a three-year training certificate and nurses holding postgraduate qualifications. Registered nurses must be registered with the state/territory registration board. 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. METeOR identifier: 270500 See <i>Full-time equivalent staff</i> .
<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 <i>Appendix 1</i> for further information.
<b>Remoteness area</b>	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: <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>	The reason a patient is removed from an elective surgery waiting list. The reason-for-removal categories are: <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>	The costs incurred in maintaining, repairing, replacing and providing additional equipment; maintaining and renovating buildings and minor additional works.
	METeOR identifier: 269970
<b>Salaried medical officers</b>	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).
	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>	The total number of episodes of care for admitted patients divided by the total number of persons in the population under study. Often presented as a rate per 1,000 or 10,000 members of a population. Rates may be crude or standardised (see <i>Appendix 1</i> ).
<b>Separation rate ratio</b>	The separation rate for one population divided by the separation rate of another.

<b>Separations</b>	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. METeOR identifier: 270407
<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>	A facility or unit dedicated to the treatment or care of patients with particular conditions or characteristics, such as an intensive care unit. METeOR identifier: 269612
<b>Student nurses</b>	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. METeOR identifier: 270499 See <i>Full-time equivalent staff</i> .
<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 2009–10*, 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 2008–09, 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 the *Australian hospital statistics 2009–10* is *Australia's hospitals 2009–10 at a glance*.

The following AIHW publications relating to hospitals, hospital service utilisation and hospital resources might also be of interest:

- 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.

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