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Australian Institute of  
Health and Welfare

# Australian hospital statistics



**2011–12**



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**Australian Institute of  
Health and Welfare**

*Authoritative information and statistics  
to promote better health and wellbeing*

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# **Australian hospital statistics**

## **2011–12**

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

# Foreword

I am pleased to present *Australian hospital statistics 2011–12*, an authoritative annual report that provides a comprehensive range of performance information and other statistics about Australia's public and private hospitals. A shorter companion report – *Australia's hospitals 2011–12 at a glance* – accompanies this report. It provides a summary of the detailed information presented here, in a form accessible to a general readership.

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

The Institute continues to work with national stakeholders to improve the usefulness, comparability and timeliness of the national hospitals databases, and their relevance to contemporary public policy debate on hospital service delivery. We look forward to continuing to work with data users and data providers on the data collections and on the presentations of information from them in our *Australian hospital statistics* suite of products.

David Kalisch  
Director

April 2013

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- Jenny Hargreaves (AIHW) (Chair)
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# Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standard
admwt	admission weight
AIHW	Australian Institute of Health and Welfare
ALOS	average length of stay
AMI	acute myocardial infarction
AR-DRG	Australian Refined Diagnosis Related Group
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographical Classification
CC	complications and/or comorbidities
CCC	catastrophic complications and/or comorbidities
CDE	common bile duct exploration
COAG	Council of Australian Governments
CSCC	catastrophic or severe complications or comorbidity
DoHA	Department of Health and Ageing
DRG	Diagnosis Related Group
DVA	Department of Veterans' Affairs
ECMO	extracorporeal membranous oxygenation
ECT	electroconvulsive therapy
g	grams
GP	general practitioner
HASAC	Health and Allied Services Advisory Council
HITH	hospital in the home
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 of Standardization
MDC	Major Diagnostic Category
METeOR	Metadata Online Registry
MRSA	methicillin-resistant <i>Staphylococcus aureus</i>
MSSA	methicillin-sensitive <i>Staphylococcus aureus</i>
NAPEDC	Non-admitted patient emergency department care
NCCC	National Casemix and Classification Centre
NEAT	National Emergency Access Target
NEST	National Elective Surgery Target
NESWTDC	National Elective Surgery Waiting Times Data Collection
NHA	National Healthcare Agreement

NHCDC	National Hospital Cost Data Collection
NHDD	National health data dictionary
NHISSC	National Health Information Standards and Statistics Committee
NHMBWG	National Health Ministers' Benchmarking Working Group
NHMD	National Hospital Morbidity Database
NHPC	National Health Performance Committee
NHPF	National Health Performance Framework
NMDS	National Minimum Data Set
NNAPEDCD	National Non-admitted Patient Emergency Department Care Database
NOCD	National Outpatient Care Database
NPHEd	National Public Hospital Establishments Database
NSABDC	National <i>Staphylococcus aureus</i> bacteraemia Data Collection
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
OPC	Outpatient care
OR	operating room
PHEC	Private Health Establishments Collection
PICQ	Performance Indicators for Coding Quality
PPH	potentially preventable hospitalisation
Qld	Queensland
RSI	relative stay index
SA	South Australia
SAB	<i>Staphylococcus aureus</i> bacteraemia
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
W	with
W/O	without

## Symbols

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



# Summary

There were 1,345 hospitals in Australia in 2011–12. The 753 public hospitals accounted for about 68% of hospital beds (58,420) and the 592 private hospitals accounted for about 32% of beds (28,351, based on 2010–11 data).

## Expenditure and funding

Public hospitals spent over \$40 billion in 2011–12. Adjusted for inflation, expenditure increased by an average of 5.9% each year between 2007–08 and 2011–12.

## Emergency department services

Between 2007–08 and 2011–12, the number of emergency services provided by public hospitals increased from 7.1 million to 7.8 million (an increase of 2.4% on average each year) and the number of public hospital emergency department presentations increased by an average of 4.3% per year.

Between 2007–08 and 2011–12, there was an 8% increase in the number of *Emergency* patients (clinical care is required within 10 minutes) and a 6% increase in the number of *Urgent* patients (clinical care is required within 30 minutes).

Over the same period, the proportion of emergency department presentations that were treated within an appropriate time increased from 69% to 72% and the median waiting time decreased from 24 minutes to 21 minutes.

In 2012, about 66% of emergency department visits were completed in 4 hours or less.

## Admitted patient care

In 2011–12, there were almost 9.3 million separations from hospitals for admitted patients – 5.5 million in public hospitals and 3.7 million in private hospitals.

The number of separations increased by 3.8% on average each year between 2007–08 and 2011–12 for public hospitals, and by 4.6% for private hospitals. Western Australia had the greatest average annual increase in public hospital separations (6.4%) and Tasmania had the least (0.9%).

Between 2007–08 and 2011–12, emergency admissions increased at a higher rate than overall for public hospitals and at a lower rate for private hospitals (4.1% and 3.2% per year, respectively).

In 2011–12, persons aged 85 and over accounted for about 7% of all separations, with numbers of separations increasing by an average of 9% each year between 2007–08 and 2011–12.

## Surgery

In 2011–12, there were 2.4 million admissions that involved a surgical procedure. Of these, about 295,000 were emergency admissions.

Indigenous Australians had about twice the rate of emergency admissions involving surgery compared with other Australians (25 per 1,000 persons and 13 per 1,000, respectively). In contrast, for elective admissions involving surgery, Indigenous Australians had a rate that was less than two-thirds the rate for other Australians (54 per 1,000 persons and 87 per 1,000, respectively).

# 1 Introduction

*Australian hospital statistics 2011–12* 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 2010–11 (AIHW 2012a and earlier), summary reports including *Australia's hospitals 2010–11 at a glance* (AIHW 2012b) and more detailed reports on some aspects of Australia's hospitals including *Australian hospital statistics 2011–12: emergency department care* (AIHW 2012c), *Australian hospital statistics 2011–12: elective surgery waiting times* (AIHW 2012d), *Australian hospital statistics 2011–12: Staphylococcus aureus bacteraemia in Australian public hospitals* (AIHW 2013a) and *Australian hospital statistics: national emergency access and elective surgery targets 2012* (AIHW 2013b).

*Australia's hospitals 2011–12 at a glance* (AIHW 2013c) accompanies this report and presents a summary of the information from this report.

## Data sources

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

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

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

Detailed information about the AIHW's hospital databases is in Appendix A, and in the Data Quality Statements accompanying this report online at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

### **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 queries. Except as noted, the AIHW does not adjust data to account for possible data errors or missing or incorrect values.

Statistics may be affected by variations in reporting practices across states and territories and over time. Where possible, these variations have been noted in the text. Comparisons between states and territories and reporting years should be made with reference to the accompanying notes in the chapters and in the appendixes. The AIHW takes active steps to improve the consistency of these data over time.

## **Structure of this report**

The broad topics addressed in the report are:

- changes on resources and activity over time (Chapter 2)
- performance indicators (Chapter 3)
- hospital resources (including the number of hospitals, hospital beds, expenditure, resources and staffing) (Chapter 4)
- emergency department services (Chapter 5)
- outpatient services (outpatient clinics and other non-admitted services that hospitals provide) (Chapter 6)
- admitted patient care (Chapter 7), including:
  - same-day acute separations (Chapter 8)
  - overnight acute separations (Chapter 9)
  - surgical separations for elective and emergency admissions (Chapter 10) and
  - sub- and non-acute care (Chapter 11).

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

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

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

## Comparisons between public and private hospitals

Most chapters contain data for both public and private hospitals. However, chapters 5 and 6 present information only for public hospital non-admitted patient care including emergency department care and outpatient clinics.

In particular, chapters 7 to 11 on admitted patient care present many comparisons of the numbers of separations, patient days and separations per 1,000 population for public and private hospitals.

## Chapter structure

The 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 outlines 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 2011–12?
- Who used these services?
- How did people access these services?
- How urgent was the care?
- How long did people wait for care?
- Why did people receive the care?
- What care was provided?
- What was the safety and quality of the care?
- How long did patients stay?
- What was the cost of the care?
- Who paid for the care?
- How was the care completed?

Generally, summary tables and figures are placed immediately below the discussion in related text. Where appropriate, tables and figures within the chapter are accompanied by footnotes referring readers to more detailed statistical tables at the end of the chapter, or accompanying the report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## 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 2011–12 at a glance* are presented in PDF format and all tables are available as downloadable Excel spread sheets. *Australia's hospitals 2011–12 at a*

*glance* is also available in HTML format on the website, and is updated whenever new data are available.

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

## Interactive data cubes

The website also has interactive cubes of data from the NHMD, 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 2011–12 (using ICD-10-AM to classify diagnoses).
- AR-DRGs:
  - version 4.0/4.1/4.2 for 1997–98 to 2004–05
  - version 5.0/5.1/5.2 for 1998–99 to 2009–10
  - version 6.0/6.0x for 2010–11 and 2011–12.
- Procedures:
  - 2000–01 and 2001–02 (using ACHI 2nd edition to classify procedures)
  - 2002–03 and 2003–04 (using ACHI 3rd edition to classify procedures)
  - 2004–05 and 2005–06 (using ACHI 4th edition to classify procedures)
  - 2006–07 and 2007–08 (using ACHI 5th edition to classify procedures)
  - 2008–09 and 2009–10 (using ACHI 6th edition to classify procedures)
  - 2010–11 and 2011–12 (using ACHI 7th edition to classify procedures).

Each principal diagnosis and AR-DRG cube includes information on the number of separations (same-day and overnight), patient days and average length of stay, by age group, sex and year of separation for each principal diagnosis or AR-DRG.

The 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 2011–12
- elective surgery waiting times summary statistics for:
  - reason for removal from waiting lists (2002–03 to 2011–12)
  - surgical specialty (2001–02 to 2011–12)
  - indicator procedure (2001–02 to 2011–12).

## Updates

At the time of writing, 2011–12 cost weights and average costs were not available for AR-DRG version 6.0x, which was used in tables in this report that present data for Diagnosis Related Groups and Major Diagnostic Categories. Therefore, 2009–10 public and private sector cost weights based on AR-DRG version 6.0x were used for the public and private

sectors in analyses that required the application of cost weights (such as the 'Cost per casemix-adjusted separation' analysis in Chapter 3).

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

## 2 Overview: 2007–08 to 2011–12

This chapter presents an overview of hospital resources and activity between 2007–08 and 2011–12.

### What data are reported?

#### Resources

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

Information on public hospital resources was sourced from the National Public Hospital Establishments Database (NPHEd) (see Appendix A). Information on health expenditure for 2010–11 was sourced from *Health expenditure Australia 2010–11* (AIHW 2012e). Some information on private hospital resources was sourced from the Australian Bureau of Statistics' (ABS) Private Health Establishments Collection (PHEC) for 2010–11 (ABS 2012). Private hospital available beds, staff, occasions of service, expenditure and revenue information for 2011–12 were not available at the time of publication.

#### Activity

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

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

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

More time series data for the years 2007–08 to 2011–12 by states and territories are included in:

- Chapter 5 for emergency department care
- Chapter 6 for non-admitted patient services
- Chapter 7 for admitted patients in public and private hospitals
- Chapter 8 for same-day acute care in public and private hospitals
- Chapter 9 for overnight acute care in public and private hospitals
- Chapter 10 for admissions involving surgery and for public hospital elective surgery waiting times
- Chapter 11 for sub- and non-acute care in public and private hospitals.

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

The comparability of data on hospital resources and activity over time may be affected by changes in coverage and administrative and reporting arrangements. In addition, the comparability of data between states and territories may be affected by variations in admission practices and in recording practices. See Appendix A for more information.

**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 in this chapter show average annual changes from 2007–08 to 2011–12 (or the latest available year of data), and annual change between 2010–11 and 2011–12 (or the change between the two latest available years of data if the 2011–12 data are unavailable). Annual change rates are not adjusted for any changes in data coverage and/or re-categorisation of the hospital as public or private, except where noted in the text.
- Expenditure and revenue are shown in both current price and constant price terms. Current prices refer to amounts as reported, unadjusted for inflation. Current price amounts are less comparable between years than constant price amounts. Constant price values are adjusted for inflation and are expressed in terms of prices in the reference year. The ABS Government Final Consumption Expenditure, State and Local – Hospitals & Nursing Homes deflator was used for public hospitals. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.
- Separations for which the care type was reported as *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded from statistics on separations. Patient days for *Newborns* that were not qualified are excluded from the counts of patient days.
- Separations per 1,000 population and patient days per 1,000 population are reported as directly age-standardised rates based on the Australian population as at 30 June of the year of interest. The Australian population as at 30 June 2001 was used as the reference population. Age-standardisation of rates enables valid comparison across years and/or jurisdictions without being affected by the differences in age distributions.
- Average cost weight comparisons are based on the latest available public and/or private cost weights and the relevant AR-DRG versions applying to each year.
- The relative stay index (RSI) is calculated as the actual number of patient days for separations in selected AR-DRGs (version 6.0x) divided by the expected number of patient days (based on national figures for the years 2007–08 to 2011–12 combined) and standardised for casemix.
- For reasons of confidentiality, data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory have not been published.

See Appendix B for more information.



# Hospital resources 2007–08 to 2011–12

## How many hospitals?

In 2011–12, there were 753 public hospitals compared with 762 in 2007–08. There were 593 private hospitals in 2010–11, compared with 564 in 2008–09 (Table 2.1).

More information on the types of hospitals, and their distribution by state and territory in 2011–12 is in Chapter 4.

**Table 2.1: Public and private hospitals<sup>(a)</sup>, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals	742	737	736	735	736	–0.2	0.1
Public psychiatric hospitals	20	19	17	17	17	–4.0	0.0
<i>Total</i>	762	756	753	752	753	–0.3	0.1
						Average since 2008–09	Since 2009–10
<b>Private hospitals<sup>(b)</sup></b>							
Private free-standing day hospital facilities	n.a.	285	302	314	n.a.	2.5	4.0
Other private hospitals	n.a.	279	279	279	n.a.	0.0	0.0
<i>Total</i>	<i>n.a.</i>	564	581	593	<i>n.a.</i>	1.3	2.1
<b>All hospitals</b>	<b>n.a.</b>	<b>1,320</b>	<b>1,334</b>	<b>1,345</b>	<b>n.a.</b>	<b>0.5</b>	<b>0.8</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 A).

(b) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2010, 2011, 2012).

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

## How many beds?

Between 2007–08 and 2011–12, public hospital bed numbers rose overall (an average of 0.9% per year), and beds per 1,000 population decreased (an average of 0.6% per year).

From 2009–10, the number of available beds was reported separately as the number of same-day and overnight admitted patient beds. Same-day beds/chairs accounted for about 12% of available beds in 2011–12 (for state and territory data see Table 4.4, Chapter 4).

Data on the number of private hospital beds is not available for 2007–08 and was not available at the time of this report for 2011–12. Between 2008–09 and 2010–11, private hospital bed numbers rose by an average of 1.1% per year.

**Table 2.2: Public and private hospital beds and beds per 1,000 population<sup>(a)</sup>, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
<i>Public acute hospitals</i>	54,137	54,382	54,812	55,789	56,582	1.1	1.4
Same-day beds/chairs	n.a.	n.a.	6,235	6,582	7,023	n.a.	6.7
Overnight beds	n.a.	n.a.	48,577	49,207	49,559	n.a.	0.7
Public psychiatric hospitals	2,330	2,140	2,088	1,983	1,838	–5.8	–7.3
<i>Total</i>	56,467	56,522	56,900	57,772	58,420	0.9	1.1
<i>Beds per 1,000 population<sup>(b)</sup></i>	2.66	2.61	2.57	2.57	2.60	–0.6	1.1
						Average since 2008–09	Since 2009–10
<b>Private hospitals<sup>(c)</sup></b>							
Private free-standing day hospital facilities	n.a.	2,495	2,822	2,957	n.a.	4.3	4.8
Other private hospitals	n.a.	24,685	24,926	25,394	n.a.	0.7	1.9
<i>Total</i>	n.a.	27,180	27,748	28,351	n.a.	1.1	2.2
<i>Beds per 1,000 population</i>	n.a.	1.26	1.25	1.26	n.a.	0.1	0.7
<b>All hospitals</b>	<b>n.a.</b>	<b>83,702</b>	<b>84,648</b>	<b>86,123</b>	<b>n.a.</b>	<b>0.7</b>	<b>1.7</b>
<b>Beds per 1,000 population<sup>(b)</sup></b>	<b>n.a.</b>	<b>3.94</b>	<b>3.91</b>	<b>3.89</b>	<b>n.a.</b>	<b>–0.3</b>	<b>–0.6</b>

(a) Beds per 1,000 population is a crude rate based on the Australian population as at the beginning of the period (30 June).

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

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2010, 2011, 2012).

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

## How were hospitals funded?

A summary measure of the significance of Australia's hospitals is the amount that is spent on them – an estimated \$49.7 billion in 2010–11, about 3.7% of Australia's gross domestic product, or about \$2,227 per person (AIHW 2012e).

Public hospital spending has been increasing faster than inflation – adjusted for inflation, it increased by 5.2% each year, on average, between 2008–09 and 2010–11.

The main sources of funding for public hospitals are the Australian Government, state and territory governments and non-government (including private health insurance and self-funded patients). Over the same period, after adjusting for inflation, public hospital funding from non-government sources increased by 8.0% on average each year (Table 2.3).

Between 2008–09 and 2010–11, spending on private hospitals increased by 5.5% on average each year. About 64% of private hospital funding was non-government and about 32% was provided by the Australian Government.

**Table 2.3: Funding sources for public hospitals, constant prices, 2008–09 to 2010–11 (\$ million)**

	2008–09	2009–10	2010–11	Change (per cent)	
				Average since 2008–09	Since 2009–10
<b>Public hospitals</b>					
Australian Government	14,799	14,068	15,440	2.1	9.8
State/territory government	17,583	19,787	20,221	7.2	2.2
Non-government	2,809	2,871	3,276	8.0	14.1
<b>Total</b>	<b>35,191</b>	<b>36,726</b>	<b>38,937</b>	<b>5.2</b>	<b>6.0</b>
<b>Private hospitals</b>					
Australian Government	3,044	3,360	3,477	6.9	3.5
State/territory government	377	386	449	9.1	16.3
Non-government	6,260	6,444	6,842	4.5	6.2
<b>Total</b>	<b>9,681</b>	<b>10,190</b>	<b>10,768</b>	<b>5.5</b>	<b>5.7</b>

Source: *Health expenditure Australia, 2010–11* (AIHW 2012e).

## Did hospital expenditure and revenue change?

Financial data reported from the NPHEd are not directly comparable with data reported in the *Health expenditure Australia 2010–11* (AIHW 2012e). 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.

Recurrent expenditure for public hospitals in 2011–12 was \$40 billion in current price terms (unadjusted for inflation), an increase of 8.7% from 2010–11 (Table 2.4). In constant price terms (adjusted for inflation) the average annual increase in recurrent expenditure for public hospitals was 5.9% between 2007–08 and 2011–12.

Total revenue for public hospitals increased in constant price terms by an average of 11.4% per year between 2007–08 and 2011–12.

For private hospitals, recurrent expenditure increased by 8.9% between 2008–09 and 2010–11 (unadjusted for inflation). Total revenue for private hospitals increased in constant price terms by 5.3% in the same period.

**Table 2.4: Recurrent expenditure<sup>(a)</sup> and revenue (\$ million), public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Total recurrent expenditure<sup>(a)</sup>, constant prices<sup>(b)</sup></b>							
Public hospitals	32,141	33,721	34,970	37,872	40,384	5.9	6.6
Private hospitals <sup>(c)</sup>	n.a.	7,616	8,624	9,610	n.a.	12.3	n.a.
<b>All hospitals</b>	<b>n.a.</b>	<b>41,337</b>	<b>43,594</b>	<b>47,482</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total recurrent expenditure<sup>(a)</sup>, current prices</b>							
Public hospitals	28,908	31,322	33,706	36,985	40,384	8.7	9.2
Private hospitals <sup>(c)</sup>	n.a.	8,137	8,946	9,610	n.a.	8.7	n.a.
<b>All hospitals</b>	<b>n.a.</b>	<b>39,460</b>	<b>42,653</b>	<b>46,595</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total revenue, constant prices<sup>(b)</sup></b>							
Public hospitals	2,992	3,204	3,548	4,020	4,617	11.4	14.9
Private hospitals <sup>(c)</sup>	n.a.	9,596	10,155	10,650	n.a.	5.3	n.a.
<b>All hospitals</b>	<b>n.a.</b>	<b>12,800</b>	<b>13,703</b>	<b>14,669</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total revenue, current prices</b>							
Public hospitals	2,691	2,975	3,420	3,925	4,617	14.4	17.6
Private hospitals <sup>(c)</sup>	n.a.	8,982	9,790	10,650	n.a.	8.9	n.a.
<b>All hospitals</b>	<b>n.a.</b>	<b>11,957</b>	<b>13,210</b>	<b>14,575</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>

(a) Excludes depreciation.

(b) Expressed in terms of prices in the reference year 2011–12. The ABS Government Final Consumption Expenditure, State and Local – Hospitals & Nursing Homes deflator was used for public hospitals. The ABS Household Final Consumption Expenditure deflator was used for private hospitals.

(c) Private hospital information was sourced from the Australian Bureau of Statistics' *Private hospitals Australia* reports (ABS 2010, 2011, 2012). Average yearly increase is calculated for the period 2008–09 to 2010–11.

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

## How many people were employed in public hospitals?

Between 2007–08 and 2011–12, the numbers of full-time equivalent staff employed in public hospitals in Australia increased by an average of 3.0% each year. There was variation in the relative size and direction of change across staff categories during this period (Table 2.5), with the greatest increase for the *Salaried medical officers* category (6.2%).

**Table 2.5: Full-time equivalent staff, public hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
Salaried medical officers	26,996	29,166	30,576	32,514	34,293	6.2	5.5
Total nurses	107,089	111,870	113,938	119,126	123,368	3.6	3.6
Diagnostic and allied health professionals	36,013	35,506	35,456	36,993	37,175	0.8	0.5
Administrative and clerical staff	36,909	37,640	38,158	41,073	42,339	3.5	3.1
Other personal care staff, domestic and other staff	33,341	32,714	33,289	33,921	33,675	0.2	–0.7
<b>Total staff</b>	<b>240,344</b>	<b>246,895</b>	<b>251,416</b>	<b>263,623</b>	<b>270,850</b>	<b>3.0</b>	<b>2.7</b>

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

## Hospital activity 2007–08 to 2011–12

### How much non-admitted patient activity?

Hospitals provide services to non-admitted patients through emergency departments, outpatient clinics and a range of other services. These data should be treated with caution due to changes in reporting practices between 2009–10 and 2011–12. For more information, see Chapter 6.

Overall, the number of non-admitted patient occasions of service reported for *Public acute hospitals* increased by 2.3% per year between 2007–08 and 2011–12, while the number of non-admitted patient occasions of service provided by *Private hospitals* increased by 3.3% per year between 2008–09 and 2010–11 (Table 2.6).

### 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 2007–08 and 2011–12, the overall number of hospital separations rose from 7.9 million to 9.3 million (Table 2.7). Over this period, the rate of growth in separations was higher for private hospitals (4.6%) than for public hospitals (3.8%). In particular, the numbers of separations reported for *Private free-standing day hospital facilities* increased by an average of 6.0% each year.

Private hospitals consistently accounted for about 40% of separations between 2007–08 and 2011–12 (Table 2.7). 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: Non-admitted patient occasions of service ('000), public and private hospitals<sup>(a)</sup>, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public acute hospitals</b>							
Individual occasions of service	48,355	49,161	49,471	50,177	53,124	2.4	5.9
Emergency	7,101	7,172	7,390	7,651	7,809	2.4	2.1
Outpatient-related <sup>(b)</sup>	16,369	16,516	16,789	16,682	16,868	0.8	1.1
Diagnostic <sup>(c)</sup>	16,213	17,065	16,815	17,197	19,349	4.5	12.5
Other <sup>(d)</sup>	8,673	8,407	8,476	8,646	9,098	1.2	5.2
Group occasions of service	429	341	328	318	303	–8.3	–4.7
<b>Total</b>	<b>48,784</b>	<b>49,502</b>	<b>49,799</b>	<b>50,494</b>	<b>53,427</b>	<b>2.3</b>	<b>5.8</b>
						<b>Average since 2008–09</b>	<b>Since 2009–10</b>
<b>Private hospitals<sup>(a)</sup></b>							
Accident and emergency	n.a.	501	527	516	n.a.	1.5	–2.0
Other outpatient <sup>(e)</sup>	n.a.	1,525	1,550	1,646	n.a.	3.9	6.2
<b>Total private hospitals<sup>(a)</sup></b>	<b>n.a.</b>	<b>2,026</b>	<b>2,077</b>	<b>2,162</b>	<b>n.a.</b>	<b>3.3</b>	<b>4.1</b>
<b>Total</b>	<b>n.a.</b>	<b>51,527</b>	<b>51,876</b>	<b>52,657</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>

(a) Does not include data for Private free-standing day hospital facilities.

(b) Includes *Allied health services, Dental, Dialysis, Endoscopy and Other medical/surgical/obstetric services.*

(c) Includes *Radiology and organ imaging, Pathology and Pharmacy services.*

(d) Includes *Psychiatric, Alcohol and drug, Community health services, District nursing and Outreach services.*

(e) Includes *Dialysis, Radiology and organ imaging, Endoscopy, Pathology, Other medical/surgical/diagnostic, Psychiatric, Alcohol and drug, Dental, Pharmacy and Allied health services, Community health services, District nursing services and Non-medical and social services.*

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

**Table 2.7: Separations ('000), public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals	4,729	4,880	5,058	5,269	5,502	3.9	4.4
Public psychiatric hospitals <sup>(a)</sup>	15	11	11	10	10	–9.8	–3.4
<b>Total public hospitals</b>	<b>4,744</b>	<b>4,891</b>	<b>5,069</b>	<b>5,279</b>	<b>5,511</b>	<b>3.8</b>	<b>4.4</b>
<b>Private hospitals</b>							
Private free-standing day hospital facilities	668	729	783	809	844	6.0	4.3
Other private hospitals	2,462	2,528	2,678	2,764	2,901	4.2	4.9
<b>Total private hospitals</b>	<b>3,130</b>	<b>3,257</b>	<b>3,462</b>	<b>3,573</b>	<b>3,745</b>	<b>4.6</b>	<b>4.8</b>
<b>All hospitals</b>	<b>7,874</b>	<b>8,148</b>	<b>8,531</b>	<b>8,853</b>	<b>9,256</b>	<b>4.1</b>	<b>4.6</b>

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

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

Between 2007–08 and 2011–12, the number of separations per 1,000 population rose by an average of 2.1% per year, with growth observed in all types of hospitals except *Public psychiatric hospitals* (Table 2.8). The highest growth in separation rate was observed in *Private free-standing day hospital facilities* (3.9% on average per year). Over the same period, overnight separation rates were relatively stable for public hospitals and decreased slightly for private hospitals.

**Table 2.8: Separations per 1,000 population, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals	219.5	221.8	224.8	229.8	236.0	1.8	2.7
Public psychiatric hospitals	0.7	0.5	0.5	0.5	0.4	–11.1	–4.6
<i>Total public hospitals</i>	<i>220.2</i>	<i>222.3</i>	<i>225.4</i>	<i>230.3</i>	<i>236.4</i>	<i>1.8</i>	<i>2.7</i>
Overnight separations	110.7	110.6	111.0	113.3	111.5	0.2	–1.6
<b>Private hospitals</b>							
Private free-standing day hospital facilities	30.7	32.8	34.5	34.9	35.7	3.9	2.4
Other private hospitals	112.7	113.4	117.6	118.9	122.4	2.1	3.0
<i>Total private hospitals</i>	<i>143.4</i>	<i>146.2</i>	<i>152.1</i>	<i>153.8</i>	<i>158.2</i>	<i>2.5</i>	<i>2.9</i>
Overnight separations	48.7	48.1	49.1	48.9	48.0	–0.4	–1.8
<b>All hospitals</b>	<b>363.6</b>	<b>368.5</b>	<b>377.4</b>	<b>384.0</b>	<b>394.6</b>	<b>2.1</b>	<b>2.7</b>
<b>Overnight separations</b>	<b>159.4</b>	<b>158.7</b>	<b>160.1</b>	<b>162.2</b>	<b>159.6</b>	<b>0.0</b>	<b>–1.6</b>

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

## 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 2007–08 and 2011–12, the number of same-day separations increased at a greater rate than overnight separations (5.0% and 3.0% average per year, respectively) (Table 2.9), with the rate of increase for same-day separations being higher in private hospitals (5.6%) than in public hospitals (4.4%). In 2011–12, same-day separations accounted for 58.1% of separations, compared with 56.2% of separations in 2007–08. For more information on same-day acute admitted patient care, see Chapter 8.

There was an increase in overnight separations between 2007–08 and 2011–12, with the rate of increase being higher for public hospitals (3.2%) than for private hospitals (2.4%). In 2011–12, overnight separations made up 49% of separations in public hospitals and 31% in private hospitals. For more information on overnight acute admitted patient care, see Chapter 9.

**Table 2.9: Same-day and overnight separations ('000), public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Same-day separations</b>							
Public hospitals							
Public acute hospitals	2,362	2,460	2,573	2,685	2,806	4.4	4.5
Public psychiatric hospitals <sup>(a)</sup>	2	1	1	1	1	-22.6	0.2
<i>Total</i>	<i>2,364</i>	<i>2,461</i>	<i>2,574</i>	<i>2,685</i>	<i>2,807</i>	<i>4.4</i>	<i>4.5</i>
<i>Proportion of total public separations (%)</i>	<i>49.8</i>	<i>50.3</i>	<i>50.8</i>	<i>50.9</i>	<i>50.9</i>	<i>0.5</i>	<i>0.1</i>
Private hospitals							
Private free-standing day hospital facilities	666	728	782	808	843	6.1	4.3
Other private hospitals	1,399	1,456	1,562	1,627	1,729	5.4	6.3
<i>Total</i>	<i>2,065</i>	<i>2,184</i>	<i>2,344</i>	<i>2,435</i>	<i>2,572</i>	<i>5.6</i>	<i>5.6</i>
<i>Proportion of total private separations (%)</i>	<i>66.0</i>	<i>67.0</i>	<i>67.7</i>	<i>68.1</i>	<i>68.7</i>	<i>1.0</i>	<i>0.8</i>
<b>All hospitals</b>	<b>4,429</b>	<b>4,645</b>	<b>4,918</b>	<b>5,120</b>	<b>5,379</b>	<b>5.0</b>	<b>5.0</b>
<b>Proportion of total separations (%)</b>	<b>56.2</b>	<b>57.0</b>	<b>57.6</b>	<b>57.8</b>	<b>58.1</b>	<b>0.8</b>	<b>0.5</b>
<b>Overnight separations</b>							
Public hospitals							
Public acute hospitals	2,368	2,420	2,485	2,585	2,696	3.3	4.3
Public psychiatric hospitals <sup>(a)</sup>	13	10	11	9	9	-8.3	-3.6
<i>Total</i>	<i>2,380</i>	<i>2,430</i>	<i>2,495</i>	<i>2,594</i>	<i>2,705</i>	<i>3.2</i>	<i>4.3</i>
Private hospitals							
Private free-standing day hospital facilities	2	1	1	1	1	-14.8	-9.7
Other private hospitals	1,062	1,073	1,117	1,137	1,171	2.5	3.0
<i>Total</i>	<i>1,065</i>	<i>1,074</i>	<i>1,118</i>	<i>1,138</i>	<i>1,173</i>	<i>2.4</i>	<i>3.0</i>
<b>All hospitals</b>	<b>3,445</b>	<b>3,504</b>	<b>3,613</b>	<b>3,732</b>	<b>3,877</b>	<b>3.0</b>	<b>3.9</b>

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

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

## 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).

Table 2.10 presents information on the *Urgency of admission* by same-day/overnight status and the broad category of admitted patient service (*Childbirth, Specialist mental health, Surgical, Medical and Other*). See 'What care was provided?' for more information on these broad categories of service.



Between 2007–08 and 2011–12, separations with an urgency of admission of *Emergency* increased for both public and private hospitals (4.1% and 3.2% per year, respectively) (Table 2.10). For *Non-emergency* admissions, separations increased for both public and private hospitals (3.8% and 4.8% per year, respectively).

**Table 2.10: Separations by broad category of service, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Childbirth	206,199	208,196	211,134	213,454	218,903	1.5	2.6
Specialist mental health	96,726	103,185	96,793	101,173	109,297	3.1	8.0
<i>Emergency</i>	1,892,416	1,940,494	1,978,752	2,113,521	2,218,994	4.1	5.0
Surgical	218,202	226,586	229,783	243,841	256,880	4.2	5.3
Medical	1,623,587	1,659,662	1,693,780	1,812,229	1,902,150	4.0	5.0
Other	50,627	54,246	55,189	57,451	59,964	4.3	4.4
<i>Non-emergency</i>	2,548,719	2,639,148	2,782,609	2,850,984	2,964,298	3.8	4.0
Surgical	641,584	660,738	676,874	687,115	695,239	2.0	1.2
Medical	1,655,641	1,718,910	1,832,704	1,882,496	1,991,254	4.7	5.8
Other	251,494	259,500	273,031	281,373	277,805	2.5	–1.3
<i>Total</i>	4,744,060	4,891,023	5,069,288	5,279,132	5,511,492	3.8	4.4
<b>Private hospitals</b>							
Childbirth	78,157	81,390	84,320	80,006	80,782	0.8	1.0
Specialist mental health	115,826	131,378	145,643	130,090	140,091	4.9	7.7
<i>Emergency</i>	176,975	165,718	178,718	195,133	200,769	3.2	2.9
Surgical	33,852	30,596	33,131	36,617	38,678	3.4	5.6
Medical	130,383	123,919	133,212	144,549	146,399	2.9	1.3
Other	12,740	11,203	12,375	13,967	15,692	5.3	12.4
<i>Non-emergency</i>	2,758,927	2,878,939	3,053,034	3,168,189	3,323,035	4.8	4.9
Surgical	1,163,556	1,206,830	1,265,071	1,291,089	1,349,008	3.8	4.5
Medical	946,849	1,006,337	1,084,585	1,147,340	1,227,888	6.7	7.0
Other	648,522	665,772	703,378	729,760	746,139	3.6	2.2
<i>Total</i>	3,129,885	3,257,425	3,461,715	3,573,418	3,744,677	4.6	4.8
<b>Total separations</b>	<b>7,873,945</b>	<b>8,148,448</b>	<b>8,531,003</b>	<b>8,852,550</b>	<b>9,256,169</b>	<b>4.1</b>	<b>4.6</b>

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

## What care was provided?

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

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

- *Surgical*: separations for which the AR-DRG belonged to the *Surgical* partition (involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Medical*: separations for which the AR-DRG belonged to the *Medical* partition (not involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Other*: separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions (involving a non-operating room procedure, such as endoscopy), excluding separations for *Childbirth* and *Specialist mental health*.

Between 2007–08 and 2011–12, private hospitals accounted for the majority of *Non-emergency surgical* separations (about 65% each year) and the majority of *Specialist mental health* separations (56% in 2011–12) (Table 2.10).

Public hospitals consistently accounted for around 72% of *Childbirth* separations between 2007–08 and 2011–12.

### **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. See Appendix B for more information.

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

Using public cost weights for both public and private hospitals, average cost weights were lower for private hospitals than for public hospitals and average costs declined slightly overall between 2007–08 and 2011–12 (Table 2.11). Over that period there was an increase in the average cost weight for *Public psychiatric hospitals*.

**Table 2.11: Average cost weight of separations<sup>(a)</sup>, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Average public cost weight of separations<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.00	1.00	0.99	0.98	0.99	–0.4	0.2
Public psychiatric hospitals	2.33	2.56	2.59	2.54	2.49	1.7	–1.8
<i>Total</i>	<i>1.00</i>	<i>1.00</i>	<i>0.99</i>	<i>0.98</i>	<i>0.99</i>	<i>–0.4</i>	<i>0.2</i>
Private hospitals <sup>(a)</sup>							
Private free-standing day hospital facilities	0.46	0.46	0.47	0.46	0.47	0.4	1.3
Other private hospitals	1.02	1.02	1.02	1.02	1.01	–0.3	–0.4
<i>Total</i>	<i>0.90</i>	<i>0.89</i>	<i>0.89</i>	<i>0.88</i>	<i>0.88</i>	<i>–0.5</i>	<i>–0.2</i>
<b>All hospitals</b>	<b>0.97</b>	<b>0.96</b>	<b>0.95</b>	<b>0.95</b>	<b>0.95</b>	<b>–0.5</b>	<b>0.1</b>

(a) Private hospital cost weights were not available for AR-DRG version 6.0x. Therefore, AR-DRG version 6.0x public cost weights 2009–10 were used for all hospitals.

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

## How long did people stay in hospital?

In 2011–12, 68% of patient days were in public hospitals (Table 2.12). Patient days for *Public psychiatric hospitals* fluctuated between 2007–08 and 2011–12. 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 2007–08 and 2011–12, the average length of stay for public acute and private hospitals fell slightly, but rose for *Public psychiatric hospitals*.

With same-day separations excluded, average lengths of stay in all hospitals combined fell from 6.2 days to 5.8 days, an average annual decrease of 1.6% between 2007–08 and 2011–12. The average length of stay excluding same-day separations is comparable with the length of stays reported for other member countries by the Organisation for Economic Co-operation and Development (OECD) (OECD 2012) (which also do not include same-day activity).

Between 2007–08 and 2011–12, overall patient days per 1,000 population decreased by 2.5% per year for *Public psychiatric hospitals*, while patient days increased by about 3.9% per year for *Private free-standing day hospital facilities* (Table 2.13).

**Table 2.12: Patient days and average length of stay, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Patient days ('000)</b>							
Public hospitals							
Public acute hospitals	17,122	17,302	17,440	17,894	18,313	1.7	2.3
Public psychiatric hospitals <sup>(a)</sup>	714	587	663	593	678	-1.3	14.4
<i>Total</i>	<i>17,836</i>	<i>17,889</i>	<i>18,103</i>	<i>18,487</i>	<i>18,991</i>	<i>1.6</i>	<i>2.7</i>
Private hospitals							
Private free-standing day hospital facilities	668	729	783	809	844	6.0	4.3
Other private hospitals	7,139	7,164	7,479	7,598	7,901	2.6	4.0
<i>Total</i>	<i>7,807</i>	<i>7,893</i>	<i>8,262</i>	<i>8,408</i>	<i>8,745</i>	<i>2.9</i>	<i>4.0</i>
<b>All hospitals</b>	<b>25,643</b>	<b>25,782</b>	<b>26,365</b>	<b>26,895</b>	<b>27,736</b>	<b>2.0</b>	<b>3.1</b>
<b>Average length of stay (days)</b>							
Public hospitals							
Public acute hospitals	3.6	3.5	3.4	3.4	3.3	-2.1	-2.0
Public psychiatric hospitals	48.4	52.8	59.1	58.6	69.3	9.4	18.4
<i>Total</i>	<i>3.8</i>	<i>3.7</i>	<i>3.6</i>	<i>3.5</i>	<i>3.4</i>	<i>-2.2</i>	<i>-1.6</i>
Private hospitals							
Private free-standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Other private hospitals	2.9	2.8	2.8	2.7	2.7	-1.6	-0.9
<i>Total</i>	<i>2.5</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.3</i>	<i>-1.6</i>	<i>-0.7</i>
<b>All hospitals</b>	<b>3.3</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>3.0</b>	<b>-2.1</b>	<b>-1.4</b>
<b>Average length of stay, excluding same-day separations (days)</b>							
Public hospitals							
Public acute hospitals	6.2	6.1	6.0	5.9	5.8	-2.0	-2.2
Public psychiatric hospitals	55.0	56.0	63.0	62.5	74.2	7.8	18.7
<i>Total</i>	<i>6.5</i>	<i>6.3</i>	<i>6.2</i>	<i>6.1</i>	<i>6.0</i>	<i>-2.0</i>	<i>-1.8</i>
Private hospitals							
Private free-standing day hospital facilities <sup>(b)</sup>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other private hospitals	5.4	5.3	5.3	5.3	5.3	-0.6	0.3
<i>Total</i>	<i>5.4</i>	<i>5.3</i>	<i>5.3</i>	<i>5.2</i>	<i>5.3</i>	<i>-0.6</i>	<i>0.3</i>
<b>All hospitals</b>	<b>6.2</b>	<b>6.0</b>	<b>5.9</b>	<b>5.8</b>	<b>5.8</b>	<b>-1.6</b>	<b>-1.2</b>

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

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

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

**Table 2.13: Patient days per 1,000 population, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals	782.7	774.2	763.2	767.3	770.6	–0.4	0.4
Public psychiatric hospitals <sup>(a)</sup>	33.6	27.2	30.2	26.7	30.4	–2.5	14.0
<i>Total</i>	<i>816.4</i>	<i>801.4</i>	<i>793.4</i>	<i>794.0</i>	<i>801.0</i>	<i>–0.5</i>	<i>0.9</i>
<b>Private hospitals</b>							
Private free-standing day hospital facilities	30.7	32.8	34.5	34.9	35.7	3.9	2.4
Other private hospitals	322.6	316.8	323.6	321.3	327.3	0.4	1.9
<i>Total</i>	<i>353.2</i>	<i>349.6</i>	<i>358.1</i>	<i>356.2</i>	<i>363.1</i>	<i>0.7</i>	<i>1.9</i>
<b>All hospitals</b>	<b>1,169.6</b>	<b>1,151.0</b>	<b>1,151.5</b>	<b>1,150.2</b>	<b>1,164.1</b>	<b>–0.1</b>	<b>1.2</b>

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

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

## Relative stay index

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

Table 2.14 presents RSI information for 2007–08 to 2011–12. The directly standardised RSI for public hospitals was consistently lower than that for private hospitals between 2007–08 and 2011–12.

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

**Table 2.14: Relative stay index, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Indirectly standardised relative stay index<sup>(a)</sup></b>							
Public hospitals							
Public acute hospitals	1.01	1.00	0.98	0.97	0.94	..	..
Public psychiatric hospitals	1.25	1.30	1.30	1.33	1.34	..	..
<i>Total</i>	<i>1.02</i>	<i>1.01</i>	<i>0.98</i>	<i>0.97</i>	<i>0.94</i>	..	..
Private hospitals							
Private free-standing day hospital facilities	0.80	0.81	0.80	0.80	0.79	..	..
Other private hospitals	1.09	1.07	1.06	1.05	1.04	..	..
<i>Total</i>	<i>1.07</i>	<i>1.05</i>	<i>1.04</i>	<i>1.03</i>	<i>1.02</i>	..	..
<b>All hospitals</b>	<b>1.03</b>	<b>1.02</b>	<b>1.00</b>	<b>0.99</b>	<b>0.96</b>	..	..
<b>Directly standardised relative stay index<sup>(b)</sup></b>							
Public hospitals							
Public acute hospitals	1.03	1.02	0.99	0.98	0.96	–1.7	–2.4
Public psychiatric hospitals	3.51	3.15	3.75	1.80	2.76	–5.8	53.5
<i>Total</i>	<i>1.03</i>	<i>1.02</i>	<i>1.00</i>	<i>0.99</i>	<i>0.96</i>	<i>–1.8</i>	<i>–2.5</i>
Private hospitals							
Private free-standing day hospital facilities	0.44	0.49	0.44	0.43	0.42	–1.0	–2.3
Other private hospitals	1.15	1.13	1.12	1.11	1.11	–0.9	–0.7
<i>Total</i>	<i>1.13</i>	<i>1.12</i>	<i>1.10</i>	<i>1.10</i>	<i>1.09</i>	<i>–0.9</i>	<i>–0.8</i>
<b>All hospitals</b>	<b>1.03</b>	<b>1.02</b>	<b>1.00</b>	<b>0.99</b>	<b>0.97</b>	<b>–1.6</b>	<b>–2.2</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.

(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.

Note: See boxes 2.1 and 2.2 for notes on data limitations and methods. See Appendix B for details on the methodology.

### 3 Hospital performance indicators

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

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

#### The National Health Performance Framework

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

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

The Health System Performance domain is most directly relevant to the assessment of the provision of hospital and other health-care services. Its 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?

Ten hospital performance indicators are presented in this chapter, and summary information for another 2 are also included. The indicators are listed in Table 3.2 against the dimensions of the NHPF. Some indicators can be related to more than one dimension of the NHPF, even though they are presented here against only one dimension. For example, hospital accreditation could be related to *Safety* and *Responsiveness*, as well as *Effectiveness*.

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

<p><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.</p>	<p><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.</p>
<p><b>Continuity of care</b> Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.</p>	<p><b>Accessibility</b> People can obtain health care at the right place and right time irrespective of income, physical location and cultural background.</p>
<p><b>Responsiveness</b> Service is client orientated. Clients are treated with dignity, confidentiality, and encouraged to participate in choices related to their care.</p>	<p><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.</p>

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

- the NHPF set as endorsed by health ministers for reporting in *Australia's health*
- the National Partnership Agreement on Improving Public Hospital Services (NPA-IPHS) (COAG 2011)
- the National Healthcare Agreement (NHA) (COAG 2012).

Six of the performance indicators in this report align with the NHA performance indicators for the outcome area of 'better health services' (COAG 2012). The NHA includes 33 performance indicators (disaggregated by Indigenous status, disability status, remoteness area and socio-economic status where possible) and seven performance benchmarks that are to be reported regularly under the Intergovernmental Agreement on Federal Financial Relations.

Of the seven NHA performance indicators based on hospital data, four relate to the outcome of *Australians receive appropriate high quality and affordable hospital and hospital related care*, and these indicators are presented in this chapter. The other 3 NHA performance indicators based on hospital data relate to different outcome areas; two of these are presented elsewhere in this report.

The NHA performance indicators based on 2007–08 to 2010–11 hospital data have been published by the Council of Australian Governments (COAG) Reform Council (CRC 2010, 2011 and 2012). The performance indicators presented here are based on data for 2011–12 and on specifications anticipated to be used for the council's 2013 and 2014 reports.

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

Any interpretation of the performance indicators presented here should take into consideration the limitations of the data from which they are derived. Information on variation in data recording practices, data quality and database coverage are presented in Appendix A.

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**

Table(s)	Indicator	Related national indicator set		
		NHA	NPA-IPHS	NHPF
<b>Effectiveness</b>				
Table 3.4	Accreditation of hospitals and beds			✓
<b>Safety</b>				
Tables 3.5, 3.6 and 3.7	Adverse events treated in hospitals			✓
Table 3.8	Unplanned/unexpected readmissions following selected surgical episodes of care (same public hospital)	✓		
Table 3.9	<i>Staphylococcus aureus</i> bacteraemia in public hospitals	✓		
<b>Responsiveness</b>				
No indicators available				
<b>Continuity of care</b>				
No indicators available				
<b>Accessibility</b>				
Tables 3.10, 3.11 and S3.1	Waiting times for emergency department care	✓		✓
Page 34	National Emergency Access Target: Proportion of visits completed in 4 hours or less*	✓	✓	
Tables 3.12, 3.13, S3.2 and S3.3	Waiting times for elective surgery	✓		✓
Page 37	National Elective Surgery Target*	✓	✓	
Tables 3.14, 3.21, S3.4, S3.5, S3.6	Rates of services: hospital procedures			✓
<b>Efficiency &amp; sustainability</b>				
Tables 3.15, 3.16, 3.18, 3.19, and S3.7 to S3.13	Cost per casemix-adjusted separation for acute care episodes			✓
Tables 3.17 and 3.20	Relative stay index			✓
Figure 3.4 Table 3.22	Average length of stay for selected AR-DRGs			✓

AR-DRG—Australian Refined Diagnosis Related Group.

NHA—National Healthcare Agreement.

NPA-IPHS—National Partnership Agreement on Improving Public Hospital Services.

NHPF—National Health Performance Framework.

\* — summary information only.

Some performance indicators based on hospitals data are not presented in this chapter as they are not indicators of hospital performance. These indicators are presented elsewhere in this report (see Table 3.3), or were reported previously in *Australian hospital statistics 2011–12: emergency department care* (2012c).

The NHA performance indicator for *Selected potentially preventable hospitalisations* relates to the outcome *Australians receive appropriate high quality and affordable primary and community health services* and is presented in Chapter 7.

The NHA performance indicator for *Hospital patient days used by those eligible and waiting for residential aged care* relates to the outcome *Older Australians receive appropriate high quality and affordable health and aged services* and is presented in Chapter 11.

**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> Tables 7.16, 7.17, 7.18 and 7.37.
Hospital patient days used by those eligible and waiting for residential aged care	✓ Proxy		<b>Chapter 11.</b> Table 11.15.

NHA—National Healthcare Agreement.

NHPF—National Health Performance Framework.

### Box 3.2: What methods were used?

The following should be noted:

- 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 B)
- Public hospitals include *Public acute* and *Public psychiatric* hospitals
- Private hospitals include *Private free-standing day hospital facilities* and *Other private* hospitals.
- The abbreviation n.p. – not published may appear in a table to protect the confidentiality of private hospital data, or for very small cell sizes (see Appendix B).

Details of methods, including the selection of AR-DRGs, diagnoses and procedures used, are presented in Appendix B 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 provided by a number of bodies, including the Australian Council on Healthcare Standards' Evaluation and Quality Improvement Program (EQuIP), Business Excellence Australia, and the Quality Improvement Council. Hospitals can also 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.

Across Australia, 707 public hospitals were accredited by one or more providers at 30 June 2012, with 57,713 public hospital beds (94% of public hospitals and 99% of public hospital beds) (Table 3.4). These hospitals delivered almost 100% of separations and 99% of patient days in public hospitals. The proportion of public hospitals that were accredited ranged from 17% in Tasmania (accounting for 95% of Tasmanian public hospital separations) to 100% in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory.

The proportion of public hospital beds that were in accredited hospitals ranged from 87% in Tasmania to 100% in Victoria, Queensland, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory. The proportion of separations in accredited public hospitals ranged from 95% in Tasmania to 100% in Victoria, Queensland, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory.

A total of 567 private hospitals were accredited in 2010–11 (ABS unpublished), with 27,825 private hospital beds (96% of private hospitals, accounting for 98% of the beds).

The comparability of accreditation data among states and territories is limited because of the voluntary nature of participation in award schemes for hospitals in some jurisdictions. As accreditation for public hospitals was counted as at 30 June 2012, hospitals that were accredited for the majority of the financial year, but had their accreditation status lapse shortly before this date, would have been counted as non-accredited.

**Table 3.4: Selected accreditation statistics by state and territory, public hospitals 2011–12, private hospitals, 2010–11**

	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
<i>Total hospitals</i>	225	151	170	96	80	23	3	5	753
Accredited hospitals	210	151	159	96	79	4	3	5	707
Accredited (%)	93	100	94	100	99	17	100	100	94
<i>Total beds<sup>(b)</sup></i>	20,073	13,370	11,245	5,677	5,232	1,188	939	696	58,420
Beds in accredited hospitals	19,536	13,370	11,236	5,677	5,228	1,031	939	696	57,713
Accredited (%)	97	100	100	100	100	87	100	100	99
Separations in accredited hospitals (%)	99	100	100	100	100	95	100	100	100
Patient days in accredited hospitals (%)	97	100	100	100	100	90	100	100	99
<b>Private hospitals<sup>(c)</sup></b>									
<i>Total hospitals</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	593
Accredited hospitals	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	567
Accredited (%)	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	96
<i>Total beds<sup>(b)</sup></i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	28,351
Beds in accredited hospitals	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	27,825
Accredited (%)	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	98

(a) For Victoria, 2 hospitals were enrolled in the accreditation process as at 30 June 2012. These hospitals are shown as accredited.

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

(c) Accreditation statistics for private hospitals were sourced from the Australian Bureau of Statistics (ABS unpublished).

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

## Safety

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

### Performance indicator: Adverse events treated in hospitals

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

Hospital separations data include information on diagnoses, places of occurrence and external causes of injury and poisoning that can indicate that an adverse event was treated and/or occurred during the hospitalisation. However, other diagnosis codes may also suggest that an adverse event has occurred, and some adverse events are not identifiable using these codes. A separation may be recorded against more than one category in tables 3.5 to 3.7 as some adverse events are reported as diagnoses and others as external causes or places of occurrence (of the injury or poisoning).

The data in tables 3.5 to 3.7 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. About 27% of separations with an

adverse event reported the adverse event as the principal diagnosis (tables 3.6 and 3.7). Condition onset flag information (see Appendix B) could be used in the future to provide more accurate estimates of adverse events occurring, and treated within, single episodes of care.

In 2011–12, 5.3% of separations reported one or more *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification* (ICD-10-AM) codes indicating one or more adverse events (Table 3.5). The proportion of separations with an adverse event was 6.1% for public hospitals and 3.9% for private hospitals. The data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may be different.

The proportion of same-day separations with an adverse event was 1.6% overall, 10.3% of overnight separations had an adverse event (Table 3.5).

Separations for sub- and non-acute care had higher rates of adverse events than acute care separations (9.3 and 5.0 separations with an adverse event per 100, respectively), and emergency admissions had higher rates of adverse events than non-emergency admissions (9.1 and 3.8 separations with an adverse event per 100, respectively).

**Table 3.5: Separations with an adverse event<sup>(a)</sup> per 100 separations, public and private hospitals, 2011–12**

Type of separation <sup>(b)</sup>	Public hospitals	Private hospitals	Total
<b>Length of stay</b>			
Same-day separations	1.8	1.4	1.6
Overnight separations	10.7	9.4	10.3
<b>Type of care</b>			
Acute care separations	5.9	3.7	5.0
Sub- and non-acute care separations	11.2	7.4	9.3
<b>Urgency of admission</b>			
Emergency admission	8.9	11.9	9.1
Non-emergency admission	4.2	3.5	3.8
<b>All separations</b>	<b>6.1</b>	<b>3.9</b>	<b>5.3</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) The categories *Length of stay*, *Type of care* and *Urgency of admission* are not mutually exclusive. Each separation with an adverse event is included in three categories; for example as a *Same-day separation*, an *Acute care separation* and an *Emergency admission*.

In public hospitals, the proportion of separations for which an adverse event was recorded was lowest in the Northern Territory (3.2%) and highest in Tasmania (7.5%) (Table 3.6). About 1.8% of same-day separations had an adverse event compared with 10.7% of overnight separations. For overnight separations, the proportion of separations with an adverse event ranged from 7.9% in the Northern Territory to 12.0% in Tasmania.

For public hospitals, about 53% of separations with an adverse event reported *Procedures causing abnormal reactions/complications* and 36% reported *Adverse effects of drugs, medicaments and biological substances*. About 24% of public hospital separations with an adverse event reported the adverse event as the principal diagnosis.

**Table 3.6: Separations with an adverse event<sup>(a)</sup>, public hospitals, states and territories, 2011–12**

Adverse event	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>External cause of injury and poisoning</b>									
Adverse effects of drugs, medicaments and biological substances	39,674	32,632	21,282	13,369	10,061	2,393	2,159	973	122,543
Misadventures to patients during surgical and medical care	3,864	5,188	3,257	1,482	1,012	422	285	159	15,669
Procedures causing abnormal reactions/complications	52,902	51,360	32,805	18,641	14,405	4,444	3,458	2,257	180,272
Other external causes of adverse events	2,093	2,633	1,261	412	953	128	194	90	7,764
<b>Place of occurrence of injury and poisoning</b>									
Place of occurrence: Health service area	101,761	91,565	59,278	34,598	26,368	7,544	5,968	3,444	330,526
<b>Diagnoses</b>									
Selected post-procedural disorders	15,433	10,457	7,673	4,719	4,435	1,233	1,073	401	45,424
Haemorrhage and haematoma complicating a procedure	7,731	8,025	4,419	2,746	1,797	487	502	326	26,033
Infection following a procedure	8,185	5,709	4,514	2,369	1,578	488	351	437	23,631
Complications of internal prosthetic devices	19,505	20,253	12,774	6,571	4,825	1,237	1,410	893	67,468
Other diagnoses of complications of medical and surgical care	11,387	16,630	8,262	4,474	3,344	1,065	721	704	46,587
<i>Adverse event reported as principal diagnosis</i>	<i>24,715</i>	<i>21,749</i>	<i>15,287</i>	<i>9,072</i>	<i>6,354</i>	<i>1,859</i>	<i>1,490</i>	<i>1,240</i>	<i>81,766</i>
<b>Total (any of the above)<sup>(b)</sup></b>	<b>103,896</b>	<b>94,060</b>	<b>60,429</b>	<b>35,373</b>	<b>27,435</b>	<b>7,652</b>	<b>6,142</b>	<b>3,592</b>	<b>338,579</b>
<b>Separations with an adverse event per 100 separations<sup>(c)</sup></b>									
<b>Length of stay</b>									
Same-day separations	1.4	1.8	2.1	2.0	2.1	3.5	1.5	0.7	1.8
Overnight separations	10.1	11.8	10.1	10.7	10.7	12.0	11.9	7.9	10.7
<b>Type of care</b>									
Acute care separations	6.1	5.8	5.8	5.7	6.7	7.6	6.0	3.1	5.9
Sub- and non-acute care separations	9.4	15.1	10.8	14.1	7.9	10.4	10.4	8.0	11.2
<b>Urgency of admission</b>									
Emergency admission	9.1	8.9	7.9	9.0	9.8	11.5	10.1	6.9	8.9
Non-emergency admission	4.0	4.4	4.6	3.9	4.3	5.6	3.7	1.3	4.2
<b>All separations</b>	<b>6.3</b>	<b>6.1</b>	<b>6.0</b>	<b>6.0</b>	<b>6.7</b>	<b>7.5</b>	<b>6.3</b>	<b>3.2</b>	<b>6.1</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 an adverse event.

(c) The categories *Length of stay*, *Type of care* and *Urgency of admission* are not mutually exclusive. Each separation with an adverse event is included in three categories; for example as a *Same-day separation*, an *Acute care separation* and an *Emergency admission*.

For private hospitals, the proportion of separations with an adverse event varied from 3.3% in Western Australia to 5.2% in South Australia (Table 3.7). About 1.4% of same-day separations reported an adverse event compared to 9.4% of overnight separations. For overnight separations, the Victoria had the lowest proportion of separations with an adverse event (8.6%), and South Australia had the highest (10.8%).

For private hospitals, about 72% of separations with an adverse event reported *Procedures causing abnormal reactions/complications* and 19% reported *Adverse effects of drugs, medicaments and biological substances*. About 33% of private hospital separations with an adverse event reported the adverse event as the principal diagnosis.

**Table 3.7: Separations with an adverse event<sup>(a)</sup>, private hospitals, states and territories, 2011–12**

Adverse event	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>External cause of injury and poisoning</b>									
Adverse effects of drugs, medicaments and biological substances	5,481	6,885	9,292	3,471	2,403	n.p.	n.p.	n.p.	28,514
Misadventures to patients during surgical and medical care	1,879	1,327	1,398	758	623	n.p.	n.p.	n.p.	6,334
Procedures causing abnormal reactions/complications	30,501	22,636	25,976	10,052	11,460	n.p.	n.p.	n.p.	105,570
Other external causes of adverse events	302	176	251	34	219	n.p.	n.p.	n.p.	1,012
<b>Place of occurrence of injury and poisoning</b>									
Place of occurrence: Health service area	39,447	32,122	37,566	14,493	14,532	n.p.	n.p.	n.p.	144,555
<b>Diagnoses</b>									
Selected post-procedural disorders	9,006	4,596	7,169	2,574	2,477	n.p.	n.p.	n.p.	26,986
Haemorrhage and haematoma complicating a procedure	4,062	3,588	3,589	1,618	1,293	n.p.	n.p.	n.p.	14,893
Infection following a procedure	3,355	2,420	2,911	1,045	1,530	n.p.	n.p.	n.p.	11,722
Complications of internal prosthetic devices	13,274	9,266	9,145	4,272	5,043	n.p.	n.p.	n.p.	43,353
Other diagnoses of complications of medical and surgical care	5,713	5,066	4,815	1,830	2,543	n.p.	n.p.	n.p.	20,793
<i>Adverse event reported as principal diagnosis</i>	11,624	11,602	11,690	5,551	6,192	n.p.	n.p.	n.p.	48,778
<b>Total (any of the above)<sup>(b)</sup></b>	<b>41,338</b>	<b>32,465</b>	<b>37,918</b>	<b>14,593</b>	<b>14,954</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>147,731</b>
<b>Separations with an adverse event per 100 separations<sup>(c)</sup></b>									
<b>Length of stay</b>									
Same-day separations	1.6	0.9	1.6	0.7	2.5	n.p.	n.p.	n.p.	1.4
Overnight separations	9.6	8.6	9.8	9.2	10.8	n.p.	n.p.	n.p.	9.4
<b>Type of care</b>									
Acute care separations	3.4	3.4	4.1	3.2	5.0	n.p.	n.p.	n.p.	3.7
Sub- and non-acute care separations	6.6	9.2	6.9	12.6	7.4	n.p.	n.p.	n.p.	7.4
<b>Urgency of admission</b>									
Emergency admission	16.1	10.8	12.0	13.1	9.2	n.p.	n.p.	n.p.	11.9
Non-emergency admission	3.6	3.1	3.5	2.7	4.7	n.p.	n.p.	n.p.	3.5
<b>All separations</b>	<b>3.9</b>	<b>3.5</b>	<b>4.2</b>	<b>3.3</b>	<b>5.2</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3.9</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 an adverse event.

(c) The categories *Length of stay*, *Type of care* and *Urgency of admission* are not mutually exclusive. Each separation with an adverse event is included in three categories; for example as a *Same-day separation*, an *Acute care* separation and an *Emergency admission*.

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

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

Rates of unplanned or unexpected readmissions were highest for *Hysterectomy* (30 per 1,000 separations), *Prostatectomy* and *Tonsillectomy and adenoidectomy* (both 28 per 1,000 separations) (Table 3.8). For *Cataract extraction*, fewer than 4 per 1,000 separations were readmitted within 28 days.

**Table 3.8: Separations<sup>(a)</sup> and rate per 1,000 separations, unplanned/unexpected readmissions for selected procedures, states and territories, 2011–12**

	NSW	Vic	Qld	WA <sup>(b)</sup>	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Appendicectomy</b>									
Separations	9,348	7,089	5,319	3,053	1,894	605	686	408	25,349
Number of readmissions	222	175	109	97	68	19	17	22	632
Per 1,000 separations	23.7	24.7	20.5	31.8	35.9	31.4	24.8	53.9	24.9
<b>Cataract extraction</b>									
Separations	17,954	16,055	6,292	8,529	6,314	695	951	528	48,789
Number of readmissions	50	51	25	22	21	n.p.	0	n.p.	156
Per 1,000 separations	2.8	3.2	4.0	2.6	3.3	n.p.	0.0	n.p.	3.2
<b>Hip replacement</b>									
Separations	2,834	2,184	1,204	978	719	170	148	28	7,287
Number of readmissions	50	38	17	22	17	4	n.p.	n.p.	129
Per 1,000 separations	17.6	17.4	14.1	22.5	23.6	23.5	n.p.	n.p.	17.7
<b>Hysterectomy</b>									
Separations	3,091	2,795	2,085	1,014	901	258	120	79	9,329
Number of readmissions	86	88	69	32	25	7	n.p.	n.p.	284
Per 1,000 separations	27.8	31.5	33.1	31.6	27.7	27.1	n.p.	n.p.	30.4
<b>Knee replacement</b>									
Separations	4,493	2,621	1,747	1,264	905	172	226	48	10,212
Number of readmissions	84	49	46	22	16	n.p.	n.p.	3	202
Per 1,000 separations	18.7	18.7	26.3	17.4	17.7	11.6	8.8	62.5	19.8
<b>Prostatectomy</b>									
Separations	2,439	2,259	1,162	594	585	161	67	40	6,713
Number of readmissions	55	62	43	30	15	3	3	4	185
Per 1,000 separations	22.6	27.4	37.0	50.5	25.6	18.6	44.8	100.0	27.6
<b>Tonsillectomy and adenoidectomy</b>									
Separations	6,273	6,515	4,271	2,373	2,053	432	383	168	20,095
Number of readmissions	153	155	140	77	69	26	7	7	557
Per 1,000 separations	24.4	23.8	32.8	32.5	33.6	60.2	18.3	41.7	27.7

(a) Separations are counted in the denominator if the admission for the selected procedure occurred between 1 July 2011 and 19 May 2012.

(b) Data for Western Australia were provided by Western Australia. Data for all other jurisdictions were sourced from the National Hospital Morbidity Database.

(c) Total excludes data for Western Australia.

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



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

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

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

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

In 2011–12, there were 1,734 cases of SAB reported for Australian public hospitals overall. These cases occurred during approximately 18.5 million days of patient care under SAB surveillance. More than three-quarters (76%) were methicillin sensitive, and would therefore have been treatable with commonly used antibiotics (Table 3.9).

All states and territories had rates of SAB below the national benchmark of 2.0 cases per 10,000 patient days, ranging from 0.7 cases per 10,000 patient days in Western Australia to 1.3 in the Northern Territory.

**Table 3.9: Cases of *Staphylococcus aureus* bacteraemia (SAB)<sup>(a)</sup> in public hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Rate per 10,000 patient days</b>									
Methicillin-resistant <i>Staphylococcus aureus</i>	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.5	0.2
Methicillin-sensitive <i>Staphylococcus aureus</i>	0.7	0.8	0.7	0.6	0.6	0.7	1.0	0.8	0.7
<b>Total<sup>(b)</sup></b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>1.1</b>	<b>1.3</b>	<b>0.9</b>
<b>Number of cases</b>									
Methicillin resistant <i>Staphylococcus aureus</i>	201	80	51	23	42	5	6	15	423
Methicillin sensitive <i>Staphylococcus aureus</i>	473	375	220	81	85	22	31	24	1,311
<b>Total</b>	<b>674</b>	<b>455</b>	<b>271</b>	<b>104</b>	<b>127</b>	<b>27</b>	<b>37</b>	<b>39</b>	<b>1,734</b>
Patient days under SAB surveillance ('000)	6,735	4,837	3,178	1,436	1,396	318	325	304	18,529
Coverage (per cent)	97	99	98	84	82	90	98	100	95

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

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

### **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 commencement of clinical care is 'the time elapsed in minutes for each patient from presentation in the emergency department to the commencement of the emergency department non-admitted clinical care'.

Emergency department waiting times information is summarised as the proportion of presentations in which patients were treated within the recommended time (for the urgency of their condition), and is presented for emergency departments in hospitals classified as *Principal referral and specialist women's and children's hospitals* and *Large hospitals*. The urgency of treatment is categorised using the National Triage Scale. It has five categories which incorporate the time by which the patient should receive care (AIHW 2012f). For more information on triage categories see Chapter 5.

There is possible variation in the recording of the time of 'commencement of clinical care' in emergency departments due to delayed implementation for some hospitals of the current definition that includes the commencement of service by 'other health professionals', where provided in accordance with established clinical pathways defined by the emergency department. As a consequence, this may have affected the calculation of waiting times and the proportion of patients who commenced clinical care within the clinically recommended time.

For example, for 2010-11 and 2011-12, Western Australian metropolitan hospitals recorded the time of 'commencement of clinical care' when care was commenced by a doctor or nurse practitioner only. For the Northern Territory, hospitals are only able to record the time that care is commenced by a doctor. See Appendix A for more information.

For 2011-12, for all triage categories overall, the proportion of presentations in which patients received emergency department care within the required time was 70%, ranging from 46% in the Northern Territory to 74% in New South Wales (Table 3.10).

**Table 3.10: Proportion<sup>(a)</sup> of emergency presentations<sup>(b)</sup> seen on time, Principal referral and specialist women's and children's hospitals and Large hospitals, states and territories, 2011–12**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	100	100	100	99	100	100	100	100	100
Emergency	82	82	82	75	78	77	76	62	80
Urgent	70	71	62	50	66	64	50	45	65
Semi-urgent	72	66	69	65	72	71	47	40	68
Non-urgent	87	86	90	93	89	88	81	78	88
<b>Total</b>	<b>74</b>	<b>71</b>	<b>69</b>	<b>63</b>	<b>72</b>	<b>71</b>	<b>55</b>	<b>46</b>	<b>70</b>

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

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

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, 69% of emergency presentations were seen on time for *Principal referral and specialist women's and children's hospitals* and 72% were seen on time for *Large hospitals* (Table 3.11).

There were relatively slight differences in the proportion of presentations seen on time for Indigenous Australians compared with other Australians (67% and 70% respectively). Patients from *Very remote* areas had the lowest proportion of presentations seen on time (61%).

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

### **Performance indicator: National Emergency Access Target**

The National Emergency Access Target (NEAT) is a performance measure required to be reported under the National Partnership Agreement on Improving Public Hospital Services.

The goal of the NEAT is to increase the proportion of emergency department patients who physically leave the emergency department (for admission to hospital, referral to another hospital, or discharge) in 4 hours or less.

The AIHW provides these data to the COAG Reform Council for them to determine state and territory performance against the agreed targets.

In 2012, Queensland, Western Australia, South Australia, Tasmania and the Australian Capital Territory achieved proportions of patients leaving the emergency department in 4 hours or less that were higher than the baseline figures specified in the agreement.

Overall, 65.5% of patients presenting to a public hospital emergency department had their visit to the emergency department completed in 4 hours or less.

For more information, see *Australian hospital statistics: national emergency access and elective surgery targets 2012* (AIHW 2013b).

**Table 3.11: Proportion<sup>(a)</sup> of emergency presentations<sup>(b)</sup> seen on time by triage category, Indigenous status, remoteness, socioeconomic status and Principal referral and specialist women's and children's hospitals and Large hospitals, 2011–12**

	Triage category					Total
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
<b>Hospital peer group</b>						
Principal referral and specialist women's and children's	100	80	64	67	87	69
Large hospitals	99	81	69	70	89	72
<b>Indigenous status<sup>(c)</sup></b>						
Indigenous	100	78	63	65	87	67
Other Australians	100	81	65	68	88	70
<b>Remoteness of residence<sup>(d)</sup></b>						
Major cities	100	81	64	67	87	69
Inner regional	100	80	67	70	88	72
Outer regional	100	79	68	69	91	72
Remote	100	82	70	65	88	70
Very remote	100	72	60	56	86	61
<b>Socioeconomic status of area of residence<sup>(e)</sup></b>						
1—Lowest	100	81	65	68	87	70
2	100	80	66	68	87	71
3	100	80	64	68	88	69
4	100	80	63	67	88	68
5—Highest	100	81	65	68	88	70
<b>Total</b>	<b>100</b>	<b>80</b>	<b>65</b>	<b>68</b>	<b>88</b>	<b>70</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) *Other Australians* includes presentations for which the Indigenous status was not reported.

(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.

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

### Performance indicator: Waiting times for elective surgery

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

The NHA indicator is prepared using linked elective surgery waiting times and admitted patient care data (for which demographic data were available), allowing analyses by remoteness areas and socioeconomic status groups. For 2011–12, the linked data accounted for about 97% of the records provided with waiting times. There was some variation in the linked data coverage between states and territories, ranging from 87% for the Northern Territory to 100% for Queensland.

Table 3.12 presents waiting time statistics for all patients admitted from public hospital waiting lists for elective surgery.

In 2011–12, the median waiting time for patients who were admitted from waiting lists was 36 days. It ranged from 27 days in Queensland to 63 days in the Australian Capital Territory. The 90th percentile for waiting time ranged from 147 days in Queensland to 348 days in Tasmania, with an overall value of 251 days (Table 3.14). In 2011–12, 2.7% of patients admitted from public hospital waiting lists waited more than a year for their elective surgery.

**Table 3.12: Waiting time statistics for patients admitted from public hospital waiting lists for elective surgery<sup>(a)</sup>, states and territories, 2011–12**

	NSW	Vic	Qld <sup>(b)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Elective surgery waiting times data</b>									
Number of admissions	211,452	154,079	114,328	81,809	65,186	15,802	11,362	7,253	661,271
Days waited at 50th percentile	49	36	27	30	34	38	63	39	36
Days waited at 90th percentile	335	189	147	159	191	348	296	219	251
Per cent waited more than 365 days	3.4	2.4	2.0	1.7	1.5	9.4	6.2	3.5	2.7

(a) Includes records with a reason for removal of *Admitted as an elective patient for awaited procedure by or on behalf of this hospital* or *Admitted as an emergency patient for awaited procedure by or on behalf of this hospital*.

(b) For 2011–12, Queensland was not able to provide elective surgery waiting times data for 3 hospitals that reported about 10,000 admissions from elective surgery waiting lists in 2010–11. However, the data for these hospitals were able to be provided in the admitted patient data presented in Table 3.13.

Waiting time statistics by Indigenous status, remoteness area and socioeconomic status of area of residence, using the linked elective surgery waiting times and admitted patient care data, are in Table 3.13.

There was a difference in the overall median waiting time for Indigenous Australians compared with other Australians (41 days and 36 days respectively) (Table 3.13).

There were also variations by socioeconomic status of area of residence, with persons living in areas classified as being in the higher socioeconomic groups having shorter overall median waiting times than those living in areas classified as being in the lower socioeconomic groups.

Persons living in *Inner regional* areas had longer overall median waiting times than persons from other areas. However, these overall data do not take into account variations in the types of surgery that patients from different socioeconomic groups or different remoteness areas were waiting for.

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

**Table 3.13: Median waiting time (in days) for patients admitted from public hospital waiting lists for elective surgery<sup>(a)</sup>, by Indigenous status, remoteness area of residence and socioeconomic status of area of residence, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Number of admissions	203,891	148,130	116,017	78,080	64,333	15,422	10,877	6,338	643,088
Proportion of all elective surgery records (%)	96	96	100	95	99	98	96	87	97
<b>Indigenous status<sup>(b)</sup></b>									
Indigenous	53	42	32	35	30	44	71	49	41
Other Australians	48	36	28	30	34	37	59	40	36
<b>Remoteness of residence<sup>(c)</sup></b>									
Major cities	43	37	27	30	38	..	59	..	36
Inner regional	56	35	28	28	33	37	65	..	37
Outer regional	65	29	32	31	29	39	..	40	36
Remote	37	35	26	29	26	39	..	39	29
Very remote	40	..	29	34	21	48	..	56	35
<b>Socioeconomic status of area of residence<sup>(d)</sup></b>									
1—Lowest	53	41	28	33	34	39	n.p.	50	39
2	57	36	28	31	35	35	n.p.	42	41
3	42	36	29	29	33	37	70	38	34
4	42	35	28	30	34	36	62	37	34
5—Highest	30	31	25	31	34	..	57	45	31
<b>Total</b>	<b>48</b>	<b>36</b>	<b>28</b>	<b>30</b>	<b>34</b>	<b>38</b>	<b>59</b>	<b>42</b>	<b>36</b>

(a) For the 97% of elective surgery records for which demographic data were available (see Table 3.12). The linked data for New South Wales does not include the data for Hawkesbury Hospital, which was included in the National Elective Surgery Waiting Times Data Collection.

(b) *Other Australians* includes records for which the Indigenous status was not reported.

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

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

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information is in tables S3.2 and S3.3 that accompany this report online.

## Performance indicator: National Elective Surgery Target

The National Elective Surgery Target (NEST) is a performance measure required to be reported under the National Partnership Agreement on Improving Public Hospital Services.

The goal of the NEST is to increase the proportion of elective surgery patients seen within clinically recommended times and to reduce the number of patients waiting beyond the clinically recommended time.

The AIHW provides these data to the COAG Reform Council for them to determine state and territory performance against the agreed targets.

In 2012, six states and territories achieved proportions seen on time greater than or equal to the baseline figures specified in the agreement for two or three clinical urgency categories.

Six states and territories had average overdue waits shorter than the baseline figures in the agreement for two or three clinical urgency categories.

During 2012, five states and territories had provided treatment or referral for the longest wait overdue patients (those who had waited the longest at 31 December 2011) for all

urgency categories. A further two states and territories had provided treatment or referral for all urgency category 1 patients.

There are 3 clinical urgency categories. They indicate that the patient should have surgery within 30, 90 and 365 days, respectively. State and territory data for clinical urgency categories are not comparable. For more information, see *Australian Hospital Statistics: national emergency access and elective surgery targets 2012* (AIHW 2013b).

### 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, the procedures were selected because of the frequency with which they are undertaken, because they are often elective and discretionary and because alternative treatments are sometimes available.

There was some variation in the numbers of separations per 1,000 population for the selected procedures among states and territories. For example, separations for *Cataract extraction* ranged from 6.4 per 1,000 population in the Australian Capital Territory to 10.5 per 1,000 in Western Australia (Table 3.14). However, as data are not available for private free-standing day hospitals in the Australian Capital Territory, this is likely to underestimate the separation rate for cataract extractions in the Australian Capital Territory.

**Table 3.14: Separations per 1,000 population for hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Cataract extraction	8.7	8.4	9.0	10.5	8.4	10.3	6.4	8.1	8.8
Cholecystectomy	2.2	2.2	2.4	2.0	2.3	2.4	2.5	1.7	2.2
Coronary angioplasty	1.5	1.6	1.5	1.6	1.5	1.2	2.8	0.0	1.5
Coronary artery bypass graft	0.5	0.5	0.6	0.3	0.6	0.4	0.7	0.0	0.5
Cystoscopy	4.1	5.7	5.4	7.2	6.0	5.6	5.4	2.9	5.3
Haemorrhoidectomy	2.9	1.7	1.7	1.1	1.4	2.0	1.3	2.6	2.0
Hip replacement	1.4	1.6	1.3	1.7	1.8	1.7	2.4	0.8	1.5
Hysterectomy, females aged 15–69 <sup>(b)</sup>	2.1	2.1	2.5	2.6	2.6	2.5	2.3	1.7	2.3
Inguinal herniorrhaphy	2.1	2.1	2.2	2.2	2.0	2.3	2.5	1.7	2.2
Knee replacement	1.9	1.6	1.8	2.2	2.0	1.5	2.8	0.8	1.8
Myringotomy	1.6	1.9	1.7	2.1	3.2	1.7	2.7	1.0	1.8
Prostatectomy <sup>(c)</sup>	2.7	3.1	2.7	2.5	2.5	3.0	3.6	1.4	2.8
Septoplasty	1.1	1.4	0.9	0.9	1.3	0.5	1.1	0.5	1.1
Tonsillectomy	2.3	2.3	2.4	2.6	2.8	1.9	3.7	1.0	2.4
Varicose veins stripping and ligation	0.5	0.8	0.5	0.6	0.7	0.4	1.4	0.4	0.6

(a) The procedures are defined using Australian Classification of Health Interventions (ACHI) codes as detailed in tables accompanying this report online in Appendix B.

(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 in Table 3.21 at the end of this chapter.

Additional information for these procedures for public and private hospitals, and by Indigenous status, remoteness area and socioeconomic status of area of residence is in tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

### **Efficiency and sustainability**

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

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

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

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

Details of the methods used in this analysis are in Appendix B.

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

Hospitals included in this analysis accounted for 97% of separations in public acute and psychiatric hospitals in 2011–12, and 94% of recurrent expenditure on public hospitals (excluding depreciation).

*Casemix-adjusted separations* is calculated as the product of *Total separations* and *Average cost weight*. Separations data are sourced from the National Hospital Morbidity Database, and the 2009–10 AR-DRG version 6.0x cost weights (DoHA 2011) are used. Separations for which the care type was reported as *Acute*, *Newborn* (with qualified days) or was not reported are included.

Nationally, the average cost per casemix-adjusted separation was \$5,204 (excluding depreciation). There was some variation in the cost per casemix-adjusted separation by state and territory (Table 3.15).

A large portion of the total cost was attributed to *Non-medical labour* and *Medical labour* costs. Nationally, these costs were \$2,564 and \$1,163, respectively, per casemix-adjusted separation. Depreciation added an average of 3.9% (\$203) to the cost of each separation.

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



**Table 3.15: Cost (\$) per casemix-adjusted separation (excluding depreciation), selected public hospitals<sup>(a)</sup>, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Medical labour costs	1,185	975	1,177	1,407	1,237	1,295	1,417	1,299	1,163
<i>Non-medical labour costs</i>	<i>2,490</i>	<i>2,443</i>	<i>2,707</i>	<i>2,729</i>	<i>2,373</i>	<i>2,990</i>	<i>3,328</i>	<i>2,969</i>	<i>2,564</i>
Nursing	1,320	1,271	1,338	1,323	1,396	1,460	1,857	1,788	1,336
Other staff (includes superannuation)	1,169	1,172	1,368	1,406	977	1,531	1,471	1,181	1,229
Other recurrent costs (excludes depreciation)	1,604	1,275	1,362	1,596	1,642	1,747	1,639	1,749	1,477
Depreciation	176	292	180	155	162	146	191	48	203
<b>Total (excludes depreciation)</b>	<b>5,280</b>	<b>4,693</b>	<b>5,246</b>	<b>5,733</b>	<b>5,251</b>	<b>6,033</b>	<b>6,384</b>	<b>6,017</b>	<b>5,204</b>

(a) *Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services* are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included. See Appendix B for further information.

Note: See boxes 3.1, 3.2 and 3.3 for notes on data limitations and methods.

More detailed information is in tables 3.18 and 3.19 at the end of this chapter and in tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

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

**Table 3.16: Cost (\$) per casemix-adjusted separation (excluding depreciation), by public hospital peer group, selected public hospitals<sup>(a)</sup>, states and territories, 2011–12**

Hospital peer group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Principal referral and specialist women's and children's hospitals	5,337	4,670	5,355	5,738	5,287	5,777	6,384	5,967	5,222
Large hospitals	5,003	4,593	3,973	5,149	5,051	7,390	..	..	4,912
Medium hospitals	4,964	4,945	4,645	5,399	5,208	6,406	..	..	5,025
Small acute hospitals	5,931	5,947	5,065	8,259	4,884	7,514	..	6,424	6,171
<b>Total (selected hospitals)</b>	<b>5,280</b>	<b>4,693</b>	<b>5,246</b>	<b>5,733</b>	<b>5,251</b>	<b>6,033</b>	<b>6,384</b>	<b>6,017</b>	<b>5,204</b>

(a) *Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services* are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included. See Appendix B for further information.

Note: See boxes 3.1, 3.2 and 3.3 for notes on data limitations and methods.

## Performance indicator: 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.

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

Table 3.17 presents both indirectly and directly standardised RSIs for all hospitals for 2011–12. For the hospitals included in the cost per casemix-adjusted separation analysis (see above), the RSI was 1.00 overall.

**Table 3.17: Relative stay index by medical/surgical/other type of AR-DRG<sup>(a)</sup>, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Indirectly standardised relative stay index<sup>(b)</sup></b>									
<i>Public hospitals</i>	1.05	0.91	0.89	0.98	1.02	1.04	1.00	1.16	0.98
Medical	1.03	0.90	0.86	0.95	1.01	1.06	0.99	1.10	0.95
Surgical	1.08	0.95	0.97	1.05	1.06	1.00	1.01	1.34	1.02
Other	1.16	0.95	0.96	1.00	1.04	1.00	1.04	1.32	1.04
<i>Private hospitals</i>	1.07	1.06	1.07	1.03	1.00	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.06
Medical	1.26	1.17	1.19	1.10	1.04	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.18
Surgical	0.97	0.99	0.97	0.98	0.97	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.97
Other	0.88	0.91	0.98	0.98	0.95	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.94
<b>All hospitals</b>	<b>1.05</b>	<b>0.96</b>	<b>0.96</b>	<b>1.00</b>	<b>1.02</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Medical</b>	<b>1.06</b>	<b>0.95</b>	<b>0.95</b>	<b>0.98</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Surgical</b>	<b>1.03</b>	<b>0.97</b>	<b>0.97</b>	<b>1.02</b>	<b>1.02</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Other</b>	<b>1.08</b>	<b>0.93</b>	<b>0.97</b>	<b>0.99</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Directly standardised relative stay index<sup>(c)</sup></b>									
<i>Public hospitals</i>	1.07	0.93	0.92	1.01	1.03	1.06	1.05	1.26	0.99
Medical	1.04	0.90	0.86	0.96	1.01	1.07	1.03	1.10	0.96
Surgical	1.10	0.97	1.01	1.09	1.07	1.04	1.07	1.54	1.04
Other	1.18	0.98	1.00	1.02	1.04	1.02	1.09	1.35	1.07
<i>Private hospitals</i>	1.20	1.13	1.16	1.11	1.10	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.14
Medical	1.35	1.22	1.27	1.19	1.17	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.24
Surgical	0.98	0.99	0.98	0.98	0.98	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.98
Other	0.90	0.97	1.00	1.05	1.03	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	0.98
<b>All hospitals</b>	<b>1.06</b>	<b>0.96</b>	<b>0.96</b>	<b>1.00</b>	<b>1.02</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Medical</b>	<b>1.07</b>	<b>0.96</b>	<b>0.95</b>	<b>0.99</b>	<b>1.02</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Surgical</b>	<b>1.04</b>	<b>0.97</b>	<b>0.98</b>	<b>1.02</b>	<b>1.03</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>
<b>Other</b>	<b>1.08</b>	<b>0.94</b>	<b>0.97</b>	<b>1.00</b>	<b>1.01</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>

(a) Separations for which the care type was reported as *Acute* or *Newborn* with qualified days, or was not reported. Relative stay index based on all hospitals using AR-DRG version 6.0x.

(b) The indirectly standardised relative stay index is not technically comparable between cells but is a comparison of the hospital group with the national average based on the casemix of that group.

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

Note: See boxes 3.1 and 3.2 for notes on data limitations and methods. Additional information on RSI by funding source is in Table 3.20.

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

Overall, the directly standardised RSI for private hospitals was 1.14, compared with 0.99 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 2012). 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 with a range of other information on these hospitals in tables 3.18 and 3.19 at the end of this chapter and in tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

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

The selected AR-DRGs (Figure 3.1 and Table 3.22) were chosen on the basis of:

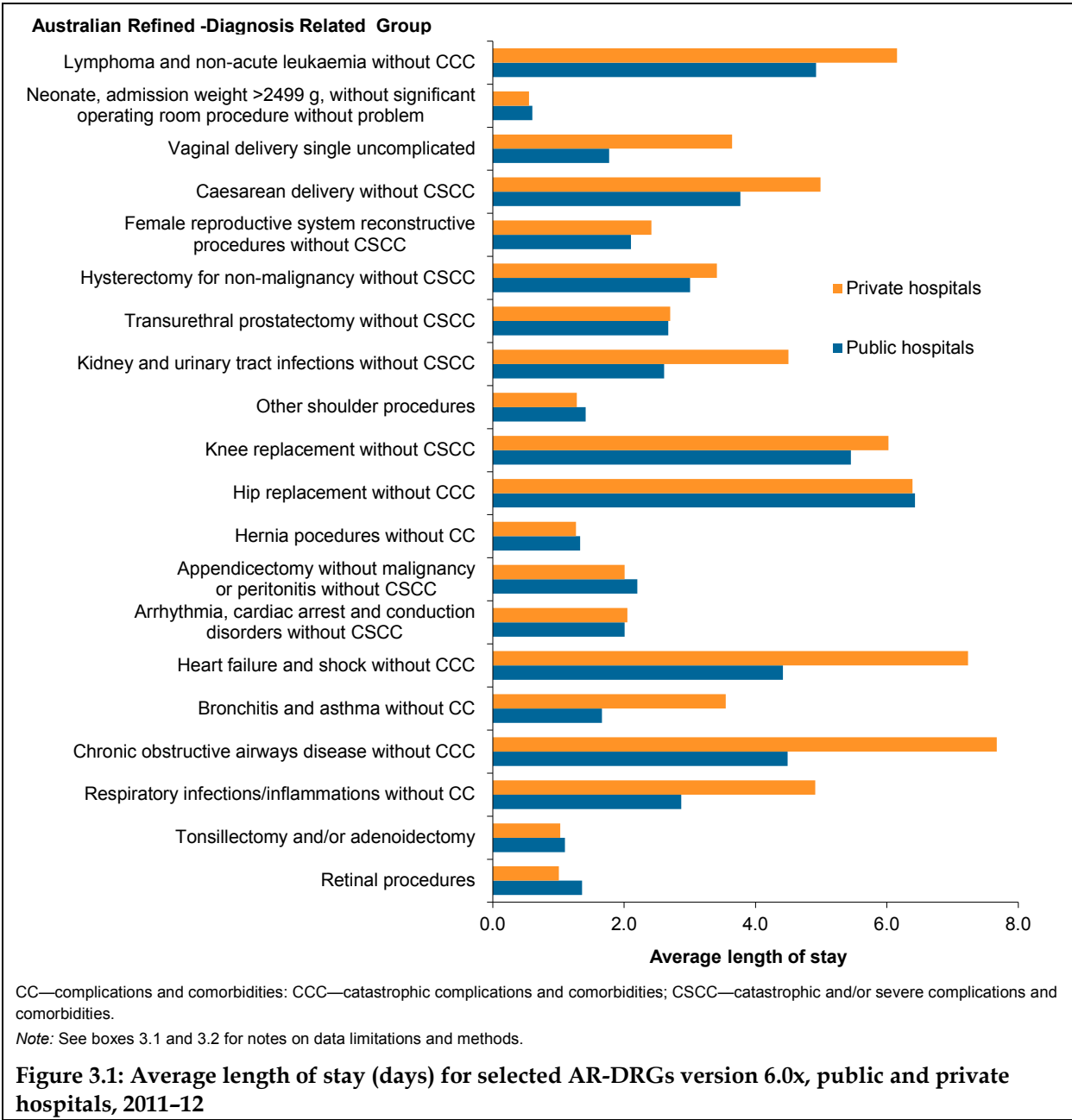
- homogeneity, where variation is more likely to be attributable to the hospital's performance rather than variations in the patients themselves
- representativeness across clinical groups (Major Diagnostic Categories) and surgical and medical AR-DRGs
- differences between jurisdictions and/or sectors
- 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 in Appendix B. Due to changes in the classification between AR-DRG version 5.2, AR-DRG version 6.0 and AR-DRG version 6.0x, the data presented here are not comparable with the data presented in previous reports.

Figure 3.1 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 8 of the 20 selected AR-DRGs. For example, the average length of stay for E65B *Chronic obstructive airways disease without catastrophic complications or comorbidities* was 4.5 days for public hospitals and 7.7 days for private hospitals.

There were also some notable differences in average lengths of stay between states and territories. For example, for F62B *Heart failure and Shock without catastrophic complications or comorbidities*, the average length of stay in public hospitals ranged from 3.8 days in Victoria and Queensland to 5.0 days in New South Wales and Tasmania (Table 3.22). For private hospitals, the average length of stay for F62B ranged from 6.3 days in Western Australia to 8.5 days in New South Wales.

Additional information on the average length of stay for selected AR-DRGs is in Table 3.22 at the end of this chapter.



**Table 3.18: Cost (\$) per casemix-adjusted separation and average cost data for selected public acute hospitals<sup>(a)</sup>, states and territories, 2011–12**

	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	1,320	1,271	1,338	1,323	1,396	1,460	1,857	1,788	1,336
Diagnostic/allied health	347	412	373	353	285	314	392	380	366
Administrative	361	284	356	438	292	450	526	364	346
Other staff	215	229	343	326	151	324	100	437	251
Superannuation	247	247	296	289	249	443	453	n.a.	265
<i>Total non-medical labour costs</i>	<i>2,490</i>	<i>2,443</i>	<i>2,707</i>	<i>2,729</i>	<i>2,373</i>	<i>2,990</i>	<i>3,328</i>	<i>2,969</i>	<i>2,564</i>
<b>Other recurrent costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Domestic services	117	100	108	139	93	99	224	158	113
Repairs/maintenance	113	87	97	202	104	65	75	153	109
Medical supplies <sup>(d)</sup>	574	400	572	380	349	746	518	435	491
Drug supplies	235	243	243	286	244	326	156	247	245
Food supplies	92	46	36	34	32	50	44	49	49
Administration	360	278	286	233	150	281	452	199	294
Other	113	121	21	323	671	180	170	507	168
<i>Total other recurrent costs excluding depreciation</i>	<i>1,604</i>	<i>1,275</i>	<i>1,362</i>	<i>1,596</i>	<i>1,642</i>	<i>1,747</i>	<i>1,639</i>	<i>1,749</i>	<i>1,477</i>
Depreciation <sup>(e)</sup>	176	292	180	155	162	146	191	48	203
<i>Total excluding medical labour costs and depreciation</i>	<i>4,094</i>	<i>3,718</i>	<i>4,068</i>	<i>4,326</i>	<i>4,015</i>	<i>4,738</i>	<i>4,967</i>	<i>4,718</i>	<i>4,041</i>
<b>Medical labour costs per casemix-adjusted separation<sup>(c)</sup> (\$)</b>									
Public patients									
Salaried/sessional staff	630	731	961	1,054	856	1,006	902	1,150	797
Visiting medical officer payments	248	70	63	172	185	2	301	97	147
Private patients (estimated) <sup>(f)</sup>	307	174	153	181	195	288	214	51	218
<i>Total medical labour costs</i>	<i>1,185</i>	<i>975</i>	<i>1,177</i>	<i>1,407</i>	<i>1,237</i>	<i>1,295</i>	<i>1,417</i>	<i>1,299</i>	<i>1,163</i>
<b>Total cost per casemix-adjusted separation<sup>(c)</sup> excluding depreciation</b>	<b>5,280</b>	<b>4,693</b>	<b>5,246</b>	<b>5,733</b>	<b>5,251</b>	<b>6,033</b>	<b>6,384</b>	<b>6,017</b>	<b>5,204</b>
<b>Total cost per casemix-adjusted separation<sup>(c)</sup> including depreciation</b>	<b>5,455</b>	<b>4,985</b>	<b>5,425</b>	<b>5,887</b>	<b>5,413</b>	<b>6,179</b>	<b>6,575</b>	<b>6,065</b>	<b>5,407</b>

(a) *Psychiatric hospitals, Drug and alcohol services, Mothercraft hospitals, Unpeered and other, Hospices, Rehabilitation facilities, Small non-acute hospitals and Multi-purpose services* are excluded from this table. The data are based on hospital establishments for which expenditure data were provided, including networks of hospitals in some jurisdictions. Some small hospitals with incomplete expenditure data were not included.

(b) These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory (see text). Superannuation figures were not available for the Northern Territory.

(c) Casemix-adjusted separations are the product of total separations and average cost weight. The average cost weight is calculated using the 2009–10 AR-DRG version 6.0x cost weights (DoHA 2012) for separations for which the care type was reported as *Acute, Newborn* (with qualified days) or was not reported.

(d) Services purchased from the private sector rather than being provided by public hospitals will result in higher medical supplies costs and lower total full-time equivalent staff.

(e) Depreciation was not reported for a small number of South Australian and Tasmanian hospitals.

(f) Estimated private patient medical costs were calculated as the sum of Salary/sessional and Visiting medical officer payments multiplied by the proportion of patient days that were for private patients. This is a notional estimate of the medical costs for all non-public patients.

Note: See boxes 3.1, 3.2 and 3.3 for notes on limitations of the data and methods.

**Table 3.19: Cost (\$) per casemix-adjusted separation<sup>(a)</sup> and selected other statistics, acute, non-acute and total public hospitals<sup>(b)</sup>, states and territories, 2011–12**

	Number of hospitals	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(\$)	Cost/casemix -adjusted sep incl dep(\$)
<b>Total hospitals in cost per casemix-adjusted separation analysis<sup>(a)(b)</sup></b>							
NSW	120	13,275	188	1.04	1.10	5,280	5,455
Vic	66	22,894	244	0.96	0.91	4,693	4,985
Qld	78	12,527	157	1.01	0.91	5,246	5,425
WA	34	16,608	186	0.91	1.00	5,733	5,887
SA	37	10,388	150	1.07	1.04	5,251	5,413
Tas	10	9,772	153	1.06	1.07	6,033	6,179
ACT	2	48,728	454	1.00	1.02	6,384	6,575
NT	5	22,671	226	0.67	1.18	6,017	6,065
<i>Total</i>	<i>352</i>	<i>15,167</i>	<i>189</i>	<i>0.99</i>	<i>1.00</i>	<i>5,204</i>	<i>5,407</i>
<b>Non-acute hospitals excluded from cost per casemix-adjusted separation analysis<sup>(b)</sup></b>							
NSW	105	587	10	1.09	0.86	n.p.	n.p.
Vic	38	863	12	0.65	1.36	n.p.	n.p.
Qld	92	262	9	0.75	0.85	n.p.	n.p.
WA	62	378	10	1.09	1.09	n.p.	n.p.
SA	43	513	15	0.83	1.31	n.p.	n.p.
Tas	13	147	5	0.90	1.80	n.p.	n.p.
ACT <sup>(f)</sup>	1	n.a.	n.a.	n.a.	n.a.	n.p.	n.p.
NT	0	..	..	..	..	n.p.	n.p.
<i>Total</i>	<i>354</i>	<i>469</i>	<i>11</i>	<i>0.89</i>	<i>1.04</i>	<i>n.p.</i>	<i>n.p.</i>
<b>All public hospitals (including Psychiatric and unpeered)<sup>(b)</sup></b>							
NSW	225	7,354	105	1.04	1.09	n.p.	n.p.
Vic	104	14,844	159	0.96	0.92	n.p.	n.p.
Qld	170	5,890	77	1.00	0.90	n.p.	n.p.
WA	96	6,126	73	0.91	1.01	n.p.	n.p.
SA	80	5,080	77	1.06	1.06	n.p.	n.p.
Tas	23	4,332	69	1.06	1.09	n.p.	n.p.
ACT <sup>(f)</sup>	3	32,485	303	1.00	1.02	n.p.	n.p.
NT	5	22,671	226	0.67	1.18	n.p.	n.p.
<b>Total</b>	<b>706</b>	<b>7,797</b>	<b>99</b>	<b>0.99</b>	<b>1.00</b>	<b>n.p.</b>	<b>n.p.</b>

Cost/casemix-adjusted sep excl dep—Cost per casemix-adjusted separation excluding depreciation.

Cost/casemix-adjusted sep incl dep—Cost per casemix-adjusted separation including depreciation.

- (a) Casemix-adjusted separations are the product of total separations and average cost weight.
- (b) Cost per casemix-adjusted separation analysis *excludes 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.
- (c) The number of different AR-DRGs version 6.0x 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 2009–10 AR-DRG version 6.0x cost weights (DoHA 2012).
- (e) Indirectly standardised relative stay index calculated as observed divided by expected length of stay modelled on age and AR-DRG version 6.0x, for public hospitals using the indirect method. See Appendix B for details on the methodology.
- (f) 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).

Note: See boxes 3.1, 3.2 and 3.3 for notes on limitations of the data and methods.

**Table 3.20: Relative stay index (indirectly standardised), by funding source, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.04	0.91	0.89	0.97	1.01	1.03	1.00	1.16	0.97
Private health insurance	1.07	0.96	0.96	1.10	1.10	1.05	1.03	1.01	1.03
Self-funded <sup>(b)</sup>	1.06	0.92	0.84	0.91	0.90	0.93	0.89	1.08	1.01
Workers compensation	1.14	1.02	1.08	1.21	1.18	1.04	1.09	1.49	1.11
Motor vehicle third party personal claim	1.24	0.91	1.05	1.20	1.24	1.28	1.00	1.34	1.09
Department of Veterans' Affairs	0.99	0.90	0.83	0.94	1.06	1.07	0.88	1.28	0.96
Other <sup>(c)</sup>	1.80	0.93	0.90	1.08	1.09	0.99	1.08	1.24	1.22
<i>Total public hospitals</i>	<i>1.05</i>	<i>0.91</i>	<i>0.89</i>	<i>0.98</i>	<i>1.02</i>	<i>1.04</i>	<i>1.00</i>	<i>1.16</i>	<i>0.98</i>
<b>Private hospitals</b>									
Public patients <sup>(a)</sup>	1.14	1.82	1.10	0.97	0.90	n.p.	n.p.	n.p.	1.13
Private health insurance	1.07	1.06	1.06	1.02	1.00	n.p.	n.p.	n.p.	1.05
Self-funded <sup>(b)</sup>	0.98	0.97	0.86	0.87	0.82	n.p.	n.p.	n.p.	0.94
Workers compensation	1.02	1.01	0.97	0.94	0.92	n.p.	n.p.	n.p.	0.99
Motor vehicle third party personal claim	0.89	1.07	1.23	0.91	0.96	n.p.	n.p.	n.p.	1.04
Department of Veterans' Affairs	1.24	1.11	1.25	1.21	1.12	n.p.	n.p.	n.p.	1.20
Other <sup>(c)</sup>	1.59	1.09	1.14	1.05	0.92	n.p.	n.p.	n.p.	1.07
<i>Total private hospitals</i>	<i>1.07</i>	<i>1.06</i>	<i>1.07</i>	<i>1.03</i>	<i>1.00</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.06</i>
<b>All hospitals</b>									
Public patients <sup>(a)</sup>	1.04	0.91	0.89	0.97	1.01	n.p.	n.p.	n.p.	0.97
Private health insurance	1.07	1.04	1.04	1.04	1.01	n.p.	n.p.	n.p.	1.05
Self-funded <sup>(b)</sup>	1.02	0.96	0.85	0.87	0.83	n.p.	n.p.	n.p.	0.96
Workers compensation	1.06	1.01	1.01	1.01	0.99	n.p.	n.p.	n.p.	1.03
Motor vehicle third party personal claim	1.22	0.93	1.06	1.17	1.22	n.p.	n.p.	n.p.	1.08
Department of Veterans' Affairs	1.08	1.02	1.16	1.10	1.09	n.p.	n.p.	n.p.	1.09
Other <sup>(c)</sup>	1.78	0.95	1.07	1.07	1.04	n.p.	n.p.	n.p.	1.15
<b>Total</b>	<b>1.05</b>	<b>0.96</b>	<b>0.96</b>	<b>1.00</b>	<b>1.02</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1.00</b>

(a) Public patients: separations for Medicare-eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements, Other hospital or public authority* (with a *Public patient election status*) and *No charge raised* (in public hospitals).

(b) Tasmania was unable to identify all patients whose funding source may have been *Self-funded*, therefore, the number of separations in this category may be underestimated and others may be overestimated.

(c) *Other*: separations with a funding source of *Other compensation, Department of Defence, Correctional facilities, Other hospital or public authority* (without a *Public patient election status*), *Other, No charge raised* (in private hospitals) and not reported.

**Table 3.21: Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2011–12**

<b>Procedure</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>Cataract extraction</b>									
Separations	71,382	51,497	41,176	24,050	17,357	6,637	1,963	971	215,033
Separations not within state of residence (%)	2	2	2	<1	2	28	23	1	3
Proportion of separations public patients (%)	29	28	12	39	37	11	53	56	27
Separations per 1,000 population	8.7	8.4	9.0	10.5	8.4	10.3	6.4	8.1	8.8
Standardised separation rate ratio	1.0	0.9	1.0	1.2	1.0	1.2	0.7	0.9	
<b>Cholecystectomy</b>									
Separations	16,571	12,897	10,810	4,864	3,970	1,295	913	375	51,695
Separations not within state of residence (%)	2	2	2	1	2	1	21	4	2
Proportion of separations public patients (%)	62	62	51	56	61	58	54	75	59
Separations per 1,000 population	2.2	2.2	2.4	2.0	2.3	2.4	2.5	1.7	2.2
Standardised separation rate ratio	1.0	1.0	1.1	0.9	1.0	1.1	1.1	0.8	
<b>Coronary angioplasty</b>									
Separations	12,171	9,681	7,051	3,851	3,012	738	921	0	37,425
Separations not within state of residence (%)	2	4	9	1	10	3	43	..	5
Proportion of separations public patients (%)	46	44	45	45	54	56	52	..	46
Separations per 1,000 population	1.5	1.6	1.5	1.6	1.5	1.2	2.8	..	1.5
Standardised separation rate ratio	1.0	1.0	1.0	1.0	1.0	0.8	1.8	..	
<b>Coronary artery bypass graft</b>									
Separations	3,864	3,206	2,720	829	1,117	238	224	0	12,198
Separations not within state of residence (%)	3	3	7	0	14	3	46	..	6
Proportion of separations public patients (%)	51	50	51	52	54	53	63	..	51
Separations per 1,000 population	0.5	0.5	0.6	0.3	0.6	0.4	0.7	..	0.5
Standardised separation rate ratio	1.0	1.1	1.2	0.7	1.1	0.7	1.4	..	

*(continued)*



**Table 3.21 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2011–12**

<b>Procedure</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>Cystoscopy</b>									
Separations	32,977	34,462	25,156	16,967	11,599	3,498	1,827	451	126,937
Separations not within state of residence (%)	2	2	3	<1	1	1	26	2	2
Proportion of separations public patients (%)	37	46	34	39	39	25	42	52	39
Separations per 1,000 population	4.1	5.7	5.4	7.2	6.0	5.6	5.4	2.9	5.3
Standardised separation rate ratio	0.8	1.1	1.0	1.4	1.1	1.1	1.0	0.6	
<b>Haemorrhoidectomy</b>									
Separations	21,821	9,557	7,658	2,696	2,556	1,109	478	520	46,395
Separations not within state of residence (%)	1	2	2	<1	1	1	19	2	2
Proportion of separations public patients (%)	31	42	23	40	30	33	29	35	33
Separations per 1,000 population	2.9	1.7	1.7	1.1	1.4	2.0	1.3	2.6	2.0
Standardised separation rate ratio	1.4	0.8	0.8	0.6	0.7	1.0	0.7	1.3	
<b>Hip replacement</b>									
Separations	11,764	9,950	6,292	4,153	3,608	1,079	773	86	37,705
Separations not within state of residence (%)	2	3	5	<1	4	1	33	7	3
Proportion of separations public patients (%)	37	36	32	39	36	30	40	66	36
Separations per 1,000 population	1.4	1.6	1.3	1.7	1.8	1.7	2.4	0.8	1.5
Standardised separation rate ratio	0.9	1.1	0.9	1.1	1.2	1.1	1.6	0.5	
<b>Hysterectomy, females aged 15–69</b>									
Separations	7,850	6,153	5,793	2,898	2,197	661	421	186	26,159
Separations not within state of residence (%)	2	2	3	<1	2	1	25	1	3
Proportion of separations public patients (%)	40	46	37	37	47	42	30	45	41
Separations per 1,000 population	2.1	2.1	2.5	2.6	2.6	2.5	2.3	1.7	2.3
Standardised separation rate ratio	0.9	0.9	1.1	1.2	1.1	1.1	1.0	0.7	

(continued)

**Table 3.21 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2011-12**

<b>Procedure</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>Inguinal herniorrhaphy</b>									
Separations	16,451	12,410	10,339	5,225	3,679	1,353	890	338	50,685
Separations not within state of residence (%)	2	2	3	1	1	1	22	1	2
Proportion of separations public patients (%)	39	42	33	38	43	41	36	45	39
Separations per 1,000 population	2.1	2.1	2.2	2.2	2.0	2.3	2.5	1.7	2.2
Standardised separation rate ratio	1.0	1.0	1.0	1.0	0.9	1.1	1.2	0.8	
<b>Knee replacement</b>									
Separations	15,452	10,077	8,677	5,162	4,061	1,001	955	106	45,491
Separations not within state of residence (%)	1	3	5	<1	5	<1	34	2	3
Proportion of separations public patients (%)	35	31	23	32	28	21	30	56	30
Separations per 1,000 population	1.9	1.6	1.8	2.2	2.0	1.5	2.8	0.8	1.8
Standardised separation rate ratio	1.0	0.9	1.0	1.2	1.1	0.8	1.5	0.4	
<b>Myringotomy (with insertion of tube)</b>									
Separations	10,817	9,649	7,708	4,778	4,719	790	914	262	39,637
Separations not within state of residence (%)	2	2	3	<1	2	10	22	<1	3
Proportion of separations public patients (%)	28	36	28	33	34	34	29	59	32
Separations per 1,000 population	1.6	1.9	1.7	2.1	3.2	1.7	2.7	1.0	1.8
Standardised separation rate ratio	0.8	1.0	0.9	1.1	1.7	0.9	1.4	0.5	
<b>Prostatectomy</b>									
Separations	10,535	9,013	6,222	2,840	2,404	942	564	87	32,607
Separations not within state of residence (%)	2	2	4	<1	2	<1	29	2	3
Proportion of separations public patients (%)	31	32	27	30	32	22	24	57	30
Separations per 1,000 population	2.7	3.1	2.7	2.5	2.5	3.0	3.6	1.4	2.8
Standardised separation rate ratio	1.0	1.1	1.0	0.9	0.9	1.1	1.3	0.5	

(continued)

**Table 3.21 (continued): Separation statistics for selected hospital procedures<sup>(a)</sup>, all hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Septoplasty</b>									
Separations	7,955	7,563	4,017	2,234	2,187	251	434	119	24,760
Separations not within state of residence (%)	3	2	4	0	3	1	24	1	3
Proportion of separations public patients (%)	22	31	14	24	30	22	35	22	25
Separations per 1,000 population	1.1	1.4	0.9	0.9	1.3	0.5	1.1	0.5	1.1
Standardised separation rate ratio	1.0	1.2	0.8	0.8	1.2	0.4	1.0	0.5	
<b>Tonsillectomy</b>									
Separations	15,517	11,829	10,462	5,941	4,040	871	1,291	262	50,213
Separations not within state of residence (%)	2	3	2	<1	1	1	25	<1	3
Proportion of separations public patients (%)	35	45	27	36	38	42	28	61	36
Separations per 1,000 population	2.3	2.3	2.4	2.6	2.8	1.9	3.7	1.0	2.4
Standardised separation rate ratio	1.0	1.0	1.0	1.1	1.2	0.8	1.5	0.4	
<b>Varicose veins stripping and ligation</b>									
Separations	4,006	4,367	2,325	1,395	1,180	210	501	93	14,077
Separations not within state of residence (%)	1	1	3	<1	1	0	30	0	2
Proportion of separations public patients (%)	34	36	23	23	42	16	41	43	32
Separations per 1,000 population	0.5	0.8	0.5	0.6	0.7	0.4	1.4	0.4	0.6
Standardised separation rate ratio	0.9	1.2	0.8	1.0	1.1	0.6	2.3	0.7	

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

**Table 3.22: Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0x, public and private hospitals, states and territories, 2011–12**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>C03Z</b>	<b>Retinal procedures</b>									
ALOS (days)	Public	1.5	1.3	1.3	1.3	1.4	1.0	1.3	n.p.	1.4
	Private	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.p.	1.0
	<i>Total</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.1</i>
Separations	Public	2,124	2,158	1,914	1,197	776	151	239	27	8,586
	Private	17,265	9,266	10,410	5,564	1,967	n.p.	n.p.	n.p.	48,722
	<i>Total</i>	<i>19,389</i>	<i>11,424</i>	<i>12,324</i>	<i>6,761</i>	<i>2,743</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>57,308</i>
<b>D11Z</b>	<b>Tonsillectomy and/or adenoidectomy</b>									
ALOS (days)	Public	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.1
	Private	1.0	1.0	1.0	1.0	1.0	n.p.	n.p.	n.p.	1.0
	<i>Total</i>	<i>1.1</i>	<i>1.1</i>	<i>1.0</i>	<i>1.1</i>	<i>1.1</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.1</i>
Separations	Public	5,197	5,862	3,464	1,945	1,788	380	378	212	19,226
	Private	10,052	5,317	6,540	3,090	2,096	n.p.	n.p.	n.p.	28,359
	<i>Total</i>	<i>15,249</i>	<i>11,179</i>	<i>10,004</i>	<i>5,035</i>	<i>3,884</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>47,585</i>
<b>E62C</b>	<b>Respiratory infections/inflamations without CC</b>									
ALOS (days)	Public	3.4	2.4	2.4	2.7	3.1	3.6	3.0	2.9	2.9
	Private	5.4	5.1	4.6	4.4	5.0	n.p.	n.p.	n.p.	4.9
	<i>Total</i>	<i>3.5</i>	<i>2.9</i>	<i>2.9</i>	<i>2.9</i>	<i>3.4</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3.1</i>
Separations	Public	10,979	6,412	5,949	3,682	2,280	480	519	841	31,142
	Private	637	1,412	1,507	445	414	n.p.	n.p.	n.p.	4,598
	<i>Total</i>	<i>11,616</i>	<i>7,824</i>	<i>7,456</i>	<i>4,127</i>	<i>2,694</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>35,740</i>
<b>E65B</b>	<b>Chronic obstructive airways disease without catastrophic CC</b>									
ALOS (days)	Public	5.0	4.1	3.9	4.2	4.4	5.4	5.5	4.5	4.5
	Private	9.1	7.6	7.7	6.7	7.0	n.p.	n.p.	n.p.	7.7
	<i>Total</i>	<i>5.2</i>	<i>4.7</i>	<i>4.8</i>	<i>4.5</i>	<i>4.7</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>4.9</i>
Separations	Public	15,746	8,926	8,429	3,808	3,694	934	512	1,005	43,054
	Private	872	1,974	2,382	608	527	n.p.	n.p.	n.p.	6,592
	<i>Total</i>	<i>16,618</i>	<i>10,900</i>	<i>10,811</i>	<i>4,416</i>	<i>4,221</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>49,646</i>

(continued)

Table 3.22 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0x, public and private hospitals, states and territories, 2011–12

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>E69B</b>	<b>Bronchitis and asthma without CC</b>									
ALOS (days)	Public	1.8	1.5	1.5	1.8	1.8	1.9	1.8	2.1	1.7
	Private	3.4	3.9	3.4	3.2	3.9	n.p.	n.p.	n.p.	3.5
	<i>Total</i>	<i>1.8</i>	<i>1.6</i>	<i>1.8</i>	<i>1.8</i>	<i>2.0</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1.8</i>
Separations	Public	12,045	8,847	5,939	3,021	2,587	485	420	366	33,710
	Private	202	584	957	198	192	n.p.	n.p.	n.p.	2,166
	<i>Total</i>	<i>12,247</i>	<i>9,431</i>	<i>6,896</i>	<i>3,219</i>	<i>2,779</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>35,876</i>
<b>F62B</b>	<b>Heart failure and shock without catastrophic CC</b>									
ALOS (days)	Public	5.0	3.8	3.8	4.2	4.9	5.0	4.9	4.8	4.4
	Private	8.5	7.0	7.3	6.3	6.9	n.p.	n.p.	n.p.	7.2
	<i>Total</i>	<i>5.3</i>	<i>4.6</i>	<i>4.8</i>	<i>4.6</i>	<i>5.3</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>5.0</i>
Separations	Public	9,307	6,116	4,608	2,526	2,206	574	297	354	25,988
	Private	881	2,173	1,927	531	624	n.p.	n.p.	n.p.	6,312
	<i>Total</i>	<i>10,188</i>	<i>8,289</i>	<i>6,535</i>	<i>3,057</i>	<i>2,830</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>32,300</i>
<b>F76B</b>	<b>Arrhythmia, cardiac arrest and conduction disorders without CSCC</b>									
ALOS (days)	Public	2.3	1.8	1.8	1.8	2.1	2.3	2.0	2.3	2.0
	Private	1.9	2.1	2.3	1.7	1.9	n.p.	n.p.	n.p.	2.0
	<i>Total</i>	<i>2.3</i>	<i>1.8</i>	<i>2.0</i>	<i>1.7</i>	<i>2.0</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2.0</i>
Separations	Public	14,211	10,772	8,113	3,810	3,455	666	687	336	42,050
	Private	2,802	3,735	4,341	1,905	1,543	n.p.	n.p.	n.p.	14,811
	<i>Total</i>	<i>17,013</i>	<i>14,507</i>	<i>12,454</i>	<i>5,715</i>	<i>4,998</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>56,861</i>
<b>G07B</b>	<b>Appendectomy without malignancy or peritonitis without CSCC</b>									
ALOS (days)	Public	2.4	2.1	2.0	2.1	2.1	2.0	2.4	2.7	2.2
	Private	2.0	2.1	1.8	2.0	2.3	n.p.	n.p.	n.p.	2.0
	<i>Total</i>	<i>2.4</i>	<i>2.1</i>	<i>1.9</i>	<i>2.1</i>	<i>2.1</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2.2</i>
Separations	Public	6,516	4,782	3,724	2,436	1,280	459	537	260	19,994
	Private	610	1,087	1,582	557	271	n.p.	n.p.	n.p.	4,309
	<i>Total</i>	<i>7,126</i>	<i>5,869</i>	<i>5,306</i>	<i>2,993</i>	<i>1,551</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>24,303</i>

(continued)

Table 3.22 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0x, public and private hospitals, states and territories, 2011–12

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>G10B</b>	<b>Hernia procedures without CC</b>									
ALOS (days)	Public	1.4	1.3	1.3	1.3	1.4	1.3	1.4	1.4	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	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.3
Separations	Public	9,371	7,215	5,161	2,944	2,383	725	404	229	28,432
	Private	11,292	8,364	8,537	3,961	2,500	n.p.	n.p.	n.p.	36,550
	<i>Total</i>	20,663	15,579	13,698	6,905	4,883	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	64,982
<b>I03B</b>	<b>Hip replacement without catastrophic CC</b>									
ALOS (days)	Public	6.8	5.6	6.5	6.4	6.6	6.9	6.2	n.p.	6.4
	Private	6.2	6.6	6.3	6.7	6.9	n.p.	n.p.	n.p.	6.4
	<i>Total</i>	6.4	6.2	6.4	6.6	6.8	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	6.4
Separations	Public	3,836	2,558	1,530	1,317	970	259	204	47	10,721
	Private	5,134	4,859	3,083	1,931	1,630	n.p.	n.p.	n.p.	17,546
	<i>Total</i>	8,970	7,417	4,613	3,248	2,600	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	28,267
<b>I04B</b>	<b>Knee replacement without CSCC</b>									
ALOS (days)	Public	5.5	5.1	5.4	6.2	5.4	5.2	4.1	n.p.	5.5
	Private	6.0	6.3	5.5	6.7	6.1	n.p.	n.p.	n.p.	6.0
	<i>Total</i>	5.8	5.9	5.5	6.5	5.9	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	5.8
Separations	Public	4,109	2,073	1,630	1,216	919	156	185	42	10,330
	Private	6,994	5,179	4,963	2,769	2,152	n.p.	n.p.	n.p.	23,127
	<i>Total</i>	11,103	7,252	6,593	3,985	3,071	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	33,457
<b>I16Z</b>	<b>Other shoulder procedures</b>									
ALOS (days)	Public	1.5	1.4	1.4	1.3	1.4	1.2	1.4	2.1	1.4
	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	1.3	1.3	1.3	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.3
Separations	Public	2,020	1,568	1,210	1,255	722	142	105	82	7,104
	Private	9,152	8,255	7,298	5,631	3,184	n.p.	n.p.	n.p.	34,712
	<i>Total</i>	11,172	9,823	8,508	6,886	3,906	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	41,816

(continued)

Table 3.22 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0x, public and private hospitals, states and territories, 2011–12

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>L63B</b>	<b>Kidney and urinary tract infections without CSCC</b>									
ALOS (days)	Public	3.1	2.2	2.3	2.4	2.8	3.4	2.9	3.2	2.6
	Private	5.2	4.4	4.4	4.3	4.7	n.p.	n.p.	n.p.	4.5
	<i>Total</i>	3.3	2.5	2.7	2.6	3.1	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.9
Separations	Public	12,869	10,099	8,269	4,854	2,717	457	642	500	40,407
	Private	879	1,840	2,217	569	452	n.p.	n.p.	n.p.	6,174
	<i>Total</i>	13,748	11,939	10,486	5,423	3,169	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	46,581
<b>M02B</b>	<b>Transurethral prostatectomy without CSCC</b>									
ALOS (days)	Public	2.8	2.5	2.5	2.5	3.1	2.4	3.3	n.p.	2.7
	Private	2.7	2.7	2.6	2.4	3.0	n.p.	n.p.	n.p.	2.7
	<i>Total</i>	2.7	2.7	2.6	2.4	3.0	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.7
Separations	Public	1,923	1,647	1,004	524	450	82	54	24	5,708
	Private	3,496	3,286	2,327	1,058	896	n.p.	n.p.	n.p.	11,554
	<i>Total</i>	5,419	4,933	3,331	1,582	1,346	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	17,262
<b>N04B</b>	<b>Hysterectomy for non-malignancy without CSCC</b>									
ALOS (days)	Public	3.1	3.0	2.8	3.0	3.0	3.0	3.0	3.3	3.0
	Private	3.5	3.7	3.0	3.3	3.8	n.p.	n.p.	n.p.	3.4
	<i>Total</i>	3.3	3.4	2.9	3.2	3.4	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	3.2
Separations	Public	2,792	2,332	1,785	913	880	210	99	62	9,073
	Private	3,768	2,666	2,954	1,522	913	n.p.	n.p.	n.p.	12,503
	<i>Total</i>	6,560	4,998	4,739	2,435	1,793	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	21,576
<b>N06B</b>	<b>Female reproductive system reconstructive procedures without CSCC</b>									
ALOS (days)	Public	2.3	2.1	1.7	2.2	2.0	2.0	2.1	n.p.	2.1
	Private	2.6	2.5	2.0	2.4	2.7	n.p.	n.p.	n.p.	2.4
	<i>Total</i>	2.5	2.3	1.9	2.4	2.5	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.3
Separations	Public	1,943	1,473	1,057	486	546	138	77	16	5,736
	Private	3,333	2,243	2,359	1,020	932	n.p.	n.p.	n.p.	10,381
	<i>Total</i>	5,276	3,716	3,416	1,506	1,478	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	16,117

(continued)

**Table 3.22 (continued): Average length of stay (days)<sup>(a)</sup> for selected AR-DRGs<sup>(b)</sup> version 6.0x, public and private hospitals, states and territories, 2011–12**

AR-DRG	Hospital sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>001C</b>	<b>Caesarean delivery without CSCC</b>									
ALOS (days)	Public	3.9	3.8	3.4	3.8	4.1	3.8	3.9	4.6	3.8
	Private	5.2	5.0	4.6	5.3	5.2	n.p.	n.p.	n.p.	5.0
	<i>Total</i>	4.3	4.2	3.9	4.5	4.5	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	4.2
Separations	Public	15,347	11,515	9,111	4,490	3,512	803	913	671	46,362
	Private	8,446	7,007	6,959	4,028	1,615	n.p.	n.p.	n.p.	29,487
	<i>Total</i>	23,793	18,522	16,070	8,518	5,127	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	75,849
<b>060C</b>	<b>Vaginal delivery single uncomplicated</b>									
ALOS (days)	Public	1.8	1.8	1.6	1.9	1.8	2.0	1.4	2.0	1.8
	Private	3.8	3.9	3.4	3.5	3.9	n.p.	n.p.	n.p.	3.6
	<i>Total</i>	2.1	2.2	1.9	2.2	2.1	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.1
Separations	Public	9,770	6,008	6,833	2,438	1,892	695	568	449	28,653
	Private	1,469	1,301	1,300	626	301	n.p.	n.p.	n.p.	5,536
	<i>Total</i>	11,239	7,309	8,133	3,064	2,193	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	34,189
<b>P67D</b>	<b>Neonate, admwt &gt;2499 g without significant OR procedure without problem</b>									
ALOS (days)	Public	2.2	2.9	2.0	2.4	2.1	2.6	2.8	2.7	2.3
	Private	4.3	2.3	3.1	3.5	2.8	n.p.	n.p.	n.p.	3.7
	<i>Total</i>	2.6	2.7	2.2	2.7	2.2	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.6
Separations	Public	25,146	3,859	3,300	1,798	1,347	790	428	329	36,997
	Private	6,217	1,516	663	726	356	n.p.	n.p.	n.p.	9,739
	<i>Total</i>	31,363	5,375	3,963	2,524	1,703	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	46,736
<b>R61B</b>	<b>Lymphoma and non-acute leukaemia without catastrophic CC</b>									
ALOS (days)	Public	5.4	4.5	5.0	4.6	4.7	4.9	5.0	5.6	4.9
	Private	4.1	3.6	5.0	3.5	4.4	n.p.	n.p.	n.p.	4.1
	<i>Total</i>	5.2	4.1	5.0	4.0	4.6	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	4.6
Separations	Public	2,477	2,037	1,078	866	740	223	118	58	7,597
	Private	484	2,228	1,703	1,017	512	n.p.	n.p.	n.p.	6,078
	<i>Total</i>	2,961	4,265	2,781	1,883	1,252	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	13,675

admwt—admission weight; CC—complications and comorbidities; CSCC—catastrophic and/or severe complications and comorbidities; OR—operating room.

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

(b) For more information on the selected AR-DRGs, see Appendix B and tables accompanying this report online.



## 4 Australia's hospital resources

This chapter presents an overview of public and private hospitals in 2011–12, covering the number and types of hospitals and availability of beds. It also describes public hospitals in terms of 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 NPHEd. Financial data reported from the NPHEd are not directly comparable with data reported in the annual AIHW publication *Health expenditure Australia 2010–11* (AIHW 2012e). In the latter, trust fund expenditure is included (whereas it is not included in the data here) and hospital expenditure may be defined to cover activity not covered by this data collection.

Private hospital information for the period 2010–11 on the numbers of hospitals, beds, expenditure and revenue was sourced from the ABS PHEC. Caution should be used in comparing the data for private hospitals and public hospitals as there are variations in the data definitions used between the NPHEd and the PHEC.

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

##### **Hospitals**

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

##### **Hospital beds**

- Comparability of bed numbers can be affected by the range and types of patients treated by a hospital (casemix). For example, hospitals may have different proportions of beds available for special and more general purposes, or for use as same-day care only or as overnight beds. Public and private hospital bed numbers presented in this chapter are based on different definitions.
- The number of average available beds presented in this report may differ from the counts published elsewhere. For example, counts based on a specified date, such as 30 June, may differ from the average available beds for the reporting period.
- Due to changes in definitions, the numbers of beds reported before 1 July 2009 may not be comparable to the numbers of beds reported after 1 July 2009.
- From 1 July 2009, average available beds for same-day patients are the number of beds, chairs or trolleys available to provide accommodation for same-day patients, averaged over the counting period.

*(continued)*

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

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

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

- A small number of establishments in 2011–12 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* (AIHW 2012f) categories and the comparability of the data may not be adequate for reporting.
- Recurrent expenditure reported in this chapter was largely expenditure by hospitals and may not necessarily include all expenditure spent on hospital services by each state or territory government. For example, recurrent expenditure on purchase of public hospital services at the state or area health service level from privately owned and/or operated hospitals may not be included.
- Expenditure on public patients hospitalised in other jurisdictions may not be included.

#### *Public hospital revenue*

- Revenue reported in this chapter was largely revenue received by individual hospitals, and may not necessarily include all revenue received by each state or territory government for the provision of public hospital services.

#### **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*.
- Variation between the states and territories in the outsourcing of services may explain some of the differences in full-time equivalent staff in some staffing categories and in average salaries reported.
- Information on numbers of visiting medical officers 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 as presented in this chapter is based on the ABS' 2006 Australian Standard Geographical Classification (see Appendix B). Beds per 1,000 population by remoteness areas are reported as crude rates based on the 30 June 2011 population in the remoteness area in question.
- Expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions.

## **How have hospital numbers changed over time?**

### **Public hospitals**

In 2011–12, there were 753 public hospitals reported, compared with 762 in 2007–08. Changes in the numbers of hospitals over time can reflect the opening of new hospitals, the closure of older hospitals or the amalgamation of existing hospitals.

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

For Tasmania, the Statewide Mental Health Services has been reported as one entity since 2009–10, when it included three separate public psychiatric hospitals. From 2010–11, it also included a drug and alcohol treatment facility. Therefore, the number of reporting units changed between 2008–09 and 2010–11, but the number of public psychiatric hospital campuses remained the same. The decrease in the number of available beds for Tasmania between 2009–10 and 2010–11 was mainly due to a classification change of 76 beds from 'acute mental health beds' to 'residential care beds', and the result of an audit of beds in acute care facilities.

**Table 4.1: Number of hospitals and average available beds<sup>(a)</sup>, public hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(b)</sup></b>							
Public hospitals	228	227	226	226	225	-0.3	-0.4
Average available beds	20,006	19,805	19,608	19,931	20,073	0.1	0.7
Available beds per 1,000 population	2.9	2.8	2.8	2.8	2.8	-1.1	-0.2
<b>Victoria<sup>(b)</sup></b>							
Public hospitals	148	149	150	151	151	0.5	0.0
Average available beds	12,682	12,869	13,186	13,408	13,370	1.3	-0.3
Available beds per 1,000 population	2.4	2.4	2.4	2.5	2.4	-0.2	-1.5
<b>Queensland</b>							
Public hospitals	177	170	170	170	170	-1.0	0.0
Average available beds	10,651	10,805	10,911	11,117	11,245	1.4	1.2
Available beds per 1,000 population	2.5	2.5	2.5	2.5	2.5	-0.4	0.0
<b>Western Australia</b>							
Public hospitals	94	94	95	94	96	0.5	2.1
Average available beds	5,405	5,369	5,376	5,492	5,677	1.2	3.4
Available beds per 1,000 population	2.6	2.5	2.4	2.4	2.4	-1.4	0.9
<b>South Australia</b>							
Public hospitals	80	80	80	80	80	0.0	0.0
Average available beds	4,981	4,874	4,859	5,040	5,232	1.2	3.8
Available beds per 1,000 population	3.1	3.1	3.0	3.1	3.2	0.4	3.3
<b>Tasmania</b>							
Public hospitals <sup>(c)</sup>	27	28	24	23	23	-3.9	0.0
Average available beds <sup>(d)</sup>	1,275	1,275	1,359	1,196	1,188	-1.8	-0.7
Available beds per 1,000 population	2.6	2.6	2.7	2.4	2.3	-2.6	-1.2
<b>Australian Capital Territory</b>							
Public hospitals	3	3	3	3	3	0.0	0.0
Average available beds	851	875	907	926	939	2.5	1.4
Available beds per 1,000 population	2.5	2.5	2.6	2.6	2.6	0.6	-0.5
<b>Northern Territory</b>							
Public hospitals	5	5	5	5	5	0.0	0.0
Average available beds	616	650	694	662	696	3.1	5.1
Available beds per 1,000 population	2.9	2.9	3.1	2.9	3.0	1.2	4.7
<b>Total</b>							
<b>Public hospitals</b>	<b>762</b>	<b>756</b>	<b>753</b>	<b>752</b>	<b>753</b>	<b>-0.3</b>	<b>0.1</b>
<b>Average available beds</b>	<b>56,467</b>	<b>56,522</b>	<b>56,900</b>	<b>57,772</b>	<b>58,420</b>	<b>0.9</b>	<b>1.1</b>
<b>Available beds per 1,000 population</b>	<b>2.7</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>-0.7</b>	<b>-0.1</b>

(a) Due to changes in the definitions of available beds, the numbers of beds reported before 1 July 2009 may not be comparable with the numbers of beds reported after 1 July 2009.

(b) From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for, New South Wales. See Box 2.1 for more information.

(c) From 2009–10, Tasmania's Statewide Mental Health Services, which was previously reported as three separate public psychiatric hospitals, was reported as one entity. From 2010–11, it also included a drug and alcohol treatment facility. Therefore, the number of reporting units changed between 2008–09 and 2010–11, but the number of public psychiatric hospital campuses remained the same.

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

While average available bed numbers rose overall between 2007–08 and 2011–12, the overall number of available beds per 1,000 population fell (from 2.7 per 1,000 to 2.6 per 1,000).

For South Australia, the Australian Capital Territory and the Northern Territory, both the average available beds and the number of available beds per 1,000 population increased between 2007–08 and 2011–12 (Table 4.1).

## Private hospitals

In 2010–11 there were 593 private hospitals, compared with 557 in 2006–07. South Australia accounted for most of the increase in private hospital numbers over this period. Between 2006–07 and 2010–11, the number of average available beds in private hospitals increased by an average of 1.5% per year. Available beds per 1,000 population were relatively stable over the same period (Table 4.2).

**Table 4.2: Number of hospitals and average available beds, private hospitals, states and territories, 2006–07 to 2010–11**

	2006–07	2007–08 <sup>(a)</sup>	2008–09	2009–10	2010–11	Change (per cent)	
						Average since 2006–07	Since 2009–10
New South Wales	175	n.a.	176	179	183	1.1	2.2
Victoria	155	n.a.	152	161	167	1.9	3.7
Queensland	109	n.a.	106	106	107	–0.5	0.9
Western Australia	54	n.a.	54	55	56	0.9	1.8
South Australia	40	n.a.	50	57	56	8.8	–1.8
Australian Capital Territory, Northern Territory and Tasmania <sup>(b)</sup>	22	n.a.	26	23	24	<0.1	4.3
<b>Total private hospitals</b>	<b>557</b>	<b>n.a.</b>	<b>564</b>	<b>581</b>	<b>593</b>	<b>1.6</b>	<b>2.1</b>
<b>Average available beds<sup>(c)</sup></b>	<b>26,678</b>	<b>n.a.</b>	<b>27,180</b>	<b>27,748</b>	<b>28,351</b>	<b>1.5</b>	<b>2.2</b>
<b>Available beds per 1,000 population<sup>(d)</sup></b>	<b>1.3</b>	<b>n.a.</b>	<b>1.2</b>	<b>1.3</b>	<b>1.3</b>	<b>0.0</b>	<b>1.0</b>

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

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

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

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

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

Source: ABS 2012.

## How many hospitals were there in 2011–12?

Table 4.3 presents the number of public and private hospitals by state and territory for 2011–12.

Where available, the numbers of private hospitals in 2011–12 were sourced from the states and territories. For the remaining states and/or territories, numbers of private hospitals in 2010–11 were sourced the ABS' Private Hospital Establishment Collection. The three largest states together accounted for almost three-quarters of all reported hospitals.

**Table 4.3: Public and private hospitals<sup>(a)</sup>, states and territories, 2011–12**

	NSW <sup>(a)</sup>	Vic <sup>(a)(b)</sup>	Qld <sup>(a)</sup>	WA <sup>(a)</sup>	SA <sup>(a)</sup>	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Public hospitals</b>									
Public acute hospitals	218	150	166	94	78	22	3	5	736
Public psychiatric hospitals	7	1	4	2	2	1	0	0	17
<b>Private hospitals</b>									
Private free-standing day hospital facilities	94	85	52	35	26	n.p.	n.p.	n.p.	307
Other private hospitals	93	81	52	21	29	n.p.	n.p.	n.p.	285
<b>Total</b>	<b>412</b>	<b>317</b>	<b>274</b>	<b>152</b>	<b>135</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,345</b>

(a) For New South Wales, Victoria, Queensland, Western Australia and South Australia, the numbers of private hospitals were provided by the jurisdiction and relate to the 2011–12 period. For other jurisdictions, the data were sourced from the ABS' Private Hospital Establishments Collection for 2010–11.

(b) The number of public hospitals in Victoria is reported as a count of the campuses that reported data separately to the National Hospital Morbidity Database in 2011–12.

(c) The total combines counts of private hospitals provided by jurisdictions for 2011–12, or sourced from the ABS' Private Hospital Establishment Collection, 2010–11.

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

## How many hospital beds?

In 2011–12, there were about 86,800 average available beds, with 67% (58,420) in public hospitals (Table 4.4).

In 2011–12 the total number of available beds per 1,000 population, in public and private hospitals, was 3.9 per 1,000. The number of available beds in public acute hospitals ranged from 2.3 per 1,000 population in Western Australia and Tasmania, to 3.1 per 1,000 in South Australia.

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 from 1 July 2009.

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

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

**Table 4.4: Public and private hospital average available beds<sup>(a)</sup> and number of average available beds per 1,000 population<sup>(b)</sup>, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average available beds<sup>(a)</sup></b>									
Public hospitals									
<i>Public acute hospitals</i>	19,239	13,218	10,804	5,463	5,045	1,178	939	696	56,582
Same-day beds/chairs	1,573	2,079	1,771	671	556	187	152	34	7,023
Overnight beds	17,666	11,138	9,033	4,793	4,489	991	787	662	49,559
Public psychiatric hospitals	834	152	441	214	187	10	..	..	1,838
<i>Private hospitals (2010–11)<sup>(c)</sup></i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	28,351
Private free-standing day hospital facilities	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	2,957
Other private hospitals	6,704	6,629	6,000	<i>n.a.</i>	1,911	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	25,394
<b>Total beds<sup>(a)</sup></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b>86,771</b>
<b>Available or licensed beds per 1,000 population<sup>(b)</sup></b>									
<i>Public hospitals</i>	2.8	2.4	2.5	2.4	3.2	2.3	2.6	3.0	2.6
Public acute hospitals	2.7	2.4	2.4	2.3	3.1	2.3	2.6	3.0	2.5
Public psychiatric hospitals	0.1	<0.1	0.1	0.1	0.1	<0.1	..	..	0.1
<i>Private hospitals<sup>(c)</sup></i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	1.3
Private free-standing day hospital facilities	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	0.1
Other private hospitals	0.9	1.2	1.3	..	1.2	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	1.1
<b>Total beds per 1,000 population<sup>(b)</sup></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b><i>n.a.</i></b>	<b>3.9</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 2011.

(c) Source: Australian Bureau of Statistics' *Private hospitals Australia 2010–11* (ABS 2012).

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

## Public hospitals

### How diverse are public hospitals?

The diversity of public hospitals is presented in Table 4.5 by public hospital peer groups. 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, 6 and 10. Detailed information on the public hospital peer group classification is in Appendix B.

The 753 public hospitals are very diverse in size and type of services they provide for admitted and non-admitted patients (Table 4.5). The diversity of admitted patient services provided by each type can be gauged by the average number of AR-DRGs reported.

In 2011–12, there were:

- 80 *Principal referral* hospitals – 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 436 AR-DRGs on average). These hospitals accounted for a total of 3.8 million separations, or 70% of the total for public hospitals (Figure 4.1), and for 12.7 million days, or 67% of the total for public hospitals (Figure 4.2).
- 11 *Specialist women's and children's* hospitals – in Sydney, Melbourne, Brisbane, Perth and Adelaide. They delivered an average of 21,956 separations per hospital, specialising in maternity and other specialist services for women, and/or specialist paediatric services.
- 40 *Large* hospitals – 23 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 252 AR-DRGs), with an average of 16,871 separations per hospital.
- 83 *Medium* hospitals – 20 in major cities and 63 in regional areas. They delivered an average of 6,534 separations per hospital (with a narrower range of services than the *Large* hospitals). Most provided emergency services (rather than formal emergency departments) and some had outpatient clinics.
- 155 *Small acute* hospitals – 114 in regional areas and 41 in remote areas. They delivered mainly acute care for admitted patients, with an average of 1,307 separations per hospital in the year, with a relatively narrow range of services (5 or more separations for an average of 50 AR-DRGs). They generally did not have emergency departments although most provided emergency services.
- 17 *Psychiatric* hospitals – specialising in the treatment and care of people with mental health problems. They were located in Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart, with 3 in regional Queensland centres.
- 8 specialist *Rehabilitation* hospitals – in Sydney, Perth, Adelaide, Wollongong and 2 in regional areas.
- 8 specialist *Mothercraft* hospitals – in Sydney, Melbourne, Brisbane and Canberra.
- 75 *Small non-acute* hospitals – mainly in regional 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 sub and non-acute admitted patient care.
- 198 other hospitals, mainly small or specialist hospitals.

More information on hospital peer groups by state and territory is in Table 4.15 at the end of this chapter, in Chapter 3 and in the tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.



**Table 4.5: The diversity of public hospitals, 2011–12**

Hospital type	Number of hospitals												
	Location				Services provided								
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Other emergency services <sup>(b)</sup>	Outpatient clinics <sup>(c)</sup>	Elective surgery <sup>(d)</sup>	Average available beds	Separations (average)	Average length of stay (days)	Non-acute care (patient days %)	AR-DRGs (5+) <sup>(e)</sup>
Principal referral	53	26	1	<b>80</b>	80	80	79	78	417	45,673	3.3	9.4	436
Specialist women's and children's	11	0	0	<b>11</b>	9	9	11	9	210	21,956	3.0	0.5	229
Large	23	16	1	<b>40</b>	37	37	39	34	138	16,871	2.8	14.4	252
Medium	20	63	0	<b>83</b>	41	69	5	59	69	6,534	3.0	27.6	138
Small acute	0	114	41	<b>155</b>	23	149	2	42	22	1,307	2.8	9.6	50
Psychiatric	11	6	0	<b>17</b>	0	0	0	0	108	600	69.1	48.8	8
Rehabilitation	6	2	0	<b>8</b>	0	0	1	1	74	1,170	18.5	89.1	15
Mothercraft	8	0	0	<b>8</b>	0	0	0	0	28	1,839	3.6	0.0	10
Small non-acute	14	50	11	<b>75</b>	5	57	1	16	33	929	9.7	74.2	33
Multi-purpose services	0	45	33	<b>78</b>	0	70	0	4	12	349	3.9	31.4	13
Other	34	95	69	<b>198</b>	8	128	0	0	11	298	9.0	78.9	5
<b>Total</b>	<b>180</b>	<b>417</b>	<b>156</b>	<b>753</b>	<b>203</b>	<b>599</b>	<b>138</b>	<b>243</b>	<b>78</b>	<b>7,311</b>	<b>3.4</b>	<b>17.6</b>	<b>95</b>

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

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

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

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

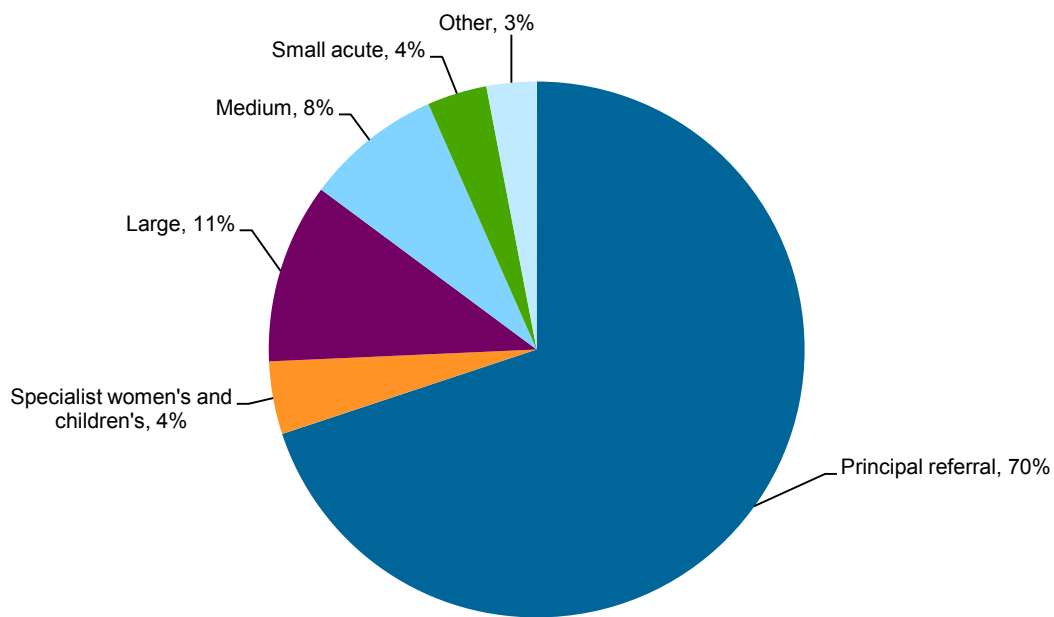
(e) This is the average number of AR-DRGs for which there were at least five separations.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in Table 4.15 at the end of this chapter.

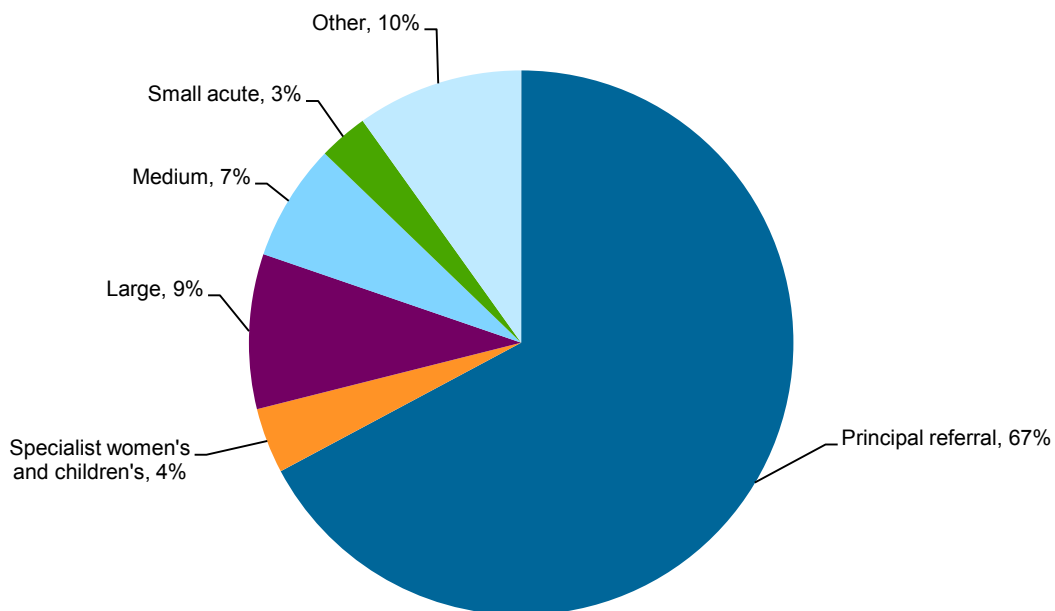
## How many public hospital beds?

Grouping hospitals by number of available beds showed that the majority of hospitals were very small (Table 4.6). This was particularly the case in jurisdictions that covered large geographical areas. The majority of beds were in larger hospitals and in more densely populated areas. The largest hospital had an average of 1,023 available beds and was located in Brisbane. More than 70% of hospitals had 50 or fewer beds.

The proportion of hospital beds in different size hospitals varied by jurisdiction. The Northern Territory did not have any public hospitals with either more than 500 beds or 10 beds or fewer. For Victoria, a higher proportion of hospital beds were in hospitals with more than 200 to 500 beds (38%) than in hospitals with more than 500 beds (19%) (see Table 4.16).



**Figure 4.1: Separations – per cent by public hospital peer group (%), public hospitals, 2011-12**



**Figure 4.2: Patient days – per cent by public hospital peer group (%), public hospitals, 2011-12**

**Table 4.6: Number of public acute and psychiatric hospitals and average available beds, by hospital size, 2011–12**

Hospital size	Hospitals	Proportion of total public hospitals (%)	Total average available beds	Proportion of total public hospital beds (%)
10 or fewer beds	217	28.8	958	1.6
More than 10 to 50 beds	318	42.2	7,776	13.3
More than 50 to 100 beds	71	9.4	5,130	8.8
More than 100 to 200 beds	65	8.6	9,709	16.6
More than 200 to 500 beds	57	7.6	17,584	30.1
More than 500 beds	25	3.3	17,261	29.5
<b>Total</b>	<b>753</b>	<b>100.0</b>	<b>58,420</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 in Table 4.16 at the end of this chapter.

## Where are public hospitals located?

The remoteness area classification is used in Table 4.7 to present information on the geographical distribution of public hospitals and available beds, and on the number of available beds per 1,000 population. The highest number of hospitals was reported for *Outer regional* areas (225) and two-thirds of beds were reported for *Major cities* (38,496 beds).

In 2011–12, there were 2.6 public hospital beds per 1,000 population (see also Table 4.17). 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 live in other areas of the state or territory, or in other jurisdictions. The patterns of bed availability across regions may also reflect a number of factors including the availability of other health-care services and patterns of disease and injury.

**Table 4.7: Number of hospitals, average available beds and number of average available beds per 1,000 population<sup>(a)</sup>, by remoteness area, public acute and psychiatric hospitals, 2011–12**

Remoteness area	Hospitals	Average available beds	Available beds per 1,000 population resident in area <sup>(a)</sup>
Major cities	180	38,496	2.5
<i>Total regional</i>	<i>417</i>	<i>17,988</i>	<i>2.8</i>
Inner regional	192	11,521	2.7
Outer regional	225	6,467	3.2
<i>Total remote</i>	<i>156</i>	<i>1,933</i>	<i>3.7</i>
Remote	80	1,395	4.3
Very Remote	76	539	2.8
<b>Total</b>	<b>753</b>	<b>58,420</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 2011.

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in Table 4.17 at the end of this chapter.

## How much expenditure and revenue?

### Public hospital recurrent expenditure

Table 4.8 presents information on *Total recurrent expenditure* and *Total revenue*.

Public hospital recurrent expenditure can be categorised into salary and non-salary 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.

Between 2007–08 and 2011–12, public hospital recurrent expenditure increased by an average of 5.9% per year in constant price terms (adjusted for inflation). The average annual increase in public hospital recurrent expenditure was highest for the Australian Capital Territory (12.6%).

Over the same period, public hospital revenue increased by an average of 11.4% per year (adjusted for inflation), ranging from an average decrease of 5.4% per year for Tasmania to an average increase of 14.7% per year for Queensland (Table 4.8).

Nationally, total recurrent expenditure by public hospitals, excluding depreciation, was over \$40 billion in 2011–12 (Table 4.9). Excluding payments to *Visiting medical officers* and payments for outsourced services, salary payments accounted for 62% of the \$40 billion spent within the public hospital system.

Expenditure totals are reported including and excluding depreciation to ensure comparable figures are available across jurisdictions. In 2011–12, depreciation ranged from 1% of total expenditure in the Northern Territory to more than 6% in Victoria (see also Table 4.18).

**Table 4.8: Recurrent expenditure<sup>(a)</sup> and revenue (\$ million, constant prices<sup>(b)</sup>), public hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Total recurrent expenditure, constant prices (\$ million)</b>							
New South Wales <sup>(c)</sup>	10,762	10,992	11,043	11,832	12,906	4.6	9.1
Victoria	8,138	8,520	8,840	9,446	9,746	4.6	3.2
Queensland <sup>(d)</sup>	5,720	6,196	6,700	7,436	7,706	7.7	3.6
Western Australia	3,228	3,508	3,655	4,012	4,381	7.9	9.2
South Australia	2,587	2,656	2,737	3,005	3,230	5.7	7.5
Tasmania	697	746	853	901	916	7.1	1.7
Australian Capital Territory	580	631	655	713	933	12.6	30.8
Northern Territory	430	476	489	527	568	7.2	7.6
<b>Total expenditure</b>	<b>32,141</b>	<b>33,727</b>	<b>34,970</b>	<b>37,872</b>	<b>40,384</b>	<b>5.9</b>	<b>6.6</b>
<b>Total revenue, constant prices (\$ million)</b>							
New South Wales	1,210	1,193	1,384	1,750	1,931	12.4	10.3
Victoria	860	951	1,021	1,118	1,297	10.8	16.0
Queensland <sup>(d)</sup>	408	534	613	550	706	14.7	28.3
Western Australia	192	210	212	244	298	11.6	22.3
South Australia	171	159	180	218	231	7.7	5.9
Tasmania	83	77	60	59	66	-5.4	13.1
Australian Capital Territory	49	58	55	55	60	5	8.6
Northern Territory	18	20	23	26	28	12	8.9
<b>Total revenue</b>	<b>2,992</b>	<b>3,204</b>	<b>3,548</b>	<b>4,020</b>	<b>4,617</b>	<b>11.4</b>	<b>14.9</b>

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

(b) Expressed in terms of prices in the reference year 2011–12. The ABS Government Final Consumption Expenditure, State and Local – Hospitals & Nursing Homes deflator was used for public hospitals. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.

(c) New South Wales hospital expenditure recorded against special purposes and trust funds was not included. Professional Indemnity expense was included for the first time in 2011–12.

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

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in Table 4.18 at the end of this chapter.

**Table 4.9: Recurrent expenditure<sup>(a)</sup> (\$ million), public acute and psychiatric hospitals, states and territories, 2011–12**

	NSW <sup>(b)</sup>	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total
Salary expenditure	7,532	6,256	5,128	2,775	1,923	569	572	392	25,146
Non-salary expenditure	5,827	4,125	2,859	1,730	1,412	370	390	180	16,894
<b>Total recurrent expenditure including depreciation</b>	<b>13,358</b>	<b>10,381</b>	<b>7,987</b>	<b>4,505</b>	<b>3,335</b>	<b>939</b>	<b>962</b>	<b>572</b>	<b>42,040</b>
Public acute hospitals	13,105	10,329	7,843	4,414	3,254	921	962	572	41,402
Public psychiatric hospitals	253	51	144	90	81	18	..	..	638
<b>Total recurrent expenditure excluding depreciation</b>	<b>12,906</b>	<b>9,746</b>	<b>7,706</b>	<b>4,381</b>	<b>3,230</b>	<b>916</b>	<b>933</b>	<b>568</b>	<b>40,384</b>
Public acute hospitals	12,661	9,697	7,568	4,293	3,151	897	933	568	39,767
Public psychiatric hospitals	245	49	138	88	79	18	..	..	617

(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. Professional Indemnity expense was included for the first time in 2011–12.

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

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in Table 4.18 at the end of this chapter.

## 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 \$4.6 billion in revenue in 2011–12 (Table 4.10). This was equivalent to 11.4% of total recurrent expenditure (excluding depreciation). Revenue as a proportion of total expenditure varied among the states and territories, ranging from 4.9% in the Northern Territory to 15.0% in New South Wales.

**Table 4.10: Revenue (\$ million), public acute and psychiatric hospitals, states and territories, 2011–12**

	NSW	Vic	Qld <sup>(a)</sup>	WA	SA <sup>(b)</sup>	Tas	ACT	NT	Total
Patient revenue	1,006	384	509	171	191	49	38	13	2,361
Recoveries	561	148	89	91	0	10	13	15	926
Other revenue	365	765	108	36	40	7	9	<1	1,330
<b>Total revenue</b>	<b>1,931</b>	<b>1,297</b>	<b>706</b>	<b>298</b>	<b>231</b>	<b>66</b>	<b>60</b>	<b>28</b>	<b>4,617</b>
Public acute hospitals	1,924	1,296	699	297	230	66	60	28	4,599
Public psychiatric hospitals	8	1	6	1	1	<1	..	..	18

(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.

## How are hospitals funded?

Public and private hospitals are funded from a range of different sources, reflecting the types of patients they treat and the services they provide. Emergency department and outpatient services are mainly funded by governments, whereas admitted patient services are commonly funded by both private (non-government) and government sources.

The original sources of funds are reported here rather than immediate sources. Hence, the Australian Government is regarded as the source of funds for the contributions that it made for public hospitals via intergovernmental agreements and for the contributions it made to private hospitals via the private health insurance premium rebates.

In 2010–11, the state and territory governments and the Australian Government provided most of the funds for public hospitals. Private hospitals were mainly funded by private health insurance and out-of-pocket payments by patients (AIHW 2012e; Table 4.11). Between 2008–09 and 2010–11, after adjusting for inflation, public hospital funding from the Australian Government increased by 2.1% on average each year (Chapter 2, Table 2.3).

**Table 4.11: Expenditure on public and private hospitals, by source of funds, 2010–11 (\$ million)**

	Public hospitals		Private hospitals	
	\$ million	Per cent of total (%)	\$ million	Per cent of total (%)
Australian Government	14,359	36.9	252	2.3
State/territory government	20,221	51.9	449	4.2
Rebates of health insurance premiums	316	0.8	2,298	21.3
Health insurance funds	671	1.7	4,883	45.3
Department of Veterans' Affairs	765	2.0	927	8.6
Individuals	1,159	3.0	1,347	12.5
Other	1,446	3.7	613	5.7
<b>Total</b>	<b>38,937</b>	<b>100.0</b>	<b>10,768</b>	<b>100.0</b>

Source: Health expenditure Australia, 2010–11 (AIHW 2012e).

## How many staff in public hospitals?

Nationally, almost 271,000 full-time equivalent staff were employed in the public hospital sector in 2011–12. *Nurses* accounted for 46% (123,000) of public hospital staff and there were more than 34,000 *Salaried medical officers*, representing about 13% of the public hospital labour force (Table 4.12).

The average salary for full-time equivalent *Nurses* in 2011–12 was about \$89,200 nationally (Table 4.12), which was an increase of 6.6% compared with the average salary of \$83,700 in 2010–11 (AIHW 2012a). In 2011–12, the average salary for full-time equivalent *Salaried medical officers* was about \$182,000 which was a 7.0% increase over the previous year. Similar information for states and territories is in Table 4.19.

The collection of data by staffing category was not consistent among states and territories and may explain some of the variation in 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. The degree of outsourcing of higher paid versus lower paid staffing functions affects the comparison of averages. For example, outsourcing

the provision of domestic services but retaining domestic service managers to oversee the activities of the contractors tends to result in higher average salaries for the domestic service staff.

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 who were contracted by hospitals to provide services to public patients and paid on a sessional or fee-for-service basis (Table 4.19). Variations in the outsourcing arrangements may also be reflected in variations in other recurrent expenditure categories reported in tables 4.10 and 4.18.

**Table 4.12: Average full-time equivalent staff<sup>(a)</sup> and average salaries, public acute and psychiatric hospitals, 2011–12**

	Full-time equivalent staff numbers	Average salaries (\$)
Salaried medical officers	34,293	181,950
Total nurses <sup>(b)</sup>	123,368	89,235
Other personal care staff	2,223	56,919
Diagnostic and allied health professionals	37,175	80,094
Administrative and clerical staff <sup>(c)</sup>	42,339	66,205
Domestic and other staff	31,452	63,289
<b>Total staff</b>	<b>270,850</b>	<b>92,841</b>

(a) Where average full-time equivalent staff numbers were not available, staff numbers at 30 June 2012 were used. Staff contracted to provide products (rather than labour) are not included.

(b) *Total nurses* comprises registered nurses, enrolled nurses, student nurses and trainee nurses.

(c) *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. Additional information for states and territories is in Table 4.19 at the end of this chapter.

## What specialised services were provided?

### Specialised service units

In 2011–12, the most common specialised services offered by hospitals were *Domiciliary care service*, services provided by *Nursing home care units* and *Obstetric/maternity service* (Table 4.13).

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

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



**Table 4.13: Number of public acute hospitals with selected specialised services by remoteness area of hospital, 2011–12**

Specialised service unit	Major cities	Regional	Remote	Total <sup>(a)</sup>
Domiciliary care service	83	239	67	<b>403</b>
Nursing home care unit	13	185	52	<b>265</b>
Obstetric/maternity service	64	137	19	<b>231</b>
Maintenance renal dialysis centre	71	78	16	<b>178</b>
Rehabilitation unit	0	62	2	<b>154</b>
Oncology unit	67	56	2	<b>130</b>
Intensive care unit (level III)	53	24	1	<b>78</b>
Major plastic/reconstructive surgery unit	42	3	0	<b>45</b>
Neonatal intensive care unit (level III)	22	7	0	<b>29</b>
In-vitro fertilisation unit	6	1	0	<b>7</b>

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

Note: See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in Table 4.20.

## 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 D.

Table 4.14 presents the number of public hospitals reporting more than 360 patient days for selected SRGs by remoteness area of the hospital. This has been included as an indicative measure of the number of specialty units.

**Table 4.14: Number of public hospitals reporting more than 360 patient days for the 20 most common Service Related Groups, by remoteness area of hospital, 2011–12**

<b>Service Related Group</b>	<b>Major cities</b>	<b>Regional</b>	<b>Remote</b>	<b>Total</b>
Non subspecialty—medicine	111	222	25	<b>359</b>
Respiratory medicine	95	196	23	<b>315</b>
Cardiology	92	147	8	<b>249</b>
Maintenance	63	146	34	<b>244</b>
Rehabilitation	107	124	1	<b>232</b>
Gastroenterology	96	116	9	<b>221</b>
Orthopaedics	102	107	11	<b>221</b>
Non subspecialty—surgery	102	96	8	<b>207</b>
Obstetrics	63	109	13	<b>185</b>
Neurology	93	87	4	<b>185</b>
Psychiatry—acute	102	56	4	<b>164</b>
Diagnostic gastrointestinal endoscopy	85	71	2	<b>158</b>
Renal dialysis	67	83	7	<b>157</b>
Upper gastrointestinal surgery	82	53	3	<b>138</b>
Urology	87	47	1	<b>135</b>
Gynaecology	77	54	4	<b>135</b>
Neurosurgery	86	45	1	<b>133</b>
Oncology	74	50	1	<b>125</b>
Colorectal surgery	80	44	0	<b>124</b>
Ear, nose and throat; head and neck	78	44	2	<b>124</b>

*Note:* See boxes 4.1 and 4.2 for notes on data limitations and methods. Additional information for states and territories is in tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## **Additional information**

More information on service related groups is in Appendix D and by state and territory for both public and private hospitals in Tables D1 to D5 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

Table 4.15: The diversity of public hospitals, states and territories, 2011-12

Hospital type	Number of hospitals								Average available beds	Separations (average)	Average length of stay (days)	Non-acute care (patient days (%))	AR-DRGs (5+) <sup>(e)</sup>
	Location			Services provided									
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Emergency services <sup>(b)</sup>	Outpatient clinics <sup>(c)</sup>	Elective surgery <sup>(d)</sup>					
<b>New South Wales</b>													
Principal referral	19	9	0	<b>28</b>	28	28	28	28	407	39,613	3.6	7.7	434
Specialist women's and children's	3	0	0	<b>3</b>	2	2	3	3	181	19,877	3.1	0.1	235
Large	10	3	0	<b>13</b>	13	13	13	13	145	14,988	3.3	11.0	253
Medium	7	24	0	<b>31</b>	23	29	0	30	66	5,738	3.0	14.3	139
Small acute	0	40	5	<b>45</b>	16	45	0	17	23	1,143	3.2	14.4	48
Psychiatric	5	2	0	<b>7</b>	0	0	0	0	119	756	55.2	35.1	9
Rehabilitation	3	2	0	<b>5</b>	0	0	0	0	45	458	24.3	99.7	6
Mothercraft	3	0	0	<b>3</b>	0	0	0	0	29	2,318	3.9	0.1	13
Small non-acute	9	17	3	<b>29</b>	5	19	0	5	34	1,022	9.5	79.2	32
Multi-purpose services	0	14	4	<b>18</b>	0	18	0	0	23	235	3.6	21.7	12
Other	8	30	5	<b>43</b>	8	32	0	0	15	307	10.1	88.6	6
<b>Total</b>	<b>67</b>	<b>141</b>	<b>17</b>	<b>225</b>	<b>95</b>	<b>186</b>	<b>44</b>	<b>96</b>	<b>89</b>	<b>7,354</b>	<b>3.9</b>	<b>15.4</b>	<b>107</b>
<b>Victoria</b>													
Principal referral	15	5	0	<b>20</b>	20	20	20	19	375	49,089	2.9	6.7	430
Specialist women's and children's	2	0	0	<b>2</b>	2	2	2	2	237	30,046	3.0	1.1	245
Large	6	8	0	<b>14</b>	12	12	14	8	115	17,959	2.3	11.1	241
Medium	7	14	0	<b>21</b>	6	12	0	3	74	7,633	3.1	40.4	126
Small acute	0	26	0	<b>26</b>	0	20	0	0	20	1,299	3.1	5.3	45
Psychiatric	1	0	0	<b>1</b>	0	0	0	0	152	926	87.3	0.0	12
Mothercraft	3	0	0	<b>3</b>	0	0	0	0	25	1,845	3.2	0.0	12
Small non-acute	4	5	0	<b>9</b>	0	2	0	0	74	1,193	20.2	84.2	31
Multi-purpose services	0	9	0	<b>9</b>	0	1	0	0	12	689	3.4	8.3	18
Other	16	28	2	<b>46</b>	0	11	0	0	16	728	7.0	75.9	9
<b>Total</b>	<b>54</b>	<b>95</b>	<b>2</b>	<b>151</b>	<b>40</b>	<b>80</b>	<b>36</b>	<b>32</b>	<b>89</b>	<b>10,227</b>	<b>3.1</b>	<b>17.1</b>	<b>114</b>

(continued)

Table 4.15 (continued): The diversity of public hospitals, states and territories, 2011–12

Hospital type	Number of hospitals								Average available beds	Separations (average)	Average length of stay (days)	Non-acute care (patient days) (%)	AR-DRGs (5+) <sup>(e)</sup>
	Location			Services provided									
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Emergency services <sup>(b)</sup>	Outpatient clinics <sup>(c)</sup>	Elective surgery <sup>(d)</sup>					
<b>Queensland</b>													
Principal referral	9	8	0	17	17	17	17	16	452	44,533	3.2	15.7	422
Specialist women's and children's	3	0	0	3	2	2	3	1	163	16,046	2.7	0.9	203
Large	2	0	1	3	3	3	3	3	138	17,044	2.4	16.4	257
Medium	1	12	0	13	4	13	0	8	59	6,107	2.5	30.1	148
Small acute	0	26	16	42	0	42	0	0	19	985	2.8	13.8	45
Psychiatric	1	3	0	4	0	0	0	0	110	96	382.9	100.0	2
Mothercraft	1	0	0	1	0	0	0	0	48	2,224	3.9	0.0	9
Small non-acute	0	12	2	14	0	14	0	1	18	837	5.3	54.0	38
Multi-purpose services	0	3	6	9	0	9	0	0	11	663	2.6	12.3	29
Other	1	17	46	64	0	56	0	0	4	60	11.8	80.6	2
<b>Total</b>	<b>18</b>	<b>81</b>	<b>71</b>	<b>170</b>	<b>26</b>	<b>156</b>	<b>23</b>	<b>29</b>	<b>66</b>	<b>5,890</b>	<b>3.3</b>	<b>21.3</b>	<b>78</b>
<b>Western Australia</b>													
Principal referral	4	1	0	5	5	5	4	5	461	62,586	3.0	9.5	461
Specialist women's and children's	2	0	0	2	2	2	2	2	239	21,096	3.4	0.3	201
Large	3	4	0	7	7	7	6	7	148	19,051	2.4	12.9	258
Medium	3	2	0	5	0	2	3	5	101	8,003	3.4	38.2	115
Small acute	0	3	12	15	3	15	2	10	24	2,413	2.2	6.9	80
Psychiatric	2	0	0	2	0	0	0	0	107	699	44.0	6.7	10
Rehabilitation	1	0	0	1	0	0	1	1	166	4,597	12.1	66.5	76
Small non-acute	1	3	0	4	0	3	1	2	31	1,494	4.7	47.1	52
Multi-purpose services	0	19	21	40	0	40	0	3	7	221	5.2	46.1	9
Other	7	5	3	15	0	7	0	0	15	176	20.6	82.5	6
<b>Total</b>	<b>23</b>	<b>37</b>	<b>36</b>	<b>96</b>	<b>17</b>	<b>81</b>	<b>19</b>	<b>35</b>	<b>59</b>	<b>6,126</b>	<b>3.2</b>	<b>16.6</b>	<b>73</b>

(continued)

Table 4.15 (continued): The diversity of public hospitals, states and territories, 2011–12

Hospital type	Number of hospitals								Average available beds	Separations (average)	Average length of stay (days)	Non-acute care (patient days (%))	AR-DRGs (5+) <sup>(e)</sup>
	Location				Service provided								
	Major cities	Regional	Remote	Total	Emergency departments <sup>(a)</sup>	Emergency services <sup>(b)</sup>	Outpatient clinics <sup>(c)</sup>	Elective surgery <sup>(d)</sup>					
<b>South Australia</b>													
Principal referral	4	0	0	4	4	4	4	4	530	55,057	3.6	4.6	499
Specialist women's and children's	1	0	0	1	1	1	1	1	325	31,472	3.2	0.3	316
Large	2	0	0	2	1	1	2	2	233	18,172	4.7	41.5	291
Medium	2	10	0	12	7	12	1	12	65	6,319	3.0	25.7	150
Small acute	0	14	4	18	1	18	0	12	24	1,138	2.7	3.1	47
Psychiatric	2	0	0	2	0	0	0	0	94	927	64.2	73.3	9
Rehabilitation	2	0	0	2	0	0	0	0	101	1,234	25.0	0.0	5
Small non-acute	0	12	6	18	0	18	0	8	24	627	7.5	57.2	28
Multi-purpose services	0	0	2	2	0	2	0	1	20	973	4.9	57.1	34
Other	2	7	10	19	0	17	0	0	13	237	11.8	75.9	4
<b>Total</b>	<b>15</b>	<b>43</b>	<b>22</b>	<b>80</b>	<b>14</b>	<b>73</b>	<b>8</b>	<b>40</b>	<b>65</b>	<b>5,080</b>	<b>4.1</b>	<b>24.5</b>	<b>78</b>
<b>Tasmania</b>													
Principal referral	..	2	0	2	2	2	2	2	414	39,107	3.3	14.2	471
Large	..	1	0	1	1	1	1	1	115	7,736	4.4	4.3	243
Medium	..	1	0	1	1	1	1	1	89	8,872	2.5	1.4	193
Small acute	..	5	1	6	0	6	0	0	14	482	5.8	8.9	24
Psychiatric	..	1	0	1	0	0	0	0	10	356	15.0	63.8	8
Small non-acute	..	1	0	1	0	1	0	0	14	304	10.5	26.1	16
Other	..	8	3	11	0	5	0	0	5	114	8.8	13.2	4
<b>Total</b>	<b>..</b>	<b>19</b>	<b>4</b>	<b>23</b>	<b>4</b>	<b>16</b>	<b>4</b>	<b>4</b>	<b>52</b>	<b>4,332</b>	<b>3.5</b>	<b>13.0</b>	<b>69</b>
<b>Australian Capital Territory</b>													
Principal referral	2	0	..	2	2	2	2	2	465	48,728	3.4	17.5	457
Mothercraft	1	0	..	1	0	0	0	0	10	n.a.	n.a.	n.a.	n.a.
<b>Total</b>	<b>3</b>	<b>0</b>	<b>..</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>313</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Northern Territory</b>													
Principal referral	..	1	1	2	2	2	2	2	291	48,507	2.7	6.0	398
Small acute	..	0	3	3	3	3	0	3	38	5,448	1.9	2.7	110
<b>Total</b>	<b>..</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>139</b>	<b>22,671</b>	<b>2.6</b>	<b>5.6</b>	<b>225</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.

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

**Table 4.16: Number of public acute and psychiatric hospitals and average available beds, by hospital size, states and territories, 2011–12**

	NSW	Vic <sup>(a)</sup>	Qld <sup>(b)</sup>	WA	SA	Tas	ACT	NT	Total
<b>Hospital size<sup>(c)</sup></b>									
10 or fewer beds	32	40	74	44	12	14	1	0	217
More than 10 to 50 beds	116	50	62	32	51	5	0	2	318
More than 50 to 100 beds	27	21	10	3	8	1	0	1	71
More than 100 to 200 beds	22	20	8	10	3	1	0	1	65
More than 200 to 500 beds	19	16	10	5	4	1	1	1	57
More than 500 beds	9	4	6	2	2	1	1	0	25
<b>Total hospitals</b>	<b>225</b>	<b>151</b>	<b>170</b>	<b>96</b>	<b>80</b>	<b>23</b>	<b>3</b>	<b>5</b>	<b>753</b>
<b>Available beds</b>									
10 or fewer beds	125	192	223	243	89	76	10	0	958
More than 10 to 50 beds	2,970	1,192	1,415	785	1,279	81	0	54	7,776
More than 50 to 100 beds	1,915	1,480	720	227	639	89	0	60	5,130
More than 100 to 200 beds	3,198	2,840	1,300	1,579	482	115	0	195	9,709
More than 200 to 500 beds	5,868	5,126	2,853	1,521	1,280	324	225	387	17,584
More than 500 beds	5,996	2,540	4,734	1,321	1,464	503	704	0	17,261
<b>Total available beds</b>	<b>20,073</b>	<b>13,370</b>	<b>11,245</b>	<b>5,677</b>	<b>5,232</b>	<b>1,188</b>	<b>939</b>	<b>696</b>	<b>58,420</b>

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

(b) The count of beds in Queensland was based on data as at 30 June 2012.

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

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

**Table 4.17: 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, states and territories, 2011–12**

Remoteness area	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospitals</b>									
Major cities	67	54	18	23	15	0	3	..	180
<i>Total regional</i>	<i>141</i>	<i>95</i>	<i>81</i>	<i>37</i>	<i>43</i>	<i>19</i>	<i>0</i>	<i>1</i>	<i>417</i>
Inner regional	76	59	27	9	15	6	0	..	192
Outer regional	65	36	54	28	28	13	..	1	225
<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>
Remote	12	2	27	22	13	2	..	2	80
Very remote	5	..	44	14	9	2	..	2	76
<b>Total all remoteness areas</b>	<b>225</b>	<b>151</b>	<b>170</b>	<b>96</b>	<b>80</b>	<b>23</b>	<b>3</b>	<b>5</b>	<b>753</b>
<b>Available beds</b>									
Major cities	14,039	9,709	6,205	4,141	3,464	..	939	..	38,496
<i>Total regional</i>	<i>5,840</i>	<i>3,650</i>	<i>4,467</i>	<i>1,110</i>	<i>1,368</i>	<i>1,166</i>	<i>0</i>	<i>387</i>	<i>17,988</i>
Inner regional	4,295	2,915	2,397	504	468	942	0	..	11,521
Outer regional	1,545	735	2,070	606	900	224	..	387	6,467
<i>Total Remote</i>	<i>194</i>	<i>11</i>	<i>573</i>	<i>426</i>	<i>398</i>	<i>22</i>	<i>..</i>	<i>309</i>	<i>1,933</i>
Remote	185	11	323	303	306	12	..	255	1,395
Very remote	10	..	250	123	92	10	..	54	539
<b>Total all remoteness areas</b>	<b>20,073</b>	<b>13,370</b>	<b>11,245</b>	<b>5,677</b>	<b>5,232</b>	<b>1,188</b>	<b>939</b>	<b>696</b>	<b>58,420</b>
<b>Number of available beds per 1,000 population resident in area<sup>(a)</sup></b>									
Major cities	2.7	2.3	2.3	2.5	2.9	..	2.6	..	2.5
<i>Total regional</i>	<i>3.1</i>	<i>2.7</i>	<i>2.8</i>	<i>2.2</i>	<i>3.6</i>	<i>2.3</i>	<i>0.0</i>	<i>3.0</i>	<i>2.8</i>
Inner regional	3.0	2.7	2.5	1.6	2.3	2.8	0.0	..	2.7
Outer regional	3.5	3.0	3.1	3.0	5.1	1.3	..	3.0	3.2
<i>Total Remote</i>	<i>5.3</i>	<i>2.5</i>	<i>4.1</i>	<i>2.6</i>	<i>6.6</i>	<i>2.2</i>	<i>..</i>	<i>3.1</i>	<i>3.7</i>
Remote	5.7	2.5	3.7	3.1	6.7	1.6	..	5.1	4.3
Very remote	2.2	..	4.8	1.9	6.3	4.1	..	1.1	2.8
<b>Total all remoteness areas</b>	<b>2.8</b>	<b>2.4</b>	<b>2.5</b>	<b>2.4</b>	<b>3.2</b>	<b>2.3</b>	<b>2.6</b>	<b>3.0</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 2011. The remoteness area of hospital was based on the ABS 2006 remoteness area classification.

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

**Table 4.18: Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2011–12**

<b>Recurrent expenditure category</b>	<b>NSW<sup>(b)</sup></b>	<b>Vic<sup>(c)</sup></b>	<b>Qld<sup>(d)</sup></b>	<b>WA</b>	<b>SA<sup>(e)</sup></b>	<b>Tas<sup>(f)</sup></b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
<b>Salary and wages expenditure</b>									
Salaried medical officers	1,572,144	1,525,641	1,424,396	798,146	519,210	154,713	135,973	109,409	6,239,631
Registered nurses	n.a.	2,722,866	1,888,231	1,054,292	780,050	208,961	252,822	160,776	n.a.
Enrolled nurses	n.a.	n.a.	185,606	31,038	137,714	22,068	28,783	9,320	n.a.
Student nurses	..	..	2,600	..	4,072	6,951	..	..	13,623
<b>Total nurses</b>	<b>3,512,585</b>	<b>2,722,866</b>	<b>2,076,524</b>	<b>1,085,330</b>	<b>921,836</b>	<b>237,979</b>	<b>281,604</b>	<b>170,096</b>	<b>11,008,821</b>
Other personal care staff	n.a.	n.a.	72,866	n.a.	38,015	n.a.	15,036	601	126,518
Diagnostic and allied health professionals	936,010	886,443	554,994	273,238	183,571	48,023	59,079	36,146	2,977,504
Administrative and clerical staff <sup>(g)</sup>	934,396	624,149	530,425	341,449	188,604	69,660	79,716	34,657	2,803,056
Domestic and other staff	576,603	496,904	468,816	276,565	72,143	58,436	162	40,929	1,990,558
<b>Total salary and wages expenditure</b>	<b>7,531,687</b>	<b>6,256,003</b>	<b>5,128,021</b>	<b>2,774,728</b>	<b>1,923,380</b>	<b>568,811</b>	<b>571,570</b>	<b>391,838</b>	<b>25,146,038</b>
<b>Non-salary expenditure</b>									
Payments to visiting medical officers	617,279	152,595	94,063	135,949	119,966	254	45,477	9,264	1,174,846
Superannuation payments	643,606	529,138	449,664	228,668	161,278	70,783	68,405	0	2,151,542
Drug supplies	575,685	507,153	355,709	217,987	146,795	49,694	23,437	23,545	1,900,005
Medical and surgical supplies	1,398,173	838,794	833,303	284,471	210,220	113,256	78,082	41,425	3,797,725
Food supplies	254,205	98,916	55,852	30,184	23,190	8,237	6,752	4,656	481,992
Domestic services	309,650	213,488	166,165	110,876	61,422	16,460	33,875	14,994	926,930
Repairs and maintenance	297,042	186,558	147,171	157,509	71,186	10,371	11,350	14,563	895,750
Patient transport	108,096	58,920	36,327	53,324	19,523	6,380	1,919	24,156	308,645
Administrative expenses	950,698	604,167	438,774	186,645	97,747	45,715	68,288	18,956	2,410,989
Interest payments	41,628	0	0	2,772	4,532	0	170	0	49,102
Depreciation	452,863	634,342	281,400	124,002	105,939	23,543	28,835	4,592	1,655,516
Other recurrent expenditure	177,872	300,734	889	197,562	390,317	25,619	23,656	24,123	1,140,772
<b>Total non-salary expenditure excluding depreciation</b>	<b>5,373,919</b>	<b>3,490,463</b>	<b>2,577,918</b>	<b>1,605,946</b>	<b>1,306,176</b>	<b>346,767</b>	<b>361,411</b>	<b>175,683</b>	<b>15,238,283</b>
<b>Total non-salary expenditure including depreciation</b>	<b>5,826,782</b>	<b>4,124,805</b>	<b>2,859,319</b>	<b>1,729,948</b>	<b>1,412,114</b>	<b>370,310</b>	<b>390,246</b>	<b>180,275</b>	<b>16,893,799</b>

(continued)



**Table 4.18 (continued): Recurrent expenditure (\$'000)<sup>(a)</sup>, public acute and psychiatric hospitals, states and territories, 2011–12**

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>	<b>12,905,606</b>	<b>9,746,466</b>	<b>7,705,940</b>	<b>4,380,674</b>	<b>3,229,556</b>	<b>915,578</b>	<b>932,981</b>	<b>567,521</b>	<b>40,384,321</b>
Public acute hospitals	12,660,545	9,697,049	7,568,356	4,292,640	3,150,606	897,477	932,981	567,521	39,767,176
Psychiatric hospitals	245,061	49,417	137,584	88,033	78,950	18,101	..	..	617,145
<b>Total expenditure including depreciation</b>	<b>13,358,469</b>	<b>10,380,808</b>	<b>7,987,340</b>	<b>4,504,676</b>	<b>3,335,494</b>	<b>939,121</b>	<b>961,816</b>	<b>572,113</b>	<b>42,039,837</b>
Public acute hospitals	13,105,460	10,329,476	7,843,427	4,414,357	3,254,395	921,015	961,816	572,113	41,402,059
Psychiatric hospitals	253,009	51,332	143,913	90,319	81,099	18,107	..	..	637,778

(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. Professional Indemnity expense was included for the first time in 2011–12. *Other personal care staff* are included in *Diagnostic and allied health professionals* and *Domestic and other staff*. New South Wales was unable to provide information for each nurse category, although data on *Total nurses* were provided.

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

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

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

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

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

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

**Table 4.19: Average full-time equivalent staff<sup>(a)</sup> and average salaries, public acute and psychiatric hospitals, states and territories, 2011–12**

	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld <sup>(d)</sup>	WA	SA	Tas <sup>(e)</sup>	ACT	NT	Total
<b>Full-time equivalent staff numbers</b>									
Salaried medical officers	9,949	8,551	7,514	3,484	2,805	857	662	471	34,293
Total nurses	39,300	31,700	23,107	11,800	10,623	2,736	2,495	1,606	123,368
Other personal care staff	n.a	n.a	1,153	n.a	849	n.a	212	8	2,223
Diagnostic and allied health professionals	10,457	14,327	5,629	3,067	1,829	554	920	392	37,175
Administrative and clerical staff <sup>(f)</sup>	11,727	12,188	7,782	4,869	3,221	1,110	954	488	42,339
Domestic and other staff	8,220	7,227	8,311	4,347	1,601	1,092	4	650	31,452
<b>Total staff</b>	<b>79,652</b>	<b>73,994</b>	<b>53,496</b>	<b>27,567</b>	<b>20,928</b>	<b>6,350</b>	<b>5,247</b>	<b>3,616</b>	<b>270,850</b>
<b>Average salaries (\$)</b>									
Salaried medical officers	158,016	178,408	189,571	229,063	185,119	180,466	205,525	232,484	181,950
Total nurses	89,379	85,894	89,866	91,979	86,775	86,968	112,849	105,894	89,235
Other personal care staff	n.a	n.a	63,186	n.a	44,780	n.a	70,814	72,404	56,919
Diagnostic and allied health professionals	89,512	61,871	98,599	89,096	100,377	86,607	64,224	92,183	80,094
Administrative and clerical staff <sup>(f)</sup>	79,681	51,211	68,159	70,123	58,552	62,744	83,586	70,977	66,205
Domestic and other staff	70,150	68,752	56,406	63,624	45,066	53,536	40,500	62,948	63,289
<b>Total staff</b>	<b>94,558</b>	<b>84,547</b>	<b>95,857</b>	<b>100,653</b>	<b>91,906</b>	<b>89,578</b>	<b>108,934</b>	<b>108,368</b>	<b>92,841</b>

(a) Where average full-time equivalent staff numbers were not available, staff numbers at 30 June 2012 were used. Staff contracted to provide products (rather than labour) are not included.

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

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

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

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

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

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

**Table 4.20: Number of public acute hospitals<sup>(a)</sup> with specialised services, states and territories, 2011–12**

<b>Specialised services</b>	<b>NSW<sup>(b)</sup></b>	<b>Vic<sup>(c)</sup></b>	<b>Qld</b>	<b>WA</b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>
Acute renal dialysis unit	25	13	17	5	4	2	1	2	<b>69</b>
Acute spinal cord injury unit	4	2	1	2	1	0	0	0	<b>10</b>
AIDS unit	9	1	2	1	1	0	1	0	<b>15</b>
Alcohol and drug unit	81	11	10	3	4	0	1	1	<b>111</b>
Burns unit (level III)	3	2	2	2	2	1	0	0	<b>12</b>
Cardiac surgery unit	10	8	6	4	2	1	1	0	<b>32</b>
Clinical genetics unit	15	10	2	3	2	1	1	0	<b>34</b>
Coronary care unit	45	24	19	5	7	3	2	2	<b>107</b>
Diabetes unit	23	21	13	6	5	3	1	1	<b>73</b>
Domiciliary care service	171	93	34	58	46	0	0	1	<b>403</b>
Geriatric assessment unit	56	40	4	21	14	3	2	0	<b>140</b>
Hospice care unit	41	26	12	30	12	1	1	1	<b>124</b>
Infectious diseases unit	13	15	10	5	4	1	1	0	<b>49</b>
Intensive care unit (level III)	38	17	9	4	4	3	1	2	<b>78</b>
In-vitro fertilisation unit	2	2	1	0	2	0	0	0	<b>7</b>
Maintenance renal dialysis centre	59	67	15	12	18	2	1	4	<b>178</b>
Major plastic/reconstructive surgery unit	13	13	8	5	4	1	1	0	<b>45</b>
Neonatal intensive care unit (level III)	14	4	4	2	2	1	1	1	<b>29</b>
Neurosurgical unit	13	8	6	3	3	1	1	0	<b>35</b>
Nursing home care unit	79	75	6	52	43	10	0	0	<b>265</b>
Obstetric/maternity service	73	54	37	29	28	3	2	5	<b>231</b>
Oncology unit	44	38	18	15	10	3	2	0	<b>130</b>
Psychiatric unit/ward	45	33	18	20	8	3	2	2	<b>131</b>
Refractory epilepsy unit	6	5	2	3	3	0	0	0	<b>19</b>
Rehabilitation unit	64	40	15	19	9	3	2	2	<b>154</b>
Sleep centre	12	11	7	5	5	2	0	0	<b>42</b>
Specialist paediatric service	41	28	20	9	7	4	2	2	<b>113</b>
Transplantation unit—bone marrow	14	7	4	3	1	1	1	0	<b>31</b>
Transplantation unit—heart (including heart/lung)	1	2	1	2	0	0	0	0	<b>6</b>
Transplantation unit—liver	2	2	2	2	2	0	0	0	<b>10</b>
Transplantation unit—pancreas	1	1	0	0	0	0	0	0	<b>2</b>
Transplantation unit—renal	7	6	2	3	1	0	0	0	<b>19</b>

(a) Excludes psychiatric hospitals.

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

(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.

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

## 5 Emergency department services

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

- total emergency services activity, including emergency departments and other emergency services
- emergency department waiting times
- the type of care received.

Timely provision of the emergency department care data by state and territory health authorities allowed much of this information to be reported in *Australian hospital statistics 2011–12: emergency department care* (AIHW 2012c) in September 2012. This report presents selected statistics from the earlier report, as well as additional information not presented in that report because the data were not available at its time of publication.

### What data are reported?

#### Emergency services

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

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

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

#### Emergency department presentations

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 NMDS for Non-admitted patient emergency department care, as defined in the *National health data dictionary, version 16* (AIHW 2012f).

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

The scope of this NMDS in 2011–12 was non-admitted patients registered for care in emergency departments in public hospitals that were classified as either peer group A (*Principal referral and specialist women's and children's hospitals*) or peer group B (*Large hospitals*) for *Australian hospital statistics 2010–11* (AIHW 2012a). The peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see Appendix B).

For 2011–12, all states and territories provided episode-level data to the NNAPEDCD for all public hospitals in peer groups A and B that had emergency departments (all hospitals that

were required to report episode-level data). Data were provided for 89 *Principal referral and specialist women's and children's* hospitals and 37 *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:

- 23 *Medium* hospitals, 20 *Small* hospitals and 9 *Unpeered/Other* hospitals in New South Wales
- 6 *Medium* hospitals in Victoria
- 4 *Medium* hospitals in Queensland
- 3 *Small remote acute* hospitals in Western Australia
- 7 *Medium* hospitals and 1 *Small remote acute* hospital in South Australia
- 1 *Medium* hospital in Tasmania
- 3 *Small remote acute* hospitals in the Northern Territory.

In 2011–12, coverage for the NNAPEDCD (all peer group A and B hospitals) was 100%, and it provided detailed information for 84% of all public hospital emergency occasions of service, an increase from 78% in 2007–08 (Table 5.1). The proportion ranged from 72% for Queensland to 100% for the Australian Capital Territory and the Northern Territory (see Table 5.4 and Table 5.7 at the end of this chapter).

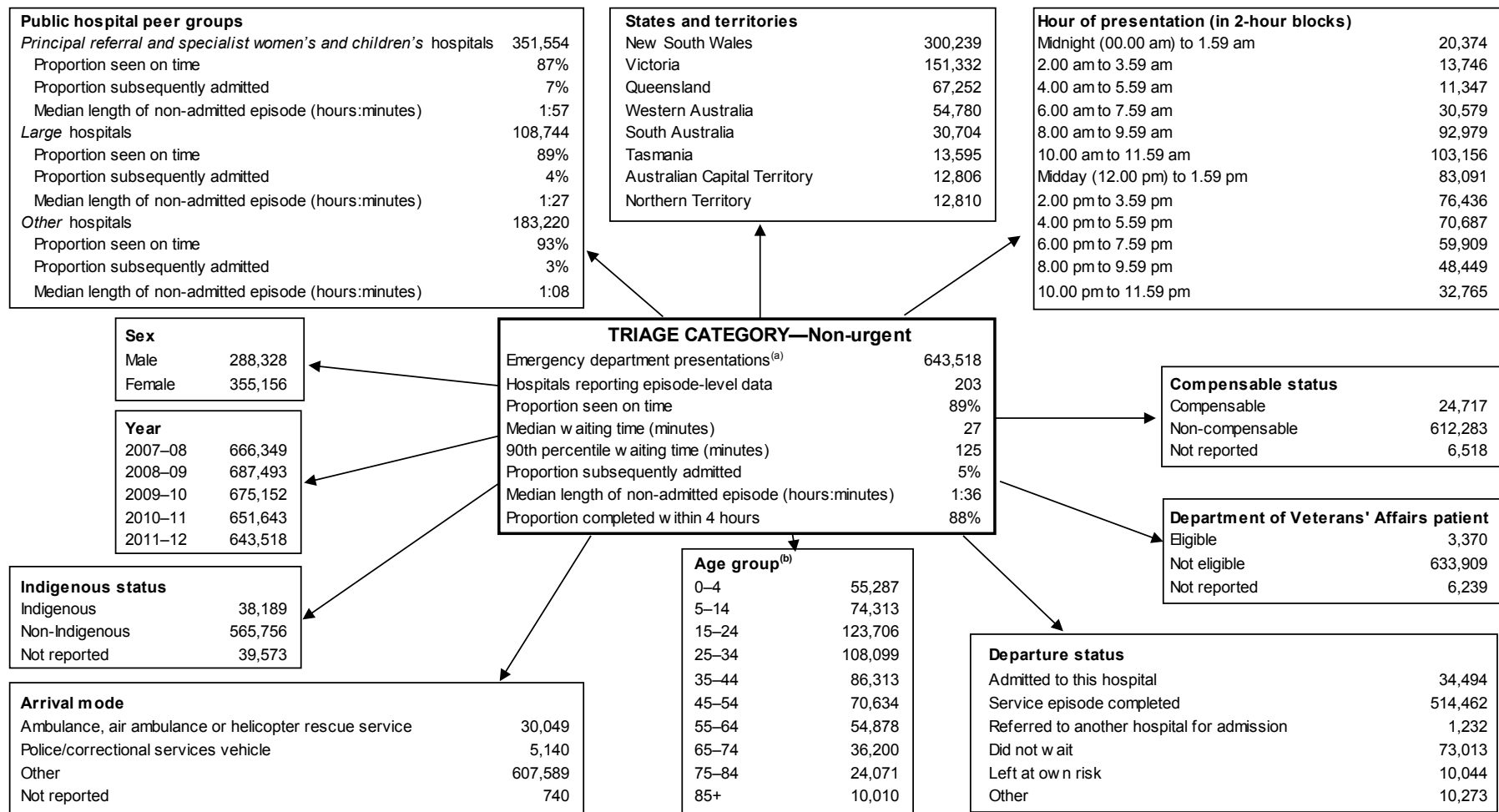
The detailed information presented for the NNAPEDCD data in this chapter should be interpreted with caution as the data may not be representative of emergency department presentations for hospitals that were not required to provide data for non-admitted patient emergency department care.

Data for public hospital emergency departments reporting to the NNAPEDCD are in Figure 5.1, tables 5.1 and 5.2, tables 5.4 to 5.8 and supplementary Table S5.1 (internet only).

Figure 5.1 presents an example of the information available from the NNAPEDCD, for presentations for which patients were assigned a triage category of *Non-urgent* (triage category 5) at the time of presentation at the emergency department.

In 2011–12:

- more than 640,000 *Non-urgent* emergency department presentations were reported by 203 hospitals
- about 89% of *Non-urgent* patients were seen on time (within 120 minutes)
- about 88% of *Non-urgent* presentations were completed within 4 hours
- the median waiting time for *Non-urgent* patients was 27 minutes
- of *Non-urgent* patients, about 5% were subsequently admitted to the same hospital (including admission within the emergency department)
- less than 5% of *Non-urgent* patients arrived by *Ambulance, air ambulance or helicopter rescue service*
- between 2007–08 and 2011–12, the number of *Non-urgent* patients who presented to emergency departments in public hospitals decreased by 3.4%. However, over the same period overall presentations to emergency departments in public hospitals increased by an average of 4.3% per year (Table 5.1)
- more than one-third (36%) of *Non-urgent* patients were aged between 15 and 34
- less than a quarter (24%) of *Non-urgent* patients arrived overnight (between 8 pm and 8 am).



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

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

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

Figure 5.1: Selected statistics for *Non-urgent* triage category emergency department presentations, 2011–12

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

The **triage category** indicates the urgency of the patient's need for medical and nursing care. It is usually assigned by triage nurses to patients at, or shortly after, the time of presentation to the emergency department, in response to the question: 'This patient should wait for medical assessment and treatment no longer than...?'. The National Triage Scale has five categories – as defined in the *National health data dictionary, version 16* (AIHW 2012f) – that incorporate the time by which the patient should receive care:

*Resuscitation*: immediate (within seconds)

*Emergency*: within 10 minutes

*Urgent*: within 30 minutes

*Semi-urgent*: within 60 minutes

*Non-urgent*: within 120 minutes.

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

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

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

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

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

- The NNAPEDCD provides information about presentations in public hospital emergency departments for hospitals that were mostly classified in peer groups A and B and located within major cities and inner regional areas. Other emergency occasions of service occur in public hospitals that do not have emergency departments, mostly in rural areas. Consequently, data for emergency department presentations may not be included for areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Disaggregations by socioeconomic status and remoteness should also be interpreted with caution.
- Statistics on emergency department presentations for non-admitted patients may be affected by variations in reporting practices across states and territories. Where possible, these variations have been noted in the text.
- There is possible variation in the recording of the time of 'commencement of clinical care' in emergency departments due to delayed implementation of the current definition for some hospitals. As a consequence, this may have affected the calculation of waiting times and the proportion of patients reported as having commenced clinical care within the clinically recommended time.

(continued)

**Box 5.2 (continued)**

- From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for, New South Wales.
- About 48,000 records for which a valid waiting time was not recorded were not used (in either the numerator or denominator) to derive waiting time statistics.

See Appendix A for more information.

## How has activity changed over time?

Between 2007–08 and 2011–12 the number of emergency occasions of service reported to the NPHED increased from 7.1 million to 7.8 million, an average annual increase of 2.4%. Over the same period, the number of presentations reported to the NNAPEDCD increased by 4.3% per year, from 5.5 million to 6.5 million.

Between 2007–08 and 2011–12, the proportion of occasions of service for which detailed episode-level data were available increased from 78% to 84% (Table 5.1).

**Table 5.1: Emergency department presentations and emergency occasions of service, public hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
Hospitals reporting emergency occasions of service to NPHED	606	607	609	612	609	0.1	–0.5
Emergency occasions of service (NPHED)	7,100,618	7,171,667	7,390,459	7,651,233	7,809,335	2.4	2.1
Hospitals reporting to NNAPEDCD	165	184	184	186	203	5.3	9.1
Presentations (NNAPEDCD)	5,537,196	5,742,139	5,957,961	6,183,288	6,547,342	4.3	5.9
<b>Estimated proportion (%)<sup>(a)</sup></b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>	<b>84</b>	<b>1.8</b>	<b>3.7</b>

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

Note: See boxes 5.1 and 5.2 for notes on data limitations and methods. Additional information for public hospital peer groups is in Table 5.8 at the end of this chapter.

Between 2007–08 and 2011–12, the numbers of presentations to public hospital emergency departments increased for all triage categories except *Non-urgent* (Table 5.2). Over this period, there was an 8% increase in the number of *Emergency* patients and a 6% increase in the number of *Urgent* patients (clinical care is recommended within 10 minutes and 30 minutes of presentation, respectively).

Between 2007–08 and 2011–12, the proportion of *Emergency presentations* treated within an appropriate time increased from 69% to 72%. Over the same period, the median waiting time decreased from 24 minutes to 21 minutes and the time by which 90% of presentations commenced clinical care decreased from 124 minutes to 108 minutes. The proportion of presentations ending in admission remained relatively stable.



**Table 5.2: Emergency presentation<sup>(a)</sup> waiting time statistics, public hospital emergency departments, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
Proportion seen on time (%)	69	70	70	70	72	1.0	2.1
Median waiting time to clinical care (minutes)	24	23	23	23	21	–3.3	–8.7
90th percentile waiting time to clinical care (minutes)	124	119	115	114	108	–3.4	–5.3
Proportion ending in admission (%)	27	27	27	28	29	1.8	3.4
<b>Number of emergency presentations by triage category</b>							
Resuscitation	38,865	41,238	41,923	42,242	42,432	2.2	0.4
Emergency	468,217	498,932	538,785	579,956	645,689	8.4	11.3
Urgent	1,727,693	1,809,326	1,914,180	2,024,030	2,187,483	6.1	8.1
Semi-urgent	2,506,123	2,559,943	2,649,000	2,748,082	2,878,297	3.5	4.7
Non-urgent	666,349	687,493	675,152	651,643	643,518	–0.9	–1.2
<b>Total</b>	<b>5,409,440</b>	<b>5,599,397</b>	<b>5,822,368</b>	<b>6,046,820</b>	<b>6,403,530</b>	<b>4.3</b>	<b>5.9</b>

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

Note: See boxes 5.1 and 5.2 for notes on data limitations and methods. Additional information for public hospital peer groups is in Table 5.8 at the end of this chapter.

Between 2007–08 and 2011–12, the number of emergency occasions of service reported to NPHED increased by an average of 2.4% per year (Table 5.3). Over that period, Western Australia reported an average annual increase of 5.0%, and an increase of 7.6% between 2010–11 and 2011–12.

Between 2007–08 and 2011–12, the number of emergency department presentations reported to the NAPEDCD increased in all states and territories (Table 5.4). Over this period, Queensland, Western Australia and the Australian Capital Territory all had average annual increases in emergency department presentations that were higher than the national average annual increase of 4.3%.

Between 2010–11 and 2011–12, the number of hospitals reporting emergency department episode-level data increased markedly for New South Wales and South Australia.

**Table 5.3: Emergency occasions of service, public hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(a)</sup></b>							
Occasions of service	2,417,721	2,416,731	2,442,982	2,484,261	2,537,681	1.2	2.2
Number of hospitals	187	187	187	189	186		
<b>Victoria<sup>(a)</sup></b>							
Occasions of service	1,522,573	1,537,510	1,591,819	1,654,943	1,659,550	2.2	0.3
Number of hospitals	91	90	88	90	90		
<b>Queensland</b>							
Occasions of service	1,471,377	1,525,407	1,578,490	1,664,170	1,711,873	3.9	2.9
Number of hospitals	152	154	156	157	156		
<b>Western Australia</b>							
Occasions of service	778,119	783,294	823,402	877,671	944,759	5.0	7.6
Number of hospitals	80	80	81	81	81		
<b>South Australia<sup>(b)</sup></b>							
Occasions of service	544,439	531,575	554,906	562,293	537,115	–0.3	–4.5
Number of hospitals	70	73	73	73	73		
<b>Tasmania</b>							
Occasions of service	142,633	146,085	159,472	154,220	154,731	2.1	0.3
Number of hospitals	19	16	17	15	16		
<b>Australian Capital Territory</b>							
Occasions of service	98,441	101,898	106,806	112,460	118,767	4.8	5.6
Number of hospitals	2	2	2	2	2		
<b>Northern Territory</b>							
Occasions of service	125,315	129,167	132,582	141,215	144,859	3.7	2.6
Number of hospitals	5	5	5	5	5		
<b>Total</b>							
<b>Occasions of service</b>	<b>7,100,618</b>	<b>7,171,667</b>	<b>7,390,459</b>	<b>7,651,233</b>	<b>7,809,335</b>	<b>2.4</b>	<b>2.1</b>
<b>Number of hospitals</b>	<b>606</b>	<b>607</b>	<b>609</b>	<b>612</b>	<b>609</b>		

(a) From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for, New South Wales.

(b) For South Australia, the decrease in emergency occasions of service between 2010–11 and 2011–12 was due to changes in the categorisation of emergency departments services at two hospitals. From 1 July 2011, the units at the two hospitals were no longer categorised as emergency departments.

Note: See boxes 5.1 and 5.2 for notes on data limitations and methods. Additional information for public hospital peer groups is in Table 5.7 at the end of this chapter.

**Table 5.4: Emergency department presentations, public hospital emergency departments, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(a)</sup></b>							
Presentations	1,962,496	2,007,863	2,035,783	2,074,098	2,235,455	3.3	7.8
Number of hospitals	71	85	84	86	95		
Estimated proportion <sup>(b)</sup>	81	83	83	83	88		
<b>Victoria<sup>(a)</sup></b>							
Presentations	1,352,129	1,358,202	1,432,745	1,483,159	1,509,065	2.8	1.7
Number of hospitals	38	38	39	39	40		
Estimated proportion <sup>(b)</sup>	89	88	90	90	91		
<b>Queensland</b>							
Presentations	948,921	1,091,076	1,134,092	1,195,325	1,238,522	6.9	3.6
Number of hospitals	22	26	26	26	26		
Estimated proportion <sup>(b)</sup>	64	72	72	72	72		
<b>Western Australia</b>							
Presentations	560,688	566,411	600,613	649,215	732,351	6.9	12.8
Number of hospitals	16	16	16	16	17		
Estimated proportion <sup>(b)</sup>	72	72	73	74	78		
<b>South Australia<sup>(c)</sup></b>							
Presentations	364,549	357,417	373,700	383,992	427,011	4.0	11.2
Number of hospitals	8	8	8	8	14		
Estimated proportion <sup>(b)</sup>	67	67	67	68	80		
<b>Tasmania</b>							
Presentations	124,853	130,108	141,630	143,848	141,700	3.2	–1.5
Number of hospitals	3	4	4	4	4		
Estimated proportion <sup>(b)</sup>	88	89	89	93	92		
<b>Australian Capital Territory</b>							
Presentations	98,441	101,897	106,815	112,232	118,396	4.7	5.5
Number of hospitals	2	2	2	2	2		
Estimated proportion <sup>(b)</sup>	100	100	100	100	100		
<b>Northern Territory</b>							
Presentations	125,119	129,165	132,583	141,419	144,842	3.7	2.4
Number of hospitals	5	5	5	5	5		
Estimated proportion <sup>(b)</sup>	100	100	100	100	100		
<b>Total</b>							
<b>Presentations</b>	<b>5,537,196</b>	<b>5,742,139</b>	<b>5,957,961</b>	<b>6,183,288</b>	<b>6,547,342</b>	<b>4.3</b>	<b>5.9</b>
<b>Number of hospitals</b>	<b>165</b>	<b>184</b>	<b>184</b>	<b>186</b>	<b>203</b>		
<b>Estimated proportion<sup>(b)</sup></b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>	<b>84</b>		

(a) From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for, New South Wales.

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

(c) For South Australia, 7 large country hospitals were first included in the South Australia's emergency department data collection in 2011–12, while units at two metropolitan hospitals were removed as they no longer functioned as true emergency departments. The net effect was a large increase in presentations between 2010–11 and 2011–12.

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

## How much activity was there in 2011–12?

Detailed episode-level information was available for 6.5 million emergency department presentations (about 84% of emergency occasions of service). More than 86% of these presentations were reported by *Principal referral and Specialist women's and children's hospitals* and *Large hospitals* (Table 5.7).

The information presented below for NNAPEDCD data should be interpreted with caution as the data may not be representative of emergency department presentations for hospitals that were not required to provide data for non-admitted patient emergency department care.

## How long did people wait for care?

Emergency department waiting times are regarded as indicators of access to hospitals.

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

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

Emergency department **waiting time to commencement of clinical care** is the time elapsed for each patient from presentation in the emergency department to commencement of the emergency department non-admitted clinical care.

Table 5.5 presents the proportion of all *Emergency presentations* reported to the NNAPEDCD that were seen on time, by state and territory and triage category for 2011–12. Some *Emergency presentations* are excluded from the calculation of the figures provided in this table. For 2011–12, there were almost 328,000 presentations with an episode end status of *Did not wait* or *Dead on arrival* that were excluded from this analysis. About 48,000 additional presentations with missing or invalid waiting times were also excluded.

For 2011–12, for all triage categories combined (excluding those whose triage category was *Not reported*), the overall proportion of *Emergency presentations* seen on time was 72%. The proportion varied by state and territory, ranging from 54% in the Northern Territory to 76% in New South Wales and South Australia (Table 5.5). The proportion also varied by triage category. About 100% of *Resuscitation* patients and 80% of *Emergency* patients were seen on time.

There is possible variation in the recording of the time of 'commencement of clinical care' in emergency departments due to delayed implementation for some hospitals of the current definition that includes the commencement of service by 'other health professionals', where provided in accordance with established clinical pathways defined by the emergency department. As a consequence, this may have affected the calculation of waiting times and the proportion of patients who commenced clinical care within the clinically recommended time.

For 2010–11 and 2011–12, Western Australian metropolitan hospitals recorded the time of 'commencement of clinical care' when care was commenced by a doctor or nurse practitioner

only. For the Northern Territory, hospitals were only able to record the time that care is commenced by a doctor. See Appendix A for more information.

**Table 5.5: Proportion (%) of emergency presentations seen on time by triage category, public hospital emergency departments<sup>(a)</sup>, states and territories, 2011–12**

<b>Triage 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>
Resuscitation	100	100	100	99	100	100	100	100	100
Emergency	82	83	82	76	79	77	76	64	80
Urgent	71	72	63	52	70	64	50	49	66
Semi-urgent	74	67	69	67	77	71	47	49	70
Non-urgent	89	87	90	94	92	88	81	89	89
<b>Total</b>	<b>76</b>	<b>72</b>	<b>69</b>	<b>65</b>	<b>76</b>	<b>71</b>	<b>55</b>	<b>54</b>	<b>72</b>

(a) Values are derived from all hospitals that reported to the NNAPEDCD. In addition to providing data to the NNAPEDCD for all hospitals classified to peer group A (*Principal referral and specialist women's and children's hospitals*) and B (*Large hospitals*), some states and territories provided data to the NNAPEDCD for public hospitals that were classified to other peer groups. Therefore, the proportions of emergency presentations seen on time provided here are not directly comparable to the proportions of emergency presentations seen on time provided in tables 3.10 and 3.11 for hospitals in peer groups A and B only.

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

## 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 tables that accompany this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

**Table 5.6: Emergency presentation waiting time<sup>(a)</sup> statistics, public hospital emergency departments, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12
<b>New South Wales<sup>(b)</sup></b>					
Median waiting time (minutes)	20	20	20	19	19
90th percentile waiting time (minutes)	103	107	107	108	103
Proportion seen on time (%)	76	75	75	76	76
<b>Victoria<sup>(b)</sup></b>					
Median waiting time (minutes)	23	20	22	22	21
90th percentile waiting time (minutes)	127	118	118	118	113
Proportion seen on time (%)	71	73	72	71	72
<b>Queensland</b>					
Median waiting time (minutes)	28	25	24	23	22
90th percentile waiting time (minutes)	131	119	115	111	103
Proportion seen on time (%)	63	66	66	67	69
<b>Western Australia</b>					
Median waiting time (minutes)	30	29	28	30	29
90th percentile waiting time (minutes)	131	124	113	113	104
Proportion seen on time (%)	61	62	64	63	65
<b>South Australia</b>					
Median waiting time (minutes)	29	27	24	20	15
90th percentile waiting time (minutes)	138	125	117	104	90
Proportion seen on time (%)	61	64	67	71	76
<b>Tasmania</b>					
Median waiting time (minutes)	32	31	29	29	24
90th percentile waiting time (minutes)	142	141	139	144	109
Proportion seen on time (%)	60	62	63	62	71
<b>Australian Capital Territory</b>					
Median waiting time (minutes)	40	38	36	43	38
90th percentile waiting time (minutes)	173	179	169	191	187
Proportion seen on time (%)	58	60	62	55	55
<b>Northern Territory</b>					
Median waiting time (minutes)	42	39	38	38	39
90th percentile waiting time (minutes)	182	167	152	136	158
Proportion seen on time (%)	52	54	56	58	54
<b>Total</b>					
<b>Median waiting time (minutes)</b>	<b>24</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>21</b>
<b>90th percentile waiting time (minutes)</b>	<b>124</b>	<b>119</b>	<b>115</b>	<b>114</b>	<b>108</b>
<b>Proportion seen on time (%)</b>	<b>69</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>72</b>

(a) *Waiting time* is the amount of time waited (in minutes) between the time of presentation to the emergency department and the time of commencement of clinical care.

(b) From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for, New South Wales.

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

**Table 5.7: Emergency department presentations, public hospital emergency departments, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Hospitals reporting emergency department presentations	30	22	19	7	5	2	2	2	89
Emergency department presentations	1,367,490	1,080,358	1,008,782	398,386	279,588	91,248	118,396	106,672	4,450,920
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100	100	100	100	100
<b>Large hospitals</b>									
Hospitals reporting emergency department presentations	13	12	3	7	1	1	..	..	37
Emergency department presentations	360,921	333,751	121,193	272,091	35,096	24,450	..	..	1,147,502
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100	99	..	..	100
<b>Estimated proportion of emergency occasions of service for hospitals in peer groups A and B</b>									
	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Other hospitals</b>									
Hospitals reporting emergency department presentations	52	6	4	3	8	1	..	3	77
Emergency department presentations	507,044	94,956	108,547	61,874	112,327	26,002	..	38,170	948,920
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	63	39	19	22	51	67	..	100	43
<b>Total</b>									
Hospitals reporting emergency department presentations	95	40	26	17	14	4	2	5	203
Emergency department presentations	2,235,455	1,509,065	1,238,522	732,351	427,011	141,700	118,396	144,842	6,547,342
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	88	91	72	78	80	92	100	100	84

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

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

**Table 5.8: Emergency department presentation statistics, by triage category and peer group, public hospital emergency departments, 2007–08 to 2011–12**

<b>Triage category and peer group</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>	<b>2010–11</b>	<b>2011–12</b>
<b>Coverage of episode-level data for hospitals in peer groups A and B</b>					
Hospitals reporting emergency department presentations	124	122	125	126	126
Emergency department presentations	4,895,446	4,916,994	5,183,569	5,423,125	5,598,442
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
<b>Principal referral and specialist women's and children's hospitals</b>					
Hospitals reporting emergency department presentations	81	83	84	87	89
Emergency department presentations	3,648,559	3,801,546	4,000,973	4,246,115	4,450,920
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
<b>Proportion by triage category (%)<sup>(b)</sup></b>					
Resuscitation	<1	<1	<1	<1	<1
Emergency	10	10	11	11	11
Urgent	35	35	35	36	36
Semi-urgent	44	44	43	43	43
Non-urgent	10	10	10	10	9
<i>Total</i> <sup>(c)</sup>	100	100	100	100	100
<b>Proportion seen on time (%)<sup>(b)(d)</sup></b>					
Resuscitation	100	100	100	100	100
Emergency	74	75	77	79	80
Urgent	60	61	62	62	64
Semi-urgent	62	63	64	65	67
Non-urgent	85	86	86	85	87
<i>Total</i>	65	66	67	67	69
<b>Median waiting time (minutes)<sup>(b)</sup></b>					
Resuscitation	0	0	0	0	0
Emergency	6	6	5	5	5
Urgent	24	23	22	22	21
Semi-urgent	42	41	39	38	36
Non-urgent	34	34	33	34	32
<i>Total</i>	26	25	24	24	22
<b>90th percentile waiting time (minutes)<sup>(b)</sup></b>					
Resuscitation	0	0	0	1	0
Emergency	24	23	21	20	18
Urgent	107	103	98	98	94
Semi-urgent	161	157	151	149	142
Non-urgent	146	145	144	147	137
<i>Total</i>	132	127	122	121	114
<b>Proportion ending in admission (%)<sup>(b)(e)</sup></b>					
Resuscitation	81	82	81	80	83
Emergency	64	64	64	63	64
Urgent	44	43	43	43	44
Semi-urgent	18	18	18	19	20
Non-urgent	6	6	6	6	7
<i>Total</i> <sup>(c)</sup>	31	31	31	32	33

(continued)



**Table 5.8 (continued): Emergency department statistics, by triage category, public hospital emergency departments, 2007–08 to 2011–12**

<b>Triage category and peer group</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>	<b>2010–11</b>	<b>2011–12</b>
<b>Large hospitals</b>					
Hospitals reporting emergency department presentations	43	39	41	39	37
Emergency department presentations	1,246,887	1,115,448	1,182,596	1,177,010	1,147,502
Estimated proportion of emergency occasions of service (%) <sup>(a)</sup>	100	100	100	100	100
Proportion by triage category (%) <sup>(b)</sup>					
Resuscitation	<1	<1	<1	<1	<1
Emergency	6	6	7	7	8
Urgent	27	28	28	30	31
Semi-urgent	49	48	48	49	49
Non-urgent	19	18	16	13	11
<i>Total</i> <sup>(c)</sup>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
Proportion seen on time (%) <sup>(b)(d)</sup>					
Resuscitation	99	99	99	98	99
Emergency	81	82	80	80	81
Urgent	70	72	72	70	69
Semi-urgent	69	71	71	69	70
Non-urgent	86	86	85	88	89
<i>Total</i>	<i>73</i>	<i>74</i>	<i>74</i>	<i>72</i>	<i>72</i>
Median waiting time (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	0
Emergency	5	5	5	5	5
Urgent	18	17	18	18	19
Semi-urgent	33	32	33	34	33
Non-urgent	34	34	36	32	30
<i>Total</i>	<i>24</i>	<i>22</i>	<i>23</i>	<i>23</i>	<i>22</i>
90th percentile waiting time (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	1
Emergency	18	17	18	18	17
Urgent	73	71	71	75	72
Semi-urgent	133	126	124	130	125
Non-urgent	146	145	148	135	126
<i>Total</i>	<i>117</i>	<i>110</i>	<i>110</i>	<i>110</i>	<i>105</i>
Proportion ending in admission (%) <sup>(b)(e)</sup>					
Resuscitation	64	65	63	63	65
Emergency	55	54	52	50	51
Urgent	35	36	35	33	34
Semi-urgent	13	14	13	13	13
Non-urgent	3	3	3	4	4
<i>Total</i> <sup>(c)</sup>	<i>20</i>	<i>21</i>	<i>21</i>	<i>21</i>	<i>22</i>

(continued)

**Table 5.8 (continued): Emergency department presentation statistics, by triage category, public hospital emergency departments, 2007–08 to 2011–12**

<b>Triage category and peer group</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>	<b>2010–11</b>	<b>2011–12</b>
<b>All hospitals<sup>(f)</sup></b>					
<b>Hospitals reporting emergency department presentations</b>	<b>165</b>	<b>184</b>	<b>184</b>	<b>186</b>	<b>203</b>
<b>Emergency department presentations</b>	<b>5,537,196</b>	<b>5,742,139</b>	<b>5,957,961</b>	<b>6,183,288</b>	<b>6,547,342</b>
<b>Estimated proportion of emergency occasions of service (%)<sup>(a)</sup></b>	<b>78</b>	<b>80</b>	<b>81</b>	<b>81</b>	<b>84</b>
Proportion by triage category (%) <sup>(b)</sup>					
Resuscitation	<1	<1	<1	<1	<1
Emergency	8	9	9	9	10
Urgent	31	32	32	33	34
Semi-urgent	46	45	45	45	45
Non-urgent	13	13	13	12	11
<b>Total<sup>(c)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Proportion seen on time (%) <sup>(b)(d)</sup>					
Resuscitation	100	100	100	100	100
Emergency	76	77	78	79	80
Urgent	63	64	65	65	66
Semi-urgent	66	67	68	68	70
Non-urgent	87	88	88	88	89
<b>Total</b>	<b>69</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>72</b>
Median waiting time (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	0	0
Emergency	6	5	5	5	5
Urgent	21	21	20	20	20
Semi-urgent	36	35	35	35	32
Non-urgent	28	28	28	28	27
<b>Total</b>	<b>24</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>21</b>
90th percentile waiting time (minutes) <sup>(b)</sup>					
Resuscitation	0	0	0	1	0
Emergency	23	21	20	20	18
Urgent	97	93	90	91	86
Semi-urgent	148	143	139	138	131
Non-urgent	137	134	134	133	125
<b>Total</b>	<b>124</b>	<b>119</b>	<b>115</b>	<b>114</b>	<b>108</b>
Proportion ending in admission (%) <sup>(b)(e)</sup>					
Resuscitation	78	79	78	77	80
Emergency	61	61	61	60	61
Urgent	41	40	40	40	41
Semi-urgent	16	16	16	16	17
Non-urgent	4	5	5	5	5
<b>Total<sup>(e)</sup></b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>29</b>

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

(b) Records for which the type of visit was reported as *Emergency presentation*.

(c) Includes records for which the triage category was not reported.

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

(e) This proportion is based on presentations for which the episode end status was reported as *Admitted to this hospital*.

(f) All hospitals includes hospitals not classified as peer groups A or B.

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

## 6 Outpatient care

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

### What data are reported?

#### Non-admitted patient occasions of service

The National Public Hospital Establishments Database (NPHEd) has almost complete coverage of public hospitals and includes data on non-admitted patient occasions of service for 14 non-admitted patient service types.

Outpatient-related occasions of service sourced from the NPHEd are individual and group sessions for *Allied health, Dental, Dialysis, Endoscopy and related procedures* and *Other medical/surgical/obstetric*.

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

#### Outpatient clinic activity

The NOCD is a compilation of summary data for outpatient clinic occasions of service in public hospitals. The data supplied are based on the Outpatient care NMDS, as defined in the *National health data dictionary, version 16* (AIHW 2012f). These data were provided to the AIHW for 2011–12 as counts of individual occasions of service and group sessions for 24 types of outpatient clinics.

The scope for the Outpatient care NMDS for 2011–12 was 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 2010–11* (AIHW 2012a). The public hospital peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see Appendix B).

For 2011–12, most states and territories were able to provide summary data to the NOCD for all public hospitals in peer groups A and B that managed outpatient clinic services. Some states and territories also provided outpatient care data for public hospitals that were classified to other peer groups:

- Western Australia provided data for 3 *Medium* hospitals, 2 *Remote acute* hospitals, 1 *Small non-acute* hospital and 1 *Rehabilitation* hospital
- South Australia provided data for 1 *Medium* hospital
- Tasmania provided data for 1 *Medium* hospital.

These data have also been included in analyses of NOCD data presented in this chapter. The proportion of individual outpatient occasions of service and group sessions for which clinic-level data were available was 98% for peer groups A and B. For all public hospitals the proportion was about 79% for individual occasions of service and 78% for group sessions (see Table 6.6).

**Box 6.1: What are the limitations of the data?**

When interpreting the data presented, the following should be noted:

- The data 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) that 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.
- 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 some jurisdictions, the reporting of outpatient clinic care varied over the periods 2010–11 and 2011–12, in order to align with the reporting requirements for Activity Based Funding. These changes included: the discontinuation of reporting for some activity; the commencement of reporting for some activity; and the re-categorisation of some clinics according to the Tier 2 clinics structure (IHPA 2011). Therefore, these data may not be comparable with data reported for previous years.
- Data supply issues in Victoria have resulted in significant under-reporting of non-admitted occasions of service in 2011–12 for *Dental*, *Mental health*, and *Community health*. Consequently, the 2011–12 data for Victoria are not directly comparable with previous years.
- For Western Australia, counts of outpatient group sessions reported to the NOCD reflect the number of individuals who attended group sessions. The data for Western Australian group sessions are therefore not directly comparable with the data provided for group sessions presented for other states and territories.
- For 2009–10 and 2011–12, Tasmania were not able to provide outpatient care data for one *Principal referral* hospital, which reported about 180,000 occasions of service to the NPHEd and about 134,000 occasions of service to the NOCD in 2010–11.
- For 2010–11 and 2011–12, Tasmania was able to exclude counts of outpatient occasions of service provided at public hospitals by private specialists. In previous years, these were included in Tasmania’s public hospital counts.

### Box 6.2: What methods were used?

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 reported to the NPHEd for public acute hospitals between 2007–08 and 2011–12.

During that period, outpatient care delivered in specialist outpatient clinics increased by an average of 0.8% per year and *Pharmacy, Pathology and Radiology and organ imaging* increased by 4.5% per year (Table 6.1). However, there were marked variations across the categories of non-admitted patient services that are likely to reflect changes in reporting practices across states and territories. For example, the large decrease between 2010–11 and 2011–12 for *Dental* occasions of service was largely caused by a decrease in reporting for Victoria.

**Table 6.1: Number of individual non-admitted patient occasions of service ('000) for outpatient and other services, public acute hospitals, 2007–08 to 2011–12<sup>(a)</sup>**

	2007–08	2008–09	2009–10 <sup>(b)</sup>	2010–11	2011–12 <sup>(c)</sup>	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Individual occasions of service</b>	('000)						
Outpatient-related							
Allied health	3,716	3,752	3,848	3,908	4,060	2.2	3.9
Dental <sup>(c)</sup>	1,035	775	864	886	452	–18.7	–49.0
Dialysis	25	26	50	23	19	–6.4	–16.2
Endoscopy and related procedures	47	58	55	63	60	6.1	–6.1
Other medical/surgical/obstetric	11,546	11,906	11,972	11,801	12,277	1.5	4.0
<i>Total outpatient-related   occasions of service</i>	<i>16,369</i>	<i>16,516</i>	<i>16,789</i>	<i>16,682</i>	<i>16,868</i>	<i>0.8</i>	<i>1.1</i>
Pharmacy, Pathology, Radiology and organ imaging	16,213	17,066	16,815	17,197	19,350	4.5	12.5
Mental health <sup>(c)</sup> and Alcohol and drug services	3,078	3,042	3,180	3,385	2,798	–2.4	–17.4
Community health <sup>(c)</sup> , Outreach and District nursing	5,595	5,365	5,296	5,261	6,300	3.0	19.8
<b>Total individual occasions of service</b>	<b>41,255</b>	<b>41,989</b>	<b>42,081</b>	<b>42,526</b>	<b>45,315</b>	<b>2.4</b>	<b>6.6</b>

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

(b) For 2009–10 and 2011–12, Tasmania was not able to provide occasions of service data for one hospital that reported about 180,000 non-admitted patient occasions of service to the NPHEd in 2010–11.

(c) For 2011–12, Victoria was not able to report all *Dental*, *Mental health* and *Community health* occasions of service.

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

Source: National Public Hospital Establishments Database.

## States and territories

Table 6.2 shows the number of individual occasions of service for outpatient-related services reported to the NPHEd for public acute hospitals across states and territories between 2007–08 and 2011–12.

During that period, individual *Outpatient* occasions of service increased by an average of 0.8% per year, with the Northern Territory reporting the highest increase of 9.3% per year.

For Tasmania, there was a marked decrease in the numbers of *Other non-admitted* occasions of service reported between 2009–10 and 2010–11 due to the exclusion of outpatient occasions of service provided at public hospitals by private specialists that had, in previous years, been included in Tasmania's public hospital counts.

Between 2010–11 and 2011–12, there were apparent variations in the activity reported by some jurisdictions. For Victoria, there were notable decreases in the numbers of occasions of service reported for *Dental*, *Mental health* and *Community health* due to data supply issues. For the Australian Capital Territory there were notable increases in *Pharmacy*, *Pathology*, *Radiology and organ imaging*, *Mental health*, *Alcohol and drug services* and *Community health*, *Outreach and District nursing* (see AHIW 2012a).

## How much activity was there in 2011–12?

Table 6.3 shows the number of individual occasions of service for outpatient-related care reported to the NPHEd for public acute hospitals by state and territory.

In 2011–12, public hospitals provided almost 16.9 million service episodes for outpatient-related care, including:

- 4.1 million services for *Allied health*
- 12.3 million service episodes delivered in specialist outpatient clinics for *Other medical/surgical/obstetric*.

The proportion of non-admitted patient occasions of service that are related to outpatient care varied across states, from 15% in the Australian Capital Territory to 93% in Tasmania. The largest contributor to outpatient-related services was *Other medical/surgical/obstetric* followed by *Allied health*. In Western Australia, *Allied health* was the most common type of outpatient-related services. There was also considerable variation in activity for other non-admitted patient service types across states and territories. These variations are likely to reflect differences in data recording practices.

In 2011–12, 304,000 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*, *Community health* and *Other Outreach* accounting for 52% of these sessions (Table 6.7).

**Table 6.2: Individual non-admitted patient occasions of service for outpatient and other services, public acute hospitals, states and territories, 2007–08 to 2011–12<sup>(a)</sup>**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(b)</sup></b>							
Outpatient-related	6,400,364	6,549,516	6,450,592	6,022,466	6,428,747	0.1	6.7
Other non-admitted <sup>(c)</sup>	12,414,382	13,137,117	12,523,328	12,827,589	15,095,464	5.0	17.7
Total <sup>(d)</sup>	18,814,746	19,686,633	18,973,920	18,850,055	21,524,211	3.4	14.2
<b>Victoria<sup>(b)(e)</sup></b>							
Outpatient-related	2,864,208	2,939,829	3,094,084	3,334,130	2,962,630	0.8	–11.1
Other non-admitted <sup>(c)</sup>	3,115,414	3,081,479	3,246,556	3,393,818	2,439,196	–5.9	–28.1
Total <sup>(d)</sup>	5,979,622	6,021,308	6,340,640	6,727,948	5,401,826	–2.5	–19.7
<b>Queensland</b>							
Outpatient-related	3,324,742	3,190,117	3,344,905	3,259,578	3,329,408	<0.1	2.1
Other non-admitted <sup>(c)</sup>	5,867,454	6,023,488	6,155,172	6,267,074	6,147,142	1.2	–1.9
Total <sup>(d)</sup>	9,192,196	9,213,605	9,500,077	9,526,652	9,476,550	0.8	–0.5
<b>Western Australia</b>							
Outpatient-related	1,697,777	1,775,362	1,902,060	2,021,564	2,243,413	7.2	11.0
Other non-admitted <sup>(c)</sup>	2,287,313	1,969,478	2,195,464	2,458,701	2,706,973	4.3	10.1
Total <sup>(d)</sup>	3,985,090	3,744,840	4,097,524	4,480,265	4,950,386	5.6	10.5
<b>South Australia</b>							
Outpatient-related	1,203,133	1,130,999	1,136,319	1,142,192	1,172,450	–0.6	2.6
Other non-admitted <sup>(c)</sup>	456,785	444,769	482,368	458,092	489,635	1.8	6.9
Total <sup>(d)</sup>	1,659,918	1,575,768	1,618,687	1,600,284	1,662,085	<0.1	3.9
<b>Tasmania<sup>(f)</sup></b>							
Outpatient-related	459,539	454,806	334,946	358,322	326,013	–8.2	–9.0
Other non-admitted <sup>(c)</sup>	399,480	453,849	295,280	30,335	23,308	–50.9	–23.2
Total <sup>(d)</sup>	859,019	908,655	630,226	388,657	349,321	–20.1	–10.1
<b>Australian Capital Territory</b>							
Outpatient-related	296,259	343,383	379,974	396,566	229,768	–6.2	–42.1
Other non-admitted <sup>(c)</sup>	150,878	158,941	169,808	170,225	1,294,070	71.1	660.2
Total <sup>(d)</sup>	447,137	502,324	549,782	566,791	1,523,838	35.9	168.9
<b>Northern Territory</b>							
Outpatient-related	122,694	131,993	146,607	147,188	175,162	9.3	19.0
Other non-admitted <sup>(c)</sup>	194,087	203,994	223,292	237,874	251,847	6.7	5.9
Total <sup>(d)</sup>	316,781	335,987	369,899	385,062	427,009	7.8	10.9
<b>Total</b>							
<b>Outpatient-related</b>	<b>16,368,716</b>	<b>16,516,005</b>	<b>16,789,487</b>	<b>16,682,006</b>	<b>16,867,591</b>	<b>0.8</b>	<b>1.1</b>
<b>Other non-admitted<sup>(c)</sup></b>	<b>24,885,793</b>	<b>25,473,115</b>	<b>25,291,268</b>	<b>25,843,708</b>	<b>28,447,635</b>	<b>3.4</b>	<b>10.1</b>
<b>Total<sup>(d)</sup></b>	<b>41,254,509</b>	<b>41,989,120</b>	<b>42,080,755</b>	<b>42,525,714</b>	<b>45,315,226</b>	<b>2.4</b>	<b>6.6</b>

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

(b) From 2009–10, the data for the Albury Base Hospital have been included in statistics for Victoria, whereas they were formerly reported by, and included in statistics for New South Wales.

(c) *Other Pharmacy, Pathology, Radiology and organ imaging, Mental health, Alcohol and drug, Community health and Outreach and District nursing.*

(d) Total individual occasions of service.

(e) For 2011–12, Victoria was not able to report all *Dental, Mental health* and *Community health* occasions of service.

(f) For 2009–10 and 2011–12, Tasmania was not able to provide occasions of service data for one hospital that reported about 180,000 non-admitted patient occasions of service to the NPHEd in 2010–11. From 2010–11, Tasmania excluded counts of outpatient occasions of service provided at public hospitals by private specialists. In previous years, these were included in Tasmania's public hospital counts.

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

Source: National Public Hospital Establishments Database.

**Table 6.3: Number of individual non-admitted patient occasions of service ('000)<sup>(a)</sup>, public acute hospitals, states and territories, 2011–12**

Type of service	NSW <sup>(b)</sup>	Vic <sup>(c)</sup>	Qld	WA	SA	Tas	ACT	NT <sup>(d)</sup>	Total
	('000)								
Outpatient-related									
Allied health	661	1,154	615	1,323	170	103	20	13	4,060
Dental	407	23	..	14	8	..	..	..	452
Dialysis	19	..	..	..	..	..	..	..	19
Endoscopy and related procedures	20	..	12	..	25	..	3	..	60
Other medical/surgical/obstetric	5,321	1,786	2,702	907	970	223	207	162	12,277
<i>Total outpatient occasions of service</i>	<i>6,429</i>	<i>2,963</i>	<i>3,329</i>	<i>2,243</i>	<i>1,172</i>	<i>326</i>	<i>230</i>	<i>175</i>	<i>16,868</i>
Pharmacy, Pathology, Radiology and organ imaging	9,057	2,072	5,701	1,389	238	..	640	252	19,350
Mental health and Alcohol and drug	2,271	99	66	83	17	3	259	..	2,798
Community health, Outreach and District nursing	3,768	268	380	1,235	234	21	394	..	6,300
<b>Total individual occasions of service</b>	<b>21,524</b>	<b>5,402</b>	<b>9,477</b>	<b>4,950</b>	<b>1,662</b>	<b>349</b>	<b>1,524</b>	<b>427</b>	<b>45,315</b>

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

(b) Justice Health in New South Wales reported a large number of occasions of service for *Pharmacy* and *District nursing* that may not be typical for other hospitals.

(c) Victoria was not able to report all *Dental*, *Mental health* and *Community health* occasions of services.

(d) *Radiology* figures for the Northern Territory are underestimated and *Pathology* figures relate only to three of the five hospitals.

Note: See boxes 6.1 and 6.2 for notes on data limitations and methods. Additional information for states and territories is in Table 6.7 at the end of this chapter.

Source: National Public Hospital Establishments Database.

## Individual occasions of service

In 2011–12, clinic-level data were provided to the NOCD for almost 13.8 million occasions of service for individuals (Table 6.4). Almost 52% of individual outpatient occasions of service reported to the NOCD were provided by *Allied health*, *Medical* and *Obstetrics* clinics.

For Victoria, the large decrease in the number of non-admitted occasions of service between 2010–11 and 2011–12 was due to data supply issues. Over the same period, there was a large increase in the number of occasions of service reported for *Medical* outpatient clinics for the Australian Capital Territory (see AIHW 2012a).

The estimated proportions of individual occasions of service reported to the NOCD for 2011–12 varied significantly by state and territory, ranging from 71% for Western Australia to 100% for the Australian Capital Territory (Table 6.6).

## Group occasions of service

In 2011–12, there were about 206,000 group sessions reported for non-admitted patient outpatient clinic care (Table 6.5). Almost 78% of group sessions reported to the NOCD were provided by *Allied health* clinics.

The estimated proportions of group occasions of service reported to the NOCD for 2011–12 ranged from 37% in Victoria to 100% for Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory (Table 6.6).



**Table 6.4: Outpatient care individual occasions of service<sup>(a)</sup>, by outpatient clinic type, selected public hospitals, states and territories, 2011–12**

Clinic type	NSW	Vic <sup>(b)</sup>	Qld	WA	SA	Tas <sup>(c)</sup>	ACT	NT	Total
Allied health	524,452	829,944	520,516	572,202	180,226	102,850	126,062	12,703	2,856,483
Dental	258,100	17,387	0	4,096	7,625	0	0	0	287,208
Gynaecology	63,314	48,089	60,608	20,293	37,456	6,918	3,457	6,562	246,694
Obstetrics	782,035	379,566	392,313	152,648	116,796	27,260	65,420	27,837	1,941,444
Cardiology	60,326	20,907	98,842	34,884	26,238	8,182	8,762	1,869	258,509
Endocrinology	168,454	48,784	64,780	45,077	30,539	14,255	0	2,618	374,138
Oncology	368,448	132,419	107,565	76,665	11,638	14,108	16,677	3,640	731,126
Respiratory	137,459	13,184	56,296	19,852	34,530	5,704	12,815	2,998	282,771
Gastroenterology	47,060	19,284	41,863	14,977	20,101	3,176	10,202	1,037	157,699
Medical	1,265,908	243,354	334,879	266,364	126,317	18,507	82,132	26,326	2,363,440
General practice/primary care	197,707	146	33,391	252	0	0	171,658	0	403,143
Paediatric	68,882	9,815	52,191	11,465	23,078	16,163	7,667	8,119	197,321
Endoscopy	16,477	0	11,989	0	17,535	298	0	1,360	47,659
Plastic surgery	48,260	91,078	33,186	44,701	29,575	8,989	7,560	1,955	265,304
Urology	25,581	49,656	50,644	22,329	15,136	2,552	0	593	166,491
Orthopaedic	309,706	215,008	288,315	90,528	70,125	23,737	20,099	15,781	1,033,299
Ophthalmology	110,881	96,933	82,776	59,369	67,874	12,468	0	12,792	443,093
Ear, nose and throat surgery	36,214	45,452	48,304	24,084	20,873	2,524	2,791	5,173	185,415
Pre-admission and pre-anaesthesia	200,194	83,438	137,482	51,031	47,129	10,628	9,172	8,135	547,209
Chemotherapy	85,268	1,394	9,718	640	26,653	1,029	0	3,975	128,677
Dialysis	17,974	0	0	951	0	0	0	5,242	24,167
Surgery	109,692	141,363	141,644	68,555	65,017	18,042	8,319	16,829	569,333
Paediatric surgery	5,702	12,846	7,033	441	3,717	0	0	0	29,739
Renal medicine	165,068	0	51,889	5,445	15,333	1,378	17,129	0	256,232
<b>Total</b>	<b>5,073,162</b>	<b>2,500,047</b>	<b>2,626,224</b>	<b>1,586,849</b>	<b>993,511</b>	<b>298,768</b>	<b>569,922</b>	<b>165,544</b>	<b>13,796,594</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) Victoria was not able to report all *Dental* occasions of services.

(c) For 2011–12, Tasmania was not able to provide occasions of service data for one hospital that reported about 134,000 non-admitted patient occasions of service to the NOCD in 2010–11.

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

Source: National Outpatient Care Database.

**Table 6.5: Outpatient care group occasions of service<sup>(a)</sup>, by outpatient clinic type, selected public hospitals, states and territories, 2011–12**

<b>Clinic type</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>
Allied health	10,958	10,201	12,472	117,249	7,055	96	1,344	0	159,375
Dental	25	0	0	0	0	0	0	0	25
Gynaecology	4	0	3	0	0	0	0	0	7
Obstetrics	3,893	0	2,431	1,955	970	0	1,157	0	10,406
Cardiology	942	0	1,501	0	343	47	0	0	2,833
Endocrinology	1,293	0	369	9	296	17	0	0	1,984
Oncology	496	0	34	10	0	0	0	0	540
Respiratory	1,608	0	67	0	132	0	84	0	1,891
Gastroenterology	37	0	1	0	92	0	0	0	130
Medical	14,526	515	347	1,566	7,486	0	35	3	24,478
General practice/primary care	85	13	11	29	0	0	238	0	376
Paediatric	559	0	59	0	365	0	0	0	983
Endoscopy	0	0	0	0	0	0	0	0	0
Plastic surgery	0	0	0	0	552	0	0	0	552
Urology	14	0	0	0	0	0	0	0	14
Orthopaedic	403	0	0	0	13	0	0	0	416
Ophthalmology	0	0	0	0	0	0	0	0	0
Ear, nose and throat surgery	1	0	0	0	0	0	0	0	1
Pre-admission and pre-anaesthesia	119	0	0	0	0	0	1	0	120
Chemotherapy	272	0	0	0	0	0	0	0	272
Dialysis	21	0	0	0	0	0	0	0	21
Surgery	58	0	128	0	179	0	0	0	365
Paediatric surgery	0	0	0	0	0	0	0	0	0
Renal medicine	470	0	10	0	7	0	278	0	765
<b>Total</b>	<b>35,784</b>	<b>10,729</b>	<b>17,433</b>	<b>120,818</b>	<b>17,490</b>	<b>160</b>	<b>3,137</b>	<b>3</b>	<b>205,554</b>

(a) There were variations among jurisdictions in the reporting of occasions of service because of differences in admission practices and in the types of facilities offering these services. There were no group sessions reported for *Endoscopy*, *Ophthalmology* and *Paediatric Surgery*.

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

Source: National Outpatient Care Database.

**Table 6.6: Outpatient occasions of service, by public hospital peer group, states and territories, 2011–12**

Peer group	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Principal referral and specialist women's and children's hospitals</b>									
Hospitals reporting to NOCD									
Individual occasions of service	31	22	20	6	5	1	2	2	89
Group occasions of service	30	14	16	6	5	0	2	1	74
Occasions of service									
Individual	4,540,820	2,033,055	2,482,827	1,062,481	859,931	183,321	569,922	165,544	11,881,581
Group	30,709	6,637	16,320	61,467	15,318	0	3,137	3	133,591
<b>Large hospitals</b>									
Hospitals reporting to NOCD									
Individual occasions of service	13	14	3	6	2	1	..	..	39
Group occasions of service	12	10	2	6	2	1	..	..	33
Occasions of service reported									
Individual	532,342	466,992	143,397	302,705	122,482	69,558	..	..	1,636,363
Group	5,075	4,092	1,113	31,549	2,036	117	..	..	43,982
<b>Other hospitals</b>									
Hospitals reporting to NOCD	0	0	0	7	1	1	0	0	9
Individual occasions of service	..	..	..	221,663	11,098	45,889	..	..	278,650
Group occasions of service	..	..	..	27,802	136	43	..	..	27,981
<b>Total</b>									
Hospitals reporting to NOCD									
Individual occasions of service	44	36	23	19	8	3	2	2	137
Group occasions of service	42	24	18	19	8	2	2	1	116
Occasions of service reported									
Individual	5,073,162	2,500,047	2,626,224	1,586,849	993,511	298,768	569,922	165,544	13,796,594
Group	35,784	10,729	17,433	120,818	17,490	160	3,137	3	205,554
Estimated proportion of occasions of service in NOCD <sup>(b)</sup>									
Individual	79	84	79	71	85	77	100	93	79
Group	59	37	82	100	95	100	100	100	70

(a) Victoria was not able to report all *Dental*, *Mental health* and *Community health* occasions of service.

(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.

Source: National Outpatient Care Database.

**Table 6.7: Non-admitted patient occasions of service, public acute hospitals, states and territories, 2011–12**

Type of non-admitted patient service	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT <sup>(b)</sup>	Total
<b>Individual occasions of service</b>									
Outpatient-related									
Allied health	661,364	1,153,840	615,174	1,323,002	169,619	103,166	20,042	13,320	4,059,527
Dental	407,418	23,278	..	13,513	7,637	0	..	..	451,846
Dialysis	19,471	..	..	..	0	..	..	..	19,471
Endoscopy and related procedures	19,625	..	12,145	..	24,909	..	2,828	..	59,507
Other medical/surgical/obstetric <sup>(c)</sup>	5,320,869	1,785,512	2,702,089	906,898	970,285	222,847	206,898	161,842	12,277,240
<i>Total outpatient occasions of service</i>	<i>6,428,747</i>	<i>2,962,630</i>	<i>3,329,408</i>	<i>2,243,413</i>	<i>1,172,450</i>	<i>326,013</i>	<i>229,768</i>	<i>175,162</i>	<i>16,867,591</i>
Mental health	1,014,067	n.a.	33,010	82,930	16,877	2,681	259,257	..	1,408,822
Alcohol and drug	1,256,848	99,356	32,997	..	..	..	..	..	1,389,201
Pharmacy <sup>(d)</sup>	4,199,079	481,973	618,792	255,820	..	..	39,428	35,550	5,630,642
Community health	1,646,019	10,643	125,390	959,942	1,920	20,627	394,483	..	3,159,024
District nursing <sup>(d)</sup>	1,575,712	253,560	122,512	150,314	5,858	..	..	..	2,107,956
Pathology	3,965,916	912,193	4,041,412	667,367	..	..	540,400	124,567	10,251,855
Radiology and organ imaging	891,658	677,531	1,041,237	466,017	238,331	..	60,502	91,730	3,467,006
Other outreach	546,165	3,940	131,792	124,583	226,649	0	0	0	1,033,129
<b>Total individual occasions of service</b>	<b>21,524,211</b>	<b>5,401,826</b>	<b>9,476,550</b>	<b>4,950,386</b>	<b>1,662,085</b>	<b>349,321</b>	<b>1,523,838</b>	<b>427,009</b>	<b>45,315,226</b>

(continued)

**Table 6.7 (continued): Non-admitted patient occasions of service, public acute hospitals, states and territories, 2011–12**

Type of non-admitted patient service	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT <sup>(b)</sup>	Total
<b>Group sessions</b>									
Outpatient care									
Allied health	14,039	25,445	15,383	22,647	7,403	..	307	..	85,224
Dental	67	..	..	6	..	..	..	..	73
Other medical/surgical/obstetric <sup>(c)</sup>	37,749	1,528	5,767	502	11,026	..	12	3	56,587
<i>Total outpatient occasions of service</i>	<i>51,876</i>	<i>26,973</i>	<i>21,150</i>	<i>23,155</i>	<i>18,429</i>	<i>..</i>	<i>319</i>	<i>3</i>	<i>141,905</i>
Mental health	29,808	..	..	4,352	475	..	6,025	..	40,660
Alcohol and drug	704	..	255	n.a.	0	..	..	..	959
Community health	29,702	..	926	30,015	0	..	33	..	60,676
District nursing	3,089	..	7	1,678	0	..	..	..	4,774
Other outreach	8,724	..	86	2,184	43,788	..	..	..	54,782
Other	74	0	0	101	0	..	..	..	175
<b>Total group sessions<sup>(e)</sup></b>	<b>123,977</b>	<b>26,973</b>	<b>22,424</b>	<b>61,485</b>	<b>62,692</b>	<b>..</b>	<b>6,377</b>	<b>3</b>	<b>303,931</b>

(a) Victoria was not able to report all *Dental*, *Mental health* and *Community health* occasions of service.

(b) *Radiology* figures for the Northern Territory are underestimated and *Pathology* figures relate only to three of the five hospitals.

(c) *Other medical/surgical/obstetric* relates to the NOCD outpatient services of *Gynaecology*, *Obstetrics*, *Cardiology*, *Endocrinology*, *Oncology*, *Respiratory*, *Gastroenterology*, *Medical*, *General practice primary care*, *Paediatric*, *Plastic surgery*, *Urology*, *Orthopaedic surgery*, *Ophthalmology*, *Ear, nose and throat*, *Chemotherapy*, *Paediatric surgery* and *Renal medical*.

(d) Justice Health (formerly known as Corrections Health) in New South Wales reported a large number of occasions of service for *Pharmacy* and *District nursing* that may not be typical for other hospitals.

(e) Includes any group sessions for *Dialysis* and *Endoscopy and related procedures*.

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

Source: National Public Hospital Establishments Database.

## 7 Admitted patient care: overview

This chapter draws on data from the NHMD to present an overview of admitted patient care in Australia's hospitals.

Subsequent chapters present information on the following subsets of admitted patient care:

- same-day acute admitted patient care (Chapter 8)
- overnight acute admitted patient care (Chapter 9)
- surgery for admitted patients (Chapter 10)
- sub- and non-acute care (Chapter 11).

### What data are reported?

The NHMD contains episode-level records from admitted patient morbidity data collection systems in Australian hospitals. The data in this chapter include administrative, demographic and clinical data.

Administrative data provide information on:

- how patients were admitted
- how patient care ended
- length of stay in hospital
- the source of funding.

Demographic data provide information on the patient's:

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

Clinical data provide information on:

- the type of care provided
- principal and additional diagnoses, including external cause of injury or poisoning
- procedures or interventions
- 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. An additional diagnosis is reported if the condition affects patient management.

A **procedure** is a clinical intervention that is surgical in nature, carries an anaesthetic risk, requires specialised training and/or requires special facilities or services available only in an acute care setting. Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures, such as X-rays. Patient support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included.

**Australian Refined Diagnosis Related Groups (AR-DRG)** is a classification system developed to 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, which are divided into *Surgical*, *Medical* and *Other* partitions, and then into 708 individual AR-DRGs (in AR-DRG version 6.0x).

In 2011–12, diagnoses and external causes of injury were recorded using the 7th edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2010). It comprises classifications of diseases and external causes of injuries and poisoning, based on the World Health Organization's version of ICD-10. The ICD-10-AM classification is hierarchical, with 20 summary disease chapters that are divided into a large number of more specific disease groupings. See Appendix B for more information.

(continued)

**Box 7.1 (continued)**

Procedures were recorded using the 7th edition of the *Australian Classification of Health Interventions* (ACHI) (NCCH 2010). The ACHI classification is divided into 20 chapters by anatomical site. These subchapters are further divided into more specific procedure blocks, ordered from the least invasive to the most invasive. The blocks, which are numbered sequentially, group the very specific procedure information. In this publication, procedures are mostly presented based on the ACHI procedure chapters and the ACHI procedure blocks. See Appendix B for more information.

See the Glossary for more terms relating to admitted patient care.

**Box 7.2: What are the limitations of the data?**

When interpreting the data presented, the following should be noted:

- Coverage for the NHMD is essentially complete. For 2011–12, 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.
- There may be variation among states and territories in the use of statistical discharges and the assignment of care types (see Appendix A).
- In 2011–12, it is estimated that 88% of Indigenous patients were correctly identified in Australian public hospitals. The overall quality of the data provided for Indigenous status in 2011–12 is considered to be in need of some improvement and varied between states and territories (AIHW forthcoming) (see Appendix B).
- Data on state of hospitalisation should be interpreted with caution because of cross-border flows of patients (see Appendix A). This is particularly important for the Australian Capital Territory. In 2011–12, about 20% of separations for the Australian Capital Territory hospitals were for patients who lived in New South Wales.

See appendixes A and B for more information.



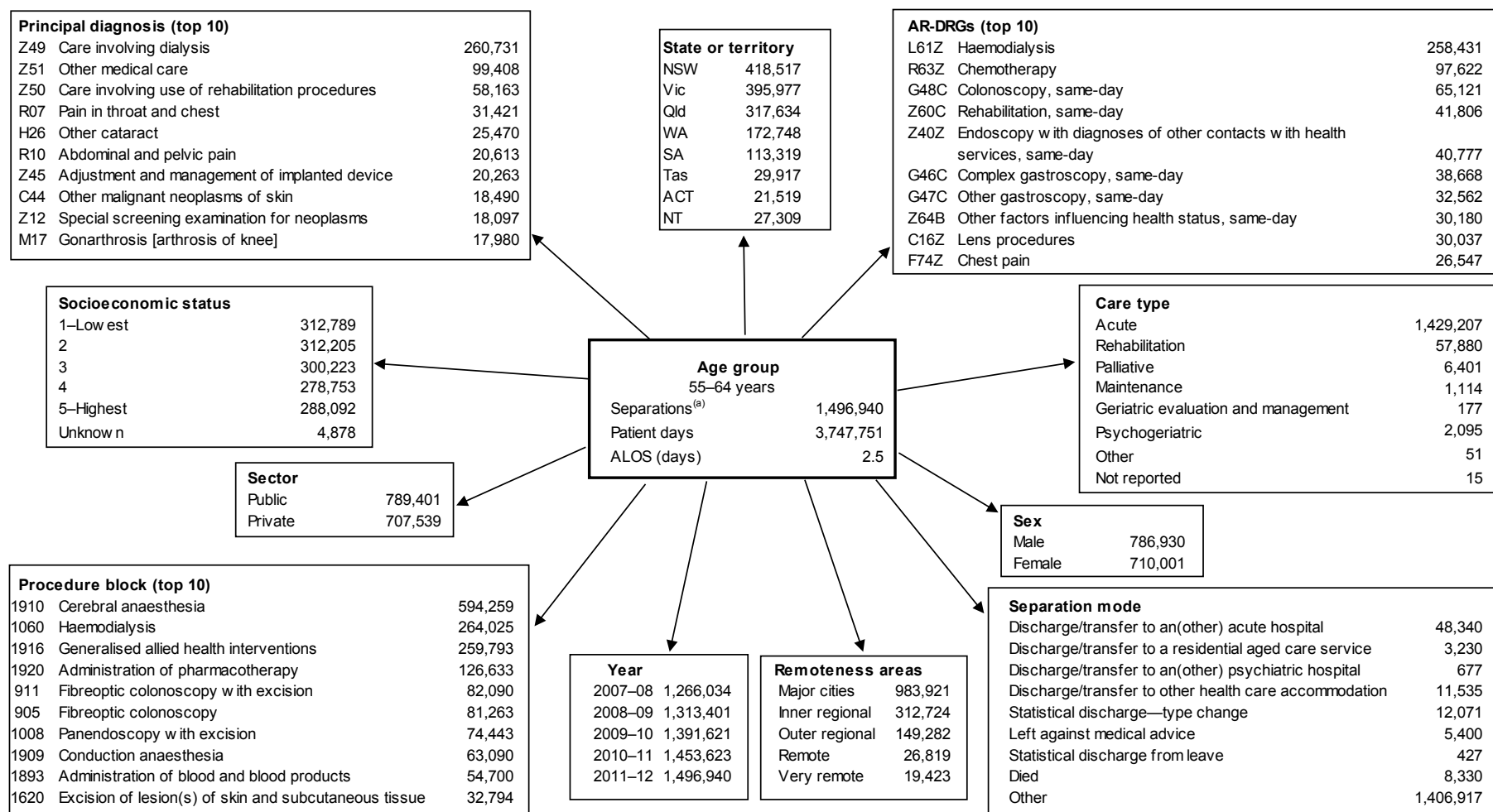
### Box 7.3: What methods were used?

- Unless otherwise indicated in footnotes, separations with a care type of *Newborn* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.
- The patient's age is calculated at the date of admission.
- In tables by age group and sex, separations for which age and sex were not reported are included in totals. In 2011–12, there were 73 separations that did not have sex reported as male or female, and 6 separations for which date of birth was not reported (so age could not be calculated).
- Separation rates are age standardised as detailed in Appendix B.
- 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).
- Data 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).
- 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.
- *Other Australians* includes separations for which the Indigenous status was not reported.

See Appendix B for more information.

Figure 7.1 demonstrates some of the data included in the NHMD using the example of separations for admitted patients aged 55 to 64 years. In 2011–12:

- there were about 1.5 million separations for people aged 55 to 64
- the number of separations for people aged 55 to 64 increased by 18% over the period 2007–08 to 2011–12, an average annual increase of 4.3%
- most of these separations were for acute care (95%) or rehabilitation care (4%)
- 53% of these separations were for men
- 53% of these separations were in public hospitals
- the vast majority of separations (94%) had a separation mode of *Other*, suggesting that these patients went home at the end of their care, and just over 3% were discharged or transferred to another hospital
- among the most common principal diagnoses were care involving dialysis, other medical care (which includes chemotherapy and palliative care) and care involving the use of rehabilitation procedures
- the most common AR-DRG was *Haemodialysis*
- the most common procedures were *Cerebral anaesthesia*, *Haemodialysis* and *Generalised allied health intervention*, which includes interventions such as physiotherapy, occupational therapy, social work and dietetics.



ALOS—average length of stay; AR-DRG—Australian Refined Diagnosis Related Group.

Figure 7.1: Data reported for separations for persons aged 55–64 years, all hospitals, 2011–12

## How has activity changed over time?

From 2010–11 to 2011–12, separations rose 4.6% to 9.3 million (Table 7.1). The increase in separations was higher in private hospitals (4.8%) than in public hospitals (4.4%).

Between 2007–08 and 2011–12, the number of separations rose by an average of 4.1% per year (Table 7.1). Over that period, the average annual rise in separations was higher in private hospitals than in public hospitals. The largest increases in acute separation rates were seen for private hospital same-day separations (4.9% per year).

The largest increases in separations occurred for sub- and non-acute care, which increased by an average of 7.6% per year for public hospitals and 16.8% per year for private hospitals between 2007–08 to 2011–12 (see Chapter 11 for more information on sub- and non-acute care).

**Table 7.1: Separations, by type of care, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Acute <sup>(a)</sup>	4,608,000	4,748,075	4,916,330	5,114,373	5,329,166	3.7	4.2
Same-day	2,342,455	2,438,918	2,548,838	2,660,640	2,777,380	4.3	4.4
Surgical <sup>(b)</sup>	348,862	359,435	365,562	373,252	380,885	2.2	2.0
Other <sup>(c)</sup>	1,993,593	2,079,483	2,183,276	2,287,388	2,396,495	4.7	4.8
Overnight	2,265,545	2,309,157	2,367,492	2,453,733	2,551,786	3.0	4.0
Surgical <sup>(b)</sup>	509,979	526,808	540,062	556,447	569,746	2.8	2.4
Other <sup>(c)</sup>	1,755,566	1,782,349	1,827,430	1,897,286	1,982,040	3.1	4.5
Sub- and non-acute <sup>(d)</sup>	135,562	142,600	152,578	164,499	181,926	7.6	10.6
<b>Total public hospitals<sup>(e)</sup></b>	<b>4,744,060</b>	<b>4,891,023</b>	<b>5,069,288</b>	<b>5,279,132</b>	<b>5,511,492</b>	<b>3.8</b>	<b>4.4</b>
<b>Private hospitals</b>							
Acute <sup>(a)</sup>	2,999,629	3,105,309	3,277,060	3,357,966	3,502,827	4.0	4.3
Same-day	1,983,181	2,082,968	2,216,940	2,282,843	2,399,171	4.9	5.1
Surgical <sup>(b)</sup>	675,710	703,982	743,928	761,808	805,846	4.5	5.8
Other <sup>(c)</sup>	1,307,471	1,378,986	1,473,012	1,521,035	1,593,325	5.1	4.8
Overnight	1,016,448	1,022,341	1,060,120	1,075,123	1,103,656	2.1	2.7
Surgical <sup>(b)</sup>	521,459	533,197	553,920	565,565	581,538	2.8	2.8
Other <sup>(c)</sup>	494,989	489,144	506,200	509,558	522,118	1.3	2.5
Sub- and non-acute <sup>(d)</sup>	130,068	151,923	184,461	215,393	241,791	16.8	12.3
<b>Total private hospitals<sup>(e)</sup></b>	<b>3,129,885</b>	<b>3,257,425</b>	<b>3,461,715</b>	<b>3,573,418</b>	<b>3,744,677</b>	<b>4.6</b>	<b>4.8</b>
<b>Total<sup>(e)</sup></b>	<b>7,873,945</b>	<b>8,148,448</b>	<b>8,531,003</b>	<b>8,852,550</b>	<b>9,256,169</b>	<b>4.1</b>	<b>4.6</b>

(a) *Acute* admitted patient care includes separations for which the care type was reported as *Acute*, *Newborn* (with qualified days) or was not reported.

(b) *Surgical* separations are defined as acute care separations with a surgical procedure reported, based on the procedures used to define 'surgical' DRGs in AR-DRG, version 6.0x (DoHA 2011).

(c) *Other* separations are those classified as acute care but not involving a surgical (or operating room) procedure. This can include non-operating room procedures such as endoscopy.

(d) *Sub- and non-acute* care includes *Rehabilitation*, *Palliative*, *Geriatric evaluation and management*, *Psychogeriatric* and *Maintenance* care types.

(e) Total includes separations with a care type of *Other admitted patient care*.

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

## States and territories

Between 2007–08 and 2011–12, the number of public hospital separations increased at a greater rate than the national average in Queensland, Western Australia, the Australian Capital Territory and the Northern Territory (Table 7.2).

Between 2010–11 and 2011–12, larger than average single-year increases in the number of public hospital separations were recorded for New South Wales, Western Australia and the Northern Territory (Table 7.2). Over the same period, above-average increases in the number of private hospital separations were recorded in New South Wales and Queensland.

**Table 7.2: Separations for public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(a)</sup></b>							
Public hospitals	1,466,737	1,505,969	1,542,968	1,582,804	1,660,602	3.2	4.9
Private hospitals	857,920	907,214	960,706	1,011,887	1,070,140	5.7	5.8
<i>Total</i>	<i>2,324,657</i>	<i>2,413,183</i>	<i>2,503,674</i>	<i>2,594,691</i>	<i>2,730,742</i>	<i>4.1</i>	<i>5.2</i>
<b>Victoria<sup>(a)</sup></b>							
Public hospitals	1,351,171	1,379,624	1,424,663	1,496,041	1,543,773	3.4	3.2
Private hospitals	802,291	811,020	885,776	875,470	917,810	3.4	4.8
<i>Total</i>	<i>2,153,462</i>	<i>2,190,644</i>	<i>2,310,439</i>	<i>2,371,511</i>	<i>2,461,583</i>	<i>3.4</i>	<i>3.8</i>
<b>Queensland</b>							
Public hospitals	831,965	883,340	922,970	964,349	1,001,215	4.7	3.8
Private hospitals	780,299	813,941	844,953	859,202	901,188	3.7	4.9
<i>Total</i>	<i>1,612,264</i>	<i>1,697,281</i>	<i>1,767,923</i>	<i>1,823,551</i>	<i>1,902,403</i>	<i>4.2</i>	<i>4.3</i>
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	458,202	467,433	505,909	548,272	588,143	6.4	7.3
Private hospitals	325,418	362,162	381,300	417,761	436,319	7.6	4.4
<i>Total</i>	<i>783,620</i>	<i>829,595</i>	<i>887,209</i>	<i>966,033</i>	<i>1,024,462</i>	<i>6.9</i>	<i>6.0</i>
<b>South Australia<sup>(a)</sup></b>							
Public hospitals	368,330	374,540	383,055	390,154	407,315	2.5	4.4
Private hospitals	243,597	255,500	270,015	283,281	289,980	4.5	2.4
<i>Total</i>	<i>611,927</i>	<i>630,040</i>	<i>653,070</i>	<i>673,435</i>	<i>697,295</i>	<i>3.3</i>	<i>3.5</i>
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	96,270	94,892	101,673	99,333	99,632	0.9	0.3
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	81,127	89,869	88,356	93,745	97,455	4.7	4.0
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	90,258	95,356	99,694	104,434	113,357	5.9	8.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>4,744,060</b>	<b>4,891,023</b>	<b>5,069,288</b>	<b>5,279,132</b>	<b>5,511,492</b>	<b>3.8</b>	<b>4.4</b>
<b>Private hospitals</b>	<b>3,129,885</b>	<b>3,257,425</b>	<b>3,461,715</b>	<b>3,573,418</b>	<b>3,744,677</b>	<b>4.6</b>	<b>4.8</b>
<b>Total</b>	<b>7,873,945</b>	<b>8,148,448</b>	<b>8,531,003</b>	<b>8,852,550</b>	<b>9,256,169</b>	<b>4.1</b>	<b>4.6</b>

(a) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Appendix A for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in Table 7.29 at the end of this chapter.

Between 2007–08 and 2011–12, the numbers of public hospital patient days increased at a higher rate than the national average for Victoria, Queensland, Western Australia, the Australian Capital Territory and the Northern Territory (Table 7.3). The decrease in patient days for Tasmanian public hospitals over the same period may, in part, reflect changes in the reporting of psychiatric care.

**Table 7.3: Patient days for public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(a)</sup></b>							
Public hospitals	6,226,798	6,114,244	6,061,168	6,192,497	6,434,979	0.8	3.9
Private hospitals	2,062,431	2,121,237	2,225,185	2,330,294	2,452,877	4.4	5.3
<i>Total</i>	<i>8,289,229</i>	<i>8,235,481</i>	<i>8,286,353</i>	<i>8,522,791</i>	<i>8,887,856</i>	<i>1.8</i>	<i>4.3</i>
<b>Victoria<sup>(a)</sup></b>							
Public hospitals	4,447,962	4,499,508	4,606,599	4,722,672	4,782,281	1.8	1.3
Private hospitals	2,091,331	2,060,800	2,235,086	2,166,659	2,261,615	2.0	4.4
<i>Total</i>	<i>6,539,293</i>	<i>6,560,308</i>	<i>6,841,685</i>	<i>6,889,331</i>	<i>7,043,896</i>	<i>1.9</i>	<i>2.2</i>
<b>Queensland</b>							
Public hospitals	2,992,821	3,072,713	3,128,097	3,206,398	3,262,934	2.2	1.8
Private hospitals	1,950,420	2,005,809	2,062,543	2,093,296	2,177,232	2.8	4.0
<i>Total</i>	<i>4,943,241</i>	<i>5,078,522</i>	<i>5,190,640</i>	<i>5,299,694</i>	<i>5,440,166</i>	<i>2.4</i>	<i>2.7</i>
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	1,630,285	1,647,019	1,722,439	1,779,052	1,856,812	3.3	4.4
Private hospitals	782,787	819,851	829,497	886,003	905,529	3.7	2.2
<i>Total</i>	<i>2,413,072</i>	<i>2,466,870</i>	<i>2,551,936</i>	<i>2,665,055</i>	<i>2,762,341</i>	<i>3.4</i>	<i>3.7</i>
<b>South Australia<sup>(a)</sup></b>							
Public hospitals	1,615,367	1,598,610	1,591,333	1,614,514	1,679,153	1.0	4.0
Private hospitals	613,980	609,747	617,179	625,664	634,321	0.8	1.4
<i>Total</i>	<i>2,229,347</i>	<i>2,208,357</i>	<i>2,208,512</i>	<i>2,240,178</i>	<i>2,313,474</i>	<i>0.9</i>	<i>3.3</i>
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	384,723	394,285	423,915	372,761	353,640	-2.1	-5.1
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	277,429	292,947	296,483	311,607	326,778	4.2	4.9
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	260,559	269,856	272,712	287,518	294,459	3.1	2.4
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>17,835,944</b>	<b>17,889,182</b>	<b>18,102,746</b>	<b>18,487,019</b>	<b>18,991,036</b>	<b>1.6</b>	<b>2.7</b>
<b>Private hospitals</b>	<b>7,806,573</b>	<b>7,892,929</b>	<b>8,262,177</b>	<b>8,407,813</b>	<b>8,745,214</b>	<b>2.9</b>	<b>4.0</b>
<b>Total</b>	<b>25,642,517</b>	<b>25,782,111</b>	<b>26,364,923</b>	<b>26,894,832</b>	<b>27,736,250</b>	<b>2.0</b>	<b>3.1</b>

(a) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Appendix A for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in Table 7.29 at the end of this chapter.

## Overnight and same-day separations

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.

### Overnight separations

Rates of overnight separations in public hospitals ranged from 90 per 1,000 in Tasmania to 191 per 1,000 in the Northern Territory (Table 7.4). For private hospitals, rates of overnight separations ranged from 39 per 1,000 in New South Wales to 63 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 76% of overnight separations were for Australian Capital Territory residents, with most of the remainder for residents of New South Wales.

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

**Table 7.4: Overnight separations per 1,000 population, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
Public	120.4	113.4	109.6	114.9	122.4	89.7	128.2	190.7	116.2
Private	38.7	52.3	62.5	56.1	49.2	n.p.	n.p.	n.p.	49.4
<b>Indigenous status</b>									
Indigenous	277.4	279.3	290.6	399.6	376.8	118.3	282.5	372.3	308.9
Other Australians <sup>(a)</sup>	158.3	166.6	168.1	164.3	170.6	89.1	126.2	118.8	161.4
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	153.8	157.0	160.3	159.1	160.7	..	141.1	..	156.6
Inner regional	166.4	188.0	184.4	181.5	169.6	134.8	n.p.	..	175.8
Outer regional	180.3	210.1	183.6	203.9	232.4	133.9	..	167.0	187.8
Remote	257.7	276.3	226.4	217.9	208.0	151.5	..	221.8	224.0
Very remote	273.8	..	262.2	239.1	226.7	209.0	..	329.4	270.1
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1–Lowest	172.4	169.2	198.4	270.5	201.5	131.8	n.p.	263.8	183.3
2	156.8	189.1	186.7	180.4	170.4	176.4	n.p.	270.2	172.6
3	172.9	171.2	169.9	164.2	164.4	138.5	289.8	255.4	169.9
4	146.8	159.0	161.4	163.6	151.9	127.3	190.3	138.7	156.1
5–Highest	141.4	144.6	138.2	149.7	136.1	..	131.4	180.9	142.1
<b>Total</b>	<b>159.1</b>	<b>165.8</b>	<b>172.1</b>	<b>170.9</b>	<b>171.7</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>165.7</b>

(a) *Other Australians* includes records for which Indigenous status was not reported.

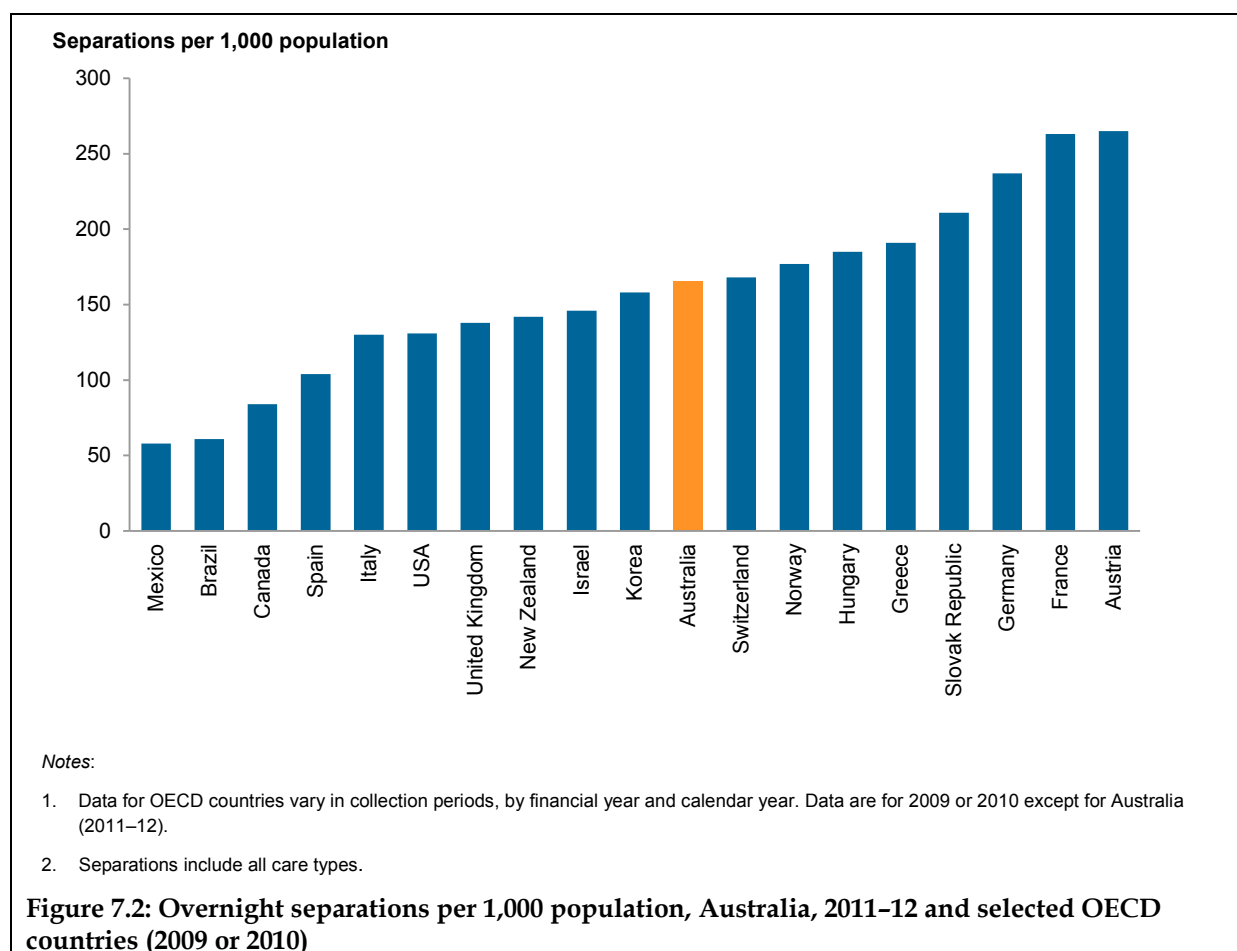
(b) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.

(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 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## International comparison – overnight separations

The number of overnight separations per 1,000 population in Australia for 2011–12 was in the middle of the range that other OECD countries reported for recent years (Figure 7.2) (OECD 2012).



## Same-day separations

The number of same-day separations may not be comparable among the states and territories due to variations in admission practices. Therefore, these data should be interpreted with caution.

Rates of same-day separations in public hospitals ranged from 90 per 1,000 in Tasmania to 354 per 1,000 in the Northern Territory (Table 7.5). For private hospitals, rates of same-day separations ranged from 99 per 1,000 in New South Wales to 133 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 82% of same-day separations were for Australian Capital Territory residents, with most of the remainder being for residents of New South Wales.

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

**Table 7.5: Same-day separations per 1,000 population, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Hospital sector</b>									
Public	95.6	151.4	110.8	133.9	105.2	90.1	150.6	354.0	120.2
Private	99.0	103.5	132.7	127.0	106.3	n.p.	n.p.	n.p.	108.8
<b>Indigenous status</b>									
Indigenous	336.7	528.0	547.9	1,162.8	785.4	105.2	370.0	1,406.4	661.8
Other Australians <sup>(a)</sup>	191.8	252.5	235.7	243.8	204.6	89.0	147.4	111.3	218.1
<b>Remoteness of residence<sup>(b)</sup></b>									
Major cities	201.5	260.1	249.0	274.3	223.3	..	193.7	..	234.9
Inner regional	185.0	240.0	240.6	230.8	174.7	179.1	n.p.	..	214.5
Outer regional	160.5	248.9	226.2	208.5	195.6	152.7	..	273.0	206.9
Remote	181.6	351.2	218.0	268.6	155.4	114.1	..	304.8	230.3
Very remote	196.8	..	191.7	177.6	156.0	131.1	..	891.0	323.7
<b>Socioeconomic status of area of residence<sup>(c)</sup></b>									
1–Lowest	182.6	263.2	241.0	281.3	218.2	157.6	n.p.	601.1	224.1
2	171.4	265.6	244.7	273.5	201.3	201.4	n.p.	386.1	215.7
3	218.7	250.8	239.0	253.3	202.0	188.3	277.5	441.5	238.0
4	183.5	252.8	249.5	246.6	219.8	172.7	254.8	154.3	228.5
5–Highest	228.1	245.2	243.9	266.6	210.4	..	183.5	273.2	236.9
<b>Total</b>	<b>194.6</b>	<b>255.0</b>	<b>243.4</b>	<b>260.9</b>	<b>211.4</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>228.9</b>

(a) *Other Australians* includes records for which Indigenous status was not reported.

(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 7.1, 7.2 and 7.3 for notes on data limitations and methods.

## Who used these services?

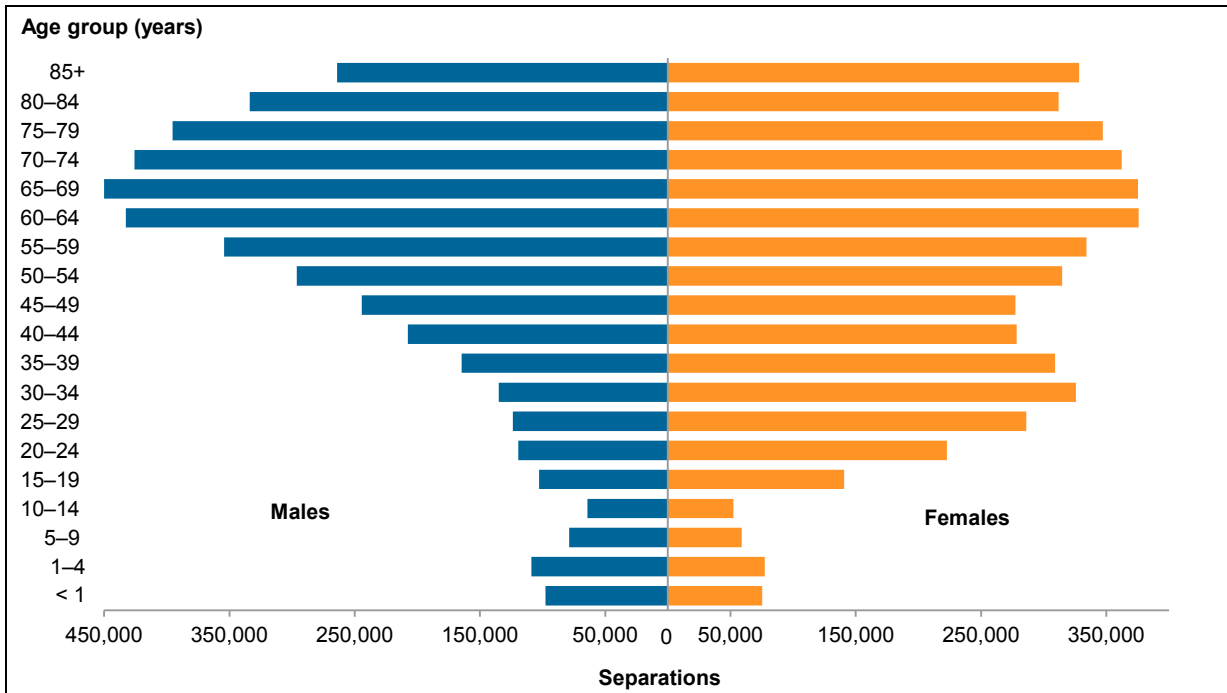
### Sex and age group

In 2011–12, overall there were about 4.9 million separations for females, compared with about 4.4 million separations for males. People aged 65 and over accounted for 39% of separations (Figure 7.3).

In 2011–12, there were more separations per 1,000 population for females than for males in the age groups 15 to 54 (Figure 7.4). Separation rates increased markedly with age for both males and females aged 55 and over.

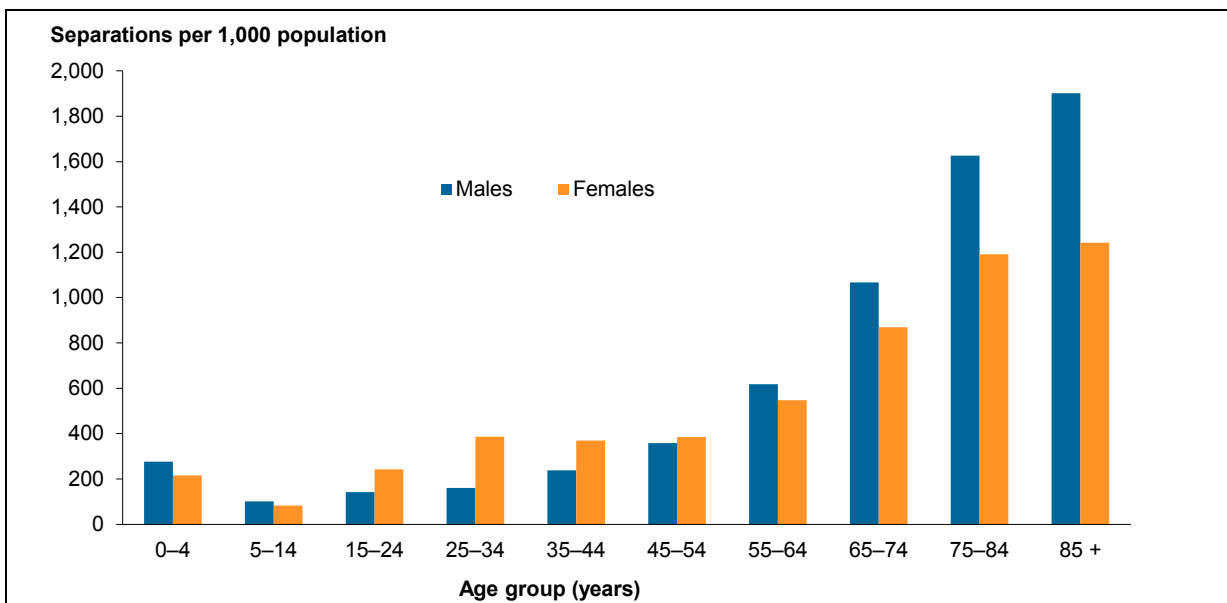
Females accounted for more patient days than males (Figure 7.5). People aged 65 and over accounted for 48% of patient days in 2011–12.





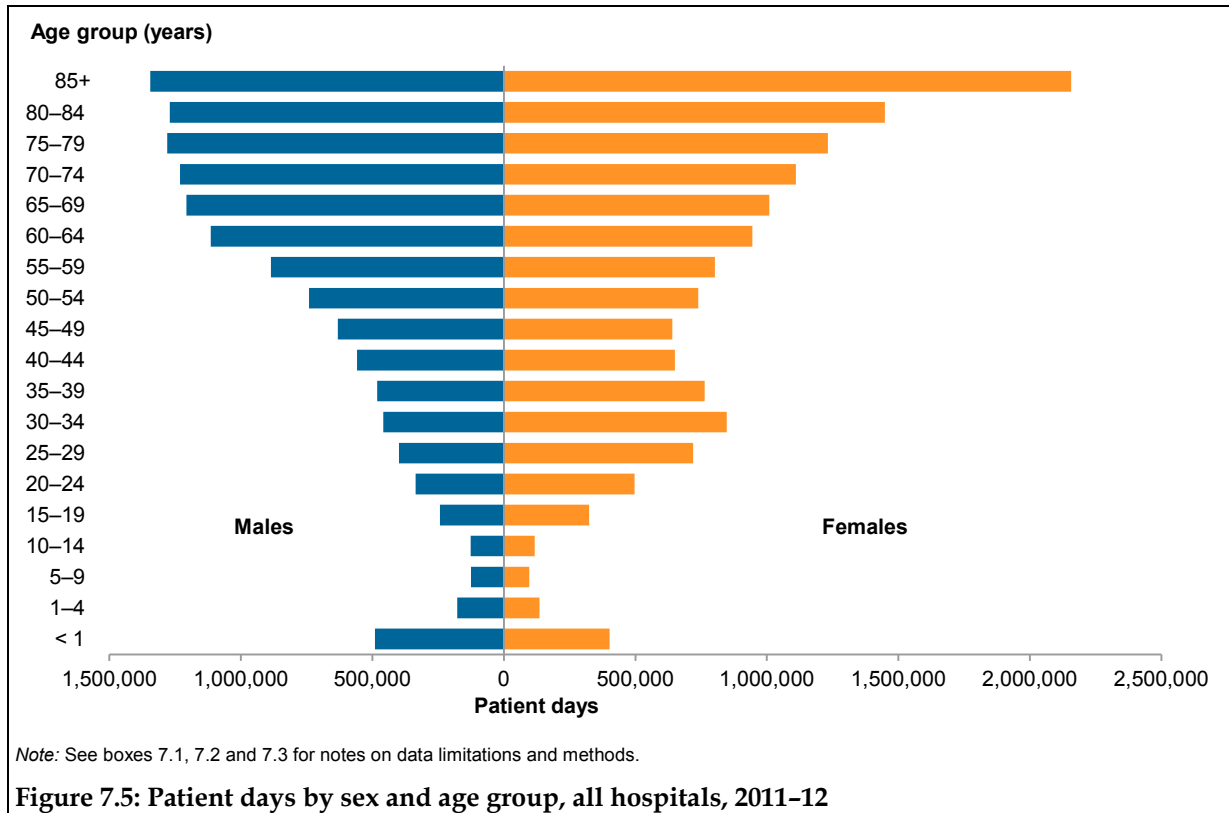
Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables 7.38 and 7.39 at the end of this chapter.

**Figure 7.3: Separations by sex and age group, all hospitals, 2011-12**



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

**Figure 7.4: Separations per 1,000 population by sex and age group, all hospitals, 2011-12**

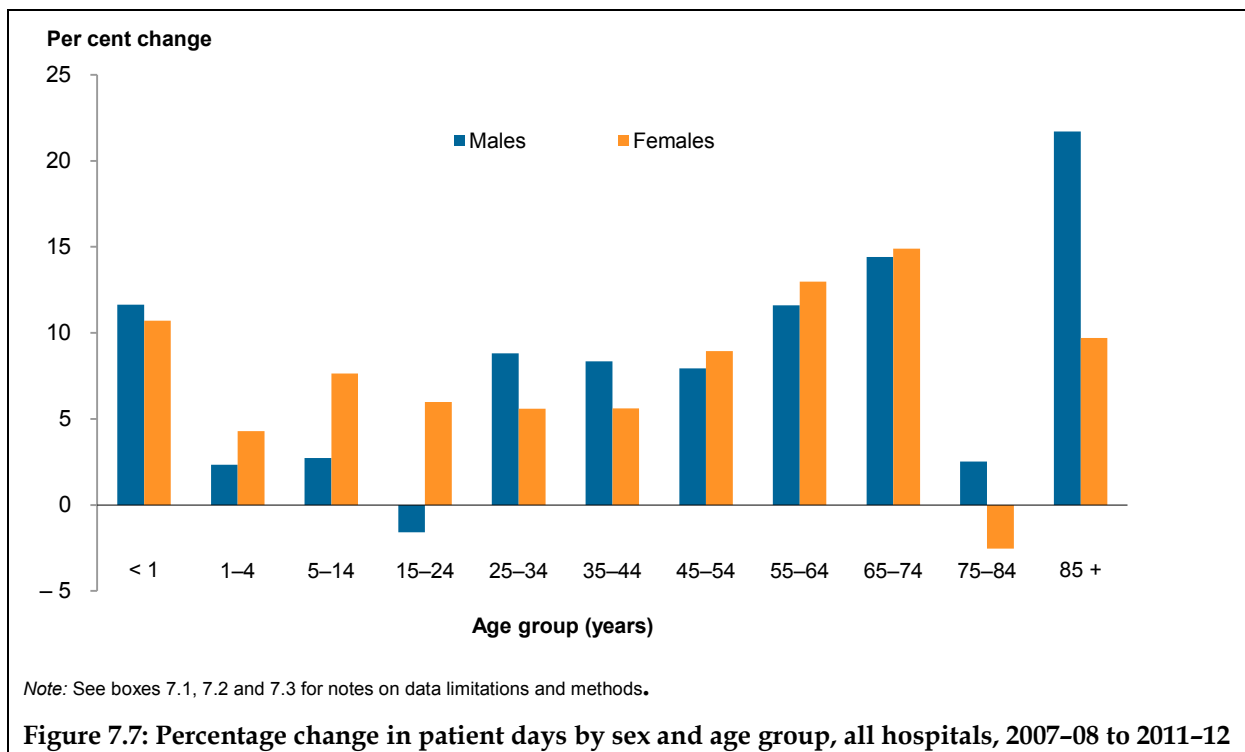
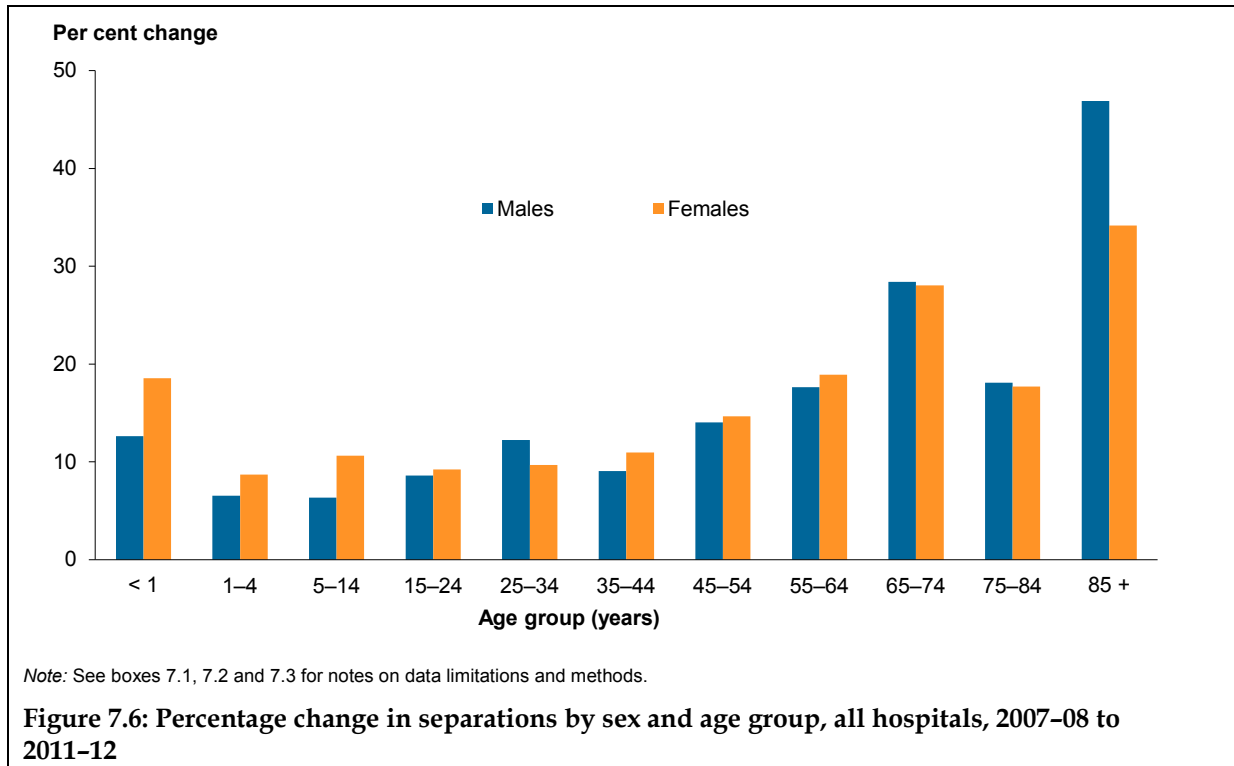


Between 2007-08 and 2011-12, the increase in separations was more marked for males than females; particularly for men aged 85 and over (Figure 7.6).

Persons aged 85 and over accounted for about 7% of all separations in 2011-12, and the number of separations for them had increased by an average of 9% each year between 2007-08 and 2011-12.

The large increase in separations and patient days for patients aged less than 1 year mostly reflects changes in the reporting of *Newborn* episodes of care (see Appendix A for more information).

Between 2007-08 and 2011-12, patient days in all hospitals increased by 9.4% for males, and by 7.1% for females (Figure 7.7). The relative size and direction of change in patient days varied by sex and age group.



## Aboriginal and Torres Strait Islander people

Caution should be used in the interpretation of these data because of jurisdictional differences in data quality. See 'Under-identification of Indigenous persons' and appendixes A and B for more information on the quality of Indigenous status data in the NHMD.

In 2011–12, there were about 366,000 separations reported for Aboriginal and Torres Strait Islander people (Table 7.6). For persons reported as Indigenous Australians:

- 92% 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 4% were reported as *Aboriginal and Torres Strait Islander origin*
- 92% of separations for Indigenous Australians in 2011–12 were from the public sector (337,000), whereas 58% of separations for other Australians were from the public sector
- there were 309 overnight separations per 1,000 population for patients reported as Indigenous, almost twice the rate for other Australians (161 per 1,000) (Table 7.4)
- there were 662 same-day separations per 1,000 population for patients reported as Indigenous, more than 3 times the rate for other Australians (218 per 1,000) (Table 7.5).

In 2011–12, there were 971 separations per 1,000 population for Indigenous Australians (Tables 7.4 and 7.5), about 2.6 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 (1,779 separations per 1,000), nearly 8 times the rate for other Australians (excludes private hospitals).

## Under-identification of Indigenous persons

The AIHW report *Indigenous identification in hospital separations data: quality report* (AIHW, forthcoming) found that nationally, about 88% of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the 'true' number of separations for Indigenous Australians was about 9% higher than reported.

Using the agreed national correction factor of 1.09 (AIHW, forthcoming), the 'true' number of separations for Indigenous Australians for 2011–12 could be estimated at about 399,000 separations. As other Australians may include unidentified Aboriginal and Torres Strait Islander people, the 'true' number of separations for other Australians would be reduced and could be estimated at about 8,857,000 separations.

Using the same method (and assuming that the age distributions for unidentified and identified Indigenous Australians is similar), the 'true' separation rates for Indigenous Australians and other Australians for 2011–12 could be estimated as about 1,058 per 1,000 population and 378 per 1,000, respectively. These rates indicate that, after adjusting for under-identification, Indigenous Australians were hospitalised at about 2.8 times the rate for other Australians.

## Sex and age group

Table 7.6 presents separations by Indigenous status, sex and age group. In 2011–12:

- 57% of separations for Indigenous Australians were for females, compared with 52% for other Australians
- 12% of separations for Indigenous Australians were for people aged 65 and over, compared with 40% of separations for other Australians.

**Table 7.6: Separations by Indigenous status, sex and age group, 2011–12**

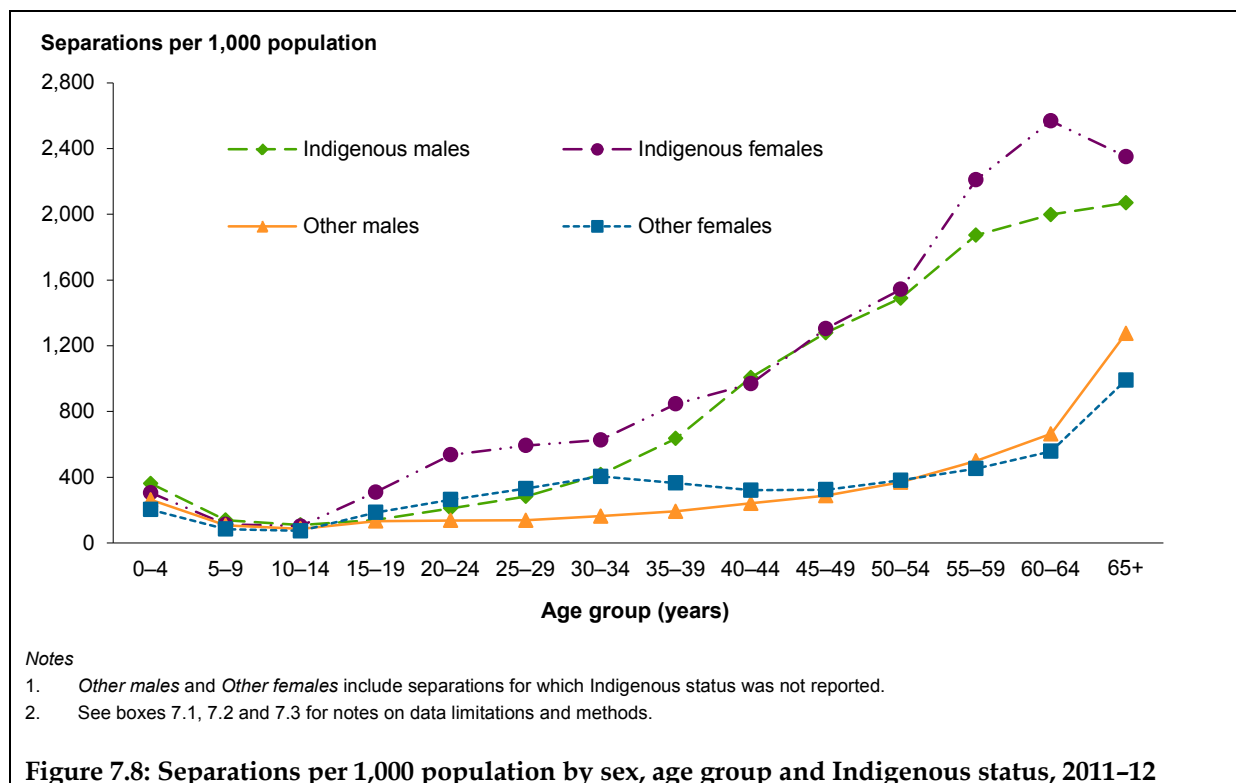
Age group (years)	Indigenous Australians			Other Australians <sup>(a)</sup>		
	Males	Females	Persons	Males	Females	Persons
0–4	13,452	10,758	24,210	193,274	141,795	335,083
5–9	4,695	3,653	8,348	74,132	55,378	129,510
10–14	3,729	3,302	7,031	60,440	49,064	109,505
15–19	4,816	10,023	14,839	98,090	130,756	228,846
20–24	6,071	14,593	20,664	113,227	208,123	321,363
25–29	6,403	13,379	19,782	117,350	272,673	390,028
30–34	7,577	11,812	19,389	127,525	313,808	441,335
35–39	11,159	15,727	26,886	153,522	293,270	446,797
40–44	16,426	17,544	33,970	191,178	261,008	452,188
45–49	17,987	20,455	38,442	226,318	256,995	483,315
50–54	17,206	19,681	36,887	279,082	294,986	574,075
55–59	17,124	21,927	39,052	337,052	312,228	649,283
60–64	12,939	18,425	31,364	419,815	357,421	777,241
65+	18,218	27,034	45,252	1,853,428	1,698,037	3,551,478
<b>Total<sup>(b)</sup></b>	<b>157,803</b>	<b>208,314</b>	<b>366,118</b>	<b>4,244,435</b>	<b>4,645,544</b>	<b>8,890,051</b>

(a) *Other Australians* includes separations for which Indigenous status was not reported.

(b) Total includes separations for which the age was not reported.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables 7.40 and 7.41 at the end of this chapter.

In 2011–12, 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.



**Figure 7.8: Separations per 1,000 population by sex, age group and Indigenous status, 2011-12**

### 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 7.31 (at the end of this chapter) presents counts of separations by both the state or territory of hospitalisation and the state or territory of usual residence of the patient. For 2011-12, about 98% of separations (9.0 million) were for people who were hospitalised in their state or territory of residence. However, in the Australian Capital Territory, only 80% of hospital separations were for Australian Capital Territory residents, with most of the remainder for 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 (454 and 594 per 1,000 population, respectively) (Table 7.7).

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.

**Table 7.7: Separations per 1,000 persons, by remoteness area of usual residence, public and private hospitals, 2011-12**

	Remoteness area					Total
	Major cities	Inner regional	Outer regional	Remote	Very remote	
Public hospitals	216.2	257.1	293.2	360.8	523.5	236.4
Private hospitals	175.4	133.2	101.5	93.5	70.4	158.2
<b>Total</b>	<b>391.5</b>	<b>390.3</b>	<b>394.7</b>	<b>454.3</b>	<b>593.9</b>	<b>394.6</b>

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, or SLA, of the patient. See Appendix B for details.

In 2011-12, separation rates varied across SES groups and between public and private hospitals. 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 (Table 7.8).

The separation rates for same-day separations versus overnight separations varied across SES groups (Tables 7.4 and 7.5). The highest rate of same-day separations occurred for patients living in areas classified as being in the three highest SES groups. The highest rate of overnight separations occurred for patients living in areas classified as being in the lowest SES group.

**Table 7.8: Separations per 1,000 population by socioeconomic status of area of residence, public and private hospitals, 2011-12**

	Socioeconomic status of are of residence					Total
	1-Lowest	2	3	4	5-Highest	
Public hospitals	304.5	259.8	252.3	206.7	151.6	236.5
Private hospitals	102.9	128.5	155.5	177.9	227.4	158.3
<b>Total</b>	<b>407.4</b>	<b>388.3</b>	<b>407.9</b>	<b>384.6</b>	<b>379.0</b>	<b>394.8</b>

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 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 2011-12, most separations in both public and private hospitals had a mode of admission of *Other* (94%). Public hospitals had a higher proportion of transfers than private hospitals

(4.8% and 2.8%, respectively). Public hospitals also reported higher proportions of *Statistical admissions* than private hospitals (1.8% and 0.5%, respectively) (Table 7.9).

**Table 7.9: Separations by mode of admission, public and private hospitals, 2011–12**

<b>Mode of admission</b>	<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
Admitted patient transferred from another hospital	261,850	103,329	365,179
Statistical admission: type change	96,644	18,888	115,532
Other	5,141,488	3,575,640	8,717,128
Not reported	11,510	46,820	58,330
<b>Total</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</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 in Table 7.34 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.

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 2011–12, more than 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 7.10).

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For example, about 82% of separations for *Injury, poisoning and certain other consequences of external causes* were from public hospitals and more than 71% of separations for *Diseases of the eye and adnexa* were from private hospitals.



**Table 7.10: Separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2011-12**

Principal diagnosis		Public hospitals	Private hospitals	Total
A00-B99	Certain infectious and parasitic diseases	118,567	22,669	141,236
C00-D48	Neoplasms	277,455	317,824	595,279
D50-D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	87,832	46,274	134,106
E00-E89	Endocrine, nutritional and metabolic diseases	85,159	42,590	127,749
F00-F99	Mental and behavioural disorders	191,051	154,068	345,119
G00-G99	Diseases of the nervous system	136,647	100,113	236,760
H00-H59	Diseases of the eye and adnexa	93,214	230,298	323,512
H60-H95	Diseases of the ear and mastoid process	31,839	28,853	60,692
I00-I99	Diseases of the circulatory system	345,790	178,015	523,805
J00-J99	Diseases of the respiratory system	311,438	92,567	404,005
K00-K93	Diseases of the digestive system	424,085	496,716	920,801
L00-L99	Diseases of the skin and subcutaneous tissue	107,370	46,858	154,228
M00-M99	Diseases of the musculoskeletal system and connective tissue	189,827	304,401	494,228
N00-N99	Diseases of the genitourinary system	246,312	184,569	430,881
O00-O99	Pregnancy, childbirth and the puerperium	343,408	147,499	490,907
P00-P96	Certain conditions originating in the perinatal period	51,476	12,082	63,558
Q00-Q99	Congenital malformations, deformations and chromosomal abnormalities	25,425	10,836	36,261
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	449,988	206,534	656,522
S00-T98	Injury, poisoning and certain other consequences of external causes	492,407	111,585	603,992
Z00-Z99	Factors influencing health status and contact with health services	1,499,539	1,009,137	2,508,676
	Not reported	2,663	1,189	3,852
<b>Total</b>		<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</b>

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

### Aboriginal and Torres Strait Islander people

More than 48% of separations for Indigenous Australians were for *Factors influencing health status and contact with health services*, compared with 26% for other Australians (Table 7.11). *Injury, poisoning and certain other consequences of external causes* was the second most common principal diagnosis among Indigenous Australians, accounting for 7.2% of separations for Indigenous Australians.

**Table 7.11: Separations by principal diagnosis in ICD-10-AM chapters, by Indigenous status, 2011–12**

Principal diagnosis		Indigenous Australians	Other Australians <sup>(a)</sup>	Total
A00–B99	Certain infectious and parasitic diseases	5,990	135,246	141,236
C00–D48	Neoplasms	5,240	590,039	595,279
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	2,056	132,050	134,106
E00–E89	Endocrine, nutritional and metabolic diseases	5,269	122,480	127,749
F00–F99	Mental and behavioural disorders	15,009	330,110	345,119
G00–G99	Diseases of the nervous system	4,624	232,136	236,760
H00–H59	Diseases of the eye and adnexa	2,603	320,909	323,512
H60–H95	Diseases of the ear and mastoid process	2,584	58,108	60,692
I00–I99	Diseases of the circulatory system	10,992	512,813	523,805
J00–J99	Diseases of the respiratory system	21,265	382,740	404,005
K00–K93	Diseases of the digestive system	18,297	902,504	920,801
L00–L99	Diseases of the skin and subcutaneous tissue	7,994	146,234	154,228
M00–M99	Diseases of the musculoskeletal system and connective tissue	6,880	487,348	494,228
N00–N99	Diseases of the genitourinary system	9,387	421,494	430,881
O00–O99	Pregnancy, childbirth and the puerperium	21,989	468,918	490,907
P00–P96	Certain conditions originating in the perinatal period	3,975	59,583	63,558
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,222	35,039	36,261
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	17,438	639,084	656,522
S00–T98	Injury, poisoning and certain other consequences of external causes	26,426	577,566	603,992
Z00–Z99	Factors influencing health status and contact with health services	176,429	2,332,247	2,508,676
	Not reported	449	3,403	3,852
<b>Total</b>		<b>366,118</b>	<b>8,890,051</b>	<b>9,256,169</b>

(a) *Other Australians* includes separations for which the Indigenous status was not reported.

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

## How many separations were due to injury and poisoning?

Some hospitalisations for injury or poisoning may be considered potentially avoidable. It should be noted that the admitted patient care data provide only a partial picture of the overall burden of injury because it does not include injuries treated by general practitioners and in the emergency departments that do not require admission to hospital.

In 2011–12, about 604,000 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 7.12). About 45% of these separations had a principal diagnosis of *Injuries to upper and lower limbs*.

**Table 7.12: Separations with a principal diagnosis of injury or poisoning, public and private hospitals, 2011–12**

Principal diagnosis	Public hospitals	Private hospitals	Total
S00–S19 Injuries to head and neck	90,886	7,237	98,123
S20–S39 Injuries to thorax, abdomen, back, spine and pelvis	46,447	5,879	52,326
S40–S99 Injuries to upper and lower limbs	216,516	55,441	271,957
T00–T19 Injuries to multi- or unspecified region; foreign body effects	11,227	1,463	12,690
T20–T35 Burns and frostbite	8,386	245	8,631
T36–T65 Poisoning and toxic effects	39,137	494	39,631
T66–T79 Other and unspecified effects of external causes	12,435	800	13,235
T80–T88 Complications of medical and surgical care	67,262	39,977	107,239
T89–T98 Other trauma complications; external cause sequelae	111	49	160
<b>Total</b>	<b>492,407</b>	<b>111,585</b>	<b>603,992</b>
<b>Separations per 1,000 population</b>	<b>21.5</b>	<b>4.8</b>	<b>26.2</b>

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

### Aboriginal and Torres Strait Islander people

Indigenous Australians were hospitalised with a principal diagnosis of injury and poisoning at about twice the rate of other Australians (Table 7.13). *Injuries to the head and neck* accounted for 26% of these separations for Indigenous Australians and 16% for other Australians. *Complications of medical and surgical care* accounted for a higher proportion of these separations for other Australians (18%) compared with Indigenous Australians (12%).

**Table 7.13: Separations with a principal diagnosis of injury or poisoning, by Indigenous status, 2011–12**

Principal diagnosis	Indigenous Australians	Other Australians <sup>(a)</sup>	Total
S00–S19 Injuries to head and neck	6,835	91,288	98,123
S20–S39 Injuries to thorax, abdomen, back, spine and pelvis	1,970	50,356	52,326
S40–S99 Injuries to upper and lower limbs	10,349	261,608	271,957
T00–T19 Injuries to multi- or unspecified region; foreign body effects	541	12,149	12,690
T20–T35 Burns and frostbite	765	7,866	8,631
T36–T65 Poisoning and toxic effects	2,165	37,466	39,631
T66–T79 Other and unspecified effects of external causes	629	12,606	13,235
T80–T88 Complications of medical and surgical care	3,148	104,091	107,239
T89–T98 Other trauma complications; external cause sequelae	24	136	160
<b>Total</b>	<b>26,426</b>	<b>577,566</b>	<b>603,992</b>
<b>Separations per 1,000 population</b>	<b>53.1</b>	<b>25.9</b>	<b>26.2</b>

(a) *Other Australians* includes separations for which the Indigenous status was not reported.

Note: See boxes 7.1, 7.2 and 7.3 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. External causes may also be required for other selected diagnoses.

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 (AIHW 2012f).

In 2011–12, there were 1.1 million separations for which an external cause of injury or poisoning was reported (Table 7.14). Some of these adverse events may be related to additional diagnoses, particularly for *Complications of medical and surgical care*.

About 77% of these separations were from public hospitals. The most frequently reported groups of external causes in both public and private hospitals were *Complications of medical and surgical care* and *Falls*. Public hospitals had notably higher proportions of separations with external causes of *Intentional self-harm* and *Assault* than private hospitals.

**Table 7.14: Separations, by external cause in ICD-10-AM groupings, public and private hospitals, 2011–12**

External cause	Public hospitals	Private hospitals	Total
V00–V99 Transport accidents	63,468	8,571	72,039
W00–W19 Falls	239,694	53,041	292,735
W20–W64 Exposure to mechanical forces	96,215	12,251	108,466
W65–W74 Accidental drowning and submersion	583	24	607
W75–W84 Other accidental threats to breathing	12,806	1,553	14,359
W85–W99 Exposure to electricity, radiation, extreme temperature/pressure	1,256	140	1,396
X00–X19 Exposure to smoke, fire, flames, hot substances	8,738	440	9,178
X20–X39 Exposure to venomous plants, animals, forces of nature	5,250	327	5,577
X40–X49 Accidental poisoning	12,407	669	13,076
X50–X59 Other external causes of accidental injury	44,718	40,769	85,487
X60–X84 Intentional self-harm	32,724	778	33,502
X85–Y09 Assault	26,101	464	26,565
Y10–Y34 Events of undetermined intent	7,311	309	7,620
Y35–Y36 Legal intervention and operations of war	170	436	606
Y40–Y84 Complications of medical and surgical care	303,644	135,986	439,630
Y85–Y98 Sequelae and supplementary factors	28,548	8,359	36,907
<b>Total<sup>(a)</sup></b>	<b>835,547</b>	<b>255,534</b>	<b>1,091,081</b>

(a) As more than one external cause can be reported for a separation, the totals may not equal the sums of the columns.

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

More information on the place of occurrence and the activity when injured is in tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## Aboriginal and Torres Strait Islander people

*Complications of medical and surgical care* was the most commonly reported external cause of injury and poisoning for hospitalisations for Indigenous Australians. *Assault* accounted for 18% of external causes reported for Indigenous Australians, compared with 2% of external causes reported for other Australians (Table 7.15).

**Table 7.15: Separations, by external cause in ICD-10-AM groupings and Indigenous status, 2011–12**

External cause		Indigenous Australians	Other Australians <sup>(a)</sup>	Total
V00–V99	Transport accidents	2,513	69,526	72,039
W00–W19	Falls	6,720	286,015	292,735
W20–W64	Exposure to mechanical forces	5,416	103,050	108,466
W65–W74	Accidental drowning and submersion	40	567	607
W75–W84	Other accidental threats to breathing	425	13,934	14,359
W85–W99	Exposure to electricity, radiation, extreme temperature/pressure	26	1,370	1,396
X00–X19	Exposure to smoke, fire, flames, hot substances	792	8,386	9,178
X20–X39	Exposure to venomous plants, animals, forces of nature	259	5,318	5,577
X40–X49	Accidental poisoning	728	12,348	13,076
X50–X59	Other external causes of accidental injury	2,356	83,131	85,487
X60–X84	Intentional self-harm	2,326	31,176	33,502
X85–Y09	Assault	6,970	19,595	26,565
Y10–Y34	Events of undetermined intent	547	7,073	7,620
Y35–Y36	Legal intervention and operations of war	36	570	606
Y40–Y84	Complications of medical and surgical care	9,770	429,860	439,630
Y85–Y98	Sequelae and supplementary factors	1,878	35,029	36,907
<b>Total<sup>(b)</sup></b>		<b>38,973</b>	<b>1,052,108</b>	<b>1,091,081</b>

(a) *Other Australians* includes separations for which the Indigenous status was not reported.

(b) 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.

## How many separations were potentially preventable?

The rate of potentially preventable hospitalisations (PPHs) is a NHA performance indicator, relating to the outcome *Australians receive appropriate high quality and affordable primary and community health services*. The proportion of total separations that were for PPHs 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.

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.

In 2011–12, more than 672,000 separations in public and private hospitals were classified as PPHs (Table 7.16). PPHs accounted for 7.3% of all hospital separations, 9.4% of public hospital separations and 4.2% of private hospital separations. More than three-quarters of PPHs (77%) were reported for public hospitals.

**Table 7.16: Separations for potentially preventable hospitalisations, public and private hospitals, 2011–12**

PPH category	Public hospitals	Private hospitals	Total
Vaccine preventable conditions	16,478	2,639	19,117
Acute conditions	252,488	89,790	342,278
<i>Chronic conditions</i> <sup>(a)</sup>	249,563	64,427	313,990
Diabetes complications	61,749	25,202	86,951
Chronic conditions (excluding diabetes)	194,668	40,534	235,202
<b>Total</b>	<b>515,743</b>	<b>156,509</b>	<b>672,252</b>
<b>Proportion of total separations (%)</b>	<b>9.4</b>	<b>4.2</b>	<b>7.3</b>

(a) As more than one chronic condition may be reported for a separation, the sum of *Diabetes complications* and *Chronic conditions (excluding diabetes)* does not necessarily equal the total number of separations for *Chronic conditions*.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by residence state is in Table 7.37 at the end of this chapter.

Between 2010–11 and 2011–12, there was a 3.1% increase in PPHs overall, mostly due to increases in the number of hospitalisations for *Acute conditions* (4.9%). Hospitalisations for *Vaccine preventable conditions* also increased by 9.1% over this period.

Table 7.17 shows a sharp decrease in *Diabetes complications* between 2009–10 and 2010–11 that was bigger than the decrease for *Chronic conditions* overall in the same period. This reflected changes in coding standards for diabetes-related conditions that took effect from 1 July 2010 (for 7th edition ICD-10-AM/ACHI). See Appendix B for more information.

In addition, changes in coding standards between 2007–08 and 2008–09 (for 6th edition ICD-10-AM/ACHI) for diabetes complications are likely to have contributed to marked decreases in the rates of reported PPHs over this period.

**Table 7.17: Separations per 1,000 population for potentially preventable hospitalisations, by PPH category, all hospitals, 2007–08 to 2011–12**

PPH category	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
Vaccine preventable conditions	0.7	0.7	0.8	0.8	0.8	3.7	9.1
Acute conditions	11.2	11.3	11.4	14.2	14.9	7.5	4.9
Chronic conditions <sup>(a)</sup>	19.4	16.6	15.9	12.9	13.0	–9.5	0.9
Diabetes complications <sup>(b)</sup>	10.7	7.8	7.1	3.7	3.6	–23.7	–0.8
Chronic conditions (excluding diabetes)	9.8	9.5	9.3	9.6	9.7	–0.2	1.6
<b>Total</b>	<b>33.4</b>	<b>30.8</b>	<b>30.3</b>	<b>27.8</b>	<b>28.6</b>	<b>–3.8</b>	<b>3.1</b>

PPH—potentially preventable hospitalisation.

(a) As more than one chronic condition may be reported for a separation, the sum of *Diabetes complications* and *Chronic conditions (excluding diabetes)* does not necessarily equal the total number of separations for *Chronic conditions*.

(b) Changes in coding standards for the recording of diabetes-related conditions took effect from 1 July 2008 and 1 July 2010. See Appendix B for more information.

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

For 2011–12, the overall rate of PPHs was highest for residents of *Remote* and *Very remote* areas (56 and 67 per 1,000 population, respectively) and lowest for residents of *Major cities* (27 per 1,000 population). Notably high rates for *Diabetes complications* were reported for residents of *Remote* and *Very remote* areas (16 and 13 per 1,000 population respectively).

The rate of PPH separations generally decreased with increasing levels of advantage (Table 7.18), ranging from 22 per 1,000 for residents of areas classified as being in the highest SES group to 35 per 1,000 for residents of areas classified as being in the lowest SES group.

**Table 7.18: Separations per 1,000 population for potentially preventable hospitalisations, by remoteness area and socioeconomic status of area of residence, all hospitals, 2011–12**

	Vaccine-preventable conditions	Acute conditions	Total chronic conditions <sup>(a)</sup>	Diabetes complications	Chronic conditions (excluding diabetes)	Total
<b>Remoteness</b>						
Major cities	0.8	13.9	12.1	3.4	9.0	26.6
Inner regional	0.7	16.2	13.3	3.4	10.3	30.1
Outer regional	0.9	17.6	15.0	3.8	11.6	33.4
Remote	1.7	24.2	30.6	16.0	15.0	56.2
Very remote	3.0	31.1	33.8	13.1	21.7	67.1
<b>Socioeconomic status of area of residence</b>						
1–Lowest	1.1	16.8	17.5	5.6	12.3	35.2
2	0.8	15.5	13.8	3.5	10.6	30.0
3	0.8	15.7	14.1	4.4	10.1	30.5
4	0.7	13.9	11.0	2.7	8.5	25.5
5–Highest	0.6	12.7	8.4	1.9	6.7	21.7
<b>Total</b>	<b>0.8</b>	<b>14.9</b>	<b>13.0</b>	<b>3.6</b>	<b>9.7</b>	<b>28.6</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.

More information about individual PPH conditions by state of residence, remoteness are of residence and socioeconomic status of area of residence is in tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## How urgent was the care?

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

Table 7.19 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 2011–12, 68% of separations were *Non-emergency* admissions, accounting for about 86% of same-day separations and 42% of overnight separations. Private hospitals accounted for about 53% of *Non-emergency* admissions and public hospitals accounted for about 92% of *Emergency* admissions (Table 7.19).

**Table 7.19: Same-day and overnight separations by broad category of service and urgency of admission, public and private hospitals, states and territories, 2011–12**

	Public hospitals	Private hospitals	Total
<b>Same-day separations</b>			
Childbirth	8,034	135	8,169
Specialist mental health	15,967	107,574	123,541
Emergency			
Surgical	22,403	4,807	27,210
Medical	560,454	10,932	571,386
Other	4,457	3,488	7,945
Non-emergency			
Surgical	358,508	801,068	1,159,576
Medical	1,582,292	938,322	2,520,614
Other	254,678	705,735	960,413
<i>Total same-day separations</i>	<i>2,806,793</i>	<i>2,572,061</i>	<i>5,378,854</i>
<b>Overnight separations</b>			
Childbirth	210,869	80,647	291,516
Specialist mental health	93,167	32,517	125,847
Emergency			
Surgical	234,477	33,871	268,348
Medical	1,341,696	135,467	1,477,163
Other	55,507	12,204	67,711
Non-emergency			
Surgical	336,731	547,940	884,671
Medical	408,962	289,566	698,528
Other	23,127	40,404	63,531
<i>Total overnight separations</i>	<i>2,704,699</i>	<i>1,172,616</i>	<i>3,877,315</i>
<b>Total separations</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</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 in tables 7.35 and 7.36 at the end of this chapter.



The numbers presented in Table 7.19 do not match those presented in chapters 8 and 9 due to the inclusion of care types other than acute in Table 7.19.

## 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, Surgical or Other*
- the intent of care – acute, sub-acute (such as *Rehabilitation* or *Palliative*) or non-acute (such as *Maintenance* care)
- Major Diagnostic Categories and AR-DRGs – based on the AR-DRG classification of acute care separations.

### Broad category of service

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

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

In 2011–12, more than 17% of separations in public hospitals were for *Surgical* care and 71% were for *Medical* care, compared with 37% each for both *Surgical* and *Medical* care in private hospitals (Table 7.20). Overall, about 3.2% of separations were for *Childbirth*.

There were about 249,000 separations for *Specialist mental health care*. Private hospitals provided about 56% of these, accounting for 87% of same-day separations and 26% 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, 94% of separations were classified as episodes of *Acute* care, 0.9% as *Newborn* (with qualified days) and 3.5% as *Rehabilitation* care (Table 7.20). Public and private sectors varied in the proportions of separations, separation rates, patient days and days per 1,000 population for each care type.

In public hospitals, the average length of stay for episodes of *Acute care* (2.9 days) was longer than that for private hospitals (2.1 days). The average length of stay for *Rehabilitation care* was 17.0 days in public hospitals, and 4.6 days in private hospitals. In part, this reflects a high proportion of same-day rehabilitation separations in the private sector, as well as a number of very long stay rehabilitation separations in the public sector. More information on sub- and non-acute care is in Chapter 11.

**Table 7.20: Selected separation statistics by care type, public and private hospitals, 2011–12**

Care type and sector	Separations	Separations per 1,000 population	Patient days	Patient days per 1,000 population	Average length of stay
<b>Public hospitals</b>					
Acute care	5,255,045	225.7	15,143,864	642.8	2.9
Newborn total <sup>(a)</sup>	237,278	10.8	907,502	38.8	3.8
Newborn with qualified days only	64,014	2.9	468,449	21.2	7.3
Newborn with a mixture of qualified and unqualified days <sup>(b)</sup>	10,058	0.5	31,711	1.4	3.2
Rehabilitation care	95,562	3.9	1,627,134	67.3	17.0
Other non-acute care <sup>(c)</sup>	86,813	3.4	1,719,878	68.2	19.8
<i>Total</i>	<i>5,511,492</i>	<i>236.4</i>	<i>18,991,036</i>	<i>801.0</i>	<i>3.4</i>
<b>Private hospitals</b>					
Acute care	3,484,968	147.6	7,405,918	309.5	2.1
Newborn total <sup>(a)</sup>	64,585	2.9	310,919	13.4	4.8
Newborn with qualified days only	15,812	0.7	104,212	4.7	6.6
Newborn with a mixture of qualified and unqualified days <sup>(b)</sup>	2,047	0.1	7,982	0.4	3.9
Rehabilitation care	226,887	9.2	1,051,109	41.6	4.6
Other non-acute care <sup>(c)</sup>	14,963	0.6	175,993	6.9	11.8
<i>Total</i>	<i>3,744,677</i>	<i>158.2</i>	<i>8,745,214</i>	<i>363.4</i>	<i>2.3</i>
<b>All hospitals</b>	<b>9,256,169</b>	<b>394.6</b>	<b>27,736,250</b>	<b>1,164.3</b>	<b>3.0</b>

(a) 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.

(b) The totals do not include separations and unqualified days for *Newborns* (without qualified days). For information on *Newborn* (without qualified days), see tables 7.32 and 7.33.

(c) 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 in tables 7.32 and 7.33 at the end of this chapter.

## Major Diagnostic Categories

The AR-DRG classification contains 23 Major Diagnostic Categories (MDCs).

Table 7.21 presents acute separations by MDCs for public and private hospitals. *Diseases and disorders of the kidney and urinary tract* accounted for 23% of acute separations for public hospitals and *Diseases and disorders of the digestive system* was the most common MDC for private hospitals. About 69% of acute separations for *Diseases and disorders of the eye* were from private hospitals.

**Table 7.21: Separation<sup>(a)</sup> statistics, by Major Diagnostic Category version 6.0x and Medical/Surgical/Other partition, public and private hospitals, 2011–12**

Major Diagnostic Category		Public hospitals		Private hospitals	
		Separations	Cost by volume (\$'000) <sup>(b)</sup>	Separations	Cost by volume (\$'000) <sup>(c)</sup>
PR	Pre-MDC (tracheostomies, transplants, ECMO)	12,928	201,461	3,216	n.a.
01	Diseases and disorders of the nervous system	267,441	1,393,291	72,030	n.a.
02	Diseases and disorders of the eye	105,346	119,746	234,802	n.a.
03	Diseases and disorders of the ear, nose, mouth and throat	196,032	476,440	224,996	n.a.
04	Diseases and disorders of the respiratory system	303,587	1,479,669	101,604	n.a.
05	Diseases and disorders of the circulatory system	448,969	1,755,728	172,388	n.a.
06	Diseases and disorders of the digestive system	541,154	1,341,529	586,137	n.a.
07	Diseases and disorders of the hepatobiliary system and pancreas	98,651	558,235	35,788	n.a.
08	Diseases and disorders of the musculoskeletal system and connective tissue	393,748	2,272,503	378,315	n.a.
09	Diseases and disorders of the skin, subcutaneous tissue and breast	201,375	739,080	199,172	n.a.
10	Endocrine, nutritional and metabolic diseases and disorders	76,610	331,248	43,896	n.a.
11	Diseases and disorders of the kidney and urinary tract	1,223,126	1,607,933	326,147	n.a.
12	Diseases and disorders of the male reproductive system	46,138	87,696	69,414	n.a.
13	Diseases and disorders of the female reproductive system	118,640	233,988	176,914	n.a.
14	Pregnancy, childbirth and puerperium	362,244	1,492,924	150,915	n.a.
15	Newborns and other neonates	84,259	786,310	19,524	n.a.
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	99,779	449,003	51,245	n.a.
17	Neoplastic disorders (haematological and solid neoplasms)	191,749	494,700	256,628	n.a.
18	Infectious and parasitic diseases	65,763	334,207	13,480	n.a.
19	Mental diseases and disorders	140,494	1,226,426	117,113	n.a.
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	37,772	127,473	30,494	n.a.
21	Injuries, poisoning and toxic effects of drugs	163,463	502,600	26,217	n.a.
22	Burns	8,432	79,681	255	n.a.
23	Factors influencing health status and other contacts with health services	134,086	217,034	207,153	n.a.
ED	Error DRGs <sup>(d)</sup>	7,380	60,499	4,984	n.a.
	<i>Surgical DRG</i>	1,019,946	6,489,551	1,424,221	n.a.
	<i>Medical DRG</i>	3,966,809	11,393,462	1,311,152	n.a.
	<i>Other DRG</i>	342,411	486,391	767,454	n.a.
<b>Total</b>		<b>5,329,166</b>	<b>18,369,404</b>	<b>3,502,827</b>	<b>n.a.</b>

DRG—Diagnosis related group; ECMO—extracorporeal membrane oxygenation; MDC—Major diagnostic category.

- (a) Separations for which the care type was reported as *Acute*, or *Newborn* (with qualified days), or not reported.  
(b) Cost by volume is calculated using the 2009–10 Round 14 AR-DRG version 6.0x cost weights.  
(c) Private cost weights are not available for AR-DRG version 6.0x.  
(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.

## Procedures

In 2011–12, about 11.7 million procedures were reported with about 5.8 million in the public sector and 5.9 million in the private sector. Private hospitals accounted for 47% of the separations for which a procedure was reported, although they accounted for 40% of the separations overall (Table 7.22). In public hospitals, 74% of separations involved a procedure (4.1 million). In contrast, 95% of separations in private hospitals involved a procedure (3.5 million).

**Table 7.22: Separations, by procedure in ACHI chapters, public and private hospitals, 2011–12**

Procedure	Public hospitals	Private hospitals	Total
1–86 Procedures on nervous system	75,203	104,443	179,646
110–129 Procedures on endocrine system	7,901	8,611	16,512
160–256 Procedures on eye and adnexa	92,871	227,115	319,986
300–333 Procedures on ear and mastoid process	27,424	33,242	60,666
370–422 Procedures on nose, mouth and pharynx	62,687	85,311	147,998
450–490 Dental services	30,825	111,821	142,646
520–570 Procedures on respiratory system	109,790	36,374	146,164
600–777 Procedures on cardiovascular system	151,401	134,824	286,225
800–817 Procedures on blood and blood-forming organs	35,636	24,340	59,976
850–1011 Procedures on digestive system	443,520	769,120	1,212,640
1040–1129 Procedures on urinary system	1,161,443	356,652	1,518,095
1160–1203 Procedures on male genital organs	41,085	73,277	114,362
1240–1299 Gynaecological procedures	134,356	224,067	358,423
1330–1347 Obstetric procedures	197,549	80,610	278,159
1360–1579 Procedures on musculoskeletal system	266,291	333,892	600,183
1600–1718 Dermatological and plastic procedures	203,090	204,354	407,444
1740–1759 Procedures on breast	19,647	37,643	57,290
1786–1799 Radiation oncology procedures	10,702	3,291	13,993
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	2,686,134	2,995,300	5,681,434
1940–2016 Imaging services	44,782	38,695	83,477
<i>Procedures reported<sup>(a)</sup></i>	<i>5,802,337</i>	<i>5,882,982</i>	<i>11,685,319</i>
No procedure or not reported	1,443,226	201,144	1,644,370
<b>Total separations</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</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.

## What was the cost of the care?

### Admitted patient expenditure—public hospitals

In 2011–12, about \$28 billion was spent on admitted patient services in public hospitals (Table 7.23). 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 7.23: Estimated expenditure on admitted patient care (\$ million), public hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$ million								
Total expenditure	12,906	9,746	7,706	4,381	3,230	916	933	568	40,384
Estimated admitted patient cost proportion <sup>(a)</sup>	0.69	0.70	0.68	0.72	0.70	0.69	0.69	0.80	0.70
Estimated admitted patient expenditure <sup>(b)</sup>	8,939	6,848	5,258	3,133	2,264	627	644	453	28,167

(a) For more information, see Chapter 3 and Appendix B.

(b) The estimated admitted patient expenditure includes expenditure on non-benchmarking hospitals (see Chapter 3) in the state or territory, for which the estimated admitted patient cost proportion may not be appropriate.

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

### Average cost weights

The cost estimates for admitted patient care are approximations of the relative costs of hospital services during 2011–12. They should be used with caution in any comparisons between the states and territories. They are not derived from, nor comparable with, the expenditure and cost per casemix-adjusted separation information in chapters 3 and 4.

Estimated total admitted patient costs are not directly comparable between public and private hospitals. Private hospital treatment may include medical, pharmacy and pathology costs that are not included in existing private hospital cost information. These costs are included in public hospital cost information.

The ‘cost weight’ for a separation is the ratio of the estimated average cost for the separation (based on AR-DRG version 6.0x) compared with the average cost for all acute separations. For 2011–12, the 2009–10 AR-DRG version 6.0x cost weights obtained from the National Hospital Cost Data Collection (NHCDC) (DoHA 2012) were applied to each separation. Separate cost weights for the private sector were not available for AR-DRG version 6.0x. For more information on the NHCDC, see Appendix C.

In public hospitals, separations for *Public patients* generally had lower average cost weights than other patients and separations funded by *Motor vehicle third party personal claim* had higher average cost weights (Table 7.24). In private hospitals, *Self-funded* separations had lower average costs than other separations. The very low average cost weight for *Public patients* in private hospitals for Western Australia reflects a large amount of contracted care involving dialysis (funded by *Other hospital or public authority*).

**Table 7.24: Average cost weight of separations, by principal source of funds, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public patients <sup>(a)</sup>	1.02	0.93	0.99	0.87	1.03	1.07	0.98	0.66	0.96
Private health insurance	1.06	1.07	1.01	1.39	1.32	0.92	1.26	0.93	1.09
Self-funded <sup>(b)</sup>	1.31	0.77	1.11	0.74	0.75	0.80	1.25	1.10	1.14
Workers compensation	1.16	1.19	1.38	1.17	1.13	1.53	1.30	1.28	1.23
Motor vehicle third party personal claim	1.57	2.21	2.22	2.26	2.16	2.53	2.44	2.26	2.02
Department of Veterans' Affairs	1.13	1.14	1.09	1.05	1.24	1.19	0.80	1.46	1.12
Other <sup>(c)</sup>	1.64	1.17	1.51	1.18	1.16	1.30	1.06	0.70	1.28
<b>Total</b>	<b>1.04</b>	<b>0.96</b>	<b>1.00</b>	<b>0.91</b>	<b>1.06</b>	<b>1.06</b>	<b>1.00</b>	<b>0.67</b>	<b>0.99</b>
<b>Private hospitals<sup>(d)</sup></b>									
Public patients <sup>(a)</sup>	0.79	0.47	0.45	0.15	0.32	n.p.	n.p.	n.p.	0.26
Private health insurance	0.90	0.90	0.89	0.92	0.90	n.p.	n.p.	n.p.	0.90
Self-funded <sup>(b)</sup>	0.89	0.71	0.64	0.72	0.87	n.p.	n.p.	n.p.	0.77
Workers compensation	1.32	1.26	1.20	1.19	1.33	n.p.	n.p.	n.p.	1.26
Motor vehicle third party personal claim	1.03	1.11	1.39	1.04	1.41	n.p.	n.p.	n.p.	1.13
Department of Veterans' Affairs	1.15	1.10	0.88	1.05	1.03	n.p.	n.p.	n.p.	1.01
Other <sup>(c)</sup>	0.63	0.95	0.85	0.74	0.92	n.p.	n.p.	n.p.	0.92
<b>Total</b>	<b>0.92</b>	<b>0.89</b>	<b>0.86</b>	<b>0.79</b>	<b>0.90</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.88</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 average cost weights for this category should be interpreted with caution.

(c) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

(d) AR-DRG version 6.0x public cost weights 2009–10 were used for both public and private hospitals. Estimated total admitted patient costs are not directly comparable between public and private hospitals. Private hospital treatment may include medical, pharmacy and pathology costs that are not included in existing private hospital cost information.

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

## Cost by volume

An estimate of expenditure in public 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 \$4,500 in the public sector (including depreciation) (based on 2009–10 AR-DRG version 6.0x, DoHA 2012). Private sector cost weights for AR-DRG version 6.0x were not available at the time this report was prepared.

The cost-by-volume figures in Table 7.21 were derived by multiplying the estimated average cost for the AR-DRG by the number of acute separations for each AR-DRG. The cost estimates for all AR-DRGs within a given MDC were then summed to produce an estimated cost for the MDC. It should be noted that the estimates in Table 7.21 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 2011–12, the total estimated cost for acute admitted patient care was \$18.4 billion in public hospitals (Table 7.21). The highest cost-by-volume MDC in the public sector was *Diseases and disorders of the musculoskeletal system and connective tissue* (\$2.3 billion). *Medical*

DRGs and *Surgical DRGs* accounted for the majority of the estimated costs in public hospitals (62% and 35%, respectively).

## 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 A).

In 2011–12, about 85% of separations in public hospitals were for *Public patients*, compared with about 3% in private hospitals. For private hospitals, about 81% of separations were funded by *Private health insurance* (Table 7.25).

**Table 7.25: Separations, by principal source of funds, public and private hospitals, 2011–12**

	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	4,658,853	110,131	4,768,984
Private health insurance	584,429	3,029,670	3,614,099
Self-funded	73,711	299,032	372,743
Workers compensation	23,436	65,869	89,305
Motor vehicle third party personal claim	28,609	7,197	35,806
Department of Veterans' Affairs	113,551	193,041	306,592
Other <sup>(b)</sup>	28,903	39,737	68,640
<b>Total</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</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) *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. Additional information by state and territory is in table 7.30 at the end of this chapter.

## How much care was contracted between hospitals?

**Inter-hospital contracted patient separations** are episodes of care for admitted patients whose treatment and/or care is provided under an arrangement between a hospital purchaser of hospital care and a provider of an admitted service for which the activity is recorded by both hospitals (AIHW 2012f).

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 2011–12, there were about 79,000 separations for inter-hospital contracted patients (Table 7.26). The total number of inter-hospital contracted patients was higher for private hospitals than for public hospitals. Most contracted care provided by private hospitals (62,000 separations) was purchased by public hospitals. Further information by state and territory is in the tables accompanying this report online.

**Table 7.26: Separations, by inter-hospital contracted patient status, public and private hospitals, 2011–12**

	Public hospitals	Private hospitals	Total
Inter-hospital contracted patient from public sector	10,389	61,684	72,073
Inter-hospital contracted patient from private sector	6,395	583	6,978
Not inter-hospital contracted patient	5,407,977	3,630,679	9,038,656
Not reported	86,731	51,731	138,462
<b>Total</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territories is in the tables accompanying this report online.

## 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 (AIHW 2012f). In 2011–12, 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 the table accompanying this report online).

## How long did patients stay?

In 2011–12, public hospitals accounted for 60% of separations and 68% of patient days. The average length of stay per separation was higher in the public sector, at 3.4 days, than in the private sector, at 2.3 days. Same-day separations accounted for 51% of public hospital separations and 69% of private hospital separations. The average length of stay for overnight separations was longer in public hospitals (6.0 days) than in private hospitals (5.3 days) (Table 7.27).

**Table 7.27: Average length of stay (ALOS), public and private hospitals, 2011–12**

	Separations	Same-day separations	Patient days	ALOS	ALOS (excluding same-day)
Public hospitals	5,511,492	2,806,793	18,991,036	3.4	6.0
Private hospitals	3,744,677	2,572,061	8,745,214	2.3	5.3
<b>Total</b>	<b>9,256,169</b>	<b>5,378,854</b>	<b>27,736,250</b>	<b>3.0</b>	<b>5.8</b>

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in table 7.29 at the end of this chapter.

## How was the care completed?

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

About 92% of separations (8.5 million) had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 7.28). This was particularly the case in the private sector, where 96% of separations (3.6 million) were categorised as *Other*, compared with 89% (4.9 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)* (394,000) and the number of separations with a mode of admission of *Admitted patient transferred from another hospital* (365,000; see Table 7.9). 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 7.28: Separations, by mode of separation, public and private hospitals, 2011–12**

	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	326,482	60,450	386,932
Discharge/transfer to residential aged care service <sup>(a)</sup>	63,288	7,379	70,667
Discharge/transfer to an (other) psychiatric hospital	6,557	186	6,743
Discharge/transfer to other health care accommodation <sup>(b)</sup>	15,529	53,345	68,874
Statistical discharge: type change	97,109	20,017	117,126
Left against medical advice/discharge at own risk	47,044	2,161	49,205
Statistical discharge from leave	5,766	98	5,864
Died	61,482	13,625	75,107
Other <sup>(c)</sup>	4,888,107	3,587,396	8,475,503
Not reported	128	20	148
<b>Total</b>	<b>5,511,492</b>	<b>3,744,677</b>	<b>9,256,169</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 in table 7.42 at the end of this chapter.

## Additional information

At the time of writing, 2011–12 cost weights and average costs were not available for AR-DRG version 6.0x, which has been used for the majority of tables that present data for Diagnosis Related Groups and Major Diagnostic Categories. After this report is published, the website will include updates for the tables that use AR-DRG cost weight and/or average cost /cost by volume information.

More detailed information on admitted patient care, including data by state and territory for principal diagnoses and procedures, is in the tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

**Table 7.29: Separation, average cost weight, patient days and average length of stay statistics, by hospital type, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Separations</b>									
<i>Public hospitals</i>	1,660,602	1,543,773	1,001,215	588,143	407,315	99,632	97,455	113,357	5,511,492
Public acute hospitals	1,655,276	1,543,310	1,000,832	586,745	405,462	99,276	97,455	113,357	5,501,713
Public psychiatric hospitals	5,326	463	383	1,398	1,853	356	..	..	9,779
<i>Private hospitals<sup>(a)</sup></i>	1,070,140	917,810	901,188	436,319	289,980	n.p.	n.p.	n.p.	3,744,677
Private free-standing day hospital facilities	225,556	209,489	211,763	120,410	65,114	n.p.	n.p.	n.p.	843,930
Other private hospitals <sup>(a)</sup>	844,584	708,321	689,425	315,909	224,866	n.p.	n.p.	n.p.	2,900,747
<i>Public acute and private hospitals</i>	2,725,416	2,461,120	1,902,020	1,023,064	695,442	n.p.	n.p.	n.p.	9,246,390
<b>Total</b>	<b>2,730,742</b>	<b>2,461,583</b>	<b>1,902,403</b>	<b>1,024,462</b>	<b>697,295</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>9,256,169</b>
<b>Overnight separations</b>									
<i>Public hospitals</i>	924,308	660,844	496,615	270,866	218,944	49,120	45,138	38,864	2,704,699
Public acute hospitals	919,191	660,387	496,235	269,498	217,482	48,772	45,138	38,864	2,695,567
Public psychiatric hospitals	5,117	457	380	1,368	1,462	348	..	..	9,132
<i>Private hospitals<sup>(a)</sup></i>	299,744	311,985	287,942	133,390	91,992	n.p.	n.p.	n.p.	1,172,616
Private free-standing day hospital facilities	0	3	0	1,226	0	n.p.	n.p.	n.p.	1,231
Other private hospitals <sup>(a)</sup>	299,744	311,982	287,942	132,164	91,992	n.p.	n.p.	n.p.	1,171,385
<i>Public acute and private hospitals</i>	1,218,935	972,372	784,177	402,888	309,474	n.p.	n.p.	n.p.	3,868,183
<b>Total</b>	<b>1,224,052</b>	<b>972,829</b>	<b>784,557</b>	<b>404,256</b>	<b>310,936</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,877,315</b>
<b>Same-day separations</b>									
<i>Public hospitals</i>	736,294	882,929	504,600	317,277	188,371	50,512	52,317	74,493	2,806,793
Public acute hospitals	736,085	882,923	504,597	317,247	187,980	50,504	52,317	74,493	2,806,146
Public psychiatric hospitals	209	6	3	30	391	8	..	..	647
<i>Private hospitals<sup>(a)</sup></i>	770,396	605,825	613,246	302,929	197,988	n.p.	n.p.	n.p.	2,572,061
Private free-standing day hospital facilities	225,556	209,486	211,763	119,184	65,114	n.p.	n.p.	n.p.	842,699
Other private hospitals <sup>(a)</sup>	544,840	396,339	401,483	183,745	132,874	n.p.	n.p.	n.p.	1,729,362
<i>Public acute and private hospitals</i>	1,506,481	1,488,748	1,117,843	620,176	385,968	n.p.	n.p.	n.p.	5,378,207
<b>Total</b>	<b>1,506,690</b>	<b>1,488,754</b>	<b>1,117,846</b>	<b>620,206</b>	<b>386,359</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5,378,854</b>

(continued)

**Table 7.29 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations as a % of total</b>									
<i>Public hospitals</i>	44.3	57.2	50.4	53.9	46.2	50.7	53.7	65.7	50.9
Public acute hospitals	44.5	57.2	50.4	54.1	46.4	50.9	53.7	65.7	51.0
Public psychiatric hospitals	3.9	1.3	0.8	2.1	21.1	2.2	..	..	6.6
<i>Private hospitals<sup>(a)</sup></i>	72.0	66.0	68.0	69.4	68.3	n.p.	n.p.	n.p.	68.7
Private free-standing day hospital facilities	100.0	100.0	100.0	99.0	100.0	n.p.	n.p.	n.p.	99.9
Other private hospitals <sup>(a)</sup>	64.5	56.0	58.2	58.2	59.1	n.p.	n.p.	n.p.	59.6
<i>Public acute and private hospitals</i>	55.3	60.5	58.8	60.6	55.5	n.p.	n.p.	n.p.	58.2
<b>Total</b>	<b>55.2</b>	<b>60.5</b>	<b>58.8</b>	<b>60.5</b>	<b>55.4</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>58.1</b>
<b>Separations per 1,000 population</b>									
<i>Public hospitals</i>	216.1	264.9	220.3	248.8	227.6	179.9	278.8	544.7	236.4
Public acute hospitals	215.3	264.8	220.2	248.2	226.5	179.2	278.8	544.7	236.0
Public psychiatric hospitals	0.8	0.1	0.1	0.6	1.1	0.7	..	..	0.4
<i>Private hospitals<sup>(a)</sup></i>	137.7	155.9	195.2	183.1	155.5	n.p.	n.p.	n.p.	158.2
Private free-standing day hospital facilities	29.2	35.8	45.7	50.8	34.1	n.p.	n.p.	n.p.	35.7
Other private hospitals <sup>(a)</sup>	108.5	120.1	149.5	132.3	121.3	n.p.	n.p.	n.p.	122.4
<i>Public acute and private hospitals</i>	353.0	420.6	415.4	431.3	381.9	n.p.	n.p.	n.p.	394.1
<b>Total</b>	<b>353.8</b>	<b>420.7</b>	<b>415.5</b>	<b>431.8</b>	<b>383.1</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>394.6</b>
<b>Average public cost weight of separations<sup>(b)</sup></b>									
<i>Public hospitals</i>	1.04	0.96	1.00	0.91	1.06	1.06	1.00	0.67	0.99
Public acute hospitals	1.04	0.96	1.00	0.91	1.06	1.06	1.00	0.67	0.99
Public psychiatric hospitals	2.49	2.60	2.96	3.03	2.23	1.01	..	..	2.49
<i>Private hospitals<sup>(a)</sup></i>	0.92	0.89	0.86	0.79	0.90	n.p.	n.p.	n.p.	0.88
Private free-standing day hospital facilities	0.56	0.43	0.50	0.33	0.42	n.p.	n.p.	n.p.	0.47
Other private hospitals <sup>(a)</sup>	1.03	1.03	0.98	0.97	1.06	n.p.	n.p.	n.p.	1.01
<i>Public acute and private hospitals</i>	0.99	0.93	0.94	0.86	0.99	n.p.	n.p.	n.p.	0.95
<b>Total</b>	<b>1.00</b>	<b>0.93</b>	<b>0.94</b>	<b>0.86</b>	<b>1.00</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>0.95</b>

(continued)

**Table 7.29 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2011–12**

	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>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
Private free-standing day hospital facilities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other private hospitals <sup>(a)</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Patient days</b>									
<i>Public hospitals</i>	<i>6,434,979</i>	<i>4,782,281</i>	<i>3,262,934</i>	<i>1,856,812</i>	<i>1,679,153</i>	<i>353,640</i>	<i>326,778</i>	<i>294,459</i>	<i>18,991,036</i>
Public acute hospitals	6,129,774	4,741,858	3,116,265	1,795,341	1,560,142	348,306	326,778	294,459	18,312,923
Public psychiatric hospitals	305,205	40,423	146,669	61,471	119,011	5,334	..	..	678,113
<i>Private hospitals<sup>(a)</sup></i>	<i>2,452,877</i>	<i>2,261,615</i>	<i>2,177,232</i>	<i>905,529</i>	<i>634,321</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,745,214</i>
Private free-standing day hospital facilities	225,556	209,489	211,763	120,410	65,114	n.p.	n.p.	n.p.	843,930
Other private hospitals <sup>(a)</sup>	2,227,321	2,052,126	1,965,469	785,119	569,207	n.p.	n.p.	n.p.	7,901,284
<i>Public acute and private hospitals</i>	<i>8,582,651</i>	<i>7,003,473</i>	<i>5,293,497</i>	<i>2,700,870</i>	<i>2,194,463</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>27,058,137</i>
<b>Total</b>	<b>8,887,856</b>	<b>7,043,896</b>	<b>5,440,166</b>	<b>2,762,341</b>	<b>2,313,474</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>27,736,250</b>
<b>Patient days per 1,000 population</b>									
<i>Public hospitals</i>	<i>817.3</i>	<i>802.9</i>	<i>716.0</i>	<i>786.5</i>	<i>893.9</i>	<i>615.3</i>	<i>949.1</i>	<i>1,592.0</i>	<i>801.0</i>
Public acute hospitals	775.2	795.6	682.8	760.6	821.7	606.0	949.1	1,592.0	770.6
Public psychiatric hospitals	42.1	7.3	33.2	25.9	72.2	9.3	..	..	30.4
<i>Private hospitals<sup>(a)</sup></i>	<i>308.8</i>	<i>374.9</i>	<i>470.3</i>	<i>381.2</i>	<i>326.9</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>363.1</i>
Private free-standing day hospital facilities	29.2	35.8	45.7	50.8	34.1	n.p.	n.p.	n.p.	35.7
Other private hospitals <sup>(a)</sup>	279.7	339.2	424.6	330.4	292.8	n.p.	n.p.	n.p.	327.3
<i>Public acute and private hospitals</i>	<i>1,084.1</i>	<i>1,170.6</i>	<i>1,153.1</i>	<i>1,141.9</i>	<i>1,148.6</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,133.7</i>
<b>Total</b>	<b>1,126.2</b>	<b>1,177.9</b>	<b>1,186.3</b>	<b>1,167.7</b>	<b>1,220.8</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,164.1</b>

(continued)

**Table 7.29 (continued): Separation, average cost weight, patient day and average length of stay statistics, by hospital type, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Average length of stay (days)</b>									
<i>Public hospitals</i>	3.9	3.1	3.3	3.2	4.1	3.5	3.4	2.6	3.4
Public acute hospitals	3.7	3.1	3.1	3.1	3.8	3.5	3.4	2.6	3.3
Public psychiatric hospitals <sup>(d)</sup>	57.3	87.3	382.9	44.0	64.2	15.0	..	..	69.3
<i>Private hospitals<sup>(a)</sup></i>	2.3	2.5	2.4	2.1	2.2	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.3
Private free-standing day hospital facilities	1.0	1.0	1.0	1.0	1.0	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.0
Other private hospitals <sup>(a)</sup>	2.6	2.9	2.9	2.5	2.5	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.7
<i>Public acute and private hospitals</i>	3.1	2.8	2.8	2.6	3.2	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	2.9
<b>Total</b>	<b>3.3</b>	<b>2.9</b>	<b>2.9</b>	<b>2.7</b>	<b>3.3</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3.0</b>
<b>Average length of stay, excluding same-day separations (days)</b>									
<i>Public hospitals</i>	6.2	5.9	5.6	5.7	6.8	6.2	6.1	5.7	6.0
Public acute hospitals	5.9	5.8	5.3	5.5	6.3	6.1	6.1	5.7	5.8
Public psychiatric hospitals <sup>(d)</sup>	59.6	88.4	386.0	44.9	81.1	15.3	..	..	74.2
<i>Private hospitals<sup>(a)</sup></i>	5.6	5.3	5.4	4.5	4.7	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	5.3
Private free-standing day hospital facilities	..	1.0	..	1.0	..	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	1.0
Other private hospitals <sup>(a)</sup>	5.6	5.3	5.4	4.6	4.7	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	5.3
<i>Public acute and private hospitals</i>	5.8	5.7	5.3	5.2	5.8	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	5.6
<b>Total</b>	<b>6.0</b>	<b>5.7</b>	<b>5.5</b>	<b>5.3</b>	<b>6.2</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5.8</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 6.0x national public sector estimated cost weights 2009–10 were applied to AR-DRG version 6.0x DRGs for all rows in *Average public cost weight of separations*.

(c) Private sector cost weights for AR-DRG version 6.0x were not available at the time this report was prepared.

(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 and 7.3 for notes on data limitations and methods.

**Table 7.30: Separations by funding source, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public <sup>(a)</sup>	1,281,749	1,322,831	881,891	535,865	361,707	79,600	85,078	110,132	4,658,853
Private health insurance	266,496	155,326	79,381	31,963	27,895	15,931	6,761	676	584,429
Self-funded <sup>(b)</sup>	40,970	13,807	15,277	935	1,718	80	222	702	73,711
Workers compensation	7,431	6,309	5,221	2,016	1,291	395	414	359	23,436
Motor vehicle third party personal claim	8,689	9,473	3,570	3,337	2,253	575	227	485	28,609
Department of Veterans' Affairs	48,415	25,328	14,775	8,731	9,540	2,666	3,819	277	113,551
Other <sup>(c)</sup>	6,852	10,699	1,100	5,296	2,911	385	934	726	28,903
<b>Total</b>	<b>1,660,602</b>	<b>1,543,773</b>	<b>1,001,215</b>	<b>588,143</b>	<b>407,315</b>	<b>99,632</b>	<b>97,455</b>	<b>113,357</b>	<b>5,511,492</b>
<b>Private hospitals</b>									
Public <sup>(a)</sup>	9,214	2,463	18,925	75,349	4,000	n.p.	n.p.	n.p.	110,131
Private health insurance	870,729	779,445	716,287	315,502	255,191	n.p.	n.p.	n.p.	3,029,670
Self-funded <sup>(b)</sup>	116,766	82,533	65,391	18,834	10,526	n.p.	n.p.	n.p.	299,032
Workers compensation	24,997	12,210	14,145	7,866	4,730	n.p.	n.p.	n.p.	65,869
Motor vehicle third party personal claim	1,079	4,101	462	828	480	n.p.	n.p.	n.p.	7,197
Department of Veterans' Affairs	44,880	34,960	78,424	15,413	13,129	n.p.	n.p.	n.p.	193,041
Other <sup>(c)</sup>	2,475	2,098	7,554	2,527	1,924	n.p.	n.p.	n.p.	39,737
<b>Total</b>	<b>1,070,140</b>	<b>917,810</b>	<b>901,188</b>	<b>436,319</b>	<b>289,980</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,744,677</b>
<b>Total</b>	<b>2,730,742</b>	<b>2,461,583</b>	<b>1,902,403</b>	<b>1,024,462</b>	<b>697,295</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>9,256,169</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 7.1, 7.2 and 7.3 for notes on data limitations and methods.

**Table 7.31: Separations, by state or territory of usual residence, public and private hospitals, states and territories, 2011-12**

State or territory of usual residence	State or territory of hospitalisation								Total	Separations per 1,000 population
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
<b>Public hospitals</b>										
New South Wales	1,630,639	31,063	11,164	839	1,804	163	20,177	546	1,696,395	220.7
Victoria	3,512	1,500,033	2,249	761	2,475	223	313	376	1,509,942	259.0
Queensland	12,072	1,741	979,372	765	441	183	226	571	995,371	219.0
Western Australia	595	634	490	582,164	311	70	40	2,189	586,493	226.8
South Australia	637	2,117	514	368	399,112	49	56	3,305	406,158	248.1
Tasmania	288	1,697	307	108	113	97,873	22	39	100,447	181.7
Australian Capital Territory	3,208	301	183	43	77	35	76,429	43	80,319	523.6
Northern Territory	234	345	443	225	1,935	3	20	105,968	109,173	230.0
Other Australian territories <sup>(a)</sup>	3,364	6	6	212	0	0	0	1	3,589	n.p.
Not elsewhere classified <sup>(b)</sup>	6,053	4,910	5,609	2,629	0	82	172	319	19,774	..
Not reported	0	926	878	29	1,047	0	0	0	3,831	..
<b>Total</b>	<b>1,660,602</b>	<b>1,543,773</b>	<b>1,001,215</b>	<b>588,143</b>	<b>407,315</b>	<b>99,632</b>	<b>97,455</b>	<b>113,357</b>	<b>5,511,492</b>	<b>236.4</b>
<b>Private hospitals</b>										
New South Wales	1,051,861	8,974	32,147	311	1,616	n.p.	n.p.	n.p.	1,102,415	141.7
Victoria	7,913	904,297	1,559	259	1,659	n.p.	n.p.	n.p.	915,962	155.6
Queensland	3,986	1,006	864,947	286	336	n.p.	n.p.	n.p.	870,686	188.6
Western Australia	313	371	292	434,972	208	n.p.	n.p.	n.p.	436,261	153.0
South Australia	401	573	281	111	284,011	n.p.	n.p.	n.p.	285,431	183.1
Tasmania	295	1,531	292	36	58	n.p.	n.p.	n.p.	74,322	130.3
Australian Capital Territory	2,499	241	170	43	63	n.p.	n.p.	n.p.	34,182	78.2
Northern Territory	388	499	753	175	1,291	n.p.	n.p.	n.p.	15,367	97.9
Other Australian territories <sup>(a)</sup>	1,310	1	61	34	0	n.p.	n.p.	n.p.	n.p.	n.p.
Not elsewhere classified <sup>(b)</sup>	1,174	299	629	91	0	n.p.	n.p.	n.p.	n.p.	..
Not reported	0	18	57	1	738	n.p.	n.p.	n.p.	821	..
<b>Total</b>	<b>1,070,140</b>	<b>917,810</b>	<b>901,188</b>	<b>436,319</b>	<b>289,980</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,744,677</b>	<b>158.2</b>
<b>Total</b>	<b>2,730,742</b>	<b>2,461,583</b>	<b>1,902,403</b>	<b>1,024,462</b>	<b>697,295</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>9,256,169</b>	<b>394.6</b>

(a) Includes Cocos (Keeling) Islands, Christmas Island and Jervis Bay Territory.

(b) Includes *Resident overseas, At sea* and *No fixed address*.

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

**Table 7.32: Separations, by care type, public and private hospitals, states and territories, 2011-12**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	1,564,100	1,490,776	947,980	566,072	387,421	95,999	91,177	111,520	5,255,045
Rehabilitation care	31,964	14,954	24,068	11,511	9,205	910	2,603	347	95,562
Palliative care	12,371	7,191	7,333	1,456	1,492	476	648	293	31,260
Geriatric evaluation and management	5,907	16,963	3,712	1,554	1,597	324	374	20	30,451
Psychogeriatric care	827	0	472	732	255	54	42	0	2,382
Maintenance care	8,671	553	6,859	1,411	3,037	384	1,210	146	22,271
Newborn—qualified days only	33,214	11,838	8,164	4,597	2,665	1,462	1,176	898	64,014
Newborn—qualified and unqualified days <sup>(b)</sup>	3,401	1,471	2,530	810	1,643	0	203	0	10,058
Newborn—unqualified days only	42,116	45,672	35,804	18,705	11,950	2,670	3,483	2,806	163,206
<i>Newborn total</i>	<i>78,731</i>	<i>58,981</i>	<i>46,498</i>	<i>24,112</i>	<i>16,258</i>	<i>4,132</i>	<i>4,862</i>	<i>3,704</i>	<i>237,278</i>
Other admitted patient care	135	0	97	0	0	13	22	133	400
Not reported	12	27	0	0	0	10	0	0	49
<i>Total<sup>(c)</sup></i>	<i>1,702,718</i>	<i>1,589,445</i>	<i>1,037,019</i>	<i>606,848</i>	<i>419,265</i>	<i>102,302</i>	<i>100,938</i>	<i>116,163</i>	<i>5,674,698</i>

(continued)



**Table 7.32 (continued): Separations, by care type, public and private hospitals, states and territories, 2011–12**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Private hospitals</b>									
Acute care	920,720	888,732	860,112	427,905	267,113	n.p.	n.p.	n.p.	3,484,968
Rehabilitation care	141,131	19,260	34,179	2,831	21,711	n.p.	n.p.	n.p.	226,887
Palliative care	464	689	2,005	2,327	249	n.p.	n.p.	n.p.	5,877
Geriatric evaluation and management	0	0	20	0	61	n.p.	n.p.	n.p.	124
Psychogeriatric care	0	5,330	0	873	0	n.p.	n.p.	n.p.	6,204
Maintenance care	113	50	2,310	115	35	n.p.	n.p.	n.p.	2,698
Newborn—qualified days only	7,264	3,483	2,102	1,359	811	n.p.	n.p.	n.p.	15,812
Newborn—qualified and unqualified days <sup>(b)</sup>	448	266	404	908	0	n.p.	n.p.	n.p.	2,047
Newborn—unqualified days only	16,169	2,346	15,795	8,342	730	n.p.	n.p.	n.p.	46,726
<i>Newborn total</i>	<i>23,881</i>	<i>6,095</i>	<i>18,301</i>	<i>10,609</i>	<i>1,541</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>64,585</i>
Other admitted patient care	0	0	56	0	0	n.p.	n.p.	n.p.	59
Not reported	0	0	0	1	0	n.p.	n.p.	n.p.	1
<i>Total<sup>(c)</sup></i>	<i>1,086,309</i>	<i>920,156</i>	<i>916,983</i>	<i>444,661</i>	<i>290,710</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,791,403</i>

(a) The reporting of *Newborns* (without qualified days) is not compulsory for the Victorian private sector, resulting in a low number of separations in this category.

(b) Public hospitals in Tasmania and the Northern Territory did not supply *Newborn* care according to the *National health data dictionary* (AIHW 2012f) definition and did not report any separations with both qualified and unqualified days.

(c) Total separations include records for *Newborn* (without qualified days).

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

**Table 7.33: Patient days, by care type, public and private hospitals, states and territories, 2011–12**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Acute care	5,280,425	3,830,328	2,478,646	1,503,936	1,228,469	296,582	257,132	268,346	15,143,864
Rehabilitation care	560,690	310,687	338,334	202,460	157,493	21,709	28,264	7,497	1,627,134
Palliative care	131,333	95,264	62,843	13,698	17,323	4,553	7,325	3,231	335,570
Geriatric evaluation and management	70,916	365,249	59,814	12,812	24,696	8,487	3,956	1,012	546,942
Psychogeriatric care	36,083	0	9,283	35,365	9,684	2,313	945	0	93,673
Maintenance care	183,769	55,391	225,528	43,809	201,657	8,865	16,489	4,485	739,993
Newborn—qualified days only	169,326	124,933	88,156	44,732	39,831	11,049	12,566	9,567	500,160
Newborn—unqualified days only	113,437	114,140	77,143	47,057	33,363	6,707	7,839	7,656	407,342
<i>Newborn total</i>	<i>282,763</i>	<i>239,073</i>	<i>165,299</i>	<i>91,789</i>	<i>73,194</i>	<i>17,756</i>	<i>20,405</i>	<i>17,223</i>	<i>907,502</i>
Other admitted patient care	2,424	0	330	0	0	72	101	321	3,248
Not reported	13	429	0	0	0	10	0	0	452
<i>Total<sup>(b)</sup></i>	<i>6,434,979</i>	<i>4,782,281</i>	<i>3,262,934</i>	<i>1,856,812</i>	<i>1,679,153</i>	<i>353,640</i>	<i>326,778</i>	<i>294,459</i>	<i>18,991,036</i>

(continued)

**Table 7.33 (continued): Patient days, by care type, public and private hospitals, states and territories, 2011–12**

Care type	NSW	Vic <sup>(a)</sup>	Qld	WA	SA	Tas	ACT	NT	Total
<b>Private hospitals</b>									
Acute care	1,929,961	1,937,906	1,920,377	799,375	551,325	n.p.	n.p.	n.p.	7,405,918
Rehabilitation care	474,543	259,415	161,515	50,268	67,736	n.p.	n.p.	n.p.	1,051,109
Palliative care	5,936	7,843	28,666	23,738	3,694	n.p.	n.p.	n.p.	71,216
Geriatric evaluation and management	0	0	711	0	3,085	n.p.	n.p.	n.p.	4,335
Psychogeriatric care	0	28,604	0	13,415	0	n.p.	n.p.	n.p.	42,061
Maintenance care	1,265	6,449	40,151	6,022	3,108	n.p.	n.p.	n.p.	58,146
Newborn—qualified days only	41,172	21,398	25,584	12,710	5,373	n.p.	n.p.	n.p.	112,194
Newborn—unqualified days only	71,045	10,573	62,579	38,527	3,033	n.p.	n.p.	n.p.	198,725
<i>Newborn total</i>	<i>112,217</i>	<i>31,971</i>	<i>88,163</i>	<i>51,237</i>	<i>8,406</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>310,919</i>
Other admitted patient care	0	0	228	0	0	n.p.	n.p.	n.p.	234
Not reported	0	0	0	1	0	n.p.	n.p.	n.p.	1
<i>Total<sup>(b)</sup></i>	<i>2,452,877</i>	<i>2,261,615</i>	<i>2,177,232</i>	<i>905,529</i>	<i>634,321</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,745,214</i>

(a) The reporting of *Newborns* (without qualified days) is not compulsory for the Victorian private sector, resulting in a low numbers of days in this category.

(b) Total patient days exclude unqualified days for *Newborns*.

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

**Table 7.34: Separations, by mode of admission, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Admitted patient transferred from another hospital	93,689	68,965	34,842	39,254	19,426	2,042	3,365	267	261,850
Statistical admission: type change	30,017	16,033	27,625	10,488	5,571	1,844	3,813	1,253	96,644
Other	1,527,822	1,457,987	938,748	538,401	381,338	95,078	90,277	111,837	5,141,488
Not reported	9,074	788	0	0	980	668	0	0	11,510
<i>Total</i>	<i>1,660,602</i>	<i>1,543,773</i>	<i>1,001,215</i>	<i>588,143</i>	<i>407,315</i>	<i>99,632</i>	<i>97,455</i>	<i>113,357</i>	<i>5,511,492</i>
<b>Private hospitals</b>									
Admitted patient transferred from another hospital	40,048	29,761	18,007	7,864	5,731	n.p.	n.p.	n.p.	103,329
Statistical admission: type change	4,492	3,027	7,415	2,147	609	n.p.	n.p.	n.p.	18,888
Other	1,007,821	885,022	875,766	426,308	283,321	n.p.	n.p.	n.p.	3,575,640
Not reported	17,779	0	0	0	319	n.p.	n.p.	n.p.	46,820
<i>Total</i>	<i>1,070,140</i>	<i>917,810</i>	<i>901,188</i>	<i>436,319</i>	<i>289,980</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,744,677</i>
<b>All hospitals</b>									
Admitted patient transferred from another hospital	133,737	98,726	52,849	47,118	25,157	n.p.	n.p.	n.p.	365,179
Statistical admission: type change	34,509	19,060	35,040	12,635	6,180	n.p.	n.p.	n.p.	115,532
Other	2,535,643	2,343,009	1,814,514	964,709	664,659	n.p.	n.p.	n.p.	8,717,128
Not reported	26,853	788	0	0	1,299	n.p.	n.p.	n.p.	58,330
<b>Total</b>	<b>2,730,742</b>	<b>2,461,583</b>	<b>1,902,403</b>	<b>1,024,462</b>	<b>697,295</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>9,256,169</b>

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

**Table 7.35: Same-day and overnight separations by broad category of service, public hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	2,921	1,104	2,070	673	564	124	369	209	8,034
Specialist mental health	8,351	930	4,856	491	1,180	5	101	53	15,967
Emergency									
Surgical	8,436	6,486	2,494	2,372	1,298	522	656	139	22,403
Medical	133,043	182,590	124,801	63,325	34,079	3,559	9,847	9,210	560,454
Other	1,873	762	734	588	231	119	133	17	4,457
Non-emergency									
Surgical	102,433	108,908	55,086	38,606	36,677	8,120	4,674	4,004	358,508
Medical	409,794	492,295	282,218	170,483	105,379	30,260	32,984	58,879	1,582,292
Other	69,443	89,854	32,341	40,739	8,963	7,803	3,553	1,982	254,678
<i>Total same-day separations</i>	<i>736,294</i>	<i>882,929</i>	<i>504,600</i>	<i>317,277</i>	<i>188,371</i>	<i>50,512</i>	<i>52,317</i>	<i>74,493</i>	<i>2,806,793</i>
<b>Overnight separations</b>									
Childbirth	69,968	53,259	41,364	20,943	14,581	3,731	4,040	2,983	210,869
Specialist mental health	32,074	20,562	18,626	10,059	7,640	2,169	1,343	857	93,330
Emergency									
Surgical	76,568	56,058	40,147	26,938	18,950	5,381	5,944	4,491	234,477
Medical	469,321	308,907	247,201	139,147	112,626	22,154	19,924	22,416	1,341,696
Other	20,473	12,655	8,398	5,781	4,954	1,245	1,108	893	55,507
Non-emergency									
Surgical	102,891	92,821	63,338	33,019	29,735	6,460	5,822	2,645	336,731
Medical	146,616	110,235	71,888	33,398	28,225	7,568	6,762	4,270	408,962
Other	6,397	6,347	5,653	1,581	2,233	412	195	309	23,127
<i>Total overnight separations</i>	<i>924,308</i>	<i>660,844</i>	<i>496,615</i>	<i>270,866</i>	<i>218,944</i>	<i>49,120</i>	<i>45,138</i>	<i>38,864</i>	<i>2,704,699</i>
<b>Total</b>	<b>1,660,602</b>	<b>1,543,773</b>	<b>1,001,215</b>	<b>588,143</b>	<b>407,315</b>	<b>99,632</b>	<b>97,455</b>	<b>113,357</b>	<b>5,511,492</b>

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

**Table 7.36: Same-day and overnight separations by broad category of service, private hospitals, states and territories, 2011-12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Childbirth	24	24	40	11	5	n.p.	n.p.	n.p.	135
Specialist mental health	45,412	18,956	33,580	4,634	493	n.p.	n.p.	n.p.	107,574
Emergency									
Surgical	396	437	501	474	2,976	n.p.	n.p.	n.p.	4,807
Medical	1,323	2,737	3,068	1,958	1,792	n.p.	n.p.	n.p.	10,932
Other	165	219	216	158	2,724	n.p.	n.p.	n.p.	3,488
Non-emergency									
Surgical	256,491	195,975	173,334	84,841	57,748	n.p.	n.p.	n.p.	801,068
Medical	259,382	183,073	247,605	139,906	87,268	n.p.	n.p.	n.p.	938,322
Other	207,203	204,404	154,902	70,947	44,982	n.p.	n.p.	n.p.	705,735
<i>Total same-day separations</i>	<i>770,396</i>	<i>605,825</i>	<i>613,246</i>	<i>302,929</i>	<i>197,988</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,572,061</i>
<b>Overnight separations</b>									
Childbirth	23,234	20,457	17,634	10,273	4,796	n.p.	n.p.	n.p.	80,647
Specialist mental health	9,885	8,982	7,173	3,724	1,455	n.p.	n.p.	n.p.	32,517
Emergency									
Surgical	3,900	9,551	10,553	4,995	4,356	n.p.	n.p.	n.p.	33,871
Medical	14,290	35,303	52,278	16,709	14,457	n.p.	n.p.	n.p.	135,467
Other	952	3,836	4,294	1,524	1,388	n.p.	n.p.	n.p.	12,204
Non-emergency									
Surgical	158,549	135,582	116,179	68,443	44,398	n.p.	n.p.	n.p.	547,940
Medical	79,207	85,451	68,946	24,981	18,318	n.p.	n.p.	n.p.	289,566
Other	9,727	12,823	10,885	2,741	2,824	n.p.	n.p.	n.p.	40,404
<i>Total overnight separations</i>	<i>299,744</i>	<i>311,985</i>	<i>287,942</i>	<i>133,390</i>	<i>91,992</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,172,616</i>
<b>Total</b>	<b>1,070,140</b>	<b>917,810</b>	<b>901,188</b>	<b>436,319</b>	<b>289,980</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,744,677</b>

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

**Table 7.37: Separations for selected potentially preventable hospitalisations<sup>(a)</sup>, by state or territory of usual residence, all hospitals, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Vaccine-preventable conditions</b>									
Influenza and pneumonia	4,951	3,009	3,282	1,391	1,483	246	215	516	15,111
Other vaccine-preventable conditions	1,051	1,413	757	421	181	36	34	146	4,043
<i>Total vaccine-preventable conditions<sup>(c)</sup></i>	<i>5,987</i>	<i>4,414</i>	<i>4,032</i>	<i>1,808</i>	<i>1,662</i>	<i>282</i>	<i>248</i>	<i>662</i>	<i>19,117</i>
<i>Vaccine-preventable PPHs per 1,000 population</i>	<i>0.8</i>	<i>0.8</i>	<i>0.9</i>	<i>0.8</i>	<i>0.9</i>	<i>0.5</i>	<i>0.7</i>	<i>3.1</i>	<i>0.8</i>
<b>Acute conditions</b>									
Appendicitis with generalised peritonitis	2,696	1,767	1,717	893	585	167	87	116	8,044
Cellulitis	15,156	10,459	9,800	4,450	3,124	741	499	818	45,136
Convulsions and epilepsy	11,349	8,253	7,518	3,573	2,765	605	501	797	35,434
Dehydration and gastroenteritis	20,021	20,482	13,937	6,347	4,973	1,122	631	675	68,271
Dental conditions	16,420	16,699	12,769	8,949	5,801	1,108	770	763	63,327
Ear, nose and throat infections	11,216	9,467	8,388	4,953	3,461	554	388	728	39,191
Gangrene	1,376	2,516	1,423	872	399	126	36	156	6,913
Pelvic inflammatory disease	1,296	1,302	1,162	528	358	88	67	142	4,947
Perforated/bleeding ulcer	1,766	1,361	927	571	465	115	79	33	5,323
Pyelonephritis	20,576	16,903	13,884	7,043	4,891	939	902	760	65,962
<i>Total acute conditions<sup>(c)</sup></i>	<i>101,819</i>	<i>89,114</i>	<i>71,474</i>	<i>38,136</i>	<i>26,803</i>	<i>5,562</i>	<i>3,959</i>	<i>4,983</i>	<i>342,278</i>
<i>Acute PPHs per 1,000 population</i>	<i>13.5</i>	<i>15.6</i>	<i>15.8</i>	<i>16.2</i>	<i>15.6</i>	<i>10.4</i>	<i>11.3</i>	<i>23.0</i>	<i>14.9</i>

(continued)

**Table 7.37 (continued): Separations for selected potentially preventable hospitalisations<sup>(a)</sup>, by state or territory of usual residence, all hospitals, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Chronic conditions</b>									
Angina	8,651	7,534	8,891	3,178	2,598	582	226	372	32,051
Asthma	13,043	10,580	7,366	3,223	2,905	523	420	448	38,543
Chronic obstructive pulmonary disease	22,802	16,182	14,533	5,616	5,551	1,369	763	1,169	68,046
Congestive cardiac failure	16,365	14,227	9,840	4,567	4,095	941	531	540	51,141
Diabetes complications	19,625	18,667	19,941	19,127	5,864	1,664	693	1,277	86,951
Hypertension	2,684	2,063	2,100	634	583	114	64	43	8,298
Iron deficiency anaemia	9,113	11,144	5,709	3,718	2,755	936	367	241	34,005
Nutritional deficiencies	122	105	79	14	34	0	12	13	379
Rheumatic heart disease <sup>(d)</sup>	642	545	698	340	244	33	24	208	2,739
<i>Total chronic conditions<sup>(c)</sup></i>	<i>90,910</i>	<i>78,652</i>	<i>67,229</i>	<i>39,682</i>	<i>24,047</i>	<i>6,011</i>	<i>3,030</i>	<i>4,147</i>	<i>313,990</i>
<i>Chronic PPHs per 1,000 population</i>	<i>11.3</i>	<i>13.0</i>	<i>14.5</i>	<i>16.8</i>	<i>12.3</i>	<i>9.9</i>	<i>9.1</i>	<i>23.4</i>	<i>13.0</i>
<i>Total chronic conditions, excluding diabetes<sup>(c)</sup></i>	<i>73,422</i>	<i>62,380</i>	<i>49,216</i>	<i>21,290</i>	<i>18,765</i>	<i>4,498</i>	<i>2,407</i>	<i>3,034</i>	<i>235,202</i>
<i>Chronic PPHs (excluding diabetes) per 1,000 population</i>	<i>9.1</i>	<i>10.3</i>	<i>10.7</i>	<i>9.1</i>	<i>9.5</i>	<i>7.3</i>	<i>7.3</i>	<i>17.6</i>	<i>9.7</i>
<b>Total selected potentially preventable hospitalisations<sup>(c)</sup></b>	<b>197,952</b>	<b>171,432</b>	<b>141,964</b>	<b>79,289</b>	<b>52,206</b>	<b>11,810</b>	<b>7,216</b>	<b>9,653</b>	<b>672,252</b>
<b>Total PPHs per 1,000 population</b>	<b>25.5</b>	<b>29.2</b>	<b>31.1</b>	<b>33.6</b>	<b>28.7</b>	<b>20.8</b>	<b>21.0</b>	<b>48.9</b>	<b>28.6</b>

PPH—potentially preventable hospitalisation.

(a) These conditions are defined using ICD-10-AM codes in Appendix B tables accompanying this report online.

(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.

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



**Table 7.38: Separations, by age group and sex, public hospitals, states and territories, 2011–12**

<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	33,831	17,126	14,049	7,478	5,207	1,386	1,341	1,445	81,863
	1–4	26,844	20,639	17,130	9,665	6,885	1,290	1,288	1,644	85,385
	5–14	35,198	26,942	23,237	12,538	7,722	1,864	2,003	2,060	111,564
	15–24	41,871	41,536	30,473	16,944	10,836	2,316	2,743	2,599	149,318
	25–34	46,825	48,496	35,511	21,930	11,944	2,808	3,329	4,436	175,279
	35–44	63,831	65,331	45,298	27,896	16,347	4,235	4,511	8,315	235,764
	45–54	88,745	88,140	63,844	37,379	25,053	6,315	5,773	11,140	326,389
	55–64	124,981	127,268	81,745	47,188	31,498	7,687	8,815	10,879	440,061
	65–74	146,818	151,122	87,561	49,273	34,060	9,809	9,569	4,994	493,206
	75–84	148,144	135,788	70,569	44,078	39,169	8,763	7,237	1,895	455,643
	85 and over	55,382	41,462	21,337	15,153	13,852	2,433	3,387	224	153,230
<i>Total males<sup>(a)</sup></i>		<i>812,472</i>	<i>763,850</i>	<i>490,754</i>	<i>289,522</i>	<i>202,573</i>	<i>48,906</i>	<i>49,996</i>	<i>49,632</i>	<i>2,707,705</i>
<b>Females</b>	Under 1	28,042	12,714	10,738	5,690	4,028	1,120	1,081	1,196	64,609
	1–4	20,072	13,866	12,754	6,958	4,775	833	1,013	1,335	61,606
	5–14	25,811	20,939	17,013	9,377	6,258	1,383	1,233	1,544	83,558
	15–24	66,519	64,333	55,691	26,927	18,821	4,403	4,310	6,149	247,153
	25–34	113,944	108,870	77,928	39,561	27,846	6,049	7,370	8,259	389,827
	35–44	86,309	90,590	58,780	34,360	22,185	5,827	6,403	10,673	315,127
	45–54	79,681	90,741	59,465	36,609	22,366	6,496	5,079	13,328	313,765
	55–64	94,359	101,141	63,230	40,333	23,573	7,484	5,167	14,052	349,339
	65–74	123,733	114,116	66,433	39,774	26,073	7,414	6,509	5,742	389,794
	75–84	132,736	109,166	59,650	38,373	30,748	6,801	5,693	1,112	384,279
	85 and over	76,911	53,426	28,778	20,659	18,067	2,915	3,600	335	204,691
<i>Total females<sup>(a)</sup></i>		<i>848,118</i>	<i>779,902</i>	<i>510,460</i>	<i>298,621</i>	<i>204,742</i>	<i>50,725</i>	<i>47,458</i>	<i>63,725</i>	<i>2,803,751</i>
<b>Total<sup>(a)</sup></b>		<b>1,660,602</b>	<b>1,543,773</b>	<b>1,001,215</b>	<b>588,143</b>	<b>407,315</b>	<b>99,632</b>	<b>97,455</b>	<b>113,357</b>	<b>5,511,492</b>

(a) Totals include separations where age group was not reported.

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

**Table 7.39: Separations, by age group and sex, private hospitals, states and territories, 2011–12**

<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	5,703	3,951	2,801	1,977	840	n.p.	n.p.	n.p.	15,838
	1–4	7,257	4,844	5,492	3,161	2,001	n.p.	n.p.	n.p.	23,640
	5–14	9,412	7,164	7,421	3,930	2,241	n.p.	n.p.	n.p.	31,432
	15–24	20,492	19,122	15,410	8,962	6,067	n.p.	n.p.	n.p.	72,886
	25–34	24,037	20,588	18,491	11,487	5,843	n.p.	n.p.	n.p.	83,576
	35–44	39,448	33,568	30,418	19,641	8,959	n.p.	n.p.	n.p.	136,521
	45–54	60,506	52,172	48,820	29,719	15,791	n.p.	n.p.	n.p.	214,204
	55–64	95,967	81,099	87,526	42,169	28,131	n.p.	n.p.	n.p.	346,869
	65–74	109,385	87,647	99,712	43,003	32,459	n.p.	n.p.	n.p.	385,035
	75–84	76,670	67,117	66,894	30,874	23,812	n.p.	n.p.	n.p.	273,651
	85 and over	30,399	27,825	28,880	10,323	10,026	n.p.	n.p.	n.p.	110,881
	<i>Total males<sup>(a)</sup></i>	<i>479,276</i>	<i>405,097</i>	<i>411,865</i>	<i>205,246</i>	<i>136,170</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,694,533</i>
<b>Females</b>	Under 1	4,048	2,640	1,903	1,165	444	n.p.	n.p.	n.p.	10,657
	1–4	4,817	3,177	3,770	1,958	1,402	n.p.	n.p.	n.p.	15,681
	5–14	8,476	6,406	6,480	3,382	2,019	n.p.	n.p.	n.p.	27,839
	15–24	32,415	30,795	27,496	14,393	6,947	n.p.	n.p.	n.p.	116,342
	25–34	63,314	57,639	52,080	27,331	12,891	n.p.	n.p.	n.p.	221,845
	35–44	77,487	76,457	59,921	32,980	15,847	n.p.	n.p.	n.p.	272,422
	45–54	75,266	71,826	67,063	33,804	20,540	n.p.	n.p.	n.p.	278,352
	55–64	103,210	86,468	85,132	43,058	30,114	n.p.	n.p.	n.p.	360,662
	65–74	106,199	80,367	85,209	35,278	29,072	n.p.	n.p.	n.p.	347,790
	75–84	81,281	65,126	67,486	27,731	24,055	n.p.	n.p.	n.p.	274,842
	85 and over	34,351	31,806	32,780	9,993	10,464	n.p.	n.p.	n.p.	123,675
	<i>Total females<sup>(a)</sup></i>	<i>590,864</i>	<i>512,707</i>	<i>489,320</i>	<i>231,073</i>	<i>153,795</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,050,107</i>
<b>Total<sup>(a)</sup></b>		<b>1,070,140</b>	<b>917,810</b>	<b>901,188</b>	<b>436,319</b>	<b>289,980</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,744,677</b>

(a) Totals include separations where age group was not reported.

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

**Table 7.40: Separations, by Indigenous status, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Aboriginal but not Torres Strait Islander origin	67,346	16,420	68,669	54,380	22,613	2,932	2,037	78,416	312,813
Torres Strait Islander but not Aboriginal origin	834	371	10,633	433	107	141	85	318	12,922
Aboriginal and Torres Strait Islander origin	1,670	1,950	5,406	907	111	185	69	915	11,213
<i>Indigenous Australians</i>	<i>69,850</i>	<i>18,741</i>	<i>84,708</i>	<i>55,720</i>	<i>22,831</i>	<i>3,258</i>	<i>2,191</i>	<i>79,649</i>	<i>336,948</i>
Neither Aboriginal nor Torres Strait Islander origin	1,579,067	1,511,411	905,093	532,423	366,676	94,973	94,151	33,707	5,117,501
Not reported	11,685	13,621	11,414	0	17,808	1,401	1,113	1	57,043
<i>Total</i>	<i>1,660,602</i>	<i>1,543,773</i>	<i>1,001,215</i>	<i>588,143</i>	<i>407,315</i>	<i>99,632</i>	<i>97,455</i>	<i>113,357</i>	<i>5,511,492</i>
<b>Private hospitals</b>									
Aboriginal but not Torres Strait Islander origin	1,945	664	2,708	18,707	360	n.p.	n.p.	n.p.	24,865
Torres Strait Islander but not Aboriginal origin	120	144	691	370	47	n.p.	n.p.	n.p.	1,425
Aboriginal and Torres Strait Islander origin	574	910	560	509	128	n.p.	n.p.	n.p.	2,880
<i>Indigenous Australians</i>	<i>2,639</i>	<i>1,718</i>	<i>3,959</i>	<i>19,586</i>	<i>535</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>29,170</i>
Neither Aboriginal nor Torres Strait Islander origin	1,032,182	909,183	832,185	416,733	265,931	n.p.	n.p.	n.p.	3,557,459
Not reported	35,319	6,909	65,044	0	23,514	n.p.	n.p.	n.p.	158,048
<i>Total</i>	<i>1,070,140</i>	<i>917,810</i>	<i>901,188</i>	<i>436,319</i>	<i>289,980</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>3,744,677</i>
<b>All hospitals</b>									
<i>Indigenous Australians</i>	<i>72,489</i>	<i>20,459</i>	<i>88,667</i>	<i>75,306</i>	<i>23,366</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>366,118</i>
<i>Other Australians<sup>(a)</sup></i>	<i>2,658,253</i>	<i>2,441,124</i>	<i>1,813,736</i>	<i>949,156</i>	<i>673,929</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>8,890,051</i>
<b>Total<sup>(a)</sup></b>	<b>2,730,742</b>	<b>2,461,583</b>	<b>1,902,403</b>	<b>1,024,462</b>	<b>697,295</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>9,256,169</b>
Separation rate for Indigenous Australians per 1,000	614.1	807.2	838.6	1,562.5	1,162.2	270.7	722.0	1,778.7	972.8
Separation rate for other Australians <sup>(a)</sup> per 1,000	350.0	419.1	403.8	408.1	375.3	316.7	384.3	314.2	385.0
Separation rate for all people per 1,000	354.2	420.7	413.5	430.4	384.2	314.9	387.4	612.2	394.3
Rate ratio <sup>(b)</sup>	1.8	1.9	2.1	3.8	3.1	0.9	1.9	5.7	2.5

(a) *Other Australians* includes records for which Indigenous status was not reported.

(b) The rate ratio is equal to the separation rate for *Indigenous Australians* divided by the separation rate for *other Australians*.

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

**Table 7.41: Overnight separations, by Indigenous status, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Aboriginal but not Torres Strait Islander origin	34,426	6,442	28,291	24,577	8,694	1,671	923	21,396	126,420
Torres Strait Islander but not Aboriginal origin	538	231	3,717	97	66	67	26	120	4,862
Aboriginal and Torres Strait Islander origin	978	815	2,397	287	78	112	47	244	4,958
<i>Indigenous Australians</i>	35,942	7,488	34,405	24,961	8,838	1,850	996	21,760	136,240
Neither Aboriginal nor Torres Strait Islander origin	880,727	647,812	455,625	245,905	201,412	46,511	43,370	17,104	2,538,466
Not reported	7,639	5,544	6,585	0	8,694	759	772	0	29,993
<i>Total</i>	924,308	660,844	496,615	270,866	218,944	49,120	45,138	38,864	2,704,699
<b>Private hospitals</b>									
Aboriginal but not Torres Strait Islander origin	643	233	624	183	107	n.p.	n.p.	n.p.	2,024
Torres Strait Islander but not Aboriginal origin	37	82	173	22	21	n.p.	n.p.	n.p.	359
Aboriginal and Torres Strait Islander origin	170	388	107	39	30	n.p.	n.p.	n.p.	817
<i>Indigenous Australians</i>	850	703	904	244	158	n.p.	n.p.	n.p.	3,200
Neither Aboriginal nor Torres Strait Islander origin	290,315	307,490	273,583	133,146	88,306	n.p.	n.p.	n.p.	1,130,869
Not reported	8,579	3,792	13,455	0	3,528	n.p.	n.p.	n.p.	38,547
<i>Total</i>	299,744	311,985	287,942	133,390	91,992	n.p.	n.p.	n.p.	1,172,616
<b>All hospitals</b>									
Indigenous Australians	36,792	8,191	35,309	25,205	8,996	n.p.	n.p.	n.p.	139,440
Other Australians <sup>(a)</sup>	1,187,260	964,638	749,248	379,051	301,940	n.p.	n.p.	n.p.	3,737,875
<b>Total</b>	<b>1,224,052</b>	<b>972,829</b>	<b>784,557</b>	<b>404,256</b>	<b>310,936</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,877,315</b>
Separation rate for Indigenous Australians per 1,000	277.4	279.3	290.6	399.6	376.8	137.5	321.8	372.3	309.8
Separation rate for other Australians <sup>(a)</sup> per 1,000	158.3	166.6	168.1	164.3	170.6	137.2	170.0	156.7	163.4
Separation rate for all people per 1,000	160.5	167.2	171.6	170.9	173.8	137.0	171.4	211.9	166.6
Rate ratio <sup>(b)</sup>	1.8	1.7	1.7	2.4	2.2	1.0	1.9	2.4	1.9

(a) *Other Australians* includes records for which Indigenous status was not reported.

(b) The rate ratio is equal to the separation rate for *Indigenous Australians* divided by the separation rate for *other Australians*.

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

**Table 7.42: Separations, by mode of separation, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Discharge/transfer to an(other) acute hospital	105,445	98,566	58,845	27,788	25,094	3,676	3,373	3,695	326,482
Discharge/transfer to residential aged care service <sup>(a)</sup>	17,904	22,384	4,936	8,010	8,280	857	568	349	63,288
Discharge/transfer to an(other) psychiatric hospital	2,029	1,384	135	1,055	1,256	669	21	8	6,557
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	4,598	3,261	1,810	1,326	1,610	247	619	2,058	15,529
Statistical discharge: type change	30,172	16,556	27,650	10,513	5,465	1,880	3,808	1,065	97,109
Left against medical advice/discharge at own risk	16,928	7,595	9,399	5,503	3,267	293	409	3,650	47,044
Statistical discharge from leave	3,559	43	666	1,351	147	0	0	0	5,766
Died	23,833	15,620	10,135	4,180	4,835	1,413	1,006	460	61,482
Other <sup>(c)</sup>	1,456,021	1,378,364	887,639	528,417	357,360	90,584	87,650	102,072	4,888,107
Not reported	113	0	0	0	1	13	1	0	128
<b>Total</b>	<b>1,660,602</b>	<b>1,543,773</b>	<b>1,001,215</b>	<b>588,143</b>	<b>407,315</b>	<b>99,632</b>	<b>97,455</b>	<b>113,357</b>	<b>5,511,492</b>
<b>Private hospitals</b>									
Discharge/transfer to an(other) acute hospital	22,042	19,099	8,163	2,952	6,808	n.p.	n.p.	n.p.	60,450
Discharge/transfer to residential aged care service <sup>(a)</sup>	1,373	2,769	1,011	928	1,081	n.p.	n.p.	n.p.	7,379
Discharge/transfer to an(other) psychiatric hospital	56	58	11	33	26	n.p.	n.p.	n.p.	186
Discharge/transfer to other health-care accommodation <sup>(b)</sup>	52,108	7	742	57	240	n.p.	n.p.	n.p.	53,345
Statistical discharge: type change	5,281	3,387	7,449	2,213	597	n.p.	n.p.	n.p.	20,017
Left against medical advice/discharge at own risk	1,004	574	360	140	57	n.p.	n.p.	n.p.	2,161
Statistical discharge from leave	9	0	79	7	n.p.	n.p.	n.p.	n.p.	98
Died	2,183	3,369	4,529	2,025	1,043	n.p.	n.p.	n.p.	13,625
Other <sup>(c)</sup>	986,084	888,547	878,844	427,964	280,107	n.p.	n.p.	n.p.	3,587,396
Not reported	0	0	0	0	n.p.	n.p.	n.p.	n.p.	20
<b>Total</b>	<b>1,070,140</b>	<b>917,810</b>	<b>901,188</b>	<b>436,319</b>	<b>289,980</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,744,677</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.

## 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 date. 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 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, 96% were reported as *Acute*, with a higher proportion in the public sector (99%) than in the private sector (93%).

### How has activity changed over time?

From 2010–11 to 2011–12, same-day acute separations increased by 4.7% to 5.2 million, a slightly higher increase than the average per year between 2007–08 and 2011–12 (4.6%) (Table 8.1).

The annual growth rate in same-day acute separations between 2007–08 and 2011–12 was higher in private hospitals (4.9%) than in public hospitals (4.3%). The greatest increase in same-day acute separations occurred in private free-standing day hospital facilities (6.1% on average each year), increasing from 664,000 in 2007–08 to 841,000 in 2011–12.

**Table 8.1: Same-day acute separations, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent) <sup>(a)</sup>	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals	2,340,658	2,438,288	2,548,148	2,660,010	2,776,747	4.4	4.4
Public psychiatric hospitals	1,797	630	690	630	633	–23.0	0.5
<i>Total</i>	<i>2,342,455</i>	<i>2,438,918</i>	<i>2,548,838</i>	<i>2,660,640</i>	<i>2,777,380</i>	<i>4.3</i>	<i>4.4</i>
<b>Private hospitals</b>							
Private free-standing day hospital facilities	664,151	726,572	780,690	806,409	841,327	6.1	4.3
Other private hospitals	1,319,030	1,356,396	1,436,250	1,476,434	1,557,844	4.2	5.4
<i>Total</i>	<i>1,983,181</i>	<i>2,082,968</i>	<i>2,216,940</i>	<i>2,282,843</i>	<i>2,399,171</i>	<i>4.9</i>	<i>5.1</i>
<b>All hospitals</b>	<b>4,325,636</b>	<b>4,521,886</b>	<b>4,765,778</b>	<b>4,943,483</b>	<b>5,176,551</b>	<b>4.6</b>	<b>4.7</b>

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

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

Between 2007–08 and 2011–12, the number of same-day acute public hospital separations increased at a greater rate than the national average in Queensland, Western Australia and the Northern Territory. Over the same period, above-average increases in the number of same-day acute private hospital separations were recorded in New South Wales, Western Australia and South Australia.

Large single-year increases in the number of same-day acute separations between 2010–11 and 2011–12 were recorded for Western Australia (both public and private hospitals), public hospitals in South Australia and the Northern Territory, and for private hospitals in New South Wales and Queensland (Table 8.2).

**Table 8.2: Same-day acute separations, public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent) <sup>(a)</sup>	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(b)</sup></b>							
Public hospitals	631,985	654,272	679,911	697,804	726,434	3.5	4.1
Private hospitals	535,887	563,959	592,552	618,824	651,662	5.0	5.3
All hospitals	1,167,872	1,218,231	1,272,463	1,316,628	1,378,096	4.2	4.7
<b>Victoria<sup>(b)</sup></b>							
Public hospitals	766,885	789,255	809,244	849,798	882,687	3.6	3.9
Private hospitals	515,376	531,609	581,364	573,363	601,695	3.9	4.9
All hospitals	1,282,261	1,320,864	1,390,608	1,423,161	1,484,382	3.7	4.3
<b>Queensland</b>							
Public hospitals	398,415	433,612	459,402	482,271	492,281	5.4	2.1
Private hospitals	502,405	530,024	549,879	556,567	586,929	4.0	5.5
All hospitals	900,820	963,636	1,009,281	1,038,838	1,079,210	4.6	3.9
<b>Western Australia<sup>(b)</sup></b>							
Public hospitals	235,065	239,899	269,408	292,117	316,669	7.7	8.4
Private hospitals	209,893	242,941	260,654	287,160	302,562	9.6	5.4
All hospitals	444,958	482,840	530,062	579,277	619,231	8.6	6.9
<b>South Australia<sup>(b)</sup></b>							
Public hospitals	160,514	164,745	170,177	173,794	183,019	3.3	5.3
Private hospitals	148,420	153,881	162,859	172,395	180,672	5.0	4.8
All hospitals	308,934	318,626	333,036	346,189	363,691	4.2	5.1
<b>Tasmania<sup>(b)</sup></b>							
Public hospitals	50,426	49,338	51,080	49,606	50,462	<0.1	1.7
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	43,513	48,248	47,081	49,304	51,505	4.3	4.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	55,652	59,549	62,535	65,946	74,323	7.5	12.7
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
All hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Total</b>							
<b>Public hospitals</b>	<b>2,342,455</b>	<b>2,438,918</b>	<b>2,548,838</b>	<b>2,660,640</b>	<b>2,777,380</b>	<b>4.3</b>	<b>4.4</b>
<b>Private hospitals</b>	<b>1,983,181</b>	<b>2,082,968</b>	<b>2,216,940</b>	<b>2,282,843</b>	<b>2,399,171</b>	<b>4.9</b>	<b>5.1</b>
<b>All hospitals</b>	<b>4,325,636</b>	<b>4,521,886</b>	<b>4,765,778</b>	<b>4,943,483</b>	<b>5,176,551</b>	<b>4.6</b>	<b>4.7</b>

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

(b) There were changes in coverage or data supply over this period for New South Wales, Victoria, Western Australia, South Australia and Tasmania that affect the interpretation of these data. See Appendix A for more information.

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

## Who used these services?

### Sex and age group

Just over half (51%) of same-day acute separations were for females (Figure 8.1). However, there were more same-day separations for males aged 0 to 14 and aged 55 and over. People aged 55 and over accounted for more than half of all same-day separations.

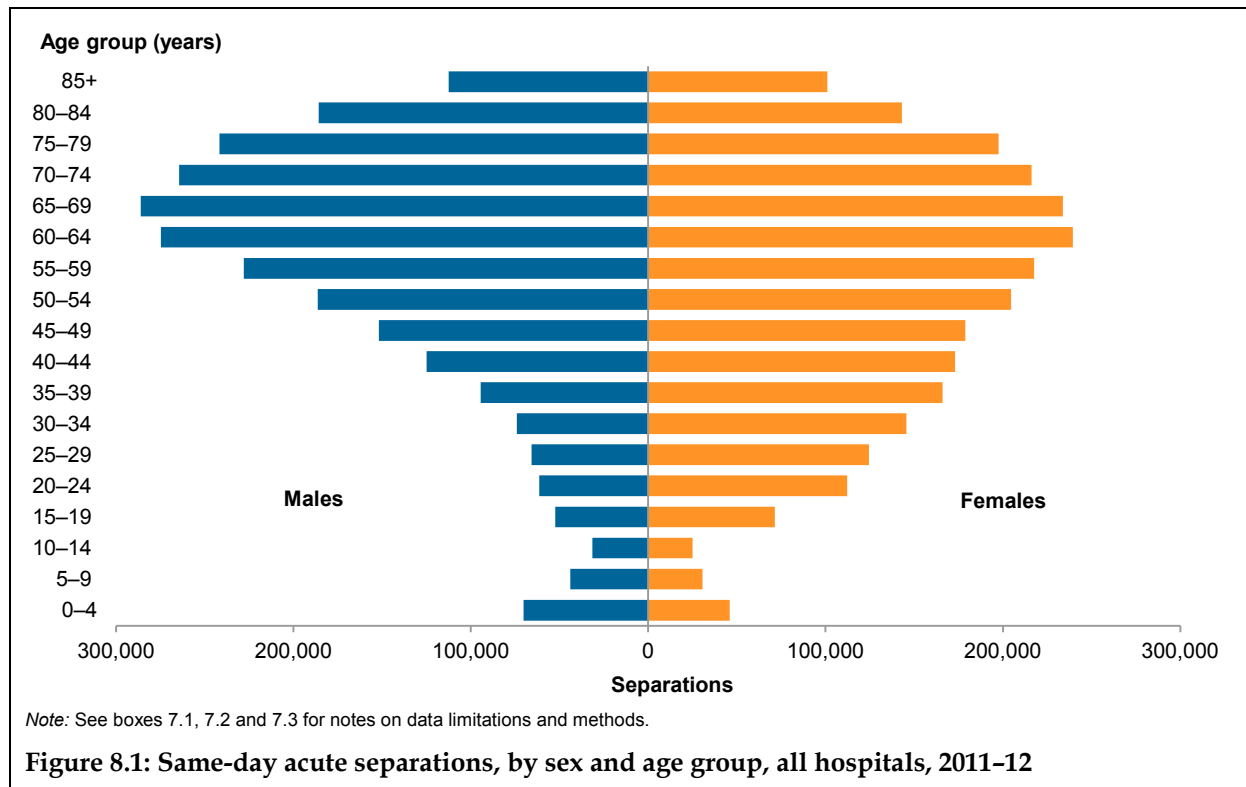


Figure 8.1: Same-day acute separations, by sex and age group, all hospitals, 2011-12

### Aboriginal and Torres Strait Islander people

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. The quality of the data provided for Indigenous status in 2011-12 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix B for more information on the quality of Indigenous data in the NHMD.

Nationally, 4.4% of all same-day acute separations were for Aboriginal or Torres Strait Islander people.

In 2011-12, the same-day acute separation rate for Indigenous Australians was more than 3 times the rate for other Australians (Table 8.3). The Northern Territory had the highest rate of same-day acute separations for Indigenous Australians.

For both Indigenous and other Australians, *Care involving dialysis* accounted for a large proportion of same-day separations, particularly for Indigenous Australians, who were admitted for dialysis at 12 times the rate for other Australians. Excluding separations for dialysis, Indigenous Australians had lower same-day acute separation rates than other Australians in New South Wales, Victoria, Queensland, Western Australia and South Australia.



**Table 8.3: Same-day acute separations per 1,000 population, by Indigenous status<sup>(a)</sup>, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
<b>Indigenous Australians</b>									
Separations	35,516	12,267	52,922	50,072	14,304	1,406	1,190	57,846	225,915
Separations per 1,000 population	334.3	527.9	543.4	1,162.3	781.8	104.8	369.4	1,405.4	660.6
Excluding <i>Care involving dialysis</i>	117.0	185.7	148.1	147.5	147.6	84.8	133.3	136.1	138.9
<b>Other Australians<sup>(c)</sup></b>									
Separations	1,342,580	1,472,115	1,026,288	569,159	349,387	49,056	50,315	16,477	4,950,636
Separations per 1,000 population	176.1	251.8	227.3	243.4	193.1	88.9	145.1	110.4	213.3
Excluding <i>Care involving dialysis</i>	136.8	200.0	185.7	187.3	152.4	63.7	72.2	81.1	168.6
<b>Total</b>									
<b>Separations</b>	<b>1,378,096</b>	<b>1,484,382</b>	<b>1,079,210</b>	<b>619,231</b>	<b>363,691</b>	<b>50,462</b>	<b>51,505</b>	<b>74,323</b>	<b>5,176,551</b>
<b>Separations per 1,000 population</b>	<b>178.1</b>	<b>252.8</b>	<b>233.6</b>	<b>259.1</b>	<b>198.9</b>	<b>89.2</b>	<b>147.1</b>	<b>363.7</b>	<b>219.5</b>
<b>Excluding <i>Care involving dialysis</i></b>	<b>136.6</b>	<b>200.0</b>	<b>185.3</b>	<b>186.8</b>	<b>152.5</b>	<b>64.2</b>	<b>73.0</b>	<b>95.1</b>	<b>168.4</b>

(a) For Tasmania, the Australian Capital Territory and the Northern Territory, separation rates by Indigenous status are calculated for public hospitals only.

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

(c) *Other Australians* includes separations for which Indigenous status was not reported.

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

## Remoteness area

In 2011–12, people who lived in *Very remote* areas had 322 same-day acute separations per 1,000 population, compared with about 221 per 1,000 nationally (Table 8.4). The SRR for *Very remote* areas was 1.46, indicating that the separation rate was 46% higher than the national separation rate.

**Table 8.4: Selected same-day acute separation statistics, by remoteness area of usual residence, all hospitals, 2011–12**

	Remoteness area					Total <sup>(a)</sup>
	Major cities	Inner regional	Outer regional	Remote	Very remote	
Separations	3,555,515	1,019,923	451,400	75,361	54,775	5,176,551
Separation rate	223.9	210.6	205.8	229.2	322.4	220.7
Standardised separation rate ratio	1.01	0.95	0.93	1.04	1.46	

(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

Each SES group accounted for between 19% and 21% of total same-day acute separations. The separation rates varied from 210 per 1,000 population for people living in areas classified as being the second-lowest SES group to 232 per 1,000 for the middle SES group (Table 8.5).

**Table 8.5: Selected same-day acute separation statistics, by socioeconomic status of area of residence, all hospitals, 2011–12**

	Socioeconomic status of area of residence					Total <sup>(a)</sup>
	1–Lowest	2	3	4	5–Highest	
Separations	1,037,271	1,030,089	1,068,511	990,801	1,029,615	5,176,551
Separation rate	219.7	209.6	231.7	220.1	220.4	220.8
Standardised separation rate ratio	0.99	0.95	1.05	1.00	1.00	

(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* (98% 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 0.3%, respectively) (Table 8.6).

**Table 8.6: Same-day acute separations, by mode of admission, public and private hospitals, 2011–12**

	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Admitted patient transferred from another hospital	32,342	3,852	3,042	39,236
Statistical admission: type change	3,167	0	396	3,563
Other	2,733,506	837,471	1,526,974	5,097,951
Not reported	8,365	4	27,432	35,801
<b>Total</b>	<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</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.

In 2011–12, almost half (47%) of same-day acute separations in public hospitals and 31% in private hospitals had a principal diagnosis in the *Factors influencing health status and contact with health services* chapter of the ICD-10-AM (Table 8.7). The major contributors to the *Factors influencing health status and contact with health services* separations were for *Care involving dialysis* and *Other medical care* (which includes chemotherapy) (Table 8.8).

The relative distribution of separations by diagnosis chapter varied across public and private hospitals. For example, about 64% of same-day acute separations for *Factors influencing health*

*status and contact with health services* were from public hospitals, while about 73% of same-day acute separations for *Diseases of the eye and adnexa* were from private hospitals.

**Table 8.7: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	35,693	2,248	8,458	46,399
C00–D48	Neoplasms	124,286	70,524	137,882	332,692
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	57,822	13,909	22,741	94,472
E00–E90	Endocrine, nutritional and metabolic diseases	32,201	5,000	13,287	50,488
F00–F99	Mental and behavioural disorders	47,919	268	111,852	160,039
G00–G99	Diseases of the nervous system	66,387	4,458	29,827	100,672
H00–H59	Diseases of the eye and adnexa	80,432	136,829	82,894	300,155
H60–H95	Diseases of the ear and mastoid process	18,365	3,112	19,411	40,888
I00–I99	Diseases of the circulatory system	80,764	19,338	46,229	146,331
J00–J99	Diseases of the respiratory system	53,962	3,463	14,831	72,256
K00–K93	Diseases of the digestive system	178,305	151,073	240,488	569,866
L00–L99	Diseases of the skin and subcutaneous tissue	36,786	11,347	21,632	69,765
M00–M99	Diseases of the musculoskeletal system and connective tissue	74,977	18,215	113,945	207,137
N00–N99	Diseases of the genitourinary system	108,344	20,027	87,975	216,346
O00–O99	Pregnancy, childbirth and the puerperium	75,963	39,539	15,954	131,456
P00–P96	Certain conditions originating in the perinatal period	2,307	n.p.	n.p.	2,744
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	11,628	1,639	5,022	18,289
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	212,757	45,183	100,847	358,787
S00–T98	Injury, poisoning and certain other consequences of external causes	163,915	5,717	27,678	197,310
Z00–Z99	Factors influencing health status and contact with health services	1,313,944	288,716	456,261	2,058,921
	Not reported	623	n.p.	n.p.	1,538
<b>Total</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</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 in tables 8.17 and 8.18 at the end of this chapter.

Public and private hospitals also differed substantially in the relative distributions of principal diagnoses at the 3-character level. Public hospitals accounted for the majority (82%) of same-day acute separations for *Care involving dialysis*, but private hospitals provided more same-day acute separations for *Other malignant neoplasms of skin* (72%) *Other cataract* (68%) and *Other medical care* (61%, which includes chemotherapy for neoplasms) (Table 8.8).

**Table 8.8: Separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings for same-day acute separations, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Z49	Care involving dialysis	1,023,065	124,289	93,646	1,241,000
Z51	Other medical care	146,510	62,387	166,915	375,812
H26	Other cataract	55,854	59,006	58,011	172,871
R10	Abdominal and pelvic pain	42,686	20,968	28,248	91,902
C44	Other malignant neoplasms of skin	23,533	26,346	33,348	83,227
K01	Embedded and impacted teeth	7,899	19,295	48,004	75,198
Z45	Adjustment and management of implanted device	21,077	7,281	40,480	68,838
Z31	Procreative management	5,590	40,161	22,520	68,271
R07	Pain in throat and chest	57,605	1,382	7,289	66,276
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	16,970	14,761	30,256	61,987
K21	Gastro-oesophageal reflux disease	14,662	19,403	27,160	61,225
D12	Benign neoplasm of colon, rectum, anus and anal canal	12,012	18,149	27,788	57,949
Z12	Special screening examination for neoplasms	10,854	16,827	28,407	56,088
K92	Other diseases of digestive system	19,971	8,007	22,875	50,853
M23	Internal derangement of knee	10,337	3,384	36,496	50,217
Z08	Follow-up examination after treatment for malignant neoplasms	20,330	4,260	24,332	48,922
O04	Medical abortion	8,763	38,279	992	48,034
H35	Other retinal disorders	2,178	35,076	7,606	44,860
R19	Other symptoms and signs involving the digestive system and abdomen	12,962	8,790	22,354	44,106
I84	Haemorrhoids	10,712	14,031	16,103	40,846
	Other	1,253,810	299,245	815,014	2,368,069
<b>Total</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</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 in tables S8.1 and S8.2 accompanying this report online.

## How urgent was the care?

Table 8.9 includes information on urgency of admission and whether the separations were considered to be *Childbirth*, *Specialist mental health*, *Surgical*, *Medical* or *Other*. See the section 'What care was provided?' for more information on these types of care.

In 2011–12, about 12% of same day acute separations were *Emergency* admissions (required within 24 hours), 97% of which were in public hospitals. About 86% of same-day acute separations were *Non-emergency* admissions (includes elective and other planned care), 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, 2011–12**

	Public hospitals		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	8,032	0.3	135	<0.1	8,167	0.2
Specialist mental health	15,862	0.6	102,611	4.3	118,473	2.3
Emergency						
Surgical	22,400	0.8	4,807	0.2	27,207	0.5
Medical	559,834	20.2	10,781	0.4	570,615	11.0
Other	4,455	0.2	3,488	0.1	7,943	0.2
<i>Total emergency</i>	<i>586,689</i>	<i>21.1</i>	<i>19,076</i>	<i>0.4</i>	<i>605,765</i>	<i>11.7</i>
Non-emergency						
Surgical	358,485	12.9	801,039	33.4	1,159,524	22.4
Medical	1,553,673	55.9	770,633	32.1	2,324,306	44.9
Other	254,639	9.2	705,677	29.4	960,316	18.6
<i>Total non-emergency</i>	<i>2,166,797</i>	<i>78.0</i>	<i>2,277,349</i>	<i>94.9</i>	<i>4,444,146</i>	<i>85.9</i>
<b>Total</b>	<b>2,777,380</b>	<b>100.0</b>	<b>2,399,171</b>	<b>100.0</b>	<b>5,176,551</b>	<b>100.0</b>

(a) Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG classification recorded for the separation. See Chapter 7 and Appendix B for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in Table 8.19 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 and Appendix B for more information.
- MDCs and 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 2011–12, more than half (56%) of same-day acute separations were reported as *Medical*, 23% were *Surgical* and 19% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 8.9). The majority of *Medical* care occurred in public hospitals (73%) and the majority of *Surgical* care occurred in private hospitals (68%). *Specialist mental health* admissions accounted for about 2.2% of same-day acute separations.

### Major Diagnostic Categories

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 more than one-quarter (27%) of same-day acute separations, and 80% of these separations were from public hospitals. About 70% of same-day acute separations for *Mental diseases and disorders* and 72% for *Diseases and disorders of the eye* were from private hospitals.

**Table 8.10: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0x, public and private hospitals, 2011–12**

Major Diagnostic Category		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	292	5	156	453
01	Diseases and disorders of the nervous system	106,333	6,369	32,650	145,352
02	Diseases and disorders of the eye	87,814	138,984	84,641	311,439
03	Diseases and disorders of the ear, nose, mouth and throat	92,826	43,843	116,420	253,089
04	Diseases and disorders of the respiratory system	51,812	755	7,333	59,900
05	Diseases and disorders of the circulatory system	141,563	6,883	40,558	189,004
06	Diseases and disorders of the digestive system	255,526	190,457	281,428	727,411
07	Diseases and disorders of the hepatobiliary system and pancreas	18,902	567	4,861	24,330
08	Diseases and disorders of the musculoskeletal system and connective tissue	139,543	20,300	136,878	296,721
09	Diseases and disorders of the skin, subcutaneous tissue and breast	95,326	56,614	87,908	239,848
10	Endocrine, nutritional and metabolic diseases and disorders	24,029	4,108	12,107	40,244
11	Diseases and disorders of the kidney and urinary tract	1,107,299	135,225	146,094	1,388,618
12	Diseases and disorders of the male reproductive system	25,652	7,206	37,012	69,870
13	Diseases and disorders of the female reproductive system	72,750	51,473	83,290	207,513
14	Pregnancy, childbirth and puerperium	88,267	39,541	17,818	145,626
15	Newborns and other neonates	5,909	465	962	7,336
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	67,285	15,294	25,761	108,340
17	Neoplastic disorders (haematological and solid neoplasms)	172,145	66,818	178,607	417,570
18	Infectious and parasitic diseases	13,249	475	1,737	15,461
19	Mental diseases and disorders	37,112	263	88,556	125,931
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	10,892	0	23,028	33,920
21	Injuries, poisoning and toxic effects of drugs	61,775	2,220	7,638	71,633
22	Burns	2,954	18	71	3,043
23	Factors influencing health status and other contacts with health services	96,543	52,230	141,234	290,007
ED	Error DRGs <sup>(a)</sup>	1,582	1,214	1,096	3,892
	<i>Surgical</i>	381,144	317,628	488,255	1,187,027
	<i>Medical</i>	2,132,441	264,416	613,998	3,010,855
	<i>Other</i>	263,795	259,283	455,591	978,669
<b>Total</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</b>

AR-DRG—Australian Refined Diagnosis Related Group; ECMO—extracorporeal membrane oxygenation; MDC—major diagnostic category.

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables 8.20 and 8.21 at the end of this chapter.

## Most common AR-DRGs

In 2011–12, the 20 most common AR-DRGs accounted for just over two-thirds (68%) of same-day acute separations. Almost one-quarter of same-day acute separations were for *Haemodialysis*, with *Chemotherapy* the next most common category (Table 8.11).

Public hospitals provided the majority (82%) of same-day separations for *Haemodialysis*, and private hospitals provided more than 90% of separations for *Retinal procedures*.

**Table 8.11: Separations for the 20 most common AR-DRGs version 6.0x for same-day acute separations, public and private hospitals, 2011–12**

AR-DRG		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
L61Z	Haemodialysis	1,016,708	123,732	93,504	1,233,944
R63Z	Chemotherapy	141,876	60,797	166,136	368,809
G48C	Colonoscopy, same-day	59,260	80,226	108,965	248,451
C16Z	Lens procedures	60,745	79,124	62,802	202,671
G47C	Other gastroscopy, same-day	39,102	52,922	60,894	152,918
G46C	Complex gastroscopy, same-day	30,014	50,832	70,208	151,054
Z40Z	Endoscopy with diagnoses of other contacts with health services, same-day	40,604	35,909	74,151	150,664
D40Z	Dental extractions and restorations	22,701	29,570	68,934	121,205
Z64B	Other factors influencing health status, same-day	43,748	14,923	58,039	116,710
U60Z	Mental health treatment, same-day, without ECT	24,356	202	82,763	107,321
J11Z	Other skin, subcutaneous tissue and breast procedures	34,903	23,885	36,390	95,178
I18Z	Other knee procedures	15,090	4,469	53,930	73,489
N07Z	Other uterine and adnexa procedures for non-malignancy	15,348	23,003	31,887	70,238
O05Z	Abortion with OR procedure	20,977	38,939	9,297	69,213
Q61B	Red blood cell disorders without catastrophic or severe CC	42,527	8,435	17,027	67,989
F74Z	Chest pain	54,256	831	3,205	58,292
L41Z	Cystourethroscopy, same-day	25,910	3,985	27,723	57,618
O66B	False labour	46,846	34	5,719	52,599
C03Z	Retinal procedures	4,554	37,702	9,067	51,323
I68C	Non-surgical spinal disorders, same-day	19,601	6,980	18,303	44,884
	Other	1,018,254	164,827	498,900	1,681,981
<b>Total</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</b>

CC— complications and comorbidities; ECT—electroconvulsive therapy; OR—operating room.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables S8.3 and S8.4 that accompany this report online.

## Procedures

In 2011–12, 7.7 million procedures were reported for same-day acute separations, with more than 4.5 million in the private sector. Public hospitals accounted for 42% of the same-day acute separations for which a procedure was reported (Table 8.12). In public hospitals, 79% of same-day acute separations involved a procedure, compared with 97% of separations in private hospitals. See Box 7.1 and Appendix B for information on the classification of procedures.

**Table 8.12: Procedures<sup>(a)</sup> reported for same-day acute separations, by ACHI chapter, public and private hospitals, 2011–12**

Procedure		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
1–86	Procedures on nervous system	27,249	14,044	41,225	82,518
110–129	Procedures on endocrine system	242	4	145	391
160–256	Procedures on eye and adnexa	80,015	134,993	81,657	296,665
300–333	Procedures on ear and mastoid process	17,630	3,121	20,906	41,657
370–422	Procedures on nose, mouth and pharynx	20,067	8,328	24,285	52,680
450–490	Dental services	24,824	33,627	74,806	133,257
520–570	Procedures on respiratory system	19,045	207	7,489	26,741
600–777	Procedures on cardiovascular system	45,879	8,095	37,038	91,012
800–817	Procedures on blood and blood-forming organs	12,941	1,895	5,292	20,128
850–1011	Procedures on digestive system	224,251	239,602	379,366	843,219
1040–1129	Procedures on urinary system	1,087,650	137,601	167,395	1,392,646
1160–1203	Procedures on male genital organs	22,813	7,065	37,683	67,561
1240–1299	Gynaecological procedures	85,792	90,834	90,119	266,745
1330–1347	Obstetric procedures	7,916	20	1,761	9,697
1360–1579	Procedures on musculoskeletal system	78,135	17,249	121,133	216,517
1600–1718	Dermatological and plastic procedures	91,379	59,029	91,682	242,090
1740–1759	Procedures on breast	7,545	4,983	10,802	23,330
1786–1799	Radiation oncology procedures	1,877	304	582	2,763
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	1,018,727	550,066	1,309,998	2,878,791
1940–2016	Imaging services	19,901	1,583	17,306	38,790
	<i>Procedures reported</i>	<i>3,221,019</i>	<i>1,540,315</i>	<i>2,983,329</i>	<i>7,744,663</i>
	No procedure or not reported	569,765	2,995	58,368	631,128
<b>Total separations</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</b>

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

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

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 8.22 and 8.23 at the end of this chapter.

In 2011–12, *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*, the most frequently reported procedure groups were *Haemodialysis*, *Administration of pharmacotherapy* (including chemotherapy) and *Fibreoptic colonoscopy*.



**Table 8.13: Procedures<sup>(a)</sup> reported for the 20 most common ACHI procedure blocks for same-day acute separations, public and private hospitals, 2011–12**

Procedure block		Public hospitals	Private free-standing day facilities	Other private hospitals	Total
1910	Cerebral anaesthesia	630,656	448,105	958,629	2,037,390
1060	Haemodialysis	1,017,937	129,085	93,516	1,240,538
1920	Administration of pharmacotherapy	217,975	66,352	198,545	482,872
911	Fibreoptic colonoscopy with excision	64,537	87,510	144,938	296,985
1008	Panendoscopy with excision	67,984	89,919	137,045	294,948
905	Fibreoptic colonoscopy	68,927	89,888	130,259	289,074
197	Extracapsular crystalline lens extraction by phacoemulsification	60,401	77,928	59,588	197,917
1909	Conduction anaesthesia	62,709	56,857	59,146	178,712
1620	Excision of lesion(s) of skin and subcutaneous tissue	47,485	38,555	61,690	147,730
1265	Curettage and evacuation of uterus	52,501	43,004	46,097	141,602
1893	Administration of blood and blood products	79,829	18,058	29,888	127,775
458	Surgical removal of tooth	12,126	25,533	62,889	100,548
1089	Examination procedures on bladder	36,376	6,215	43,424	86,015
1916	Generalised allied health interventions	41,561	507	35,175	77,243
1005	Panendoscopy	19,313	30,028	25,576	74,917
1297	Procedures for reproductive medicine	5,535	42,804	22,302	70,641
1259	Examination procedures on uterus	27,103	3,409	30,300	60,812
1922	Other procedures related to pharmacotherapy	11,562	6,934	31,994	50,490
1873	Psychological/psychosocial therapies	77	0	46,001	46,078
1517	Arthroscopic meniscectomy of knee with repair	6,602	2,959	33,971	43,532
	Other	689,823	276,665	732,356	1,698,844
	<i>Procedures reported</i>	<i>3,221,019</i>	<i>1,540,315</i>	<i>2,983,329</i>	<i>7,744,663</i>
	No procedure or not reported	569,765	2,995	58,368	631,128
<b>Total separations</b>		<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</b>

ACHI—Australian Classification of Health Interventions.

(a) A procedure is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the table 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 in tables S8.5 and S8.6 that accompany this report online.

## Who paid for the care?

About 87% of same-day acute separations from public hospitals were *Public patients*, and about 80% of same-day acute separations from private hospitals were funded by *Private health insurance* (Table 8.14). Just over two-thirds of same-day separations that were funded by the *Department of Veterans' Affairs* were from private hospitals. One in 10 same-day acute separations from private hospitals were *Self-funded*, with a higher proportion occurring in *Private free-standing day facilities* (17%) than in *Other private hospitals* (7%).

**Table 8.14: Same-day acute separations, by principal source of funds, public and private hospitals, 2011–12**

Principal source of funds	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Public patients <sup>(a)</sup>	2,411,842	76,151	26,657	2,514,650
Private health insurance	257,147	591,528	1,317,204	2,165,879
Self-funded	36,152	138,890	101,600	276,642
Workers compensation	9,350	3,510	24,736	37,596
Motor vehicle third party personal claim	8,324	1,450	2,175	11,949
Department of Veterans' Affairs	43,598	23,803	68,485	135,886
Other <sup>(b)</sup>	10,967	5,995	16,987	33,949
<b>Total same-day acute separations</b>	<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some *Public patient* services were funded through the Medicare Benefits Schedule.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

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

## How was the care completed?

About 96% of same-day acute separations had a mode of separation of *Other*, suggesting that most patients went home after their episode of care. In private hospitals, 98% of separations reported a mode of separation of *Other*, compared with 94% in public hospitals. A higher proportion of public hospital same-day separations ended with a *Transfer to another hospital (acute or psychiatric)* compared with private hospital (4.4% and 0.7%, respectively) (Table 8.15).

**Table 8.15: Same-day acute separations, by mode of separation, public and private hospitals, 2011–12**

Mode of separation	Public hospitals	Private free-standing day facilities	Other private hospitals	Total
Discharge/transfer to an (other) acute hospital	121,403	10,404	5,297	137,104
Discharge/transfer to residential aged care service <sup>(a)</sup>	11,573	12	230	11,815
Discharge/transfer to an (other) psychiatric hospital	1,841	6	18	1,865
Discharge/transfer to other health care accommodation	2,226	69	28,528	30,823
Statistical discharge: type change	4,604	0	313	4,917
Left against medical advice/discharge at own risk	15,929	24	470	16,423
Statistical discharge from leave	400	0	32	432
Died	5,766	5	325	6,096
Other <sup>(b)</sup>	2,613,591	830,807	1,522,618	4,967,016
Not reported	47	0	13	60
<b>Total</b>	<b>2,777,380</b>	<b>841,327</b>	<b>1,557,844</b>	<b>5,176,551</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.

**Table 8.16: Same-day acute separations, public and private hospitals, states and territories, 2011-12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute	726,234	882,681	492,281	316,639	182,629	50,455	51,505	74,323	2,776,747
Public psychiatric	200	6	0	30	390	7	..	..	633
<i>Total</i>	<i>726,434</i>	<i>882,687</i>	<i>492,281</i>	<i>316,669</i>	<i>183,019</i>	<i>50,462</i>	<i>51,505</i>	<i>74,323</i>	<i>2,777,380</i>
Separation rate	94.4	151.4	108.1	133.7	102.4	90.1	148.2	353.1	119.0
<b>Private hospitals</b>									
Private free-standing day facilities	225,556	209,486	210,391	119,184	65,114	n.p.	n.p.	n.p.	841,327
Other private hospitals	426,106	392,209	376,538	183,378	115,558	n.p.	n.p.	n.p.	1,557,844
<i>Total</i>	<i>651,662</i>	<i>601,695</i>	<i>586,929</i>	<i>302,562</i>	<i>180,672</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,399,171</i>
Separation rate	84.6	102.9	127.0	126.9	97.5	n.p.	n.p.	n.p.	101.7
<b>All hospitals</b>	<b>1,378,096</b>	<b>1,484,382</b>	<b>1,079,210</b>	<b>619,231</b>	<b>363,691</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>5,176,551</b>
<b>Separation rate</b>	<b>179.0</b>	<b>254.3</b>	<b>235.1</b>	<b>260.5</b>	<b>199.9</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>220.7</b>

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

**Table 8.17: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2011-12**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00-B99	Certain infectious and parasitic diseases	7,713	13,277	8,264	3,784	1,669	221	391	374	35,693
C00-D48	Neoplasms	31,450	40,897	22,220	14,431	10,400	3,087	882	919	124,286
D50-D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	12,648	22,323	8,272	7,729	4,057	1,403	1,056	334	57,822
E00-E89	Endocrine, nutritional and metabolic diseases	6,188	12,499	4,786	4,811	1,728	1,011	470	708	32,201
F00-F99	Mental and behavioural disorders	13,852	13,439	9,546	4,835	3,833	1,135	372	907	47,919
G00-G99	Diseases of the nervous system	14,465	25,476	12,354	6,595	3,941	1,762	1,354	440	66,387
H00-H59	Diseases of the eye and adnexa	23,803	22,751	10,111	11,995	8,591	1,157	1,271	753	80,432
H60-H95	Diseases of the ear and mastoid process	3,711	5,716	4,458	1,904	1,791	268	272	245	18,365
I00-I99	Diseases of the circulatory system	22,121	24,772	14,822	9,049	6,371	1,385	1,616	628	80,764
J00-J99	Diseases of the respiratory system	13,565	17,030	13,127	4,645	3,362	717	616	900	53,962
K00-K93	Diseases of the digestive system	49,407	58,973	28,971	23,266	7,850	4,813	2,978	2,047	178,305
L00-L99	Diseases of the skin and subcutaneous tissue	8,423	10,689	7,054	3,819	4,783	992	432	594	36,786
M00-M99	Diseases of the musculoskeletal system and connective tissue	18,525	22,377	12,666	9,538	7,369	2,036	1,717	749	74,977
N00-N99	Diseases of the genitourinary system	29,269	34,621	20,584	11,594	7,521	2,139	1,535	1,081	108,344
O00-O99	Pregnancy, childbirth and the puerperium	20,673	18,901	18,655	5,531	7,607	1,040	1,045	2,511	75,963
P00-P96	Certain conditions originating in the perinatal period	880	494	488	201	111	38	63	32	2,307
Q00-Q99	Congenital malformations, deformations and chromosomal abnormalities	4,018	3,123	2,036	1,026	887	223	249	66	11,628
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	51,979	73,224	38,510	27,555	12,303	2,998	3,982	2,206	212,757
S00-T98	Injury, poisoning and certain other consequences of external causes	44,051	50,587	34,314	17,337	9,785	1,893	3,174	2,774	163,915
Z00-Z99	Factors influencing health status and contact with health services	349,170	411,420	221,043	147,024	79,060	22,143	28,029	56,055	1,313,944
	Not reported	523	98	0	0	0	1	1	0	623
<b>Total</b>		<b>726,434</b>	<b>882,687</b>	<b>492,281</b>	<b>316,669</b>	<b>183,019</b>	<b>50,462</b>	<b>51,505</b>	<b>74,323</b>	<b>2,777,380</b>

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

**Table 8.18: Same-day acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2011–12**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	2,841	2,478	2,928	1,269	727	n.p.	n.p.	n.p.	10,706
C00–D48	Neoplasms	56,262	44,186	58,125	23,331	19,951	n.p.	n.p.	n.p.	208,406
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	6,902	8,842	14,798	2,154	2,864	n.p.	n.p.	n.p.	36,650
E00–E89	Endocrine, nutritional and metabolic diseases	3,617	5,194	4,576	2,663	1,480	n.p.	n.p.	n.p.	18,287
F00–F99	Mental and behavioural disorders	48,602	17,214	36,073	4,668	520	n.p.	n.p.	n.p.	112,120
G00–G99	Diseases of the nervous system	8,411	7,922	9,557	5,039	2,251	n.p.	n.p.	n.p.	34,285
H00–H59	Diseases of the eye and adnexa	76,986	46,297	49,847	20,637	13,774	n.p.	n.p.	n.p.	219,723
H60–H95	Diseases of the ear and mastoid process	6,698	5,225	4,192	2,710	2,633	n.p.	n.p.	n.p.	22,523
I00–I99	Diseases of the circulatory system	21,687	17,069	11,592	7,435	4,824	n.p.	n.p.	n.p.	65,567
J00–J99	Diseases of the respiratory system	6,348	3,921	4,754	1,362	1,265	n.p.	n.p.	n.p.	18,294
K00–K93	Diseases of the digestive system	116,398	113,133	85,603	37,190	26,835	n.p.	n.p.	n.p.	391,561
L00–L99	Diseases of the skin and subcutaneous tissue	8,934	9,018	6,265	3,834	3,910	n.p.	n.p.	n.p.	32,979
M00–M99	Diseases of the musculoskeletal system and connective tissue	35,886	33,579	25,296	17,268	14,942	n.p.	n.p.	n.p.	132,160
N00–N99	Diseases of the genitourinary system	38,383	26,961	21,867	10,125	6,520	n.p.	n.p.	n.p.	108,002
O00–O99	Pregnancy, childbirth and the puerperium	11,004	18,574	15,356	8,656	956	n.p.	n.p.	n.p.	55,493
P00–P96	Certain conditions originating in the perinatal period	68	157	55	56	43	n.p.	n.p.	n.p.	437
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	2,359	1,552	1,381	640	513	n.p.	n.p.	n.p.	6,661
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	40,660	45,137	31,150	15,987	8,370	n.p.	n.p.	n.p.	146,030
S00–T98	Injury, poisoning and certain other consequences of external causes	9,141	7,599	7,108	3,403	5,006	n.p.	n.p.	n.p.	33,395
Z00–Z99	Factors influencing health status and contact with health services	150,475	186,726	196,406	134,135	63,288	n.p.	n.p.	n.p.	744,977
	Not reported	0	911	0	0	0	n.p.	n.p.	n.p.	915
<b>Total</b>		<b>651,662</b>	<b>601,695</b>	<b>586,929</b>	<b>302,562</b>	<b>180,672</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,399,171</b>

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

**Table 8.19: Same-day acute separations by broad categories of service<sup>(a)</sup>, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	2,919	1,104	2,070	673	564	124	369	209	8,032
Specialist mental health	8,333	930	4,832	430	1,178	5	101	53	15,862
Emergency									
Surgical	8,434	6,486	2,493	2,372	1,298	522	656	139	22,400
Medical	132,827	182,534	124,595	63,253	34,057	3,539	9,843	9,186	559,834
Other	1,871	762	734	588	231	119	133	17	4,455
Non-emergency									
Surgical	102,422	108,907	55,081	38,605	36,674	8,120	4,674	4,002	358,485
Medical	400,211	492,110	270,143	170,013	100,054	30,230	32,176	58,736	1,553,673
Other	69,417	89,854	32,333	40,735	8,963	7,803	3,553	1,981	254,639
<i>Total</i>	<i>726,434</i>	<i>882,687</i>	<i>492,281</i>	<i>316,669</i>	<i>183,019</i>	<i>50,462</i>	<i>51,505</i>	<i>74,323</i>	<i>2,777,380</i>
<b>Private hospitals</b>									
Childbirth	24	24	40	11	5	n.p.	n.p.	n.p.	135
Specialist mental health	45,410	14,868	32,721	4,634	493	n.p.	n.p.	n.p.	102,611
Emergency									
Surgical	396	437	501	474	2,976	n.p.	n.p.	n.p.	4,807
Medical	1,216	2,737	3,050	1,946	1,782	n.p.	n.p.	n.p.	10,781
Other	165	219	216	158	2,724	n.p.	n.p.	n.p.	3,488
Non-emergency									
Surgical	256,490	195,975	173,328	84,841	57,729	n.p.	n.p.	n.p.	801,039
Medical	140,758	183,032	222,213	139,551	69,994	n.p.	n.p.	n.p.	770,633
Other	207,203	204,403	154,860	70,947	44,969	n.p.	n.p.	n.p.	705,677
<i>Total</i>	<i>651,662</i>	<i>601,695</i>	<i>586,929</i>	<i>302,562</i>	<i>180,672</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>2,399,171</i>

(a) Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG classification recorded for the separation. See Chapter 7 and Appendix B for more information.

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

**Table 8.20: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0x, public hospitals, states and territories, 2011–12**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	50	60	30	93	51	5	n.p.	n.p.	292
01	Diseases and disorders of the nervous system	24,449	37,309	21,341	11,272	6,883	2,099	1,962	1,018	106,333
02	Diseases and disorders of the eye	25,306	26,017	11,302	12,609	9,047	1,254	1,376	903	87,814
03	Diseases and disorders of the ear, nose, mouth and throat	20,443	30,278	20,338	9,237	7,895	1,902	1,345	1,388	92,826
04	Diseases and disorders of the respiratory system	13,634	15,955	11,949	4,950	2,867	974	715	768	51,812
05	Diseases and disorders of the circulatory system	34,846	44,697	28,012	16,315	11,338	1,832	3,450	1,073	141,563
06	Diseases and disorders of the digestive system	72,714	85,999	40,410	36,155	8,193	5,575	3,807	2,673	255,526
07	Diseases and disorders of the hepatobiliary system and pancreas	5,202	6,602	3,068	2,079	804	524	380	243	18,902
08	Diseases and disorders of the musculoskeletal system and connective tissue	38,135	40,954	25,995	15,621	10,977	2,950	3,433	1,478	139,543
09	Diseases and disorders of the skin, subcutaneous tissue and breast	23,274	26,825	20,020	10,613	10,002	2,448	891	1,253	95,326
10	Endocrine, nutritional and metabolic diseases and disorders	5,147	8,227	4,222	3,540	1,499	659	449	286	24,029
11	Diseases and disorders of the kidney and urinary tract	329,621	312,908	181,398	110,530	75,200	16,624	26,487	54,531	1,107,299
12	Diseases and disorders of the male reproductive system	6,573	7,554	4,263	3,886	2,193	568	323	292	25,652
13	Diseases and disorders of the female reproductive system	19,123	24,632	13,477	5,776	6,444	1,597	920	781	72,750
14	Pregnancy, childbirth and puerperium	24,344	19,888	24,764	5,726	8,019	1,168	1,096	3,262	88,267
15	Newborns and other neonates	3,501	739	968	320	189	45	78	69	5,909
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	14,208	27,255	8,936	9,132	4,356	1,748	1,080	570	67,285
17	Neoplastic disorders (haematological and solid neoplasms)	8,588	96,277	27,123	32,687	3,586	2,553	719	612	172,145
18	Infectious and parasitic diseases	3,167	4,819	2,920	1,354	579	82	143	185	13,249
19	Mental diseases and disorders	11,898	11,104	6,731	2,567	2,902	1,094	239	577	37,112
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	1,800	2,810	2,687	2,221	881	28	121	344	10,892
21	Injuries, poisoning and toxic effects of drugs	15,807	19,527	12,650	7,020	3,869	718	980	1,204	61,775
22	Burns	1,059	616	723	221	204	47	26	58	2,954
23	Factors influencing health status and other contacts with health services	22,781	31,180	18,844	12,595	4,969	3,953	1,481	740	96,543
ED	Error DRGs <sup>(a)</sup>	764	455	110	150	72	15	n.p.	n.p.	1,582
<b>Total</b>		<b>726,434</b>	<b>882,687</b>	<b>492,281</b>	<b>316,669</b>	<b>183,019</b>	<b>50,462</b>	<b>51,505</b>	<b>74,323</b>	<b>2,777,380</b>

AR-DRG—Australian Refined Diagnosis Related Group; ECMO—extracorporeal membrane oxygenation; MDC—major diagnostic category.

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

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

**Table 8.21: Same-day acute separations, by Major Diagnostic Category, AR-DRG version 6.0x, private hospitals, states and territories, 2011–12**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	58	26	47	15	n.p.	n.p.	n.p.	n.p.	161
01	Diseases and disorders of the nervous system	9,483	8,935	11,488	5,333	2,552	n.p.	n.p.	n.p.	39,019
02	Diseases and disorders of the eye	78,112	47,065	50,824	21,166	14,096	n.p.	n.p.	n.p.	223,625
03	Diseases and disorders of the ear, nose, mouth and throat	45,460	41,317	31,148	21,774	14,425	n.p.	n.p.	n.p.	160,263
04	Diseases and disorders of the respiratory system	1,490	1,929	2,774	929	787	n.p.	n.p.	n.p.	8,088
05	Diseases and disorders of the circulatory system	16,488	9,712	8,486	6,319	3,984	n.p.	n.p.	n.p.	47,441
06	Diseases and disorders of the digestive system	143,136	137,407	109,632	39,003	28,849	n.p.	n.p.	n.p.	471,885
07	Diseases and disorders of the hepatobiliary system and pancreas	1,116	1,358	1,782	362	630	n.p.	n.p.	n.p.	5,428
08	Diseases and disorders of the musculoskeletal system and connective tissue	44,051	39,209	30,190	19,937	17,792	n.p.	n.p.	n.p.	157,178
09	Diseases and disorders of the skin, subcutaneous tissue and breast	37,184	34,373	34,221	18,649	15,892	n.p.	n.p.	n.p.	144,522
10	Endocrine, nutritional and metabolic diseases and disorders	3,736	3,935	4,102	2,605	1,349	n.p.	n.p.	n.p.	16,215
11	Diseases and disorders of the kidney and urinary tract	50,728	49,962	72,792	78,785	26,042	n.p.	n.p.	n.p.	281,319
12	Diseases and disorders of the male reproductive system	13,609	10,545	8,362	6,594	3,439	n.p.	n.p.	n.p.	44,218
13	Diseases and disorders of the female reproductive system	41,858	40,619	26,816	12,685	8,109	n.p.	n.p.	n.p.	134,763
14	Pregnancy, childbirth and puerperium	11,723	19,217	15,641	8,770	965	n.p.	n.p.	n.p.	57,359
15	Newborns and other neonates	420	371	250	100	206	n.p.	n.p.	n.p.	1,427
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	7,450	10,519	16,279	2,418	2,972	n.p.	n.p.	n.p.	41,055
17	Neoplastic disorders (haematological and solid neoplasms)	44,202	63,157	77,949	31,870	22,130	n.p.	n.p.	n.p.	245,425
18	Infectious and parasitic diseases	280	364	706	62	778	n.p.	n.p.	n.p.	2,212
19	Mental diseases and disorders	36,919	12,418	31,512	2,693	522	n.p.	n.p.	n.p.	88,819
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	11,514	4,764	4,488	1,977	n.p.	n.p.	n.p.	n.p.	23,028
21	Injuries, poisoning and toxic effects of drugs	2,231	2,548	2,167	1,140	1,482	n.p.	n.p.	n.p.	9,858
22	Burns	9	31	18	12	15	n.p.	n.p.	n.p.	89
23	Factors influencing health status and other contacts with health services	49,970	60,549	45,027	19,248	13,519	n.p.	n.p.	n.p.	193,464
ED	Error DRGs <sup>(a)</sup>	435	1,365	228	116	131	n.p.	n.p.	n.p.	2,310
<b>Total</b>		<b>651,662</b>	<b>601,695</b>	<b>586,929</b>	<b>302,562</b>	<b>180,672</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,399,171</b>

AR-DRG—Australian Refined Diagnosis Related Group; ECMO—extracorporeal membrane oxygenation; MDC—major diagnostic category.

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

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



**Table 8.22: Procedures<sup>(a)</sup> reported for same-day acute separations, by ACHI chapter, public hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86 Procedures on nervous system	6,562	8,407	4,546	3,533	3,200	631	225	145	27,249
110–129 Procedures on endocrine system	62	85	50	25	n.p.	n.p.	3	n.p.	242
160–256 Procedures on eye and adnexa	23,314	23,263	9,977	11,757	8,557	1,169	1,266	712	80,015
300–333 Procedures on ear and mastoid process	3,141	5,900	4,369	1,722	1,748	269	257	224	17,630
370–422 Procedures on nose, mouth and pharynx	4,252	6,677	5,343	1,820	1,319	278	232	146	20,067
450–490 Dental services	5,203	8,031	4,606	2,663	2,806	809	378	328	24,824
520–570 Procedures on respiratory system	5,582	6,296	3,450	1,833	711	656	300	217	19,045
600–777 Procedures on cardiovascular system	11,607	16,321	5,807	5,716	3,446	1,394	1,205	383	45,879
800–817 Procedures on blood and blood-forming organs	2,617	5,551	1,287	1,356	1,762	253	31	84	12,941
850–1011 Procedures on digestive system	69,822	75,454	26,489	37,778	3,499	6,490	2,695	2,024	224,251
1040–1129 Procedures on urinary system	326,320	305,853	175,667	108,192	74,687	16,305	26,313	54,313	1,087,650
1160–1203 Procedures on male genital organs	5,902	6,899	3,581	3,306	2,114	524	256	231	22,813
1240–1299 Gynaecological procedures	21,693	28,816	13,549	7,004	10,526	1,719	1,015	1,470	85,792
1330–1347 Obstetric procedures	2,439	1,833	1,330	899	868	147	252	148	7,916
1360–1579 Procedures on musculoskeletal system	22,939	24,083	12,539	8,094	6,332	1,860	1,603	685	78,135
1600–1718 Dermatological and plastic procedures	21,513	29,141	17,342	10,394	9,038	2,061	899	991	91,379
1740–1759 Procedures on breast	2,443	2,117	1,043	1,207	421	217	65	32	7,545
1786–1799 Radiation oncology procedures	281	619	732	185	n.p.	n.p.	0	n.p.	1,877
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	243,144	365,430	155,408	139,472	64,171	26,996	15,612	8,494	1,018,727
1940–2016 Imaging services	5,938	5,903	2,613	2,884	1,654	537	299	73	19,901
No procedure or not reported	152,953	170,341	136,010	50,984	35,818	4,670	8,537	10,452	569,765
<b>Total separations</b>	<b>726,434</b>	<b>882,687</b>	<b>492,281</b>	<b>316,669</b>	<b>183,019</b>	<b>50,462</b>	<b>51,505</b>	<b>74,323</b>	<b>2,777,380</b>

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

(a) These are counts of separations that reported at least one procedure within the ACHI procedure chapter.

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

**Table 8.23: Procedures<sup>(a)</sup> reported for same-day acute separations, by ACHI chapter, private hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86 Procedures on nervous system	13,085	14,692	12,182	8,736	4,723	n.p.	n.p.	n.p.	55,269
110–129 Procedures on endocrine system	55	44	22	12	5	n.p.	n.p.	n.p.	149
160–256 Procedures on eye and adnexa	75,705	45,814	49,242	20,376	13,434	n.p.	n.p.	n.p.	216,650
300–333 Procedures on ear and mastoid process	7,297	5,417	4,586	2,948	2,652	n.p.	n.p.	n.p.	24,027
370–422 Procedures on nose, mouth and pharynx	11,670	6,492	6,879	3,909	2,572	n.p.	n.p.	n.p.	32,613
450–490 Dental services	28,637	29,474	20,405	16,210	9,616	n.p.	n.p.	n.p.	108,433
520–570 Procedures on respiratory system	1,737	1,854	2,345	789	755	n.p.	n.p.	n.p.	7,696
600–777 Procedures on cardiovascular system	15,248	10,150	9,151	4,680	3,187	n.p.	n.p.	n.p.	45,133
800–817 Procedures on blood and blood-forming organs	1,120	1,856	2,795	584	477	n.p.	n.p.	n.p.	7,187
850–1011 Procedures on digestive system	188,392	180,683	140,941	53,202	37,403	n.p.	n.p.	n.p.	618,968
1040–1129 Procedures on urinary system	58,554	55,452	77,083	82,123	27,588	n.p.	n.p.	n.p.	304,996
1160–1203 Procedures on male genital organs	14,854	10,878	8,128	5,593	3,564	n.p.	n.p.	n.p.	44,748
1240–1299 Gynaecological procedures	50,821	56,775	39,360	20,484	8,485	n.p.	n.p.	n.p.	180,953
1330–1347 Obstetric procedures	270	627	660	107	51	n.p.	n.p.	n.p.	1,781
1360–1579 Procedures on musculoskeletal system	42,579	34,207	26,656	14,922	14,519	n.p.	n.p.	n.p.	138,382
1600–1718 Dermatological and plastic procedures	39,941	35,654	32,845	19,608	18,110	n.p.	n.p.	n.p.	150,711
1740–1759 Procedures on breast	4,727	2,961	4,874	1,791	1,037	n.p.	n.p.	n.p.	15,785
1786–1799 Radiation oncology procedures	453	147	53	21	195	n.p.	n.p.	n.p.	886
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	549,973	470,200	467,080	181,868	131,253	n.p.	n.p.	n.p.	1,860,064
1940–2016 Imaging services	8,231	3,551	4,563	1,392	787	n.p.	n.p.	n.p.	18,889
No procedure or not reported	7,466	18,604	18,975	7,055	4,681	n.p.	n.p.	n.p.	61,363
<b>Total separations</b>	<b>651,662</b>	<b>601,695</b>	<b>586,929</b>	<b>302,562</b>	<b>180,672</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>2,399,171</b>

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

(a) These are counts of separations that reported at least one procedure within the ACHI procedure chapter.

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

## 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 NHMD. For definitions of terms and classifications, and more information on data limitations and methods, see Chapter 7 (boxes 7.1, 7.2 and 7.3).

Of all overnight separations, 95% were reported as *Acute* in both the public and private sectors.

### How has activity changed over time?

Between 2007–08 and 2011–12, the number of overnight acute separations (in both public and private sectors combined) increased by an average of 2.7% per year, with an average annual increase of 3.0% in public hospitals and 2.1% in private hospitals (Table 9.1).

**Table 9.1: Overnight acute separations, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent) <sup>(a)</sup>	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Public acute hospitals <sup>(b)</sup>	2,254,140	2,299,960	2,358,333	2,445,577	2,544,092	3.1	4.0
Public psychiatric hospitals <sup>(c)</sup>	11,405	9,197	9,159	8,156	7,694	-9.4	-5.7
<i>Total</i>	<i>2,265,545</i>	<i>2,309,157</i>	<i>2,367,492</i>	<i>2,453,733</i>	<i>2,551,786</i>	<i>3.0</i>	<i>4.0</i>
<b>Private hospitals<sup>(b)</sup></b>							
Private free-standing day hospital facilities	2,341	1,247	1,259	1,363	1,231	-14.8	-9.7
Other private hospitals	1,014,107	1,021,094	1,058,861	1,073,760	1,102,425	2.1	2.7
<i>Total</i>	<i>1,016,448</i>	<i>1,022,341</i>	<i>1,060,120</i>	<i>1,075,123</i>	<i>1,103,656</i>	<i>2.1</i>	<i>2.7</i>
<b>All hospitals</b>	<b>3,281,993</b>	<b>3,331,498</b>	<b>3,427,612</b>	<b>3,528,856</b>	<b>3,655,442</b>	<b>2.7</b>	<b>3.6</b>

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

(b) For 2009–10, data were missing for Western Australia for 2,400 separations in public hospitals and 10,600 separations in private hospitals.

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

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

Between 2007–08 and 2011–12, the greatest increases in number of overnight acute public hospital separations occurred in Western Australia and the Australian Capital Territory (Table 9.2).

Over the same period, above average increases in the number of overnight acute private hospital separations were recorded in New South Wales, Victoria, Queensland and Western Australia.

Large single-year increases in the number of overnight acute hospital separations between 2010–11 and 2011–12 were recorded for public hospitals in New South Wales, Queensland, Western Australia and the Australian Capital Territory and for private hospitals in Victoria and Queensland.

**Table 9.2: Overnight acute separations, public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales</b>							
Public hospitals	791,647	806,544	812,097	828,898	874,293	2.5	5.5
Private hospitals	253,448	260,688	268,024	270,018	276,770	2.2	2.5
<i>Total</i>	<i>1,045,095</i>	<i>1,067,232</i>	<i>1,080,121</i>	<i>1,098,916</i>	<i>1,151,063</i>	<i>2.4</i>	<i>4.7</i>
<b>Victoria</b>							
Public hospitals	551,855	557,718	580,354	608,894	621,425	3.0	2.1
Private hospitals	265,846	258,873	280,390	278,660	290,786	2.3	4.4
<i>Total</i>	<i>817,701</i>	<i>816,591</i>	<i>860,744</i>	<i>887,554</i>	<i>912,211</i>	<i>2.8</i>	<i>2.8</i>
<b>Queensland</b>							
Public hospitals	405,463	418,960	431,204	447,294	466,393	3.6	4.3
Private hospitals	248,963	254,922	261,394	267,591	275,689	2.6	3.0
<i>Total</i>	<i>654,426</i>	<i>673,882</i>	<i>692,598</i>	<i>714,885</i>	<i>742,082</i>	<i>3.2</i>	<i>3.8</i>
<b>Western Australia<sup>(a)</sup></b>							
Public hospitals	209,765	214,047	223,900	242,507	254,810	5.0	5.1
Private hospitals	111,946	115,178	115,779	124,923	127,610	3.3	2.2
<i>Total</i>	<i>321,711</i>	<i>329,225</i>	<i>339,679</i>	<i>367,430</i>	<i>382,420</i>	<i>4.4</i>	<i>4.1</i>
<b>South Australia</b>							
Public hospitals	196,743	198,181	200,360	202,226	208,710	1.5	3.2
Private hospitals	88,422	88,856	89,104	88,376	87,252	–0.3	–1.3
<i>Total</i>	<i>285,165</i>	<i>287,037</i>	<i>289,464</i>	<i>290,602</i>	<i>295,962</i>	<i>0.9</i>	<i>1.8</i>
<b>Tasmania<sup>(b)</sup></b>							
Public hospitals	43,793	43,409	48,278	47,803	47,009	1.8	–1.7
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	32,947	35,664	35,526	38,795	41,051	5.7	5.8
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	33,332	34,634	35,773	37,316	38,095	3.4	2.1
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>2,265,545</b>	<b>2,309,157</b>	<b>2,367,492</b>	<b>2,453,733</b>	<b>2,551,786</b>	<b>3.0</b>	<b>4.0</b>
<b>Private hospitals</b>	<b>1,016,448</b>	<b>1,022,341</b>	<b>1,060,120</b>	<b>1,075,123</b>	<b>1,103,656</b>	<b>2.1</b>	<b>2.7</b>
<b>Total</b>	<b>3,281,993</b>	<b>3,331,498</b>	<b>3,427,612</b>	<b>3,528,856</b>	<b>3,655,442</b>	<b>2.7</b>	<b>3.6</b>

(a) For 2009–10, data were missing for Western Australia for 2,400 separations in public hospitals and 10,600 separations in private hospitals.

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

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

# Who used these services?

## Sex and age group

Males accounted for less than half (46%) of overnight acute separations (Figure 9.1). There were, however, more overnight separations for males than females in the age groups 0 to 14 and 50 to 79. People aged 55 and over accounted for nearly half of all overnight acute separations.

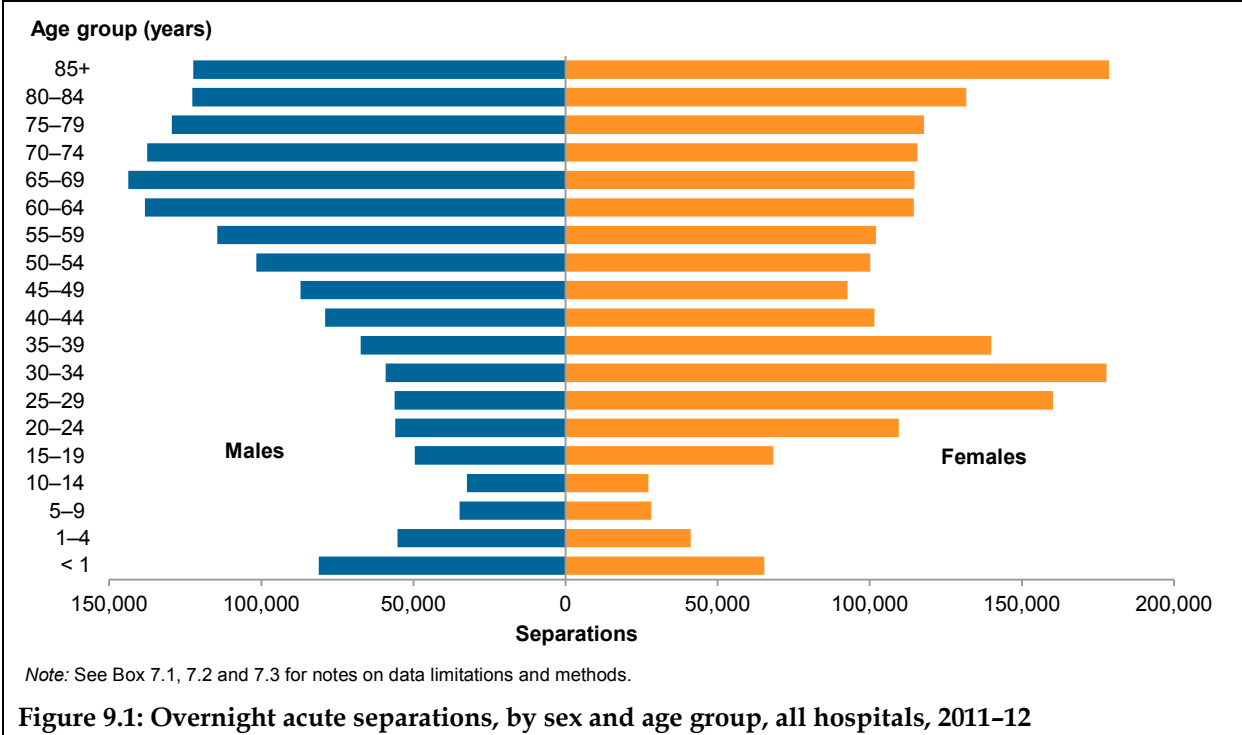


Figure 9.1: Overnight acute separations, by sex and age group, all hospitals, 2011-12

## Aboriginal and Torres Strait Islander people

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. The quality of the data provided for Indigenous status in 2011-12 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix B for more information on the quality of Indigenous data in the NHMD.

Nationally, 3.7% of overnight acute separations were for Aboriginal or Torres Strait Islander people. In 2011-12, the overnight acute separation rate for Indigenous Australians was almost twice the rate for other Australians. Western Australia had the highest rate of overnight acute separations for Indigenous Australians (Table 9.3). For the Northern Territory, the rate of overnight acute separations for Indigenous Australians was over 3 times the rate for other Australians (excludes private hospital data).

**Table 9.3: Overnight acute separations per 1,000 population, by Indigenous status, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
<b>Indigenous Australians</b>									
Separations	36,042	7,973	34,405	24,562	8,833	1,815	942	21,395	136,300
Separations per 1,000 population <sup>(c)</sup>	268.0	265.7	278.3	383.3	367.2	117.8	262.8	363.9	298.6
<b>Other Australians<sup>(d)</sup></b>									
Separations	1,115,021	904,238	707,677	357,858	287,129	45,194	40,109	16,700	3,519,142
Separations per 1,000 population <sup>(c)</sup>	149.5	156.7	159.1	155.1	163.3	91.0	113.9	115.2	154.4
<b>Total</b>									
<b>Separations</b>	<b>1,151,063</b>	<b>912,211</b>	<b>742,082</b>	<b>382,420</b>	<b>295,962</b>	<b>47,009</b>	<b>41,051</b>	<b>38,095</b>	<b>3,655,442</b>
<b>Separations per 1,000 population<sup>(c)</sup></b>	<b>151.7</b>	<b>157.4</b>	<b>162.5</b>	<b>161.6</b>	<b>166.5</b>	<b>91.6</b>	<b>115.3</b>	<b>178.1</b>	<b>157.5</b>

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

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

(c) The separation rate presented in this table differs from the separation rate in Table 7.4 because all care types (that is, including sub- and non-acute care) are included in Table 7.4. In addition, the total separation rate differs from the figures in Table 9.17 due to differences in the population age groups used for calculating the age-standardised rates.

(d) *Other Australians* includes records for which Indigenous status was not reported.

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

## Remoteness area

In 2011–12, people living in *Very remote* areas of Australia had 261 overnight acute separations per 1,000 population, compared with 157 per 1,000 nationwide (Table 9.4). The SRR of 1.66 for this area indicates that the overnight separation rate in *Very remote areas* was 66% higher than the national rate.

**Table 9.4: Overnight acute separation statistics, by remoteness area of residence, all hospitals, 2011–12**

	Remoteness area					Total <sup>(a)</sup>
	Major cities	Inner regional	Outer regional	Remote	Very remote	
Separations	2,355,043	783,286	383,235	67,986	44,511	3,655,442
Separation rate	147.4	167.8	180.4	216.4	260.5	156.9
Standardised separation rate ratio	0.94	1.07	1.15	1.38	1.66	

(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

Each SES group accounted for between 17% and 22% of total overnight acute separations. Separation rates varied from 133 per 1,000 population for patients living in areas classified as being the highest SES group to 175 per 1,000 for the lowest (Table 9.5).

**Table 9.5: Overnight acute separation statistics, by socioeconomic status of area of residence, all hospitals, 2011-12**

	Socioeconomic status of area of residence					Total <sup>(a)</sup>
	1–Lowest	2	3	4	5–Highest	
Separations	815,054	794,126	741,788	664,340	618,062	3,655,442
Separation rate	174.8	164.2	160.9	147.2	132.8	156.9
Standardised separation rate ratio	1.11	1.05	1.03	0.94	0.85	

(a) The total includes separations for which the socioeconomic status group was not able to be categorised.

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

## How did people access these services?

The **mode of admission** records the mechanism by which a patient begins an episode of care.

In both public and private hospitals, most overnight acute separations had a mode of admission of *Other* (93% overall), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 9.6). Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals (6.9% and 4.9%, respectively) (Table 9.6).

**Table 9.6: Overnight acute separations, by mode of admission, public and private hospitals, 2011-12**

Mode of admission	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	177,476	54,215	231,691
Statistical admission: type change	11,241	2,015	13,256
Other	2,360,046	1,031,041	3,391,087
Not reported	3,023	16,385	19,408
<b>Total</b>	<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</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.

Overall, almost half of all overnight acute separations in 2011-12 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 from public hospitals. For *Diseases of the musculoskeletal system and connective tissue*, over 60% of separations were from private hospitals (Table 9.7).

**Table 9.7: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	81,616	11,905	93,521
C00–D48	Neoplasms	131,887	104,751	236,638
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	29,520	9,583	39,103
E00–E89	Endocrine, nutritional and metabolic diseases	51,889	24,242	76,131
F00–F99	Mental and behavioural disorders	137,824	36,317	174,141
G00–G99	Diseases of the nervous system	67,217	65,065	132,282
H00–H59	Diseases of the eye and adnexa	12,753	10,568	23,321
H60–H95	Diseases of the ear and mastoid process	13,395	6,326	19,721
I00–I99	Diseases of the circulatory system	258,500	111,831	370,331
J00–J99	Diseases of the respiratory system	252,431	73,787	326,218
K00–K93	Diseases of the digestive system	243,252	104,944	348,196
L00–L99	Diseases of the skin and subcutaneous tissue	69,842	13,839	83,681
M00–M99	Diseases of the musculoskeletal system and connective tissue	112,560	172,091	284,651
N00–N99	Diseases of the genitourinary system	135,776	76,446	212,222
O00–O99	Pregnancy, childbirth and the puerperium	267,372	92,003	359,375
P00–P96	Certain conditions originating in the perinatal period	49,164	11,645	60,809
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	13,758	4,173	17,931
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	234,071	60,235	294,306
S00–T98	Injury, poisoning and certain other consequences of external causes	322,013	78,032	400,045
Z00–Z99	Factors influencing health status and contact with health services	65,092	35,632	100,724
	Not reported	1,854	241	2,095
<b>Total</b>		<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</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 in tables 9.18 and 9.19 at the end of this chapter.

The most common principal diagnosis (at the 3-character level) reported for overnight acute separations was *Single spontaneous delivery*, which accounted for 4.6% of overnight acute separations in public hospitals and 2.8% in private hospitals. The 20 most common principal diagnoses included several childbirth-related and heart-related conditions, as well as respiratory conditions (Table 9.8). See Appendix B for information about recent changes in coding standards for obstetrics.

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 9.8: Overnight acute separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings, public and private hospitals, 2011–12**

Principal diagnosis	Public hospitals	Private hospitals	Total
O80 Single spontaneous delivery	116,986	31,165	148,151
O82 Single delivery by caesarean section	56,700	33,121	89,821
R07 Pain in throat and chest	61,334	13,900	75,234
G47 Sleep disorders	15,679	51,792	67,471
J18 Pneumonia, organism unspecified	50,535	9,283	59,818
J44 Other chronic obstructive pulmonary disease	48,492	7,022	55,514
K80 Cholelithiasis	36,391	18,504	54,895
I21 Acute myocardial infarction	38,579	8,548	47,127
M17 Gonarthrosis [arthrosis of knee]	15,562	31,172	46,734
R10 Abdominal and pelvic pain	38,457	8,133	46,590
N39 Other disorders of urinary system	35,790	9,606	45,396
I50 Heart failure	35,042	9,770	44,812
I20 Angina pectoris	29,329	13,566	42,895
L03 Cellulitis	35,248	6,119	41,367
I48 Atrial fibrillation and flutter	26,814	12,886	39,700
K40 Inguinal hernia	15,255	20,999	36,254
O81 Single delivery by forceps and vacuum extractor	23,419	12,165	35,584
J35 Chronic diseases of tonsils and adenoids	13,757	19,971	33,728
T81 Complications of procedures, not elsewhere classified	22,316	9,849	32,165
K35 Acute appendicitis	25,875	4,700	30,575
Other	1,810,226	771,385	2,581,611
<b>Total</b>	<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</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 in tables S9.1 and S9.2 accompanying this report online.

## How urgent was the 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 2011–12, about half of all overnight acute separations were *Emergency* admissions (required within 24 hours), 90% of which were from public hospitals. Just over 39% of overnight acute separations were *Non-emergency* admissions (includes elective and other planned care), and more than half of these were from private hospitals (Table 9.9).

**Table 9.9: Overnight acute separations by broad category of service<sup>(a)</sup>, public and private hospitals, states and territories, 2011–12**

	Public hospitals		Private hospitals		Total	
	Separations	Per cent (column)	Separations	Per cent (column)	Separations	Per cent (column)
Childbirth	210,833	8.3	80,646	7.3	291,479	8.0
Specialist mental health	88,957	3.5	31,194	2.8	120,151	3.3
Emergency						
Surgical	234,404	9.2	33,827	3.1	268,231	7.3
Medical	1,330,631	52.1	133,768	12.1	1,464,399	40.1
Other	55,488	2.2	12,192	1.1	67,680	1.9
Non-emergency						
Surgical	335,342	13.1	547,711	49.4	883,053	24.2
Medical	273,142	10.7	223,932	20.4	497,074	13.6
Other	22,989	0.9	40,386	3.8	63,375	1.7
<b>Total</b>	<b>2,551,786</b>	<b>100.0</b>	<b>1,103,656</b>	<b>100.0</b>	<b>3,655,442</b>	<b>100.0</b>

(a) Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG classification recorded for the separation. See Chapter 7 and Appendix B for more information.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in Table 9.20 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 and Appendix B for more information.
- MDCs and 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 2011–12, more than half (54%) of overnight acute separations were reported as *Medical*, almost a third (31%) were *Surgical* and about 4% were *Other* care (excluding *Childbirth* and *Specialist mental health*, Table 9.9). The majority of *Medical* care occurred in public hospitals (82%), as did almost 50% of *Surgical* care. *Childbirth* admissions accounted for 8.0% of overnight acute separations and *Specialist mental health* for 3.3%.

### Major Diagnostic Categories

Table 9.10 presents overnight acute separations by MDCs for public and private hospitals.

*Diseases and disorders of the musculoskeletal system and connective tissue* accounted for 13% of total overnight acute separations for the combined public and private sectors, and just over half of these separations (53%) were from public hospitals. For *Injuries, poisoning and toxic effects of drugs*, more than 86% of the overnight acute separations were from public hospitals. For *Diseases and disorders of the male reproductive system* just over half (55%) of the overnight acute separations were from private hospitals

**Table 9.10: Overnight acute separations, by Major Diagnostic Category, AR-DRG version 6.0x, public and private hospitals, 2011–12**

Major Diagnostic Category		Public hospitals	Private hospitals	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	12,636	3,055	15,691
01	Diseases and disorders of the nervous system	161,108	33,011	194,119
02	Diseases and disorders of the eye	17,532	11,177	28,709
03	Diseases and disorders of the ear, nose, mouth and throat	103,206	64,733	167,939
04	Diseases and disorders of the respiratory system	251,775	93,516	345,291
05	Diseases and disorders of the circulatory system	307,406	124,947	432,353
06	Diseases and disorders of the digestive system	285,628	114,252	399,880
07	Diseases and disorders of the hepatobiliary system and pancreas	79,749	30,360	110,109
08	Diseases and disorders of the musculoskeletal system and connective tissue	254,205	221,137	475,342
09	Diseases and disorders of the skin, subcutaneous tissue and breast	106,049	54,650	160,699
10	Endocrine, nutritional and metabolic diseases and disorders	52,581	27,681	80,262
11	Diseases and disorders of the kidney and urinary tract	115,827	44,828	160,655
12	Diseases and disorders of the male reproductive system	20,486	25,196	45,682
13	Diseases and disorders of the female reproductive system	45,890	42,151	88,041
14	Pregnancy, childbirth and puerperium	273,977	93,556	367,533
15	Newborns and other neonates	78,350	18,097	96,447
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	32,494	10,190	42,684
17	Neoplastic disorders (haematological and solid neoplasms)	19,604	11,203	30,807
18	Infectious and parasitic diseases	52,514	11,268	63,782
19	Mental diseases and disorders	103,382	28,294	131,676
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	26,880	7,466	34,346
21	Injuries, poisoning and toxic effects of drugs	101,688	16,359	118,047
22	Burns	5,478	166	5,644
23	Factors influencing health status and other contacts with health services	37,543	13,689	51,232
ED	Error DRGs <sup>(a)</sup>	5,798	2,674	8,472
	<i>Surgical</i>	638,802	618,338	1,257,140
	<i>Medical</i>	1,834,368	432,738	2,267,106
	<i>Other</i>	78,616	52,580	131,196
<b>Total</b>		<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</b>

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is available in tables 9.21 and 9.22 at the end of this chapter.

## Most common AR-DRGs

In 2011–12, the 20 most common AR-DRGs accounted for more than one-quarter of overnight acute separations. The 2 most common AR-DRGs for overnight acute separations were childbirth-related, followed by *Chest pain* and *Sleep apnoea* (Table 9.11).

Public hospitals provided the majority of separations for childbirth and *Chest pain*. Private hospitals provided the majority of separations for AR-DRGs such as *Sleep apnoea*, *Other shoulder procedures*, *Circulatory disorders* (F42B) and *Knee replacement* (I04B).

**Table 9.11: Separations for the 20 most common AR-DRGs version 6.0x for overnight acute separations, public and private hospitals, 2011–12**

AR-DRG	Public hospitals	Private hospitals	Total
O60B Vaginal delivery without CSCC	100,689	34,513	135,202
O01C Caesarean delivery without CSCC	46,242	29,477	75,719
F74Z Chest pain	57,856	8,951	66,807
E63Z Sleep apnoea	6,638	45,500	52,138
G70B Other digestive system diagnoses without CSCC	41,271	8,210	49,481
G10B Hernia procedures without CC	19,977	28,135	48,112
J64B Cellulitis without CSCC	40,707	5,510	46,217
E65B Chronic obstructive airways disease without catastrophic CC	38,454	6,402	44,856
P67D Neonate, admission weight >2499 g without significant operating room procedure without problem	33,714	8,714	42,428
G66Z Abdominal pain or mesenteric adenitis	34,807	4,993	39,800
O66A Antenatal and other obstetric admission	32,246	6,755	39,001
I16Z Other shoulder procedures	6,586	31,758	38,344
H08B Laparoscopic cholecystectomy without closed CDE without CSCC	21,054	16,975	38,029
G67B Oesophagitis and gastroenteritis without CSCC	32,036	4,476	36,512
L63B Kidney and urinary tract infections without CSCC	30,306	5,530	35,836
D11Z Tonsillectomy and/or adenoidectomy	14,957	20,041	34,998
F42B Circulatory disorders without AMI with invasive cardiac investigative procedure without CSCC	12,503	22,275	34,778
F76B Arrhythmia, cardiac arrest and conduction disorders without CSCC	26,097	7,826	33,923
I04B Knee replacement without CSCC	10,312	23,092	33,404
U63B Major affective disorders age<70/ without CSCC	18,047	12,918	30,965
Other	1,927,287	771,605	2,698,892
<b>Total</b>	<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</b>

AMI—acute myocardial infarction; CC—complications and comorbidities; CDE—common duct exploration; g—grams; CSCC—catastrophic or severe complications or comorbidities.

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables S9.3 and S9.4 accompanying this report online.

## Procedures

In 2011–12, almost 6.9 million procedures were reported for overnight acute separations, with about 4.0 million in the public sector and 2.8 million in the private sector. Public hospitals accounted for 64% of the overnight acute separations for which a procedure was reported (Table 9.12). In public hospitals, 66% or 1.7 million overnight acute separations involved a procedure. In contrast, for private hospitals, 87% or 1 million overnight acute separations involved a procedure.

**Table 9.12: Procedures<sup>(a)</sup> reported for overnight acute separations, by ACHI chapter, public and private hospitals, 2011–12**

Procedure		Public hospitals	Private hospitals	Total
1–86	Procedures on nervous system	47,591	48,930	96,521
110–129	Procedures on endocrine system	7,645	8,460	16,105
160–256	Procedures on eye and adnexa	12,794	10,456	23,250
300–333	Procedures on ear and mastoid process	9,674	9,195	18,869
370–422	Procedures on nose, mouth and pharynx	42,524	52,671	95,195
450–490	Dental services	5,856	3,380	9,236
520–570	Procedures on respiratory system	89,883	28,537	118,420
600–777	Procedures on cardiovascular system	105,318	89,592	194,910
800–817	Procedures on blood and blood-forming organs	22,621	17,124	39,745
850–1011	Procedures on digestive system	218,013	149,802	367,815
1040–1129	Procedures on urinary system	72,206	51,430	123,636
1160–1203	Procedures on male genital organs	18,253	28,525	46,778
1240–1299	Gynaecological procedures	48,550	43,099	91,649
1330–1347	Obstetric procedures	189,603	78,828	268,431
1360–1579	Procedures on musculoskeletal system	187,295	195,122	382,417
1600–1718	Dermatological and plastic procedures	109,784	53,276	163,060
1740–1759	Procedures on breast	12,080	21,856	33,936
1786–1799	Radiation oncology procedures	8,249	2,365	10,614
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	1,518,070	905,021	2,423,091
1940–2016	Imaging services	24,555	19,681	44,236
	<i>Procedures reported</i>	<b>4,033,446</b>	<b>2,860,102</b>	<b>6,895,988</b>
	No procedure or not reported	873,461	139,781	1,013,242
<b>Total separations</b>		<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</b>

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

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables 9.23 and 9.24 at the end of this chapter.

In 2011–12, *Generalised 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: Procedures<sup>(a)</sup> reported for the 20 most common ACHI procedure blocks for overnight acute separations, public and private hospitals, 2011–12**

Procedure block		Public hospitals	Private hospitals	Total
1916	Generalised allied health interventions	1,016,420	384,330	1,400,750
1910	Cerebral anaesthesia	672,115	640,223	1,312,338
1909	Conduction anaesthesia	123,194	130,778	253,972
1893	Administration of blood and blood products	141,721	60,201	201,922
1340	Caesarean section	62,200	35,560	97,760
1920	Administration of pharmacotherapy	67,690	27,009	94,699
1344	Postpartum suture	68,535	23,306	91,841
668	Coronary angiography	43,786	40,356	84,142
1333	Analgesia and anaesthesia during labour and delivery	50,646	27,510	78,156
1334	Medical or surgical induction of labour	54,030	23,282	77,312
1335	Medical or surgical augmentation of labour	46,249	15,003	61,252
1828	Sleep study	7,345	48,693	56,038
607	Examination procedures on ventricle	24,241	30,098	54,339
986	Division of abdominal adhesions	28,255	25,027	53,282
965	Cholecystectomy	29,699	20,846	50,545
570	Non-invasive ventilatory support	34,909	13,968	48,877
412	Tonsillectomy or adenoidectomy	20,342	27,631	47,973
1566	Excision procedures on other musculoskeletal sites	25,516	16,865	42,381
1912	Postprocedural analgesia	19,603	22,278	41,881
957	Examination of gallbladder or biliary tract	22,924	17,459	40,383
	Other	1,474,026	1,229,679	2,706,145
	<i>Procedures reported</i>	<i>4,033,446</i>	<i>2,860,102</i>	<i>6,895,988</i>
	No procedure or not reported	873,461	139,781	1,013,242
<b>Total separations</b>		<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</b>

ACHI—Australian Classification of Health Interventions.

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

Note: See boxes 7.1, 7.2 and 7.3 for notes on data limitations and methods. Additional information by state and territory is in tables S9.5 and S9.6 accompanying this report online.

## 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 *Surgical* and *Medical* care had longer lengths of stay in private hospitals than in public hospitals (Table 9.14).

**Table 9.14: Patient days and average length of stay, for overnight acute separations, by broad category of service<sup>(a)</sup>, public and private hospitals, 2011–12**

Broad category of service	Public hospitals		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
Childbirth	671,050	3.2	378,928	4.7	1,049,978	3.6
Specialist mental health	1,603,099	18.0	604,463	19.4	2,207,562	18.4
Emergency						
Surgical	1,851,659	7.9	278,451	8.2	2,130,110	7.9
Medical	5,363,729	4.0	780,233	5.8	6,143,962	4.2
Other	373,346	6.7	68,411	5.6	441,757	6.5
Non-emergency						
Surgical	1,419,108	4.2	1,814,849	3.3	3,233,957	3.7
Medical	1,503,379	5.5	1,086,446	4.9	2,589,825	5.2
Other	81,726	3.6	107,160	2.7	188,886	3.0
<b>Total</b>	<b>12,867,096</b>	<b>5.0</b>	<b>5,118,941</b>	<b>4.6</b>	<b>17,986,037</b>	<b>4.9</b>

(a) Separations have been categorised as *Childbirth*, *Medical*, *Surgical* or *Other* based on the AR-DRG classification recorded for the separation. The category *Specialist mental health* is assigned for those separations for which at least one day of specialised psychiatric care is reported.

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

## Who paid for the care?

More than 83% of overnight acute separations from public hospitals were for *Public patients* and 84% of overnight acute separations from private hospitals were funded by *Private health insurance* (Table 9.15). The *Department of Veterans' Affairs* funded 2.3% of overnight acute separations in public hospitals and 6.7% in private hospitals.

**Table 9.15: Overnight acute separations, by principal source of funds, public and private hospitals, 2011–12**

Principal source of funds	Public hospitals	Private hospitals	Total
Public patients <sup>(a)</sup>	2,108,984	3,819	2,112,803
Private health insurance	297,726	929,098	1,226,824
Self-funded <sup>(b)</sup>	35,905	50,399	86,304
Workers compensation	13,426	29,197	42,623
Motor vehicle third party personal claim	18,675	2,432	21,107
Department of Veterans' Affairs	59,808	73,946	133,754
Other <sup>(c)</sup>	17,262	14,765	32,027
<b>Total</b>	<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</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 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.

About 87% 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 92% 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, 2011–12**

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	187,186	41,080	228,266
Discharge/transfer to residential aged care service	35,432	5,229	40,661
Discharge/transfer to an (other) psychiatric hospital	4,478	154	4,632
Discharge/transfer to other health care accommodation	9,460	15,051	24,511
Statistical discharge: type change	73,757	17,068	90,825
Left against medical advice/discharge at own risk	30,007	1,412	31,419
Statistical discharge from leave	4,405	56	4,461
Died	35,495	9,561	45,056
Other	2,171,490	1,014,039	3,185,529
Not reported	76	6	82
<b>Total</b>	<b>2,551,786</b>	<b>1,103,656</b>	<b>3,655,442</b>

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

## Additional information

The following tables provide more information on diagnosis and procedures for overnight acute separations, by state and territory. Information on the 50 most common principal diagnoses, diagnosis-related groups and procedure blocks is available in tables accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.



**Table 9.17: Overnight acute separations, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Public acute hospitals	869,978	620,968	466,388	253,448	207,390	46,774	41,051	38,095	2,544,092
Public psychiatric hospitals	4,315	457	5	1,362	1,320	235	..	..	7,694
<i>Total</i>	<i>874,293</i>	<i>621,425</i>	<i>466,393</i>	<i>254,810</i>	<i>208,710</i>	<i>47,009</i>	<i>41,051</i>	<i>38,095</i>	<i>2,551,786</i>
Separations per 1,000 population <sup>(a)</sup>	114.6	107.2	103.0	108.0	117.7	86.5	115.8	185.2	110.1
<b>Private hospitals</b>									
Private free-standing day hospital facilities	0	3	0	1,226	0	n.p.	n.p.	n.p.	1,231
Other private hospitals	276,770	290,783	275,689	126,384	87,252	n.p.	n.p.	n.p.	1,102,425
<i>Total</i>	<i>276,770</i>	<i>290,786</i>	<i>275,689</i>	<i>127,610</i>	<i>87,252</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,103,656</i>
Separations per 1,000 population <sup>(a)</sup>	36.0	49.0	59.9	53.6	47.0	n.p.	n.p.	n.p.	46.7
<b>Total</b>	<b>1,151,063</b>	<b>912,211</b>	<b>742,082</b>	<b>382,420</b>	<b>295,962</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>3,655,442</b>
<b>Separations per 1,000 population<sup>(a)</sup></b>	<b>150.6</b>	<b>156.2</b>	<b>163.0</b>	<b>161.6</b>	<b>164.7</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>156.8</b>

(a) Separation rates may differ from the figures in Table 9.3 due to differences in the population age groups used for calculating the age-standardised rates.

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

**Table 9.18: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2011–12**

Principal diagnosis	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99 Certain infectious and parasitic diseases	29,214	19,486	14,688	8,119	5,911	1,191	1,188	1,819	81,616
C00–D48 Neoplasms	42,040	35,284	24,972	11,964	11,417	2,983	2,406	821	131,887
D50–D89 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	9,868	7,830	5,079	2,623	2,860	548	421	291	29,520
E00–E89 Endocrine, nutritional and metabolic diseases	16,169	12,772	10,385	5,028	4,602	1,073	656	1,204	51,889
F00–F99 Mental and behavioural disorders	46,825	31,752	23,019	16,908	13,284	2,698	1,977	1,361	137,824
G00–G99 Diseases of the nervous system	20,031	20,432	12,574	5,860	5,523	1,318	913	566	67,217
H00–H59 Diseases of the eye and adnexa	4,428	3,325	1,955	1,568	980	70	238	189	12,753
H60–H95 Diseases of the ear and mastoid process	4,233	3,304	2,359	1,653	1,135	206	182	323	13,395
I00–I99 Diseases of the circulatory system	88,582	62,504	49,814	22,934	22,148	5,370	4,421	2,727	258,500
J00–J99 Diseases of the respiratory system	90,246	58,668	43,655	25,129	21,306	4,532	3,791	5,104	252,431
K00–K93 Diseases of the digestive system	81,714	59,937	44,921	24,956	19,428	4,930	4,228	3,138	243,252
L00–L99 Diseases of the skin and subcutaneous tissue	23,242	14,697	14,057	8,119	5,134	1,086	968	2,539	69,842
M00–M99 Diseases of the musculoskeletal system and connective tissue	38,143	27,928	19,108	12,638	9,588	2,104	1,797	1,254	112,560
N00–N99 Diseases of the genitourinary system	44,872	34,002	25,598	13,509	11,565	2,126	2,297	1,807	135,776
O00–O99 Pregnancy, childbirth and the puerperium	89,269	64,859	53,203	27,324	18,390	4,788	5,156	4,383	267,372
P00–P96 Certain conditions originating in the perinatal period	17,255	11,669	9,013	4,585	3,748	832	1,281	781	49,164
Q00–Q99 Congenital malformations, deformations and chromosomal abnormalities	5,125	3,286	2,359	1,371	1,007	248	231	131	13,758
R00–R99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	83,421	59,320	40,132	21,179	21,253	3,377	2,616	2,773	234,071
S00–T98 Injury, poisoning and certain other consequences of external causes	107,939	77,071	60,318	35,034	23,994	5,902	5,790	5,965	322,013
Z00–Z99 Factors influencing health status and contact with health services	29,925	13,198	9,184	4,309	5,437	1,626	494	919	65,092
Not reported	1,752	101	0	0	0	1	0	0	1,854
<b>Total</b>	<b>874,293</b>	<b>621,425</b>	<b>466,393</b>	<b>254,810</b>	<b>208,710</b>	<b>47,009</b>	<b>41,051</b>	<b>38,095</b>	<b>2,551,786</b>

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

**Table 9.19: Overnight acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2011–12**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00–B99	Certain infectious and parasitic diseases	1,640	3,332	4,476	1,063	905	n.p.	n.p.	n.p.	11,905
C00–D48	Neoplasms	25,906	29,634	25,646	11,394	8,078	n.p.	n.p.	n.p.	104,751
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1,563	2,855	2,736	1,144	982	n.p.	n.p.	n.p.	9,583
E00–E89	Endocrine, nutritional and metabolic diseases	5,932	5,666	5,557	3,897	2,090	n.p.	n.p.	n.p.	24,242
F00–F99	Mental and behavioural disorders	11,306	9,050	8,868	3,912	1,741	n.p.	n.p.	n.p.	36,317
G00–G99	Diseases of the nervous system	15,284	16,726	18,984	7,628	4,606	n.p.	n.p.	n.p.	65,065
H00–H59	Diseases of the eye and adnexa	3,047	2,017	1,500	2,436	1,121	n.p.	n.p.	n.p.	10,568
H60–H95	Diseases of the ear and mastoid process	1,928	1,312	1,445	783	600	n.p.	n.p.	n.p.	6,326
I00–I99	Diseases of the circulatory system	25,679	32,565	31,164	11,132	8,403	n.p.	n.p.	n.p.	111,831
J00–J99	Diseases of the respiratory system	18,709	18,354	20,062	7,312	6,082	n.p.	n.p.	n.p.	73,787
K00–K93	Diseases of the digestive system	25,310	27,057	28,159	10,651	8,703	n.p.	n.p.	n.p.	104,944
L00–L99	Diseases of the skin and subcutaneous tissue	2,867	3,863	4,132	1,365	1,022	n.p.	n.p.	n.p.	13,839
M00–M99	Diseases of the musculoskeletal system and connective tissue	45,536	45,427	35,707	23,358	14,576	n.p.	n.p.	n.p.	172,091
N00–N99	Diseases of the genitourinary system	20,099	19,327	18,389	8,147	6,802	n.p.	n.p.	n.p.	76,446
O00–O99	Pregnancy, childbirth and the puerperium	26,402	22,778	20,775	11,630	5,316	n.p.	n.p.	n.p.	92,003
P00–P96	Certain conditions originating in the perinatal period	2,673	3,300	2,349	2,034	686	n.p.	n.p.	n.p.	11,645
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1,430	1,000	889	426	308	n.p.	n.p.	n.p.	4,173
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	9,560	19,056	17,657	5,772	5,965	n.p.	n.p.	n.p.	60,235
S00–T98	Injury, poisoning and certain other consequences of external causes	17,217	19,192	21,725	9,994	7,013	n.p.	n.p.	n.p.	78,032
Z00–Z99	Factors influencing health status and contact with health services	14,682	8,040	5,469	3,532	2,253	n.p.	n.p.	n.p.	35,632
	Not reported	0	235	0	0	0	n.p.	n.p.	n.p.	241
<b>Total</b>		<b>276,770</b>	<b>290,786</b>	<b>275,689</b>	<b>127,610</b>	<b>87,252</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,103,656</b>

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

**Table 9.20: Overnight acute separations by broad category of service<sup>(a)</sup>, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Childbirth	69,943	53,259	41,362	20,941	14,580	3,731	4,040	2,977	210,833
Specialist mental health	30,390	20,399	17,371	9,236	7,221	2,159	1,324	857	88,957
Emergency									
Surgical	76,546	56,042	40,139	26,924	18,940	5,380	5,944	4,489	234,404
Medical	465,334	307,089	245,395	136,889	111,912	21,839	19,886	22,287	1,330,631
Other	20,463	12,655	8,396	5,779	4,950	1,244	1,108	893	55,488
Non-emergency									
Surgical	102,736	91,842	63,220	32,958	29,687	6,452	5,813	2,634	335,342
Medical	102,534	73,816	44,887	20,518	19,198	5,792	2,747	3,650	273,142
Other	6,347	6,323	5,623	1,565	2,222	412	189	308	22,989
<i>Total</i>	<i>874,293</i>	<i>621,425</i>	<i>466,393</i>	<i>254,810</i>	<i>208,710</i>	<i>47,009</i>	<i>41,051</i>	<i>38,095</i>	<i>2,551,786</i>
<b>Private hospitals</b>									
Childbirth	23,234	20,457	17,634	10,273	4,796	n.p.	n.p.	n.p.	80,646
Specialist mental health	9,883	7,740	7,167	3,651	1,455	n.p.	n.p.	n.p.	31,194
Emergency									
Surgical	3,900	9,551	10,546	4,959	4,355	n.p.	n.p.	n.p.	33,827
Medical	14,228	35,293	52,006	15,585	14,294	n.p.	n.p.	n.p.	133,768
Other	952	3,836	4,289	1,517	1,388	n.p.	n.p.	n.p.	12,192
Non-emergency									
Surgical	158,528	135,565	116,122	68,326	44,390	n.p.	n.p.	n.p.	547,711
Medical	56,319	65,521	57,050	20,565	13,750	n.p.	n.p.	n.p.	223,932
Other	9,726	12,823	10,875	2,734	2,824	n.p.	n.p.	n.p.	40,386
<i>Total</i>	<i>276,770</i>	<i>290,786</i>	<i>275,689</i>	<i>127,610</i>	<i>87,252</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>1,103,656</i>

(a) Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG recorded for the separation. See Chapter 7 and Appendix B for more information.

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

**Table 9.21: Overnight acute separations by Major Diagnostic Category AR-DRG version 6.0x, public hospitals, states and territories, 2011–12**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	4,171	3,394	2,367	1,030	1,009	256	224	185	12,636
01	Diseases and disorders of the nervous system	55,094	41,363	28,170	15,584	13,128	3,298	2,579	1,892	161,108
02	Diseases and disorders of the eye	6,127	4,537	2,768	2,055	1,332	122	314	277	17,532
03	Diseases and disorders of the ear, nose, mouth and throat	31,187	26,986	18,913	11,388	9,276	1,831	1,668	1,957	103,206
04	Diseases and disorders of the respiratory system	90,242	59,290	43,618	24,329	21,112	4,762	3,652	4,770	251,775
05	Diseases and disorders of the circulatory system	105,243	72,283	61,670	26,713	28,179	5,418	4,545	3,355	307,406
06	Diseases and disorders of the digestive system	97,434	72,038	51,319	28,199	23,490	5,284	4,658	3,206	285,628
07	Diseases and disorders of the hepatobiliary system and pancreas	27,168	20,215	14,462	7,589	6,183	1,688	1,335	1,109	79,749
08	Diseases and disorders of the musculoskeletal system and connective tissue	86,847	61,758	44,769	27,771	19,985	4,934	4,774	3,367	254,205
09	Diseases and disorders of the skin, subcutaneous tissue and breast	35,140	23,294	20,911	11,910	8,559	1,658	1,447	3,130	106,049
10	Endocrine, nutritional and metabolic diseases and disorders	17,137	13,031	10,064	5,117	4,576	1,065	719	872	52,581
11	Diseases and disorders of the kidney and urinary tract	38,164	29,577	21,464	11,200	9,857	1,713	2,019	1,833	115,827
12	Diseases and disorders of the male reproductive system	6,530	5,182	3,752	2,155	1,835	375	417	240	20,486
13	Diseases and disorders of the female reproductive system	14,195	12,270	8,972	4,358	3,851	928	697	619	45,890
14	Pregnancy, childbirth and puerperium	91,488	66,300	54,372	28,160	18,909	4,899	5,234	4,615	273,977
15	Newborns and other neonates	36,435	14,984	11,766	6,315	4,788	1,556	1,472	1,034	78,350
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	10,749	8,504	5,652	3,041	3,068	599	475	406	32,494
17	Neoplastic disorders (haematological and solid neoplasms)	6,348	5,510	3,182	1,898	1,643	532	363	128	19,604
18	Infectious and parasitic diseases	18,938	12,833	9,414	5,395	3,241	879	804	1,010	52,514
19	Mental diseases and disorders	32,081	26,066	18,507	12,083	10,482	1,992	1,247	924	103,382
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	10,384	4,657	4,475	4,050	1,920	436	607	351	26,880
21	Injuries, poisoning and toxic effects of drugs	34,197	24,832	18,885	10,952	7,525	1,772	1,548	1,977	101,688
22	Burns	1,305	1,082	1,089	849	661	137	50	305	5,478
23	Factors influencing health status and other contacts with health services	14,838	10,296	5,094	2,118	3,788	787	170	452	37,543
ED	Error DRGs <sup>(a)</sup>	2,851	1,143	738	551	313	88	33	81	5,798
<b>Total</b>		<b>874,293</b>	<b>621,425</b>	<b>466,393</b>	<b>254,810</b>	<b>208,710</b>	<b>47,009</b>	<b>41,051</b>	<b>38,095</b>	<b>2,551,786</b>

DRG—diagnosis related group; ECMO—extracorporeal membrane oxygenation; MDC—major diagnostic category.

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

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

**Table 9.22: Overnight acute separations by Major Diagnostic Category AR-DRG version 6.0x, private hospitals, states and territories, 2011–12**

Major Diagnostic Category		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	768	760	855	285	320	n.p.	n.p.	n.p.	3,055
01	Diseases and disorders of the nervous system	7,803	9,259	9,464	3,346	2,213	n.p.	n.p.	n.p.	33,011
02	Diseases and disorders of the eye	3,164	2,144	1,649	2,584	1,171	n.p.	n.p.	n.p.	11,177
03	Diseases and disorders of the ear, nose, mouth and throat	20,163	14,348	13,619	7,272	6,087	n.p.	n.p.	n.p.	64,733
04	Diseases and disorders of the respiratory system	18,491	25,757	29,574	10,155	6,867	n.p.	n.p.	n.p.	93,516
05	Diseases and disorders of the circulatory system	26,638	37,270	35,555	11,947	10,493	n.p.	n.p.	n.p.	124,947
06	Diseases and disorders of the digestive system	24,776	30,392	32,450	11,794	9,570	n.p.	n.p.	n.p.	114,252
07	Diseases and disorders of the hepatobiliary system and pancreas	7,854	7,796	7,834	2,973	2,476	n.p.	n.p.	n.p.	30,360
08	Diseases and disorders of the musculoskeletal system and connective tissue	57,250	57,334	48,985	29,052	19,320	n.p.	n.p.	n.p.	221,137
09	Diseases and disorders of the skin, subcutaneous tissue and breast	13,225	15,495	13,253	6,319	4,071	n.p.	n.p.	n.p.	54,650
10	Endocrine, nutritional and metabolic diseases and disorders	7,281	6,353	6,021	4,408	2,391	n.p.	n.p.	n.p.	27,681
11	Diseases and disorders of the kidney and urinary tract	9,683	13,227	11,335	4,350	3,802	n.p.	n.p.	n.p.	44,828
12	Diseases and disorders of the male reproductive system	7,718	6,664	5,377	2,545	1,675	n.p.	n.p.	n.p.	25,196
13	Diseases and disorders of the female reproductive system	12,591	9,249	9,900	4,750	3,712	n.p.	n.p.	n.p.	42,151
14	Pregnancy, childbirth and puerperium	27,102	23,149	20,945	11,685	5,353	n.p.	n.p.	n.p.	93,556
15	Newborns and other neonates	7,801	3,725	2,649	2,335	803	n.p.	n.p.	n.p.	18,097
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	1,679	3,040	2,903	1,224	1,017	n.p.	n.p.	n.p.	10,190
17	Neoplastic disorders (haematological and solid neoplasms)	1,500	3,475	3,360	1,624	931	n.p.	n.p.	n.p.	11,203
18	Infectious and parasitic diseases	2,137	3,021	3,661	1,221	751	n.p.	n.p.	n.p.	11,268
19	Mental diseases and disorders	8,493	7,139	6,685	3,154	1,499	n.p.	n.p.	n.p.	28,294
20	Alcohol/drug use and alcohol/drug induced organic mental disorders	2,610	1,886	1,874	716	254	n.p.	n.p.	n.p.	7,466
21	Injuries, poisoning and toxic effects of drugs	3,045	4,190	4,711	2,606	1,217	n.p.	n.p.	n.p.	16,359
22	Burns	29	61	43	14	13	n.p.	n.p.	n.p.	166
23	Factors influencing health status and other contacts with health services	4,509	4,138	2,173	1,025	1,048	n.p.	n.p.	n.p.	13,689
ED	Error DRGs <sup>(a)</sup>	460	914	814	226	198	n.p.	n.p.	n.p.	2,674
<b>Total</b>		<b>276,770</b>	<b>290,786</b>	<b>275,689</b>	<b>127,610</b>	<b>87,252</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,103,656</b>

DRG—diagnosis related group; ECMO—extracorporeal membrane oxygenation; MDC—major diagnostic category.

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

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

**Table 9.23: Procedures<sup>(a)</sup> reported for overnight acute separations by ACHI chapter, public hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86 Procedures on nervous system	15,319	13,343	7,768	4,870	3,684	1,146	940	521	47,591
110–129 Procedures on endocrine system	2,738	1,966	1,343	789	529	115	120	45	7,645
160–256 Procedures on eye and adnexa	4,360	3,429	1,899	1,621	1,032	78	231	144	12,794
300–333 Procedures on ear and mastoid process	2,451	2,497	1,881	1,272	971	171	171	260	9,674
370–422 Procedures on nose, mouth and pharynx	11,528	12,890	7,174	4,746	4,147	778	825	436	42,524
450–490 Dental services	1,281	1,200	1,383	856	530	87	183	336	5,856
520–570 Procedures on respiratory system	29,427	24,637	15,763	8,237	6,806	1,946	1,796	1,271	89,883
600–777 Procedures on cardiovascular system	34,537	26,321	19,642	9,758	9,615	2,111	2,360	974	105,318
800–817 Procedures on blood and blood-forming organs	7,420	5,849	4,234	2,173	1,793	499	464	189	22,621
850–1011 Procedures on digestive system	71,196	56,572	39,532	21,464	18,272	4,747	4,033	2,197	218,013
1040–1129 Procedures on urinary system	21,634	19,429	13,229	7,038	6,435	1,120	1,485	1,836	72,206
1160–1203 Procedures on male genital organs	5,559	5,065	3,163	1,888	1,679	376	352	171	18,253
1240–1299 Gynaecological procedures	15,063	12,524	9,653	4,821	4,145	999	710	635	48,550
1330–1347 Obstetric procedures	62,513	47,131	35,748	21,366	13,388	3,217	3,682	2,558	189,603
1360–1579 Procedures on musculoskeletal system	61,238	45,514	33,784	20,910	14,486	4,234	4,002	3,127	187,295
1600–1718 Dermatological and plastic procedures	31,330	28,603	20,744	13,019	8,885	1,667	1,951	3,585	109,784
1740–1759 Procedures on breast	3,486	3,150	2,389	1,369	1,162	223	179	122	12,080
1786–1799 Radiation oncology procedures	3,155	2,064	1,463	558	560	168	222	59	8,249
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	500,512	383,616	269,556	155,983	129,654	31,267	26,588	20,894	1,518,070
1940–2016 Imaging services	11,330	4,454	3,844	2,511	1,300	307	587	222	24,555
No procedure or not reported	318,653	196,125	168,740	81,930	69,359	13,238	11,256	14,160	873,461
<b>Total</b>	<b>874,293</b>	<b>621,425</b>	<b>466,393</b>	<b>254,810</b>	<b>208,710</b>	<b>47,009</b>	<b>41,051</b>	<b>38,095</b>	<b>2,551,786</b>

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

(a) These are counts of 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.

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

**Table 9.24: Procedures<sup>(a)</sup> reported for overnight acute separations by ACHI chapter, private hospitals, states and territories, 2011–12**

Procedure chapters		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86	Procedures on nervous system	13,926	12,388	11,108	6,723	3,020	n.p.	n.p.	n.p.	48,930
110–129	Procedures on endocrine system	3,085	1,931	1,610	1,064	549	n.p.	n.p.	n.p.	8,460
160–256	Procedures on eye and adnexa	2,987	1,976	1,510	2,464	1,114	n.p.	n.p.	n.p.	10,456
300–333	Procedures on ear and mastoid process	3,028	1,649	1,884	1,376	864	n.p.	n.p.	n.p.	9,195
370–422	Procedures on nose, mouth and pharynx	17,188	11,265	10,046	6,737	4,690	n.p.	n.p.	n.p.	52,671
450–490	Dental services	971	907	500	424	426	n.p.	n.p.	n.p.	3,380
520–570	Procedures on respiratory system	5,704	6,929	10,601	2,300	2,580	n.p.	n.p.	n.p.	28,537
600–777	Procedures on cardiovascular system	22,537	27,554	22,407	8,991	6,099	n.p.	n.p.	n.p.	89,592
800–817	Procedures on blood and blood-forming organs	4,764	4,016	4,377	1,725	1,566	n.p.	n.p.	n.p.	17,124
850–1011	Procedures on digestive system	37,031	37,459	38,836	16,792	12,669	n.p.	n.p.	n.p.	149,802
1040–1129	Procedures on urinary system	13,605	13,359	12,164	5,141	4,552	n.p.	n.p.	n.p.	51,430
1160–1203	Procedures on male genital organs	8,791	7,501	5,868	2,833	1,923	n.p.	n.p.	n.p.	28,525
1240–1299	Gynaecological procedures	12,963	9,427	10,163	4,740	3,824	n.p.	n.p.	n.p.	43,099
1330–1347	Obstetric procedures	22,823	19,820	17,137	10,329	4,729	n.p.	n.p.	n.p.	78,828
1360–1579	Procedures on musculoskeletal system	50,549	50,418	42,140	26,310	17,454	n.p.	n.p.	n.p.	195,122
1600–1718	Dermatological and plastic procedures	13,720	14,550	11,452	7,108	4,050	n.p.	n.p.	n.p.	53,276
1740–1759	Procedures on breast	5,879	5,284	4,432	3,511	1,819	n.p.	n.p.	n.p.	21,856
1786–1799	Radiation oncology procedures	714	855	473	122	166	n.p.	n.p.	n.p.	2,365
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	232,910	237,827	218,324	106,902	72,682	n.p.	n.p.	n.p.	905,021
1940–2016	Imaging services	6,297	5,511	5,434	1,292	928	n.p.	n.p.	n.p.	19,681
	No procedure or not reported	26,650	36,799	44,885	13,483	11,589	n.p.	n.p.	n.p.	139,781
<b>Total</b>		<b>276,770</b>	<b>290,786</b>	<b>275,689</b>	<b>127,610</b>	<b>87,252</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>1,103,656</b>

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

(a) These are counts of 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.

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



# 10 Surgery in Australian hospitals

This chapter presents information on surgery in Australian hospitals.

It includes an overview of surgery in public and private hospitals, based on information for more than 2.4 million acute separations involving surgery in 2011–12, sourced from the NHMD. It then presents more detailed information on surgery for separations with an *Emergency* or *Elective* urgency of admission that includes:

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

The chapter also presents waiting times information on 'elective surgery' as defined in the *National health data dictionary, version 16* (AIHW 2012f), based on:

- data for about 660,000 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 procedure performed
- linked data for public hospital elective surgery waiting times and admitted patient care for more than 640,000 records. The linked elective surgery and admitted patient data allowed analysis of public hospital waiting times for elective surgery for Indigenous and non-Indigenous Australians, by remoteness area and socioeconomic status of the patient's usual residence. Estimates of the separation rates for indicator procedures (see Box 10.2 and Appendix B) and for cancer-related principal diagnoses are included.

Timely provision of the NESWTDC data by state and territory health authorities allowed the waiting times information to be reported in *Australian hospital statistics 2011–12: elective surgery waiting times* (AIHW 2012d) in October 2012. This chapter presents selected headline statistics from the earlier report, as well as additional information not provided in that report because the admitted patient data were not available.

## What data are reported?

### Separations involving surgery

Information on admitted patient care for both *Emergency* and *Elective admissions involving surgery* is derived from the NHMD (see Appendix A). Terms relevant to admitted patient care data are summarised in Box 7.1.

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

## Elective surgery waiting times

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

The data reported are for patients removed from elective surgery waiting lists in public hospitals between 1 July 2011 and 30 June 2012. It is estimated that the NESWTDC data covers about 97% of all elective surgery in public hospitals. Waiting times data are not available for private hospitals. See Appendix A for more information.

### Box 10.1: Definitions

#### How are separations involving surgery defined in this chapter?

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

For the NHMD, **separations involving surgery** are defined as acute care separations with a 'surgical procedure' reported, based on the procedures used to define 'surgical' DRGs in AR-DRG version 6.0x (DoHA 2011). Separations for *Specialist mental health care* and *Childbirth* were excluded (see Chapter 7).

Separations involving surgery are presented in this chapter as **emergency** and **elective admissions involving surgery**. *Emergency admissions* includes separations for which the Urgency of admission was reported as *Emergency* (about 295,000 records nationally). *Elective admissions* includes separations for which the Urgency of admission was reported as *Elective* (about 2 million records nationally). A relatively small number of separations involving surgery had an Urgency of admission that was *Not assigned* or *Not reported* (about 27,000 records nationally). These records are in Table 10.1 but are not included in subsequent tables in this chapter.

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

#### Waiting times data for elective surgery

For the NESWTDC, elective surgery comprises elective care (admission could be delayed by at least 24 hours), where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (AIHW 2012f).

## Linked admitted patient care and elective surgery waiting times data

For 2011–12, 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.

## Box 10.2: What are the limitations of the data?

### Admitted patient care data

- Limitations of the data on admitted patient care are in Chapter 7 and Appendix A.
- The quality of Indigenous status data in the NHMD is variable and these data should be used with caution. For more information on the quality of Indigenous status data see Appendix B.
- In the Northern Territory, urgency of admission for private hospital separations was missing for all records. For the purposes of this chapter, all separations involving surgery have been categorised as elective admissions involving surgery. Therefore, these counts may not agree with counts presented for non-emergency surgery in other chapters in this report.

### Elective surgery waiting times data

- The data collection covered most public hospitals that undertake elective surgery (see Appendix A). However, some patients treated in private hospitals under contract in Victoria and Tasmania were included. 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 2011–12, about 97% of public elective admissions involving surgery were performed by hospitals that also reported to the NESWTDC. This proportion varied by state and territory, ranging from 100% for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 76% in Victoria. The proportion also varied by hospital peer group, ranging from 100% for *Principal referral and specialist women's and children's* hospitals to 80% for *Medium* hospitals.
- Methods to calculate waiting times have varied across states and territories and over time (see Appendix B).
- From 2009–10, the data for the Albury Base Hospital have been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. Data for Albury Base Hospital are therefore now included in statistics for Victoria whereas they were formerly reported by and included in statistics for New South Wales.
- In 2011–12, for patients who were admitted after being transferred from another hospital's waiting list, New South Wales, South Australia and the Northern Territory reported the total time waited on all hospital waiting lists. This could have an effect of increasing the waiting times reported for overall removals for those jurisdictions relative to others.

### Linked NHMD and NESWTDC data

- The linked data accounted for about 97% of the records provided with waiting times. There was some variation in the linked data coverage between states and territories, ranging from 87% for the Northern Territory to 100% for Queensland.
- Coverage of the linked data by remoteness area ranged from 86% in *Inner* and *outer regional* areas to 100% in *Major cities*. Coverage by SES group ranged from 92% for the second most disadvantaged group to 100% for the least disadvantaged group (5 – Highest). These variations in coverage should be considered when interpreting the waiting times and the age-standardised rates in this chapter.

# How has surgery activity changed over time?

## National

Between 2010–11 to 2011–12, separations involving surgery rose 3.6% to more than 2.4 million.

Between 2007–08 and 2011–12, the number of separations involving surgery rose by an average of 3.2% per year (Table 10.1). Over the same period, the number of emergency admissions involving surgery increased by an average of 4.1% per year and the number of elective admissions involving surgery increased by an average of 3.4% per year. The average annual rise in elective admissions involving surgery was higher in private hospitals (4.1%) than in public hospitals (2.0%).

**Table 10.1: Separations involving surgery by urgency of admission, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Emergency admissions	218,079	226,469	229,707	243,771	256,804	4.2	5.3
Elective admissions	625,581	644,175	656,741	669,884	676,148	2.0	0.9
<i>Sub-total</i>	<i>843,660</i>	<i>870,644</i>	<i>886,448</i>	<i>913,655</i>	<i>932,952</i>	<i>2.5</i>	<i>2.1</i>
Childbirth-related surgery	60,690	62,537	64,347	65,993	69,039	3.3	4.6
Urgency not assigned	15,177	15,597	15,849	15,760	17,461	3.6	10.8
Urgency not reported	4	2	3,327	284	218	n.p.	n.p.
<i>All surgery</i>	<i>919,531</i>	<i>948,780</i>	<i>969,971</i>	<i>995,692</i>	<i>1,019,670</i>	<i>2.6</i>	<i>2.4</i>
<b>Private hospitals</b>							
Emergency admissions	33,840	30,575	33,069	36,556	38,634	3.4	5.7
Elective admissions	1,140,256	1,172,326	1,245,704	1,279,501	1,339,422	4.1	4.7
<i>Sub-total</i>	<i>1,174,096</i>	<i>1,202,901</i>	<i>1,278,773</i>	<i>1,316,057</i>	<i>1,378,056</i>	<i>4.1</i>	<i>4.7</i>
Childbirth-related surgery	34,954	35,474	37,097	35,698	36,812	1.3	3.1
Urgency not assigned	23,073	34,278	18,745	9,206	8,075	n.p.	n.p.
Urgency not reported	0	0	330	2,110	1,253	n.p.	n.p.
<i>All surgery</i>	<i>1,232,123</i>	<i>1,272,653</i>	<i>1,334,945</i>	<i>1,363,071</i>	<i>1,424,196</i>	<i>3.7</i>	<i>4.5</i>
<b>All hospitals</b>							
<b>Emergency admissions</b>	<b>251,919</b>	<b>257,044</b>	<b>262,776</b>	<b>280,327</b>	<b>295,438</b>	<b>4.1</b>	<b>5.4</b>
<b>Elective admissions</b>	<b>1,765,837</b>	<b>1,816,501</b>	<b>1,902,445</b>	<b>1,949,385</b>	<b>2,015,570</b>	<b>3.4</b>	<b>3.4</b>
<i>Sub-total</i>	<i>2,017,756</i>	<i>2,073,545</i>	<i>2,165,221</i>	<i>2,229,712</i>	<i>2,311,008</i>	<i>3.5</i>	<i>3.6</i>
Childbirth-related surgery	95,644	98,011	101,444	101,691	105,851	2.6	4.1
Urgency not assigned	38,250	49,875	34,594	24,966	25,536	n.p.	n.p.
Urgency not reported	4	2	3,657	2,394	1,471	n.p.	n.p.
<b>All surgery</b>	<b>2,151,654</b>	<b>2,221,433</b>	<b>2,304,916</b>	<b>2,358,763</b>	<b>2,443,866</b>	<b>3.2</b>	<b>3.6</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## States and territories

Between 2007–08 and 2011–12, the number of emergency admissions involving surgery increased for public hospitals in most states and territories (Table 10.2).

Emergency admissions involving surgery in private hospitals also increased in most states and territories. South Australia had the highest increase in emergency admissions involving surgery (17.6%) in private hospitals between 2010–11 and 2011–12.

**Table 10.2: Emergency admissions involving surgery, public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales</b>							
Public hospitals	72,965	77,185	77,905	79,858	84,980	3.9	6.4
Private hospitals	4,075	4,278	4,204	4,046	4,296	1.3	6.2
<i>Total</i>	<i>77,040</i>	<i>81,463</i>	<i>82,109</i>	<i>83,904</i>	<i>89,276</i>	<i>3.8</i>	<i>6.4</i>
<b>Victoria</b>							
Public hospitals	54,453	54,716	57,817	59,997	62,528	3.5	4.2
Private hospitals	6,611	6,964	7,874	8,964	9,988	10.9	11.4
<i>Total</i>	<i>61,064</i>	<i>61,680</i>	<i>65,691</i>	<i>68,961</i>	<i>72,516</i>	<i>4.4</i>	<i>5.2</i>
<b>Queensland</b>							
Public hospitals	34,286	35,794	36,979	39,814	42,632	5.6	7.1
Private hospitals	9,423	9,649	10,533	11,241	11,047	4.1	–1.7
<i>Total</i>	<i>43,709</i>	<i>45,443</i>	<i>47,512</i>	<i>51,055</i>	<i>53,679</i>	<i>5.3</i>	<i>5.1</i>
<b>Western Australia</b>							
Public hospitals	24,483	25,101	26,076	28,025	29,296	4.6	4.3
Private hospitals	3,393	3,717	4,842	5,501	5,433	12.5	–1.5
<i>Total</i>	<i>27,876</i>	<i>28,818</i>	<i>30,918</i>	<i>33,526</i>	<i>34,729</i>	<i>5.6</i>	<i>3.6</i>
<b>South Australia</b>							
Public hospitals	18,063	18,945	18,720	19,531	20,238	2.9	3.6
Private hospitals	6,695	5,201	5,013	6,233	7,331	2.3	17.6
<i>Total</i>	<i>24,758</i>	<i>24,146</i>	<i>23,733</i>	<i>25,764</i>	<i>27,569</i>	<i>2.7</i>	<i>7.0</i>
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	5,441	5,711	2,500	5,770	5,902	2.1	2.3
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	4,763	5,238	5,788	6,377	6,600	8.5	3.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	3,625	3,779	3,922	4,399	4,628	6.3	5.2
Private hospitals <sup>(b)</sup>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>218,079</b>	<b>226,469</b>	<b>229,707</b>	<b>243,771</b>	<b>256,804</b>	<b>4.2</b>	<b>5.3</b>
<b>Private hospitals</b>	<b>33,840</b>	<b>30,575</b>	<b>33,069</b>	<b>36,556</b>	<b>38,634</b>	<b>3.4</b>	<b>5.7</b>
<b>Total</b>	<b>251,919</b>	<b>257,044</b>	<b>262,776</b>	<b>280,327</b>	<b>295,438</b>	<b>4.1</b>	<b>5.4</b>

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

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Between 2007–08 and 2011–12, the number of elective admissions involving surgery increased for public hospitals in all states and territories (Table 10.3).

Over the same period, Western Australia had the highest average annual increase in elective admissions involving surgery (6.6%) in private hospitals.

**Table 10.3: Elective admissions involving surgery, public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales</b>							
Public hospitals	185,219	183,554	184,325	189,681	193,730	1.1	2.1
Private hospitals	345,452	363,722	382,465	391,822	409,531	4.3	4.5
<i>Total</i>	530,671	547,276	566,790	581,503	603,261	3.3	3.7
<b>Victoria</b>							
Public hospitals	186,681	196,717	201,661	202,715	199,876	1.7	-1.4
Private hospitals	277,604	284,616	306,155	313,182	331,335	4.5	5.8
<i>Total</i>	464,285	481,333	507,816	515,897	531,211	3.4	3.0
<b>Queensland</b>							
Public hospitals	105,221	108,311	112,458	114,288	115,709	2.4	1.2
Private hospitals	254,415	253,890	270,111	275,223	288,108	3.2	4.7
<i>Total</i>	359,636	362,201	382,569	389,511	403,817	2.9	3.7
<b>Western Australia</b>							
Public hospitals	61,094	65,128	65,452	69,188	70,892	3.8	2.5
Private hospitals	118,347	127,671	132,185	145,057	153,090	6.6	5.5
<i>Total</i>	179,441	192,799	197,637	214,245	223,982	5.7	4.5
<b>South Australia</b>							
Public hospitals	61,452	63,054	63,060	64,087	65,644	1.7	2.4
Private hospitals	93,994	98,106	101,183	100,106	101,816	2.0	1.7
<i>Total</i>	155,446	161,160	164,243	164,193	167,460	1.9	2.0
<b>Tasmania<sup>(a)</sup></b>							
Public hospitals	10,773	11,662	14,349	13,832	13,945	6.7	0.8
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Australian Capital Territory</b>							
Public hospitals	9,790	10,018	9,522	10,149	10,317	1.3	1.7
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Northern Territory</b>							
Public hospitals	5,351	5,731	5,914	5,944	6,035	3.1	1.5
Private hospitals <sup>(b)</sup>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Total</b>							
<b>Public hospitals</b>	<b>625,581</b>	<b>644,175</b>	<b>656,741</b>	<b>669,884</b>	<b>676,148</b>	<b>2.0</b>	<b>0.9</b>
<b>Private hospitals</b>	<b>1,140,256</b>	<b>1,172,326</b>	<b>1,245,704</b>	<b>1,279,501</b>	<b>1,339,422</b>	<b>4.1</b>	<b>4.7</b>
<b>Total</b>	<b>1,765,837</b>	<b>1,816,501</b>	<b>1,902,445</b>	<b>1,949,385</b>	<b>2,015,570</b>	<b>3.4</b>	<b>3.4</b>

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

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## How much activity was there in 2011–12?

In 2011–12, there were more than 295,000 emergency admissions involving surgery and more than 2 million elective admissions involving surgery (Table 10.4).

Nationally, there were about 100 separations involving surgery per 1,000 population, with emergency admissions accounting for about 13 per 1,000 population. There was some variation among states and territories in the proportion of separations involving surgery that were emergency admissions, ranging from 11.7% in Queensland to 14.1% in South Australia.

**Table 10.4: Separations involving surgery per 1,000 population, by urgency of admission, states and territories, all hospitals, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
<b>Emergency admissions</b>									
Separations	89,276	72,516	53,679	34,729	27,569	5,902	6,600	4,628	295,438
Separations per 1,000	11.9	12.6	11.9	14.7	15.3	11.1	18.5	21.4	12.8
<b>Elective admissions</b>									
Separations	603,261	531,211	403,817	223,982	167,460	13,945	10,317	6,035	2,015,570
Separations per 1,000	79.0	91.9	88.5	94.6	94.0	25.6	29.8	30.6	86.7
<b>Total</b>									
<b>Separations</b>	<b>692,537</b>	<b>603,727</b>	<b>457,496</b>	<b>258,711</b>	<b>195,029</b>	<b>19,847</b>	<b>16,917</b>	<b>10,663</b>	<b>2,311,008</b>
<b>Separations per 1,000</b>	<b>90.9</b>	<b>104.5</b>	<b>100.4</b>	<b>109.4</b>	<b>109.3</b>	<b>36.6</b>	<b>48.3</b>	<b>52.0</b>	<b>99.5</b>

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

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

### An example: linked elective surgery and admitted patient data

In 2011–12, about two-thirds of admissions (437,000) from public hospital elective surgery waiting lists were for procedures that were not categorised as one of the 15 indicator procedures. Using the linked data, Figure 10.1 presents information on those admissions. In 2011–12:

- admitted patient data could be linked for 98% of these admissions (427,000)
- less than 1% were emergency admissions
- they accounted for almost 930,000 patient days, with an average length of stay of 2.2 days
- the most common principal diagnoses included *Other malignant neoplasms of skin* (23,800 separations), *Internal derangement of knee* (11,500) and *Mononeuropathies of upper limb* (10,900)
- apart from anaesthesia and generalised allied health interventions (which are not surgical), the most common procedures performed were *Excision of skin lesions* (50,200 procedures), *Curettage and evacuation of uterus* (22,100) and *Examination procedures on the uterus* (15,500)
- the most common age groups were 45 to 54 and 55 to 64 years
- 54% of these separations were for females.

Between 2007–08 and 2011–12, admissions from public hospital elective surgery waiting lists for patients awaiting a procedure that was not one of the 15 specific indicator procedures increased by about 16%.

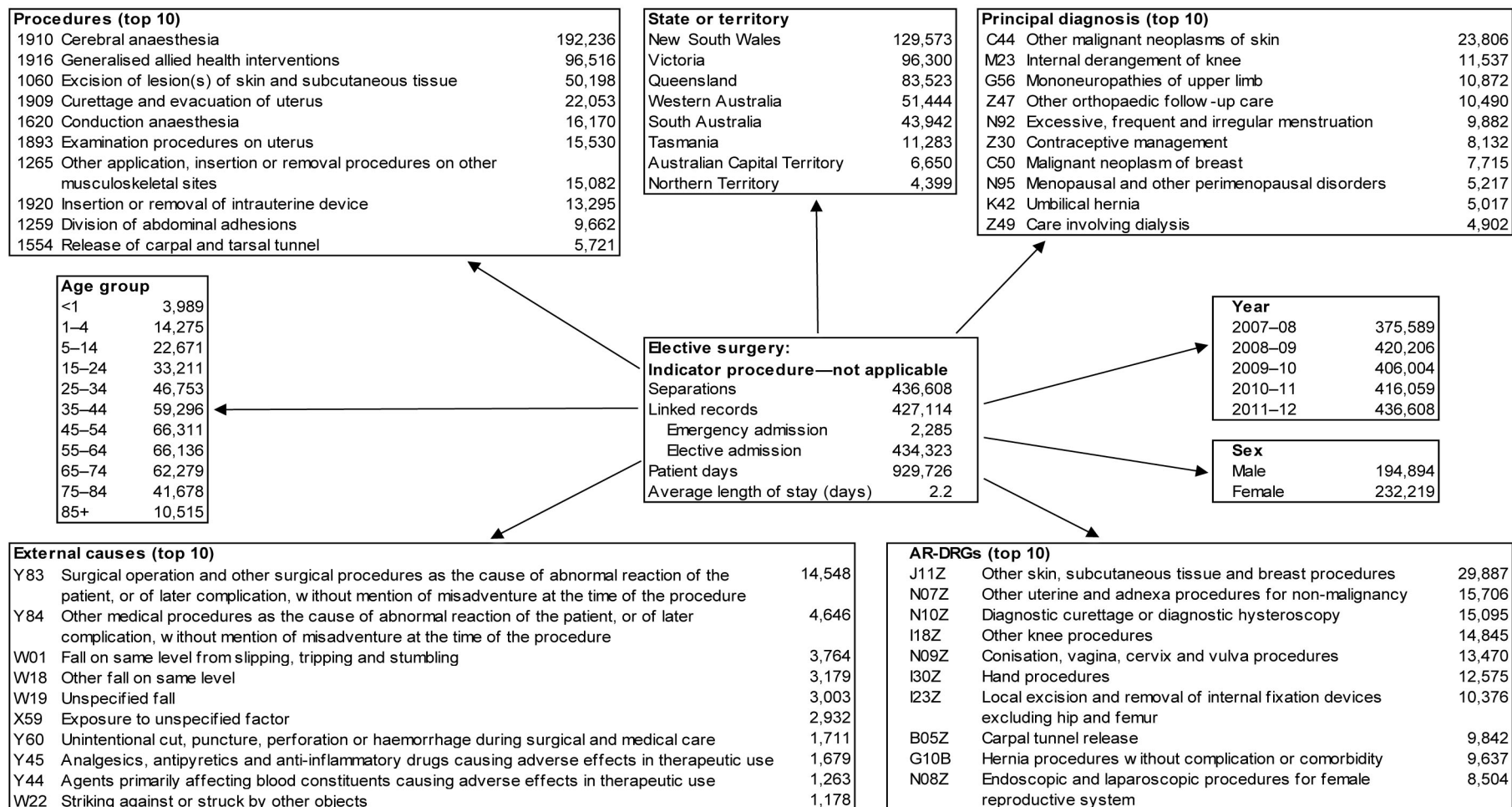


Figure 10.1: Data reported for admissions from public hospital elective surgery waiting lists for separations where the awaited procedure was not one of the 15 indicator procedures, public hospitals, 2011-12

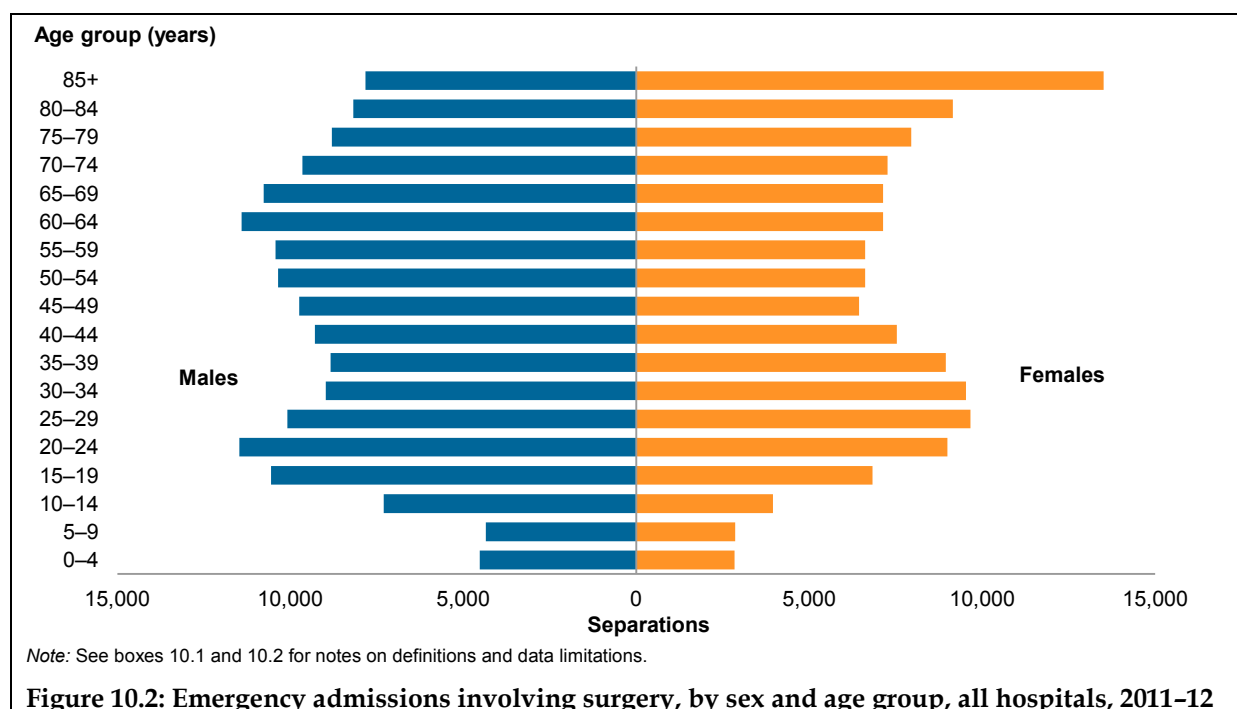


## Who used these services?

### Sex and age group

Males accounted for more than half (55%) of emergency admissions involving surgery (Figure 10.2). There were more emergency admissions involving surgery for males than females in almost all age groups except 30 to 39 and those aged 80 and over. Persons aged 15 to 29 accounted for about 20% of all emergency admissions involving surgery.

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



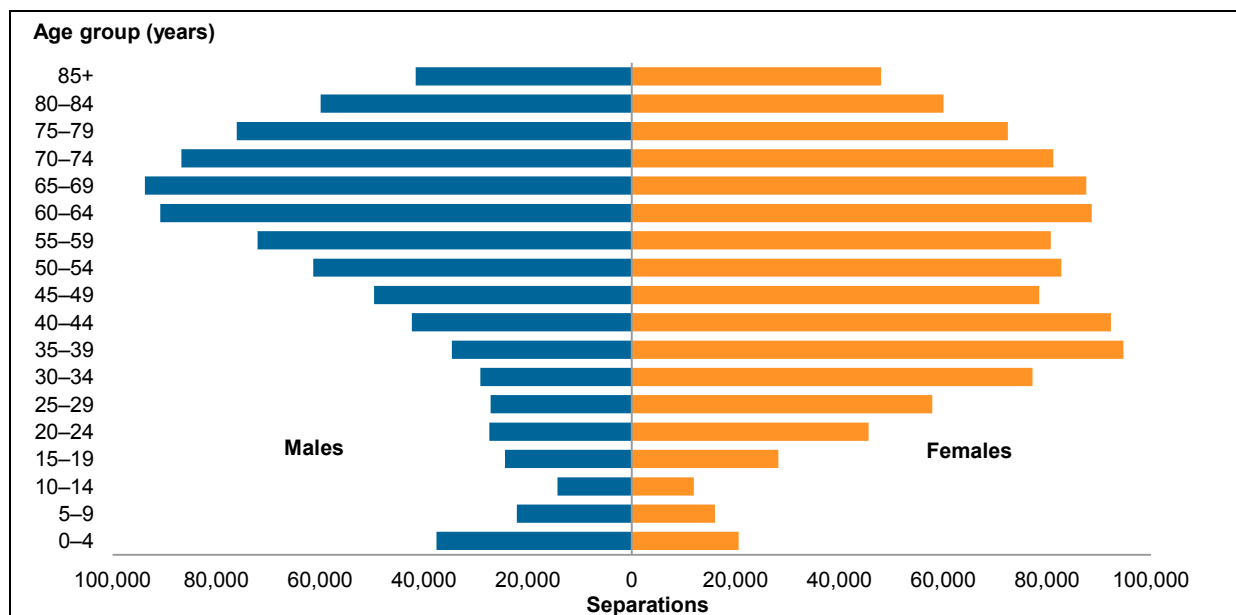
**Figure 10.2: Emergency admissions involving surgery, by sex and age group, all hospitals, 2011-12**

Females accounted for more than half (56%) of elective admissions involving surgery (Figure 10.3). There were more elective admissions involving surgery for females than males in the age groups from 15 to 59 and 80 and over. In particular, for the age groups from 30 to 39, there were more than two and half times as many elective admissions involving surgery for females as for males.

### Access: rates of separations involving surgery

In 2011-12, public hospitals provided almost 41 separations involving surgery per 1,000 population and private hospitals provided about 59 per 1,000 (Table 10.5).

There was some variation in the rates of separations involving surgery by urgency of admission, Indigenous status, remoteness area and socioeconomic status of area of residence.



Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Figure 10.3: Elective admissions involving surgery, by sex and age group, all hospitals, 2011-12

Table 10.5: Separations involving surgery per 1,000 population by urgency of admission, Indigenous status, remoteness area and socioeconomic status of area of residence, public and private hospitals, 2011-12

	Public hospitals		Private hospitals		Total		Number
	Emergency admissions	Elective admissions	Emergency admissions	Elective admissions	Emergency admissions	Elective admissions	
<b>Indigenous status<sup>(a)</sup></b>							
Indigenous	24.9	44.5	0.3	9.3	25.2	53.8	34,213
Other Australians	10.9	28.8	1.7	58.1	12.6	87.0	2,276,795
<b>Remoteness of residence<sup>(b)</sup></b>							
Major cities	10.5	25.8	1.8	60.0	12.3	85.8	1,551,471
Inner regional	12.0	36.1	1.4	54.7	13.4	90.8	493,183
Outer regional	12.5	38.7	1.0	45.7	13.5	84.4	211,342
Remote	16.3	39.7	1.0	37.0	17.3	76.8	29,871
Very remote	20.6	33.5	0.8	25.2	21.4	58.8	13,414
<b>Socioeconomic status<sup>(c)</sup></b>							
1-Lowest	12.9	38.3	0.9	40.2	13.8	78.5	430,352
2	12.0	34.3	1.1	49.6	13.1	83.9	468,760
3	11.9	32.1	1.6	58.6	13.5	90.7	477,618
4	10.3	25.2	1.9	62.1	12.3	87.3	448,155
5-Highest	8.3	16.2	2.6	75.2	10.9	91.4	474,178
<b>Total</b>	<b>11.2</b>	<b>29.3</b>	<b>1.6</b>	<b>57.3</b>	<b>12.8</b>	<b>86.7</b>	<b>2,311,008</b>

(a) Other Australians includes presentations for which the Indigenous status was not reported.

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## Aboriginal and Torres Strait Islander people

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. The quality of the data provided for Indigenous status in 2011–12 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix B for more information on the quality of Indigenous data in the NHMD.

### Separations involving surgery

There were more than 34,000 separations involving surgery for Indigenous Australians in 2011–12, a rate of 79 per 1,000 population for Indigenous Australians compared to 100 per 1,000 for other Australians (Table 10.5).

About a third of separations involving surgery for Indigenous Australians were emergency admissions (32%), and the rate of emergency admissions involving surgery for Indigenous Australians was 25 per 1,000 population, almost twice the rate for other Australians (13 per 1,000).

The separation rate for elective admissions involving surgery for Indigenous Australians (54 per 1,000) was about 62% of the rate for other Australians (87 per 1,000).

### Indicator procedures

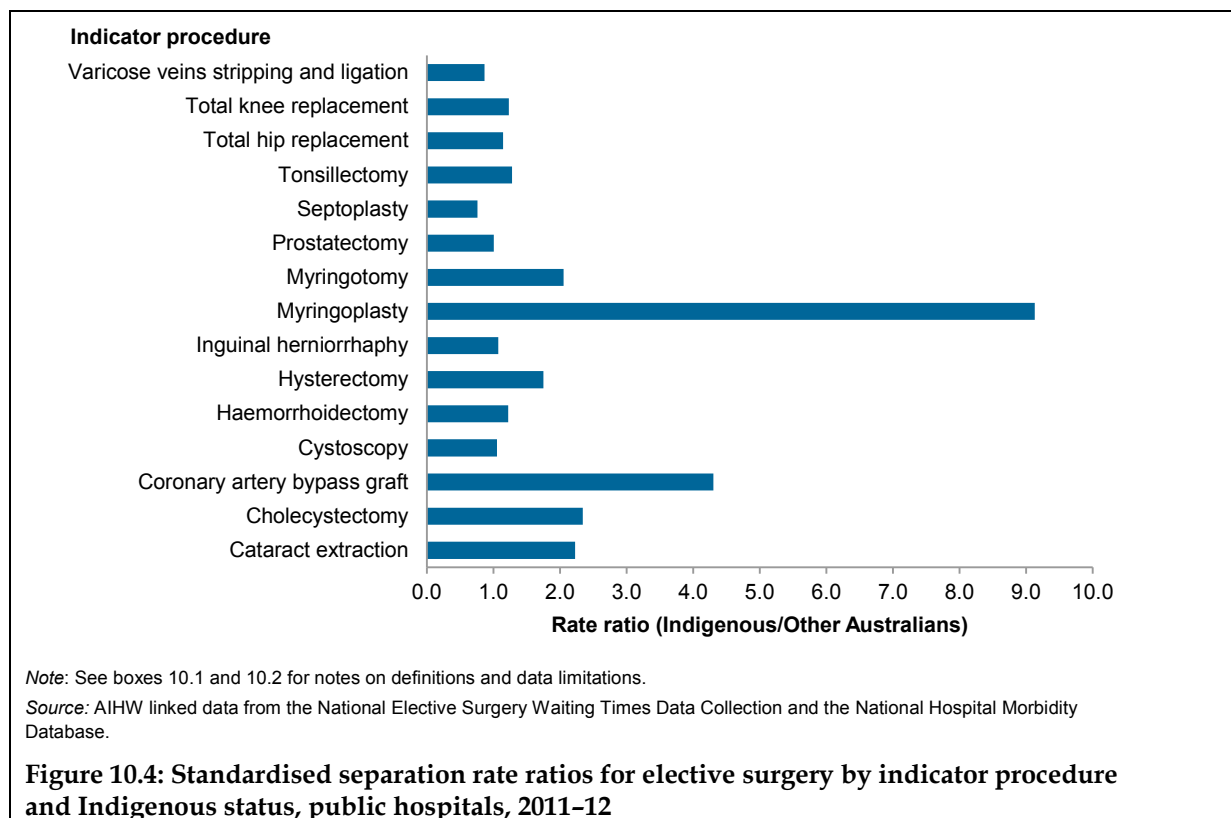
Analysis of the linked NHMD and NESWTDC data provides an opportunity to understand how elective surgery activity for people admitted from waiting lists varied across population groups.

The SRRs presented in Figure 10.4 compare the separation rates for Indigenous Australians with 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 11 of the 15 indicator procedures, the data suggest that the separation rates for Indigenous Australians were markedly different from the rates for other Australians. The rates were not notably different for *Varicose veins stripping and ligation*, *Cystoscopy*, *Inguinal herniorrhaphy*, *Prostatectomy* and *Total hip replacement*.

The highest SRRs were reported for *Myringoplasty* (9.1) and *Coronary artery bypass graft* (4.3). Indigenous Australians had SRRs less than 1.0 for *Septoplasty* and *Varicose veins stripping and ligation*.

For more information, see Table S10.1 accompanying this report online at [www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/).



## Remoteness area

### Separations involving surgery

The overall rate of separations involving surgery was highest for those living in *Inner regional* areas (104 per 1,000 population, Table 10.5). The rate of elective admissions involving surgery was lowest for those living in *Very remote* areas (59 per 1,000) and highest for those living in *Inner regional* areas (91 per 1,000). The separation rate for emergency admissions involving surgery was highest for those living in *Very remote* areas (21 per 1,000) and decreased with decreasing remoteness.

For elective admissions involving surgery in public hospitals, the separation rate was lowest for those living in *Major cities* (26 per 1,000) and highest for those living in *Remote areas* (40 per 1,000). In contrast, for private hospitals the rate was highest for those living in *Major cities* (60 per 1,000) and decreased with increasing remoteness to 25 per 1,000 for *Very remote* areas. This may reflect variations in the availability of private hospital services in the more remote areas of Australia.

### Indicator procedures

Using the linked NHMD and NESWTDC data, Table 10.6 presents separation rates by indicator procedure and remoteness area. The rate for *Myringoplasty* for people living in *Very remote* areas was more than 13 times the national rate.

For more information, see Table S10.2 accompanying this report online at [www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/).

**Table 10.6: Separations per 1,000 population for admissions from public hospital elective surgery waiting lists, by indicator procedure and remoteness area of usual residence<sup>(a)</sup>, public hospitals, 2011–12**

Indicator procedure	Remoteness area					Total
	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	
Cataract extraction	2.3	2.4	3.1	3.6	3.6	2.4
Cholecystectomy	0.7	0.9	0.9	1.1	0.8	0.8
Coronary artery bypass graft	0.1	0.2	0.2	0.2	0.4	0.2
Cystoscopy	1.8	1.8	1.5	1.6	1.1	1.8
Haemorrhoidectomy	0.2	0.2	0.3	0.4	0.3	0.2
Hysterectomy	0.4	0.6	0.6	0.6	0.5	0.5
Inguinal herniorrhaphy	0.6	0.7	0.7	0.9	0.5	0.7
Myringoplasty	0.1	0.1	0.1	0.4	1.2	0.1
Myringotomy	0.3	0.3	0.3	0.6	0.5	0.3
Prostatectomy	0.3	0.4	0.3	0.3	0.3	0.3
Septoplasty	0.2	0.2	0.2	0.2	0.2	0.2
Tonsillectomy	0.8	1.0	0.8	0.9	0.5	0.8
Total hip replacement	0.3	0.4	0.5	0.4	0.2	0.4
Total knee replacement	0.5	0.6	0.7	0.7	0.5	0.5
Varicose veins stripping and ligation	0.2	0.2	0.2	0.2	0.1	0.2
Not applicable/not stated	17.3	21.0	23.2	26.3	20.5	18.7
<b>Total</b>	<b>26.0</b>	<b>31.0</b>	<b>33.4</b>	<b>38.2</b>	<b>31.4</b>	<b>27.8</b>

(a) 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.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

## Socioeconomic status

### Separations involving surgery

There was little variation in the rate of emergency admissions involving surgery by SES of area of residence (Table 10.5). For elective admissions involving surgery, separation rates ranged from 79 per 1,000 population for those living in areas classified as being in the lowest SES group to 91 per 1,000 for those living in areas classified as being in the highest and middle SES groups.

In 2011–12, the separation rate for elective admissions involving surgery in public hospitals was highest for people living in areas classified as being in the lowest SES group (38 per 1,000) and tended to decrease with increasing SES to 16 per 1,000 for people living in areas classified in the highest SES group. In contrast, the rate in private hospitals was highest for people living in areas classified as being in the highest SES group (75 per 1,000) and lowest for people living in areas classified in the lowest SES group (40 per 1,000).

### Indicator procedures

Across all indicator procedures, people living in areas classified as being in the highest SES group had the lowest separation rates for public elective surgery (Table 10.7).

The greatest variation in separation rates by socioeconomic status were for *Myringoplasty*, with the rate for people living in areas classified as being in the lowest SES group almost

twice the overall rate. The rates for *Cataract extraction* were more evenly distributed among SES groups, with people living in areas classified as being in the lowest SES group having separation rates about 25% higher than the overall rate, and those in the highest SES group having separation rates about 40% lower than the overall rate.

For more information, see Table S10.3 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

**Table 10.7: Separations per 1,000 population for admissions from public hospital elective surgery waiting lists, by indicator procedure and socioeconomic status<sup>(a)</sup> of area of residence, public hospitals, 2011–12**

Indicator procedure	Socioeconomic status of area of residence					Total
	1–Lowest	2	3	4	5–Highest	
Cataract extraction	4.0	3.9	3.3	2.9	1.8	2.4
Cholecystectomy	1.5	1.2	1.0	0.8	0.5	0.8
Coronary artery bypass graft	0.3	0.2	0.2	0.2	0.1	0.2
Cystoscopy	2.9	2.8	2.6	2.0	1.5	1.8
Haemorrhoidectomy	0.3	0.2	0.2	0.2	0.1	0.2
Hysterectomy	0.8	0.7	0.6	0.5	0.3	0.5
Inguinal herniorrhaphy	1.1	1.0	0.8	0.8	0.5	0.7
Myringoplasty	0.2	0.1	0.1	0.1	<0.1	0.1
Myringotomy	0.4	0.4	0.4	0.4	0.2	0.3
Prostatectomy	0.5	0.5	0.5	0.4	0.2	0.3
Septoplasty	0.3	0.3	0.3	0.2	0.2	0.2
Tonsillectomy	1.2	1.1	1.0	0.9	0.5	0.8
Total hip replacement	0.6	0.6	0.5	0.4	0.3	0.4
Total knee replacement	1.0	1.0	0.7	0.6	0.4	0.5
Varicose veins stripping and ligation	0.3	0.2	0.2	0.2	0.2	0.2
Not applicable/not stated	31.3	26.9	25.3	21.1	14.0	18.7
<b>Total</b>	<b>46.7</b>	<b>41.1</b>	<b>37.7</b>	<b>31.6</b>	<b>20.7</b>	<b>27.8</b>

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

## How did people access these services?

Most separations involving surgery had a mode of admission of *Other* (97%), the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 10.8). However, for emergency admissions involving surgery, about 11% were transferred from another hospital.

**Table 10.8: Separations involving surgery by urgency of admission and mode of admission, all hospitals, 2011-12**

Admission mode	Emergency admissions	Elective admissions	Total
Admitted patient transferred from another hospital	33,518	21,475	54,993
Other	261,722	1,971,534	2,233,256
Not reported	198	22,560	22,758
<b>Total</b>	<b>295,438</b>	<b>2,015,570</b>	<b>2,311,008</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## Why did people receive the care?

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

In 2011-12, more than 14% of separations involving surgery had a principal diagnosis in the ICD-10-AM chapter *Diseases of the musculoskeletal system and connective tissue* and almost 14% had a principal diagnosis in the *Neoplasms* chapter (Table 10.9).

The relative distributions of separations involving surgery by diagnosis chapter varied by urgency of admission. For example, more than 97% of separations involving surgery for *Diseases of the musculoskeletal system and connective tissue*, *Diseases of the nervous system*, *Diseases of the eye and adnexa* and *Diseases of the ear and mastoid process and childbirth and the puerperium* were elective admissions. More than half of separations involving surgery for *Injury, poisoning and certain other consequences of external causes* were emergency admissions.

### Most common principal diagnoses

The 20 most common principal diagnoses accounted for half of the principal diagnoses reported for emergency admissions involving surgery (Table 10.10). The most common principal diagnosis at the 3-character level for emergency admissions was *Acute appendicitis*, with 89% of those separations in public hospitals. *Angina pectoris* was the principal diagnosis with the highest proportion of emergency admissions in private hospitals (33%).

For elective admissions involving surgery, the 20 most common principal diagnoses accounted for about 46% of the principal diagnoses reported (Table 10.11). The most common principal diagnosis at the 3-character level for elective admissions was *Other cataract*, with 67% of those separations coming from private hospitals. About 95% of elective admissions involving surgery with a principal diagnosis of *Other retinal disorders* and about 92% with a principal diagnosis of *Procreative management* were from private hospitals.

**Table 10.9: Separations involving surgery, by principal diagnosis in ICD-10-AM chapters and urgency of admission, all hospitals, 2011-12**

Principal diagnosis		Emergency admissions	Elective admissions	Total
A00-B99	Certain infectious and parasitic diseases	2,325	3,346	5,671
C00-D48	Neoplasms	12,612	304,011	316,623
D50-D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	567	1,379	1,946
E00-E89	Endocrine, nutritional and metabolic diseases	3,351	27,244	30,595
F00-F99	Mental and behavioural disorders	98	33	131
G00-G99	Diseases of the nervous system	1,479	50,435	51,914
H00-H59	Diseases of the eye and adnexa	4,521	306,392	310,913
H60-H95	Diseases of the ear and mastoid process	445	41,044	41,489
I00-I99	Diseases of the circulatory system	34,250	103,673	137,923
J00-J99	Diseases of the respiratory system	5,328	82,411	87,739
K00-K93	Diseases of the digestive system	64,665	167,578	232,243
L00-L99	Diseases of the skin and subcutaneous tissue	6,995	41,828	48,823
M00-M99	Diseases of the musculoskeletal system and connective tissue	9,440	319,542	328,982
N00-N99	Diseases of the genitourinary system	13,265	215,041	228,306
O00-O99	Pregnancy, childbirth and the puerperium	13,259	65,561	78,820
P00-P96	Certain conditions originating in the perinatal period	220	252	472
Q00-Q99	Congenital malformations, deformations and chromosomal abnormalities	1,320	20,074	21,394
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	4,722	21,078	25,800
S00-T98	Injury, poisoning and certain other consequences of external causes	115,654	100,104	215,758
Z00-Z99	Factors influencing health status and contact with health services	922	144,544	145,466
<b>Total</b>		<b>295,438</b>	<b>2,015,570</b>	<b>2,311,008</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.



**Table 10.10: Separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings for emergency admissions involving surgery, public and private hospitals, 2011–12**

<b>Principal diagnosis</b>	<b>Public hospitals</b>	<b>Private hospitals</b>	<b>Total</b>
K35 Acute appendicitis	23,985	3,076	27,061
S72 Fracture of femur	16,957	2,523	19,480
I21 Acute myocardial infarction	11,613	1,923	13,536
S82 Fracture of lower leg, including ankle	11,540	1,293	12,833
S52 Fracture of forearm	9,010	1,040	10,050
K80 Cholelithiasis	7,354	1,421	8,775
S62 Fracture at wrist and hand level	6,929	539	7,468
S61 Open wound of wrist and hand	6,455	516	6,971
T81 Complications of procedures, not elsewhere classified	4,556	845	5,401
K61 Abscess of anal and rectal regions	4,675	477	5,152
S42 Fracture of shoulder and upper arm	4,517	482	4,999
O03 Spontaneous abortion	4,465	285	4,750
S66 Injury of muscle and tendon at wrist and hand level	4,177	259	4,436
K56 Paralytic ileus and intestinal obstruction without hernia	3,463	641	4,104
O02 Other abnormal products of conception	3,549	157	3,706
I20 Angina pectoris	2,319	1,123	3,442
L02 Cutaneous abscess, furuncle and carbuncle	2,912	179	3,091
S01 Open wound of head	2,832	205	3,037
O00 Ectopic pregnancy	2,817	168	2,985
S02 Fracture of skull and facial bones	2,774	98	2,872
Other	119,905	21,384	141,289
<b>Total</b>	<b>256,804</b>	<b>38,634</b>	<b>295,438</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

**Table 10.11: Separations for the 20 most common principal diagnoses in 3-character ICD-10-AM groupings for elective admissions involving surgery, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private hospitals	Total
H26	Other cataract	57,419	119,035	176,454
C44	Other malignant neoplasms of skin	27,311	67,338	94,649
Z31	Procreative management	5,568	62,136	67,704
M23	Internal derangement of knee	13,137	49,280	62,417
M17	Gonarthrosis [arthrosis of knee]	17,870	41,983	59,853
O04	Medical abortion	8,352	38,786	47,138
H35	Other retinal disorders	2,474	43,109	45,583
K40	Inguinal hernia	17,369	25,268	42,637
J35	Chronic diseases of tonsils and adenoids	15,243	24,080	39,323
G56	Mononeuropathies of upper limb	12,658	20,409	33,067
K80	Cholelithiasis	17,112	15,260	32,372
H25	Senile cataract	6,529	24,160	30,689
M75	Shoulder lesions	4,827	24,771	29,598
N92	Excessive, frequent and irregular menstruation	14,089	14,595	28,684
M16	Coxarthrosis [arthrosis of hip]	7,782	16,744	24,526
J34	Other disorders of nose and nasal sinuses	7,013	16,826	23,839
I84	Haemorrhoids	8,842	14,717	23,559
Z47	Other orthopaedic follow-up care	10,586	10,943	21,529
H65	Nonsuppurative otitis media	6,978	12,849	19,827
C50	Malignant neoplasm of breast	8,234	10,477	18,711
	Other	406,755	686,656	1,093,411
<b>Total</b>		<b>676,148</b>	<b>1,339,422</b>	<b>2,015,570</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## What care was provided?

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

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

## Major Diagnostic Categories

Table 10.12 presents separations involving surgery by MDC and urgency of admission. About 27% of emergency admissions and 20% of elective admissions involving surgery were for *Diseases and disorders of the musculoskeletal system and connective tissue*, with 84% of these being elective admissions. More than 60% of separations involving surgery for *Injuries, poisoning and toxic effects of drugs* were emergency admissions.

**Table 10.12: Separations involving surgery, by Major Diagnostic Category<sup>(a)</sup>, AR-DRG version 6.0x and urgency of admission, all hospitals, 2011–12**

Major diagnostic category		Emergency admissions	Elective admissions	Total
PR	Pre-MDC (tracheostomies, transplants, ECMO)	8,524	6,660	15,184
01	Diseases and disorders of the nervous system	9,842	51,957	61,799
02	Diseases and disorders of the eye	6,283	313,263	319,546
03	Diseases and disorders of the ear, nose, mouth and throat	6,879	155,994	162,873
04	Diseases and disorders of the respiratory system	3,027	18,079	21,106
05	Diseases and disorders of the circulatory system	31,145	89,568	120,713
06	Diseases and disorders of the digestive system	57,414	160,226	217,640
07	Diseases and disorders of the hepatobiliary system and pancreas	12,719	43,370	56,089
08	Diseases and disorders of the musculoskeletal system and connective tissue	79,439	406,704	486,143
09	Diseases and disorders of the skin, subcutaneous tissue and breast	9,163	247,619	256,782
10	Endocrine, nutritional and metabolic diseases and disorders	2,966	30,572	33,538
11	Diseases and disorders of the kidney and urinary tract	6,342	61,952	68,294
12	Diseases and disorders of the male reproductive system	3,167	56,591	59,758
13	Diseases and disorders of the female reproductive system	6,779	256,975	263,754
14	Pregnancy, childbirth and puerperium	13,251	65,570	78,821
15	Newborns and other neonates	671	385	1,056
16	Diseases and disorders of the blood and blood-forming organs, and immunological disorders	924	3,330	4,254
17	Neoplastic disorders (haematological and solid neoplasms)	1,543	8,727	10,270
18	Infectious and parasitic diseases	3,936	2,703	6,639
21	Injuries, poisoning and toxic effects of drugs	26,041	17,256	43,297
22	Burns	1,841	1,414	3,255
23	Factors influencing health status and other contacts with health services	219	11,483	11,702
ED	Error DRGs <sup>(b)</sup>	3,323	5,172	8,495
<b>Total</b>		<b>295,438</b>	<b>2,015,570</b>	<b>2,311,008</b>

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

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

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

### Most common AR-DRGs

For emergency admissions involving surgery, the 20 most common AR-DRGs accounted for half of the AR-DRGs reported (Table 10.13). In 2011–12, about 7% of emergency admissions involving surgery had an AR-DRG of *Appendicectomy without malignancy or peritonitis without catastrophic or severe complications or comorbidities*. For *Implantation or replacement of pacemaker, total system without catastrophic complications or comorbidities*, about 32% of emergency admissions involving surgery were in private hospitals.

**Table 10.13: Separations involving surgery for the 20 most common AR-DRGs version 6.0x for emergency admissions, public and private hospitals, 2011–12**

Diagnosis related group		Public hospitals	Private hospitals	Total
G07B	Appendectomy w/o malignancy or peritonitis without CSCC	19,232	2,494	21,726
I30Z	Hand procedures	11,498	1,011	12,509
I13B	Humerus, tibia, fibula and ankle procedures without CC	11,097	1,271	12,368
O05Z	Abortion with operating room procedure	8,765	482	9,247
F10B	Interventional coronary procedures with AMI without catastrophic CC	7,667	1,328	8,995
I08B	Other hip and femur procedures without catastrophic CC	7,578	1,203	8,781
I19B	Other elbow or forearm procedures without CC	7,487	950	8,437
X06B	Other procedures for other injuries without CSCC	6,927	594	7,521
G07A	Appendectomy with malignancy or peritonitis or with CSCC	6,500	707	7,207
H08B	Laparoscopic cholecystectomy without closed CDE without CSCC	5,423	1,273	6,696
G11Z	Anal and stomal procedures	5,703	843	6,546
X05B	Other procedures for injuries to hand without CC	5,456	495	5,951
A06B	Trachiotomy with ventilation >95 hours without catastrophic CC or trachiotomy/ventilation >95 hours with catastrophic CC	5,236	277	5,513
I08A	Other hip and femur procedures with catastrophic CC	4,592	462	5,054
G02A	Major small and large bowel procedures with catastrophic CC	3,748	545	4,293
I03B	Hip replacement without catastrophic CC	2,982	777	3,759
F12B	Implantation or replacement of pacemaker, total system without catastrophic CC	2,445	1,151	3,596
I27B	Soft tissue procedures without CC	3,080	271	3,351
H08A	Laparoscopic cholecystectomy with closed CDE or with CSCC	2,708	449	3,157
G04C	Peritoneal adhesiolysis without CC	2,557	537	3,094
	Other	126,123	21,514	147,637
<b>Total</b>		<b>256,804</b>	<b>38,634</b>	<b>295,438</b>

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

For elective admissions involving surgery, the 20 most common AR-DRGs accounted for more than half (57%) of the AR-DRGs reported (Table 10.14). The most common AR-DRG for elective admissions was for *Lens procedures*, which accounted for about 10% of elective admissions involving surgery.

**Table 10.14: Separations involving surgery for the 20 most common AR-DRGs version 6.0x for elective admissions, public and private hospitals, 2011–12**

Diagnosis related group		Public hospitals	Private hospitals	Total
C16Z	Lens procedures	62,832	144,305	207,137
J11Z	Other skin, subcutaneous tissue and breast procedures	37,120	63,037	100,157
I18Z	Other knee procedures	17,589	68,008	85,597
N07Z	Other uterine and adnexa procedures for non-malignancy	19,319	60,786	80,105
O05Z	Abortion with operating room procedure	15,415	48,257	63,672
G10B	Hernia procedures without CC	25,763	35,926	61,689
C03Z	Retinal procedures	6,638	48,070	54,708
G11Z	Anal and stomal procedures	20,472	33,661	54,133
D11Z	Tonsillectomy and/or adenoidectomy	17,932	28,109	46,041
I30Z	Hand procedures	15,801	28,589	44,390
J08B	Other skin graft and/or debridement procedures without CC	9,333	35,046	44,379
I16Z	Other shoulder procedures	6,875	34,472	41,347
N10Z	Diagnostic curettage or diagnostic hysteroscopy	18,110	20,022	38,132
J10Z	Skin, subcutaneous tissue and breast plastic or procedures	9,035	27,169	36,204
N11Z	Other female reproductive system or procedures	3,049	31,683	34,732
I04B	Knee replacement without CSCC	10,129	22,906	33,035
H08B	Laparoscopic cholecystectomy without closed CDE without CSCC	16,181	15,928	32,109
N09Z	Conisation, vagina, cervix and vulva procedures	16,273	13,656	29,929
B05Z	Carpal tunnel release	11,672	17,576	29,248
D10Z	Nasal procedures	7,303	17,624	24,927
	Other	329,307	544,592	873,899
<b>Total</b>		<b>676,148</b>	<b>1,339,422</b>	<b>2,015,570</b>

CC—complications or comorbidities; CDE—Common bile duct exploration; CSCC—catastrophic or severe complications or comorbidities.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## Procedures

In this section, counts of procedures are presented for surgical procedures only. See Box 7.1 and Appendix B for information on the classification of procedures.

Almost 23% of all surgical procedures reported for separations involving surgery were for *Procedures on musculoskeletal system*, with 81% of these being elective admissions (Table 10.15).

In 2011–12, almost 2.8 million surgical procedures were reported for separations involving surgery, with 2.4 million reported for elective admissions. Emergency admissions accounted for about 13% of the procedures reported for separations involving surgery.

**Table 10.15: Procedures<sup>(a)(b)</sup> reported for separations involving surgery by ACHI chapter and urgency of admission, all hospitals, 2011–12**

Procedure		Emergency admissions	Elective admissions	Total
1–86	Procedures on nervous system	14,773	89,979	104,752
110–129	Procedures on endocrine system	232	15,349	15,581
160–256	Procedures on eye and adnexa	8,007	330,714	338,721
300–333	Procedures on ear and mastoid process	479	35,654	36,133
370–422	Procedures on nose, mouth and pharynx	3,839	139,015	142,854
450–490	Dental services	58	2,339	2,397
520–570	Procedures on respiratory system	13,439	16,260	29,699
600–777	Procedures on cardiovascular system	47,701	131,231	178,932
800–817	Procedures on blood and blood-forming organs	2,229	30,986	33,215
850–1011	Procedures on digestive system	82,035	258,617	340,652
1040–1129	Procedures on urinary system	7,557	84,213	91,770
1160–1203	Procedures on male genital organs	4,409	61,363	65,772
1240–1299	Gynaecological procedures	19,548	354,976	374,524
1330–1347	Obstetric procedures	698	778	1,476
1360–1579	Procedures on musculoskeletal system	120,400	514,147	634,547
1600–1718	Dermatological and plastic procedures	35,398	286,862	322,260
1740–1759	Procedures on breast	365	52,203	52,568
1786–1799	Radiation oncology procedures	38	2,061	2,099
1820–1922	Non-invasive, cognitive and other interventions, n.e.c.	3,838	1,634	5,472
1940–2016	Imaging services	0	6	6
<b>Total surgical procedures</b>		<b>365,043</b>	<b>2,408,387</b>	<b>2,773,430</b>

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

- (a) A procedure was counted if it was an operating room procedure included in the definition of the AR-DRG as *Surgical*.
- (b) A procedure is counted once for the group if it has at least one procedure reported within the group. As more than one procedure can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## Most common procedures

In 2011–12, *Appendicectomy* was the most common surgical procedure for emergency admissions involving surgery (Table 10.16). Around 89% of emergency admissions for *Appendicectomy* procedures were performed in public hospitals. *Insertion of cardiac pacemaker generator* was the surgical procedure with the highest proportion of emergency admissions in private hospitals (30%).

**Table 10.16: Procedures<sup>(a)</sup> reported for the 20 most common ACHI procedure blocks for emergency admissions involving surgery, public and private hospitals, 2011–12**

Procedure	Public hospitals	Private hospitals	Total
926 Appendicectomy	26,489	3,231	29,720
671 Transluminal coronary angioplasty with stenting	11,166	2,714	13,880
1566 Excision procedures on other musculoskeletal sites	11,625	1,629	13,254
1479 Fixation of fracture of pelvis or femur	9,604	1,304	10,908
1628 Other debridement of skin and subcutaneous tissue	10,521	386	10,907
965 Cholecystectomy	8,958	1,821	10,779
1265 Curettage and evacuation of uterus	9,046	522	9,568
1539 Open reduction of fracture of ankle or toe	6,641	793	7,434
569 Ventilatory support	6,629	326	6,955
1489 Arthroplasty of hip	5,576	1,104	6,680
1429 Open reduction of fracture of radius	5,361	705	6,066
986 Division of abdominal adhesions	4,525	896	5,421
930 Incision procedures on rectum or anus	4,872	508	5,380
1466 Repair of tendon of hand	4,278	272	4,550
650 Insertion of cardiac pacemaker generator	3,103	1,324	4,427
1636 Repair of nail	3,885	185	4,070
1256 Procedures for management of ectopic pregnancy	2,827	169	2,996
1559 Incision procedures on other musculoskeletal sites	2,723	248	2,971
913 Colectomy	2,379	437	2,816
1486 Reduction of fracture of pelvis or femur	2,437	288	2,725
Other	114,159	19,772	133,931
<b>Total</b>	<b>256,804</b>	<b>38,634</b>	<b>295,438</b>

ACHI—Australian Classification of Health Interventions.

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

In 2011–12, *Extracapsular crystalline lens extraction by phacoemulsification* was the most common surgical procedure for elective admissions, accounting for almost 10% of elective admissions (Table 10.17). Around 92% of elective admissions for *Procedures for reproductive medicine* were performed in private hospitals.

**Table 10.17: Procedures<sup>(a)</sup> reported for the 20 most common ACHI procedure blocks for elective admissions involving surgery, public and private hospitals, 2011–12**

Procedure	Public hospitals	Private hospitals	Total
197 Extracapsular crystalline lens extraction by phacoemulsification	60,700	137,184	197,884
1620 Excision of lesion(s) of skin and subcutaneous tissue	33,298	56,951	90,249
1265 Curettage and evacuation of uterus	26,079	57,524	83,603
1297 Procedures for reproductive medicine	5,495	65,072	70,567
412 Tonsillectomy or adenoidectomy	22,813	33,293	56,106
1517 Arthroscopic meniscectomy of knee with repair	7,125	40,784	47,909
990 Repair of inguinal hernia	17,190	24,276	41,466
209 Application, insertion or removal procedures on retina, choroid or posterior chamber	2,185	38,036	40,221
1518 Arthroplasty of knee	13,183	26,580	39,763
941 Procedures for haemorrhoids	14,064	24,376	38,440
965 Cholecystectomy	18,993	17,790	36,783
1651 Local skin flap, simple and small, single stage	6,622	25,042	31,664
76 Release of carpal and tarsal tunnel	11,767	17,852	29,619
1489 Arthroplasty of hip	8,735	17,758	26,493
1554 Other application, insertion or removal procedures on other musculoskeletal sites	12,297	11,257	23,554
309 Myringotomy	7,593	14,442	22,035
1503 Arthroscopic excision of knee	6,601	14,526	21,127
1266 Excision of lesion of uterus	7,322	12,799	20,121
1566 Excision procedures on other musculoskeletal sites	4,775	14,450	19,225
1165 Transurethral prostatectomy	7,110	11,803	18,913
Other	382,201	677,627	1,059,828
<b>Total</b>	<b>676,148</b>	<b>1,339,422</b>	<b>2,015,570</b>

ACHI—Australian Classification of Health Interventions.

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

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## How long did patients stay?

The length of stay for separations involving surgery varied by urgency of admission and, to a lesser extent, between public and private hospitals. Overall the length of stay for emergency admissions involving surgery was more than three times as long as for elective admissions involving surgery (Table 10.18).



**Table 10.18: Patient days and average length of stay for separations involving surgery, by urgency of admission, public and private hospitals, 2011–12**

	Public hospitals		Private hospitals		Total	
	Patient days	Average length of stay	Patient days	Average length of stay	Patient days	Average length of stay
<b>Same-day</b>						
Emergency admissions	22,400	1.0	4,807	1.0	27,207	1.0
Elective admissions	354,163	1.0	796,638	1.0	1,150,801	1.0
<i>All same-day surgery</i>	<i>376,563</i>	<i>1.0</i>	<i>801,445</i>	<i>1.0</i>	<i>1,178,008</i>	<i>1.0</i>
<b>Overnight</b>						
Emergency admissions	1,851,659	7.9	278,451	8.2	2,130,110	7.9
Elective admissions	1,237,497	3.8	1,780,860	3.3	3,018,357	3.5
<i>All overnight surgery</i>	<i>3,089,156</i>	<i>4.8</i>	<i>2,059,311</i>	<i>3.3</i>	<i>5,148,467</i>	<i>4.1</i>
<b>Total</b>						
<b>Emergency admissions</b>	<b>1,874,059</b>	<b>7.3</b>	<b>283,258</b>	<b>7.3</b>	<b>2,157,317</b>	<b>7.3</b>
<b>Elective admissions</b>	<b>1,591,660</b>	<b>2.4</b>	<b>2,577,498</b>	<b>1.9</b>	<b>4,169,158</b>	<b>2.1</b>
<b>All surgery</b>	<b>3,465,719</b>	<b>3.4</b>	<b>2,860,756</b>	<b>2.0</b>	<b>6,326,475</b>	<b>2.7</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## Who paid for the care?

About 77% of emergency admissions involving surgery in public hospitals were for *Public patients* and about 14% were funded by *Private health insurance* (Table 10.19). For private hospitals, almost 85% of emergency admissions involving surgery were funded by *Private health insurance* and about 8% were funded by the *Department of Veterans' Affairs*.

About 88% of elective admissions involving surgery in public hospitals were for *Public patients* and less than 7% of separations were funded by *Private health insurance*. In private hospitals about 80% of elective admissions involving surgery were funded by *Private health insurance* and 12% were *Self-funded*.

## 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 95% of separations involving surgery had a mode of separation of *Other*, suggesting that most patients go home after their episode of care (Table 10.20). This was particularly the case in private hospitals, where 96% of separations reported a mode of separation of *Other*, compared with 93% in public hospitals.

**Table 10.19: Separations involving surgery, by principal source of funds and urgency of admission, public and private hospitals, 2011–12**

	Public hospitals	Private hospitals	Total
<b>Emergency admissions</b>			
Public patients <sup>(a)</sup>	196,948	82	197,030
Private health insurance	36,193	32,663	68,856
Self-funded	3,872	915	4,787
Workers compensation	6,836	1,506	8,342
Motor vehicle third party personal claim	5,380	114	5,494
Department of Veterans' Affairs	4,647	3,168	7,815
Other <sup>(b)</sup>	2,928	186	3,114
<i>Total</i>	<i>256,804</i>	<i>38,634</i>	<i>295,438</i>
<b>Elective admissions</b>			
Public patients <sup>(a)</sup>	593,879	6,766	600,645
Private health insurance	46,270	1,064,278	1,110,548
Self-funded	25,586	156,799	182,385
Workers compensation	2,744	41,617	44,361
Motor vehicle third party personal claim	1,626	3,918	5,544
Department of Veterans' Affairs	3,778	49,762	53,540
Other <sup>(b)</sup>	2,265	16,282	18,547
<i>Total</i>	<i>676,148</i>	<i>1,339,422</i>	<i>2,015,570</i>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefits Scheme.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

**Table 10.20: Separations involving surgery, by mode of separation, public and private hospitals, 2011–12**

Mode of separation	Public hospitals	Private hospitals	Total
Discharge/transfer to an (other) acute hospital	32,914	24,828	57,742
Discharge/transfer to residential aged care service <sup>(a)</sup>	3,929	1,036	4,965
Discharge/transfer to an (other) psychiatric hospital	124	23	147
Discharge/transfer to other health care accommodation <sup>(b)</sup>	1,793	21,423	23,216
Statistical discharge: type change	15,370	10,470	25,840
Left against medical advice/discharge at own risk	3,963	411	4,374
Statistical discharge from leave	203	41	244
Died	5,526	1,331	6,857
Other <sup>(c)</sup>	869,119	1,318,481	2,187,600
Not reported	11	12	23
<b>Total</b>	<b>932,952</b>	<b>1,378,056</b>	<b>2,311,008</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 10.1 and 10.2 for notes on definitions and data limitations.

## Waiting times for elective surgery

This section includes information on waiting times for elective surgery in public hospitals. It uses public hospital information sourced from the NESWTDC and the linked data sourced from the NHMD.

The waiting times data in this section are for patients who completed their wait and were admitted for their surgery on either an emergency or 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 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 for those reasons for removal was reported in *Australian hospital statistics 2011–12: elective surgery waiting times* (AIHW 2012d).

### How has activity changed over time?

Between 2007–08 and 2011–12, the number of admissions for elective surgery from waiting lists increased by an annual average of 3.7% (Tables 10.21). However, there was also a rise in the coverage of the NESWTDC over that period, from 90% to 97%, 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* peer group was relatively stable at about 71% of admissions from elective surgery waiting lists. Between 2010–11 and 2011–12, there was a 26% increase in the number of hospitals reporting to the NESWTDC, mainly due to the inclusion of waiting times data for hospitals not previously reported (see Appendix A). The estimated proportion of elective surgery reported by *Medium* hospitals to the NESWTDC increased from 63% in 2007–08 to 79% in 2011–12.

### States and territories

Between 2010–11 and 2011–12, South Australia and Western Australia had the highest proportional increase in elective surgery admissions (40% and 26% respectively), due to the increase in numbers of reporting hospitals (Table 10.22). Over the same period, Victoria, Tasmania and the Australian Capital Territory all had a decrease in the number of admissions for elective surgery. For 2011–12, Queensland was not able to report elective surgery waiting list data for 3 hospitals that reported about 10,000 admissions in 2010–11.

### How did waiting times for care change over time?

Overall, the median waiting times for elective surgery increased from 34 days in 2007–08 to 36 days in 2011–12 (Table 10.23).

Over the same period, the number of days waited at the 90th percentile increased from 234 to 251. In contrast, the proportion of patients who waited greater than 365 days to be admitted decreased from 3.0% in 2007–08 to 2.7% in 2011–12.

Between 2007–08 and 2011–12, New South Wales, Victoria, Queensland and Tasmania had an increase in the days waited at the 50th percentile. Over the same period, most states and territories had a decrease in the proportion of patients who waited greater than 365 days for their surgery.

**Table 10.21: Waiting list statistics for admissions<sup>(a)</sup> from waiting lists for elective surgery, by public hospital peer group, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>Principal referral and specialist women's and children's hospitals</b>							
Number of hospitals <sup>(b)</sup>	83	84	85	89	87	1.2	–2.2
Estimated proportion of peer group elective surgery (%) <sup>(c)</sup>	100	100	100	100	100	0.0	0.0
Number of admissions	406,307	437,133	448,247	464,218	465,049	3.4	0.2
<b>Large hospitals</b>							
Number of hospitals <sup>(b)</sup>	35	33	36	31	34	–0.7	9.7
Estimated proportion of peer group elective surgery (%) <sup>(c)</sup>	85	89	87	87	93	2.2	7.0
Number of admissions	96,938	92,179	98,458	94,395	101,499	1.2	7.5
<b>Medium hospitals</b>							
Number of hospitals <sup>(b)(d)</sup>	51	51	47	46	59	3.7	28.3
Estimated proportion of peer group elective surgery (%) <sup>(c)(d)</sup>	63	63	61	64	79	5.7	22.7
Number of admissions <sup>(d)</sup>	59,212	62,960	57,090	60,720	76,453	6.6	25.9
<b>Total<sup>(d)(e)</sup></b>							
<b>Number of hospitals<sup>(b)(d)</sup></b>	<b>192</b>	<b>193</b>	<b>193</b>	<b>193</b>	<b>243</b>	<b>6.1</b>	<b>25.9</b>
<b>Estimated proportion (%)<sup>(c)(d)</sup></b>	<b>90</b>	<b>91</b>	<b>91</b>	<b>92</b>	<b>97</b>	<b>1.8</b>	<b>4.4</b>
<b>Number of admissions<sup>(d)</sup></b>	<b>570,907</b>	<b>601,037</b>	<b>612,439</b>	<b>627,184</b>	<b>661,271</b>	<b>3.7</b>	<b>5.4</b>
<b>Admissions per 1,000 population<sup>(d)(f)</sup></b>	<b>27.4</b>	<b>28.6</b>	<b>28.6</b>	<b>28.8</b>	<b>30.0</b>	<b>2.3</b>	<b>4.1</b>

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

(b) Number of hospitals included in the National Elective Surgery Waiting Times Data Collection. Caution should be used in interpreting the numbers of hospitals by peer group over time as a hospital may be categorised to different peer groups in different years, based on changes in admitted patient activity.

(c) The number of separations with an urgency of admission reported as *Elective* and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with an urgency of admission reported as *Elective* and a surgical procedure for all public hospitals.

(d) In 2011–12, a large number of hospitals in Western Australia and South Australia commenced reporting to the elective surgery waiting list collection, which accounted for most of the large increases in admissions, hospitals, estimated proportion and admissions per 1,000 population for 2011–12 compared with 2010–11.

(e) Includes hospitals not included in the specified hospital peer groups.

(f) Crude rate based on the Australian estimated resident population as at 31 December for that year.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Source: National Elective Surgery Waiting Times Data Collection.

**Table 10.22: Waiting list statistics for admissions<sup>(a)</sup> from waiting lists for elective surgery, public hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)	
						Average since 2007–08	Since 2010–11
<b>New South Wales<sup>(b)</sup></b>							
Number of hospitals	97	97	96	96	96		
Number of admissions	200,949	200,775	199,912	206,266	211,452	1.3	2.5
Estimated proportion	100	100	100	100	100	0.0	0.0
Admissions per 1,000 population <sup>(c)</sup>	29.3	29.2	28.7	29.2	29.6	0.3	1.4
<b>Victoria<sup>(b)</sup></b>							
Number of hospitals	31	31	32	32	32		
Number of admissions	131,211	148,516	156,598	157,572	154,079	4.1	–2.2
Estimated proportion	71	76	78	78	77	2.1	–0.9
Admissions per 1,000 population <sup>(c)</sup>	25.4	28.5	29.6	29.2	28.2	2.7	–3.5
<b>Queensland<sup>(d)</sup></b>							
Number of hospitals	31	32	32	32	29		
Number of admissions	110,219	112,876	116,863	117,277	114,328	0.9	–2.5
Estimated proportion	100	100	100	99	95	–1.3	–3.9
Admissions per 1,000 population <sup>(c)</sup>	26.6	27.0	27.4	26.9	25.8	–0.7	–3.8
<b>Western Australia<sup>(e)</sup></b>							
Number of hospitals	14	14	14	14	35		
Number of admissions	57,389	60,701	61,634	65,142	81,809	n.p.	n.p.
Estimated proportion	90	82	87	94	100	n.p.	n.p.
Admissions per 1,000 population <sup>(c)</sup>	27.5	28.7	28.3	29.0	35.6	n.p.	n.p.
<b>South Australia<sup>(e)</sup></b>							
Number of hospitals	8	8	8	8	40		
Number of admissions	41,328	44,454	44,557	46,433	65,186	n.p.	n.p.
Estimated proportion	66	69	69	71	98	n.p.	n.p.
Admissions per 1,000 population <sup>(c)</sup>	26.2	28.1	27.9	28.8	40.0	n.p.	n.p.
<b>Tasmania</b>							
Number of hospitals	4	4	4	4	4		
Number of admissions	14,067	17,090	16,756	16,624	15,802	3.0	–4.9
Estimated proportion	100	100	100	100	100	0.0	0.0
Admissions per 1,000 population <sup>(c)</sup>	28.6	34.6	33.6	33.0	31.1	2.1	–5.7
<b>Australian Capital Territory</b>							
Number of hospitals	2	2	2	2	2		
Number of admissions	9,618	10,160	9,830	11,389	11,362	4.3	–0.2
Estimated proportion	97	100	100	100	100	0.7	0.0
Admissions per 1,000 population <sup>(c)</sup>	28.5	29.7	28.3	32.2	31.5	2.5	–2.2
<b>Northern Territory</b>							
Number of hospitals	5	5	5	5	5		
Number of admissions	6,126	6,465	6,289	6,481	7,253	4.3	11.9
Estimated proportion	100	100	100	100	100	0.0	0.0
Admissions per 1,000 population <sup>(c)</sup>	28.9	30.1	28.5	28.6	31.5	2.2	10.2

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

(b) From 2009–10, the data for Albury Base Hospital have been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. For 2010–11 and 2011–12, the data for Albury Base Hospital were not available.

(c) Crude rate based on the estimated resident population as at 31 December for that year.

(d) For 2011–12, Queensland was not able to report elective surgery waiting list data for 3 hospitals that reported about 10,000 admissions in 2010–11.

(e) In 2011–12, a large number of hospitals in Western Australia and South Australia commenced reporting to the elective surgery waiting list collection, which accounts for the large increases in admissions, hospitals, estimated proportion and admissions per 1,000 population for 2011–12 compared with 2010–11.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

**Table 10.23: Waiting time statistics for admissions<sup>(a)</sup> from waiting lists for elective surgery, public hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12
<b>New South Wales<sup>(b)</sup></b>					
Days waited at 50th percentile	38	39	44	47	49
Days waited at 90th percentile	277	282	329	332	335
Proportion waited greater than 365 days	1.8	2.5	4.9	3.6	3.4
<b>Victoria<sup>(b)</sup></b>					
Days waited at 50th percentile	32	31	35	36	36
Days waited at 90th percentile	220	193	196	181	189
Proportion waited greater than 365 days	3.6	2.9	2.8	2.5	2.4
<b>Queensland</b>					
Days waited at 50th percentile	26	26	27	28	27
Days waited at 90th percentile	134	131	147	146	147
Proportion waited greater than 365 days	2.3	1.8	2.4	1.3	2.0
<b>Western Australia</b>					
Days waited at 50th percentile	30	31	32	29	30
Days waited at 90th percentile	205	174	160	159	159
Proportion waited greater than 365 days	3.0	2.0	1.5	1.6	1.7
<b>South Australia</b>					
Days waited at 50th percentile	42	36	36	38	34
Days waited at 90th percentile	208	206	188	207	191
Proportion waited greater than 365 days	3.8	2.6	1.1	2.0	1.5
<b>Tasmania</b>					
Days waited at 50th percentile	36	44	36	38	38
Days waited at 90th percentile	369	448	332	359	348
Proportion waited greater than 365 days	10.1	13.1	8.7	9.6	9.4
<b>Australian Capital Territory</b>					
Days waited at 50th percentile	72	74	73	76	63
Days waited at 90th percentile	372	376	356	377	296
Proportion waited greater than 365 days	10.3	10.5	9.5	10.8	6.2
<b>Northern Territory</b>					
Days waited at 50th percentile	42	40	44	33	39
Days waited at 90th percentile	337	254	269	223	219
Proportion waited greater than 365 days	8.6	5.5	5.8	3.9	3.5
<b>Total</b>					
<b>Days waited at 50th percentile</b>	<b>34</b>	<b>33</b>	<b>35</b>	<b>36</b>	<b>36</b>
<b>Days waited at 90th percentile</b>	<b>234</b>	<b>219</b>	<b>245</b>	<b>250</b>	<b>251</b>
<b>Proportion waited greater than 365 days</b>	<b>3.0</b>	<b>2.9</b>	<b>3.4</b>	<b>2.8</b>	<b>2.7</b>

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

(b) From 2009–10, the data for Albury Base Hospital have been reported by the Victorian Department of Health as part of the Albury Wodonga Health Service. For 2010–11 and 2011–12, the data for Albury Base Hospital were not available.

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

## How much activity was there in 2011–12?

In 2011–12, there were almost 701,000 additions to elective surgery waiting lists and 721,000 removals from public hospital elective surgery waiting lists. Removals included patients who were admitted for the procedure they were waiting for, and those who were removed for other reasons. For more information, see Table 3.9 in *Australian hospital statistics: elective surgery waiting times 2011–12* (AIHW 2012d).

## How long did people wait for care?

This section presents information on waiting times using public hospital information sourced from the NESWTDC and the linked data sourced from the NHMD. The waiting times data presented here are for patients who completed their wait and were admitted to their surgery as either an elective or emergency admission.

Chapter 3 of *Australian hospital statistics: elective surgery waiting times 2011–12* (AIHW 2012d) 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 presented by state and territory, by public hospital peer group, by the specialty of the surgeon who performed the elective surgery and by indicator procedure.

## How did waiting times differ for Indigenous and other Australians?

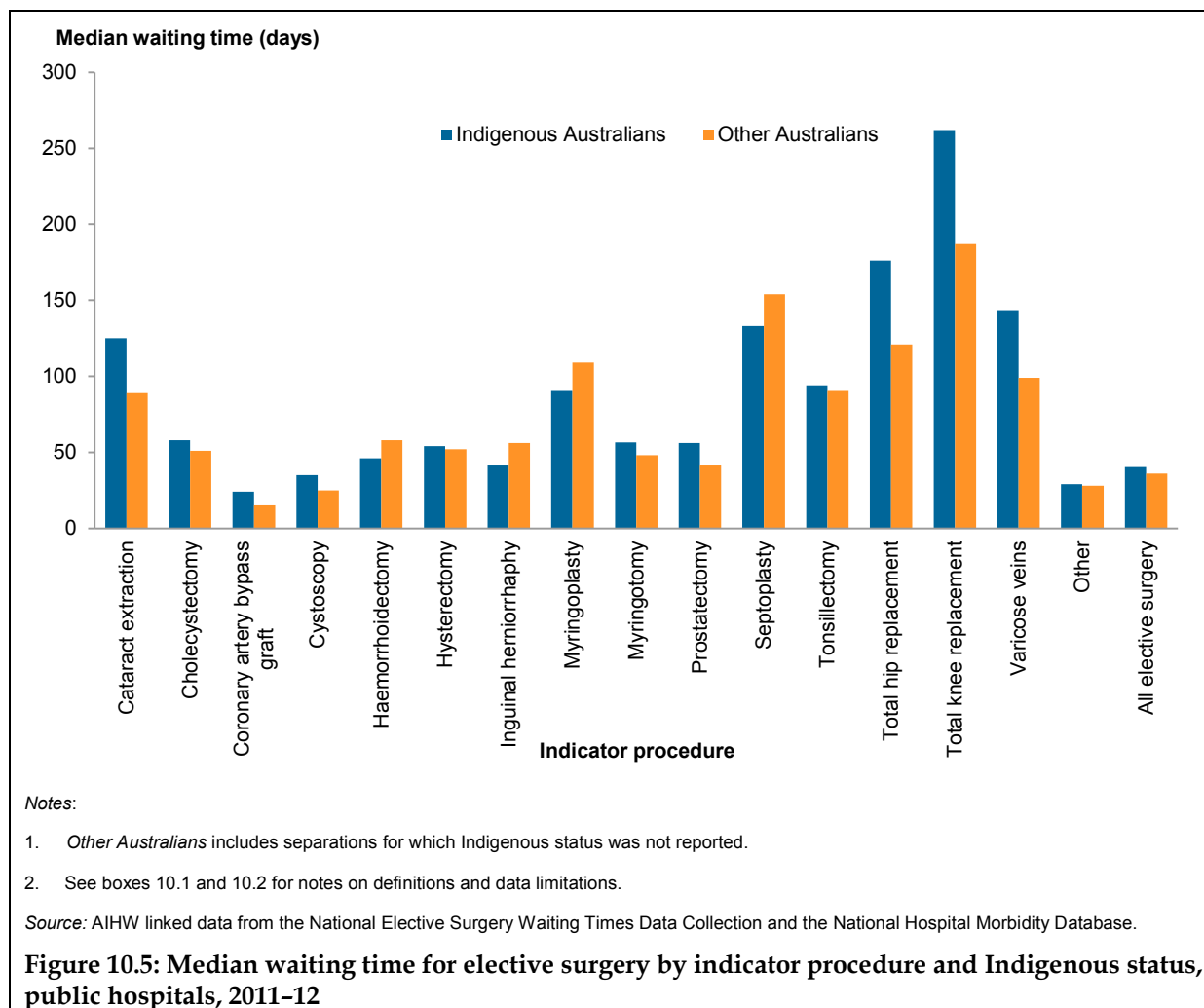
In 2011–12, there were about 18,500 admissions from public hospital waiting lists for elective surgery for patients identified as Aboriginal and/or Torres Strait Islander.

Overall, the median waiting time for Indigenous Australians was greater than the median waiting time for other Australians (41 days and 36 days respectively, Table S10.1 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>).

### Indicator procedures

Indigenous Australians had higher median waiting times for 9 of the 11 indicator procedures for which there were at least 100 separations for Indigenous Australians. The greatest difference in median waiting times was for *Total knee replacement* (262 days for Indigenous Australians and 187 days for other Australians). *Hysterectomy*, *Tonsillectomy*, *Cholecystectomy*, *Myringotomy*, *Coronary artery bypass graft* and *Cystoscopy* had the smallest differences in median waiting times by Indigenous status (Figure 10.5).

For more information, see Table S10.1 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.



### How did waiting times vary by remoteness area?

Overall, about 63% of admissions from waiting lists for elective surgery were for patients living in *Major cities*, 22% were for patients in *Inner regional* areas and 11% were for patients in *Outer regional* areas (Table S10.2, accompanying this report online).

#### Indicator procedures

The median waiting time varied somewhat by remoteness, ranging from 29 days for people living in *Remote* areas to 37 days for people living in *Inner regional* areas (Table 10.24).

There was some variation in the median waiting time for remoteness areas by indicator procedure. For indicator procedures with at least 50 admissions in *Remote* and *Very remote* areas, *Cataract extraction* had the greatest variation in waiting times by remoteness area. People from *Inner regional* areas had the highest median waiting time of 165 days, and people from *Remote* areas had the lowest (63 days) (Table 10.24). *Coronary artery bypass graft* had the least variation by remoteness area, ranging from 13 days for people from *Inner regional* areas to 23 days for people from *Very remote* areas.

For more information, see Table S10.2 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.



**Table 10.24: Median waiting time (days) to admission for elective surgery by selected indicator procedure and remoteness area of usual residence, public hospitals, 2011–12**

Indicator procedure	Remoteness area					Total
	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	
Cataract extraction	76	165	119	63	91	90
Cholecystectomy	52	52	51	29	46	51
Coronary artery bypass graft	15	13	21	22	23	15
Cystoscopy	24	26	29	30	36	25
Haemorrhoidectomy	63	55	49	30	52	57
Hysterectomy	55	51	45	39	43	52
Inguinal herniorrhaphy	59	56	49	32	39	56
Myringoplasty	110	108	125	83	82	104
Myringotomy	48	49	55	25	55	49
Prostatectomy	41	42	56	34	47	42
Septoplasty	158	159	135	118	42	153
Tonsillectomy	91	94	95	77	69	92
Total hip replacement	111	139	141	113	125	121
Total knee replacement	167	242	202	175	142	188
Varicose veins stripping and ligation	100	107	96	76	59	100
Not applicable/not stated	28	28	28	25	28	28
<b>Total</b>	<b>36</b>	<b>37</b>	<b>36</b>	<b>29</b>	<b>35</b>	<b>36</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

## How did waiting vary by socioeconomic status?

Overall, about 26% of admissions from waiting lists were for people living in areas classified as being in the lowest SES group, decreasing to about 11% for people living in areas classified as being in the highest SES group (Table S10.3, accompanying this report online).

Median waiting times varied by socioeconomic status, ranging from 31 days for people living in areas classified as the highest SES group to 41 days for the second lowest SES group (Table 10.25).

### Indicator procedures

*Total knee replacement* was the indicator procedure with the greatest variation in waiting times by socioeconomic status, ranging from 229 days for people living in areas classified as being in the second lowest SES group to 150 days for people in the highest SES group.

*Cystoscopy* had the least variation by socioeconomic status group (Table 10.25).

For more information, see Table S10.3 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

**Table 10.25: Median waiting times (days) for elective surgery by indicator procedures and socioeconomic status of area of usual residence, public hospitals, 2011–12**

Indicator procedure	Socioeconomic status of area of residence					Total
	1–Lowest	2	3	4	5–Highest	
Cataract extraction	111	122	68	71	76	90
Cholecystectomy	56	53	51	49	41	51
Coronary artery bypass graft	18	13	18	14	17	15
Cystoscopy	27	24	25	25	25	25
Haemorrhoidectomy	57	55	57	62	57	57
Hysterectomy	53	58	49	50	45	52
Inguinal herniorrhaphy	58	62	54	54	49	56
Myringoplasty	111	113	88	94	98	104
Myringotomy	47	50	47	51	41	49
Prostatectomy	49	48	39	36	37	42
Septoplasty	191	188	122	124	123	153
Tonsillectomy	92	101	90	89	77	92
Total hip replacement	144	128	114	101	108	121
Total knee replacement	210	229	160	156	150	188
Varicose veins stripping and ligation	103	104	98	97	101	100
Not applicable/not stated	29	30	28	28	25	28
<b>Total</b>	<b>39</b>	<b>41</b>	<b>34</b>	<b>34</b>	<b>31</b>	<b>36</b>

Note: See boxes 10.1 and 10.2 for notes on definitions and data limitations.

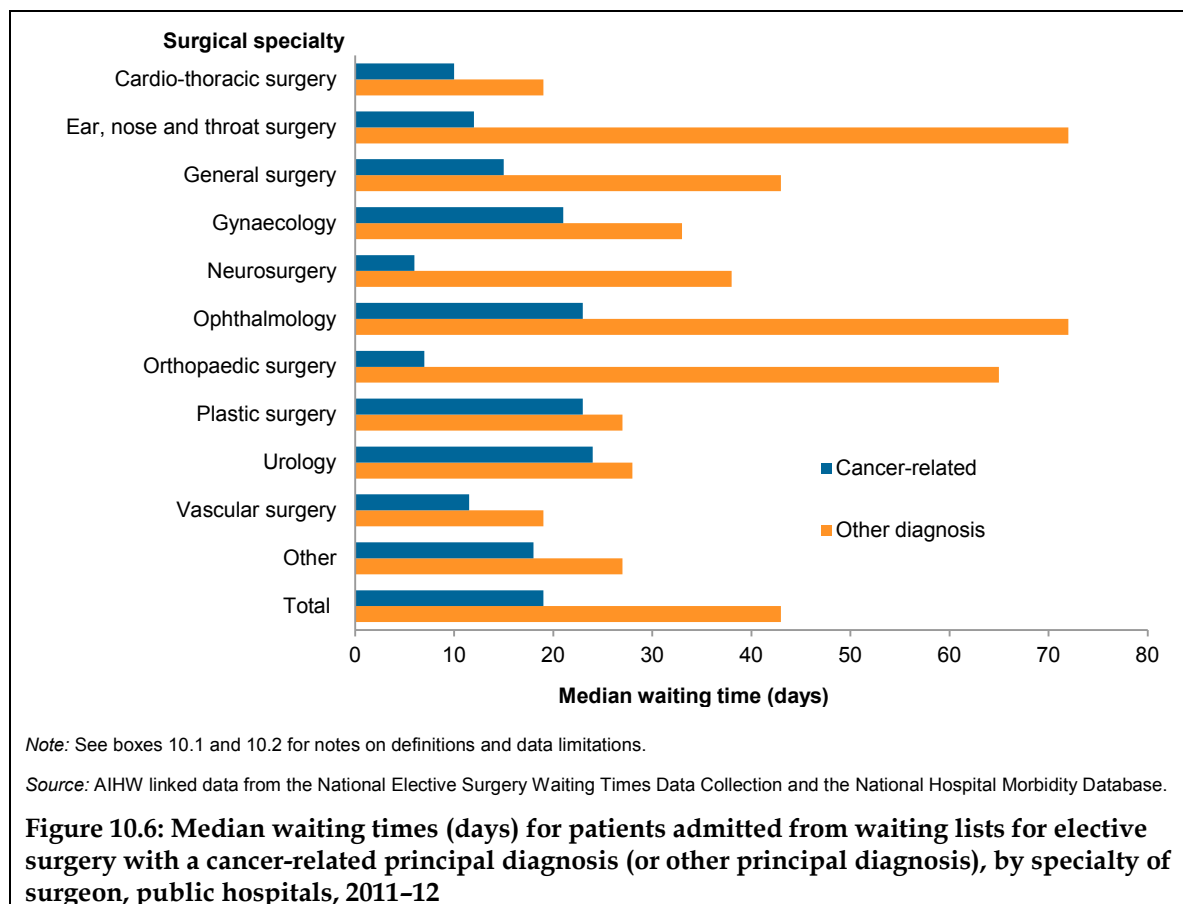
Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

### How did waiting times vary by diagnosis?

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

Figure 10.6 shows that there were shorter overall waiting times for admissions with a principal diagnosis of a cancer (median of 19 days) compared with other admissions (43 days), and for most surgical specialties. Cancer principal diagnoses were defined by the ICD-10-AM diagnosis codes C00–C99, D00–D09, D45, D46, D47.1 and D47.3.

The largest variation in median waiting times by surgical specialty was for *Ear, nose and throat surgery* for which patients with a cancer-related principal diagnosis had a median waiting time of 12 days, compared with 72 days for other diagnoses and 65 days overall. The surgical specialties that had the least variation in median waiting times for separations with a cancer-related principal diagnosis compared with other diagnoses were *Plastic surgery* (23 days for cancer, compared with 27 days) and *Urology* (24 days for cancer, compared with 28 days).



Median waiting times varied according to the type of cancer. The selected 'cancer types' presented in Table 10.26 were defined as separations with a principal diagnosis of:

- Bladder cancer (C67, D09.0)
- Bowel cancer (C18-20, D01.0-D01.2)
- Breast cancer (C50, D05)
- Gynaecological cancer (C51-58, D069, D07.0-D07.3)
- Kidney cancer (C64)
- Lung cancer (C33-34, D02.1-D02.2)
- Melanoma (C43, D03)
- Prostate cancer (C61, D07.5).

In 2011-12, patients admitted with a principal diagnosis for lung cancer had a median waiting time of 11 days and 90% of patients had been admitted for surgery within 32 days (Table 10.26). Patients with a principal diagnosis of prostate cancer had a median waiting time of 29 days and 90% of patients had been admitted for surgery within 92 days.

**Table 10.26: Waiting time statistics for admissions from waiting lists for elective surgery, for selected principal diagnoses for cancer, 2011–12**

<b>Cancer type</b>	<b>Separations</b>	<b>Days waited at 50th percentile</b>	<b>Days waited at 90th percentile</b>
Bladder cancer	7,136	21	75
Bowel cancer	4,998	15	36
Breast cancer	9,380	12	28
Gynaecological cancer	7,360	22	75
Kidney cancer	1,263	24	74
Lung cancer	1,130	11	32
Melanoma	4,040	14	35
Prostate cancer	6,740	29	92
All other principal diagnoses	601,041	40	260
<b>Total</b>	<b>643,088</b>	<b>36</b>	<b>247</b>

*Note:* See boxes 10.1 and 10.2 for notes on definitions and data limitations.

*Source:* AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

## Additional information

Further detailed information by Indigenous status, remoteness area and socioeconomic status of area of residence is in tables S10.1 to S10.3 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

Detailed information on waiting time statistics for patients admitted from waiting lists during 2011–12 are published in *Australian hospital statistics: elective surgery waiting times 2011–12* (AIHW 2012d).

# 11 Sub- and non-acute admitted patient care

This chapter presents an overview of sub- and non-acute admitted patient care provided by public and private hospitals in Australia, based on over 420,000 separations sourced from the National Hospital Morbidity Database (NHMD).

## What data are reported?

Subacute admitted patient care includes the following categories:

- *Rehabilitation care* – 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* – 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* – 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.

Non-acute care is:

- *Maintenance care* – 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 patient may require care over an indefinite period. This care includes that provided to a patient who would normally receive care in another setting, for example at home, or in a residential aged care service, by a relative or carer, that is unavailable in the short term.

**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 A should be taken into consideration when interpreting the data.

Some sub- and non-acute activity may occur during an acute episode of admitted patient care, or may be delivered as a non-admitted patient service. Therefore, the information presented in this chapter is likely to underestimate this activity.

There is some apparent variation among jurisdictions in the use of statistical discharges and associated assignment of care types which may affect the comparability of the data.

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

**Box 11.2: What methods were used?**

In this chapter, separations are reported for the care types: *Rehabilitation*, *Palliative care*, *Geriatric evaluation and management*, *Psychogeriatric care* or *Maintenance care*.

In some tables in this chapter, the category **Other sub- and non-acute care** has been used. It includes the care types: *Geriatric evaluation and management*, *Psychogeriatric care* and *Maintenance care*.

For details of other methods used in this chapter, see Chapter 7 and Appendix B.

## How has activity changed over time?

### National

Between 2007–08 and 2011–12, the number of separations for sub- and non-acute care increased from about 265,000 to about 424,000, an average increase of 12.4% per year (Table 11.1). Over this period, the average rate of increase was higher in private hospitals (16.8%) than in public hospitals (7.6%). *Geriatric evaluation and management* in public hospitals doubled, increasing by an average of 19.7% per year between 2007–08 and 2011–12 and *Rehabilitation care* in private hospitals increasing by an average of 18.3% per year.

### States and territories

Between 2007–08 and 2011–12, the average rate of increase for sub- and non-acute separations in private hospitals varied among jurisdictions. It was highest for South Australia (34.4% on average per year) and New South Wales (19.9%) (Table 11.2).

Over the same period, the average rate of increase for sub- and non-acute care in public hospitals was highest in Queensland (11.4%). For the Northern Territory, the number of sub- and non-acute separations in public hospitals decreased by 10.6% between 2007–08 and 2011–12.

**Table 11.1: Sub- and non-acute separations by care type, public and private hospitals, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent) <sup>(a)</sup>	
						Average since 2007–08	Since 2010–11
<b>Public hospitals</b>							
Rehabilitation	75,446	77,875	82,675	86,426	95,562	6.1	10.6
Palliative care	21,598	24,262	26,633	28,255	31,260	9.7	10.6
Geriatric evaluation and management	14,813	18,307	21,310	26,484	30,451	19.7	15.0
Psychogeriatric care	4,494	2,393	2,336	2,445	2,382	-14.7	-2.6
Maintenance care	19,211	19,763	19,624	20,889	22,271	3.8	6.6
<i>Total public hospitals</i>	<i>135,562</i>	<i>142,600</i>	<i>152,578</i>	<i>164,499</i>	<i>181,926</i>	<i>7.6</i>	<i>10.5</i>
<b>Private hospitals</b>							
Rehabilitation	115,659	137,946	168,972	200,808	226,887	18.3	13.0
Palliative care	5,766	5,281	5,016	5,507	5,877	0.5	6.7
Geriatric evaluation and management	87	113	88	77	124	9.3	61.0
Psychogeriatric care	6,857	6,579	8,102	6,336	6,204	-2.5	-2.1
Maintenance care	1,699	2,004	2,283	2,665	2,698	12.3	1.2
<i>Total private hospitals</i>	<i>130,068</i>	<i>151,923</i>	<i>184,461</i>	<i>215,393</i>	<i>241,790</i>	<i>16.8</i>	<i>12.3</i>
<b>Total</b>	<b>265,630</b>	<b>294,523</b>	<b>337,039</b>	<b>379,892</b>	<b>423,716</b>	<b>12.4</b>	<b>11.5</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.2: Sub- and non-acute separations, public and private hospitals, states and territories, 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent) <sup>(a)</sup>	
						Average since 2007–08	Since 2010–11
<b>New South Wales</b>							
Public hospitals	43,105	45,153	50,960	56,102	59,740	8.5	6.4
Private hospitals	68,585	82,567	100,130	123,045	141,708	19.9	15.2
<i>Total</i>	<i>111,690</i>	<i>127,720</i>	<i>151,090</i>	<i>179,147</i>	<i>201,448</i>	<i>15.9</i>	<i>12.4</i>
<b>Victoria</b>							
Public hospitals	32,431	32,651	35,065	37,349	39,661	5.2	6.2
Private hospitals	21,069	20,538	24,022	23,447	25,329	4.7	8.0
<i>Total</i>	<i>53,500</i>	<i>53,189</i>	<i>59,087</i>	<i>60,796</i>	<i>64,990</i>	<i>5.0</i>	<i>6.9</i>
<b>Queensland</b>							
Public hospitals	27,604	30,439	32,104	34,615	42,444	11.4	22.6
Private hospitals	28,743	28,805	33,487	34,990	38,514	7.6	10.1
<i>Total</i>	<i>56,347</i>	<i>59,244</i>	<i>65,591</i>	<i>69,605</i>	<i>80,958</i>	<i>9.5</i>	<i>16.3</i>
<b>Western Australia</b>							
Public hospitals	13,372	13,487	12,601	13,648	16,664	5.7	22.1
Private hospitals	3,579	4,043	4,867	5,678	6,146	14.5	8.2
<i>Total</i>	<i>16,951</i>	<i>17,530</i>	<i>17,468</i>	<i>19,326</i>	<i>22,810</i>	<i>7.7</i>	<i>18.0</i>
<b>South Australia</b>							
Public hospitals	11,073	11,614	12,518	14,134	15,586	8.9	10.3
Private hospitals	6,755	12,763	18,052	22,510	22,056	34.4	–2.0
<i>Total</i>	<i>17,828</i>	<i>24,377</i>	<i>30,570</i>	<i>36,644</i>	<i>37,642</i>	<i>20.5</i>	<i>2.7</i>
<b>Tasmania</b>							
Public hospitals	2,051	2,145	2,230	1,910	2,148	1.2	12.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Australian Capital Territory</b>							
Public hospitals	4,665	5,956	5,749	5,645	4,877	1.1	–13.6
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Northern Territory</b>							
Public hospitals	1,261	1,155	1,351	1,096	806	–10.6	–26.5
Private hospitals	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
<b>Total</b>							
<b>Public hospitals</b>	<b>135,562</b>	<b>142,600</b>	<b>152,578</b>	<b>164,499</b>	<b>181,926</b>	<b>7.6</b>	<b>10.6</b>
<b>Private hospitals</b>	<b>130,068</b>	<b>151,923</b>	<b>184,461</b>	<b>215,393</b>	<b>241,790</b>	<b>16.8</b>	<b>12.3</b>
<b>Total</b>	<b>265,630</b>	<b>294,523</b>	<b>337,039</b>	<b>379,892</b>	<b>423,716</b>	<b>12.4</b>	<b>11.5</b>

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.



## How much activity was there in 2011–12?

Overall, 4.6% of separations in 2011–12 were for sub- and non-acute separations (Table 11.3). The proportion of separations that were for sub- and non-acute care varied among states and territories, ranging from 2.2% of all separations in Western Australia to 7.4% in New South Wales.

**Table 11.3: Sub- and non-acute separations by care type, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Public hospitals</b>									
Rehabilitation	31,964	14,954	24,068	11,511	9,205	910	2,603	347	95,562
Palliative care	12,371	7,191	7,333	1,456	1,492	476	648	293	31,260
Geriatric evaluation and management	5,907	16,963	3,712	1,554	1,597	324	374	20	30,451
Psychogeriatric care	827	0	472	732	255	54	42	0	2,382
Maintenance care	8,671	553	6,859	1,411	3,037	384	1,210	146	22,271
<i>Public hospital total</i>	<i>59,740</i>	<i>39,661</i>	<i>42,444</i>	<i>16,664</i>	<i>15,586</i>	<i>2,148</i>	<i>4,877</i>	<i>806</i>	<i>181,926</i>
<b>Private hospitals</b>									
Rehabilitation	141,131	19,260	34,179	2,831	21,711	n.p.	n.p.	n.p.	226,887
Palliative care	464	689	2,005	2,327	249	n.p.	n.p.	n.p.	5,877
Geriatric evaluation and management	0	0	20	0	61	n.p.	n.p.	n.p.	124
Psychogeriatric care	0	5,330	0	873	0	n.p.	n.p.	n.p.	6,204
Maintenance care	113	50	2,310	115	35	n.p.	n.p.	n.p.	2,698
<i>Private hospital total</i>	<i>141,708</i>	<i>25,329</i>	<i>38,514</i>	<i>6,146</i>	<i>22,056</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>241,790</i>
<b>Total separations</b>	<b>201,448</b>	<b>64,990</b>	<b>80,958</b>	<b>22,810</b>	<b>37,642</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>423,716</b>
<b>Proportion of all separations</b>	<b>7.4</b>	<b>2.6</b>	<b>4.4</b>	<b>2.2</b>	<b>5.4</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>4.6</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

Overall in 2011–12, there were 17.0 sub- and non-acute separations per 1,000 population. There was large variation among states and territories, ranging from 9.7 per 1,000 in Western Australia to 24.1 per 1,000 for New South Wales (Table 11.4).

In Table 11.4, the data for Tasmania, the Australian Capital Territory and the Northern Territory are for public hospitals only. However, separations for private hospitals for all jurisdictions are included in the Australian total.

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.

In 2011–12 overall, there were 8.8 overnight sub- and non-acute separations per 1,000 population, with some variation between states and territories, ranging from 6.9 per 1,000 for South Australia to 9.5 per 1,000 for Victoria.

There was notable variation between states and territories in the rates for same-day separations for sub- and non-acute care, ranging from 0.4 per 1,000 for Western Australia to 15.6 per 1,000 for New South Wales.

**Table 11.4: Sub- and non-acute separations per 1,000 population by same-day/overnight status, states and territories, all hospitals, 2011–12**

Care type	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
<b>Same-day separations</b>									
Rehabilitation	15.3	<0.1	7.9	0.2	11.4	<0.1	2.2	0.6	7.9
Palliative care	0.2	<0.1	0.1	0.2	<0.1	0.1	0.1	0.1	0.1
Geriatric evaluation and management	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.0	<0.1
Psychogeriatric care	<0.1	0.7	<0.1	<0.1	0.0	<0.1	0.0	0.0	0.2
Maintenance care	<0.1	0.0	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
<i>Same-day total</i>	<i>15.6</i>	<i>0.7</i>	<i>8.3</i>	<i>0.4</i>	<i>11.5</i>	<i>0.1</i>	<i>2.3</i>	<i>0.7</i>	<i>8.2</i>
<b>Overnight separations</b>									
Rehabilitation	5.5	5.4	4.7	5.9	4.0	1.4	5.6	1.3	5.2
Palliative care	1.3	1.2	1.9	1.4	0.8	0.7	1.9	2.4	1.4
Geriatric evaluation and management	0.6	2.6	0.8	0.7	0.7	0.5	1.1	0.1	1.2
Psychogeriatric care	0.1	0.2	0.1	0.7	0.1	0.1	0.1	0.0	0.2
Maintenance care	1.0	0.1	1.7	0.6	1.3	0.6	3.6	1.3	0.9
<i>Overnight total</i>	<i>8.5</i>	<i>9.5</i>	<i>9.1</i>	<i>9.3</i>	<i>6.9</i>	<i>3.2</i>	<i>12.4</i>	<i>5.1</i>	<i>8.8</i>
<b>Total</b>	<b>24.1</b>	<b>10.2</b>	<b>17.5</b>	<b>9.7</b>	<b>18.4</b>	<b>3.3</b>	<b>14.7</b>	<b>5.8</b>	<b>17.0</b>

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

(b) Data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory are included in the Total column.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

### Overnight separations for sub- and non-acute care

There was a large difference in the overall separation rates of overnight sub- and non-acute care between public and private hospitals (6.1 per 1,000 population and 2.7 per 1,000, respectively) (Table 11.5).

The separation rate for overnight sub- and non-acute for Indigenous Australians was about 22% higher than the rate for other Australians (11.0 per 1,000 and 9.0 per 1,000, respectively).

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

Nationally, there was very little variation in the rates of overnight sub- and non-acute care by socioeconomic status of area of residence.

**Table 11.5: Separations per 1,000 population for overnight sub- and non-acute care by hospital sector, Indigenous status, remoteness area and socioeconomic status of area of residence, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>
<b>Hospital sector</b>									
Public	5.8	6.2	6.5	6.8	4.8	3.2	12.4	5.1	6.1
Private	2.7	3.3	2.6	2.4	2.2	n.p.	n.p.	n.p.	2.7
<b>Indigenous status<sup>(c)</sup></b>									
Indigenous	9.2	13.5	12.3	16.4	9.6	4.4	19.1	6.9	11.0
Other Australians	8.8	9.8	9.0	9.2	7.3	3.3	12.3	3.6	9.0
<b>Remoteness of residence<sup>(d)</sup></b>									
Major cities	8.8	9.9	9.8	9.5	7.5	..	10.3	..	9.2
Inner regional	7.8	9.0	8.7	7.5	4.6	3.7	n.p.	..	8.0
Outer regional	7.8	7.6	7.8	9.1	5.9	2.3	..	5.3	7.3
Remote	9.3	7.2	8.1	10.0	5.6	2.6	..	3.4	7.6
Very remote	11.0	..	10.1	10.2	5.0	2.2	..	6.6	9.1
<b>Socioeconomic status of area of residence<sup>(e)</sup></b>									
1—Lowest	8.0	9.6	9.9	11.3	7.5	3.0	n.p.	5.3	8.5
2	7.6	8.7	9.6	11.0	6.8	3.9	n.p.	4.8	8.4
3	9.6	9.9	8.7	8.3	6.3	3.4	21.8	5.3	9.0
4	8.1	9.4	9.2	9.4	6.8	3.7	13.9	5.3	8.8
5—Highest	9.6	10.0	8.0	8.5	6.6	..	9.0	3.1	9.3
<b>Total</b>	<b>8.5</b>	<b>9.5</b>	<b>9.1</b>	<b>9.3</b>	<b>6.9</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>8.8</b>

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

(b) Data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory are included in the Total column.

(c) *Other Australians* includes records for which the Indigenous status was not reported. The populations used for calculating age standardised separations rates by Indigenous status use different age groups compared with the populations used to calculate all other rates presented in this table. Therefore, the separation rates by Indigenous status are not directly comparable with the rates by hospital sector, remoteness of residence or socioeconomic status.

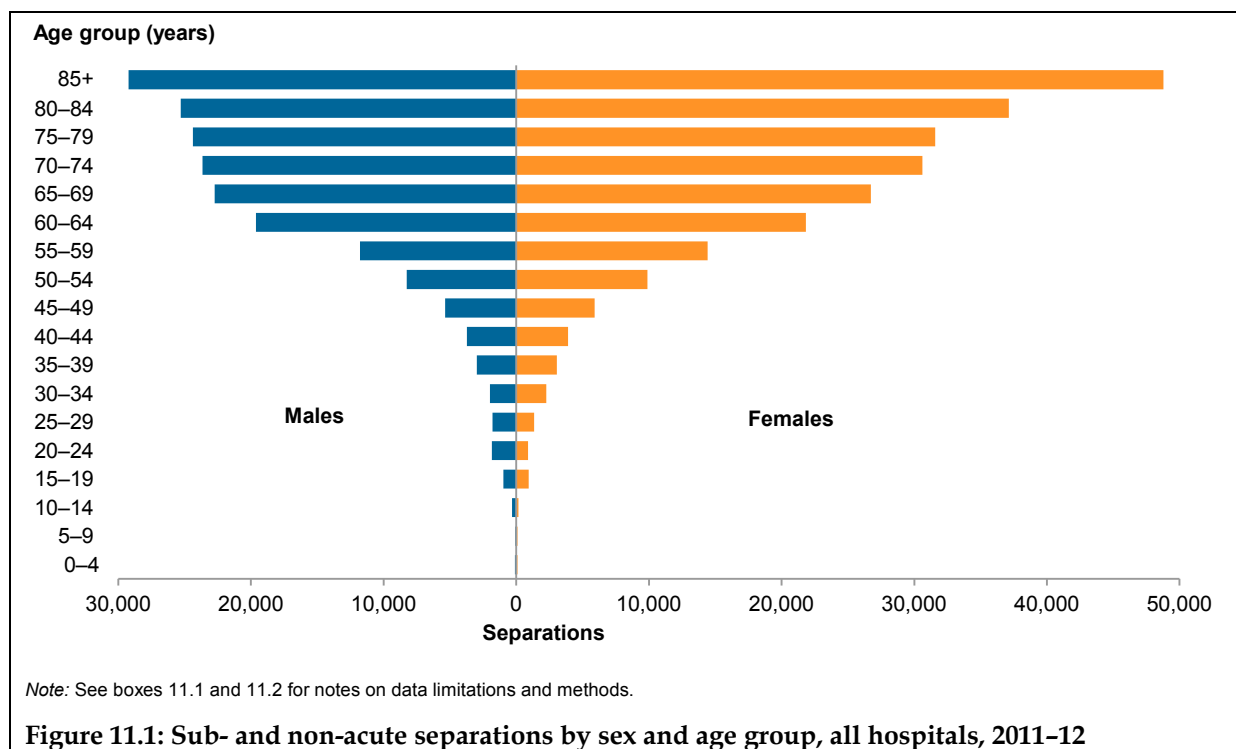
(d) Disaggregation by remoteness area is by usual residence, not remoteness of hospital. However, state/territory data are reported by jurisdiction of the hospital, regardless of the jurisdiction of residence.

(e) 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.

## Who used these services?

### Sex and age group

Females accounted for more than half (57%) of sub- and non-acute separations (Figure 11.1) and there were more separations for females than for males in the age groups 30 and over. Persons aged 65 and over accounted for more than 70% of all sub- and non-acute separations.



### Aboriginal and Torres Strait Islander people

Separations for Aboriginal and Torres Strait Islander people are likely to be under-enumerated. The quality of the data provided for Indigenous status in 2011-12 for admitted patient care varied by jurisdiction. See Chapter 7 and Appendix B for more information on the quality of Indigenous data in the NHMD.

In 2011-12, there were almost 3,800 sub- and non-acute separations for which the Indigenous status was reported as *Aboriginal and/or Torres Strait Islander*, accounting for less than 1% of all sub- and non-acute separations (Table 11.6). This compares with about 4% for all separations. The proportion of separations for sub- and non-acute care that were for Indigenous Australians varied among the states and territories.

In 2011-12, there were 13 sub- and non-acute separations per 1,000 population for Indigenous Australians, about 78% of the rate for other Australians (17 per 1,000). Indigenous Australians had lower separation rates for *Rehabilitation* care than other Australians (7 per 1,000 and 13 per 1,000, respectively). Indigenous Australians had higher separation rates for *Palliative* care than other Australians.

**Table 11.6: Sub- and non-acute separations, by Indigenous status, all hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	NT <sup>(a)</sup>	Total <sup>(b)</sup>	Separations per 1,000 population
<b>Indigenous Australians</b>										
Rehabilitation	539	134	763	376	179	23	28	139	2,187	7.3
Palliative care	184	37	173	102	15	8	3	48	571	2.4
Other sub- and non-acute care	200	48	394	194	35	4	27	107	1,009	3.7
<i>Total Indigenous Australians</i>	<i>923</i>	<i>219</i>	<i>1,330</i>	<i>672</i>	<i>229</i>	<i>35</i>	<i>58</i>	<i>294</i>	<i>3,767</i>	<i>13.4</i>
<i>Proportion of all hospital separations</i>	<i>1.3</i>	<i>1.1</i>	<i>1.5</i>	<i>0.9</i>	<i>1.0</i>	<i>1.1</i>	<i>2.6</i>	<i>0.4</i>	<i>1.0</i>	
<b>Other Australians<sup>(c)</sup></b>										
Rehabilitation	172,556	34,080	57,484	13,966	30,737	887	2,575	208	320,262	13.2
Palliative care	12,651	7,843	9,165	3,681	1,726	468	645	245	36,566	1.5
Other sub- and non-acute care	15,318	22,848	12,979	4,491	4,950	758	1,599	59	63,121	2.6
<i>Total other Australians</i>	<i>200,525</i>	<i>64,771</i>	<i>79,628</i>	<i>22,138</i>	<i>37,413</i>	<i>2,113</i>	<i>4,819</i>	<i>512</i>	<i>419,949</i>	<i>17.3</i>
<i>Proportion of all hospital separations</i>	<i>7.5</i>	<i>2.7</i>	<i>4.4</i>	<i>2.3</i>	<i>5.6</i>	<i>2.2</i>	<i>5.1</i>	<i>1.5</i>	<i>4.7</i>	
<b>Total</b>	<b>201,448</b>	<b>64,990</b>	<b>80,958</b>	<b>22,810</b>	<b>37,642</b>	<b>2,148</b>	<b>4,877</b>	<b>806</b>	<b>423,716</b>	<b>17.3</b>

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

(b) Data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory are included in the Total column.

(c) *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 separation rates for sub- and non-acute admitted patient care by remoteness area of usual residence. Overall, people usually resident in *Major cities* had much higher rates for *Rehabilitation* care than other areas (16 separations per 1,000 population, compared with 13 per 1,000 nationwide) (Table 11.7). The separation rate ratios (SRR) indicate notable differences in the separation rates for *Rehabilitation* care across remoteness areas for both public and private hospitals.

For public hospitals, the rate of *Rehabilitation* care varied from 2.8 per 1,000 population for people residing in *Outer regional* areas to 4.2 per 1,000 for people residing in *Major cities* (Table 11.7). There were more marked variations for private hospitals, with the rate of *Rehabilitation* care ranging from 1.6 per 1,000 in *Remote* areas to 12.0 per 1,000 in *Major cities*.

**Table 11.7: Sub- and non-acute separation statistics, by remoteness area of usual residence, public and private hospitals, 2011–12**

	Remoteness area					Total <sup>(a)</sup>
	Major cities	Inner regional	Outer regional	Remote	Very remote	
<b>Public hospitals</b>						
<b>Rehabilitation</b>						
Separations	69,613	17,605	6,534	893	416	95,562
Separations per 1,000 population	4.2	3.3	2.8	3.1	3.3	3.9
Separation rate ratio	1.09	0.85	0.73	0.80	0.85	
<b>Palliative care</b>						
Separations	19,915	7,029	3,714	372	167	31,260
Separations per 1,000 population	1.2	1.3	1.5	1.3	1.6	1.3
Separation rate ratio	0.96	1.01	1.23	1.05	1.25	
<b>Geriatric evaluation and management</b>						
Separations	22,950	5,803	1,514	85	35	30,451
Separations per 1,000 population	1.3	1.0	0.6	0.3	0.4	1.2
Separation rate ratio	1.12	0.86	0.55	0.28	0.38	
<b>Psychogeriatric care</b>						
Separations	1,903	370	79	19	4	2,382
Separations per 1,000 population	0.1	0.1	<0.1	0.1	n.p.	0.1
Separation rate ratio	1.21	0.68	0.34	0.80	n.p.	
<b>Maintenance care</b>						
Separations	12,694	5,289	3,192	602	377	22,271
Separations per 1,000 population	0.7	0.9	1.4	2.4	3.9	0.9
Separation rate ratio	0.84	1.09	1.57	2.73	4.43	
<b>Total public hospitals</b>						
<b>Separations</b>	<b>127,075</b>	<b>36,096</b>	<b>15,033</b>	<b>1,971</b>	<b>999</b>	<b>181,926</b>
<b>Separations per 1,000 population</b>	<b>7.6</b>	<b>6.6</b>	<b>6.4</b>	<b>7.2</b>	<b>9.3</b>	<b>7.3</b>
<b>Separation rate ratio</b>	<b>1.04</b>	<b>0.91</b>	<b>0.88</b>	<b>0.99</b>	<b>1.27</b>	
<b>Private hospitals</b>						
<b>Rehabilitation</b>						
Separations	196,572	25,470	4,064	411	184	226,887
Separations per 1,000 population	12.0	4.7	1.8	1.6	2.0	9.2
Separation rate ratio	1.30	0.51	0.20	0.18	0.22	
<b>Palliative care</b>						
Separations	4,026	1,469	347	24	5	5,877
Separations per 1,000 population	0.2	0.3	0.2	0.1	n.p.	0.2
Separation rate ratio	1.02	1.14	0.64	0.38	n.p.	
<b>Other sub- and non-acute care<sup>(b)</sup></b>						
Separations	7,535	1,275	190	19	4	9,026
Separations per 1,000 population	0.5	0.3	0.1	0.1	n.p.	0.4
Separation rate ratio	1.25	0.74	0.32	0.20	n.p.	
<b>Total private hospitals</b>						
<b>Separations</b>	<b>208,133</b>	<b>28,214</b>	<b>4,601</b>	<b>454</b>	<b>193</b>	<b>241,790</b>
<b>Separations per 1,000 population</b>	<b>12.7</b>	<b>5.3</b>	<b>2.1</b>	<b>1.8</b>	<b>2.1</b>	<b>9.8</b>
<b>Separation rate ratio</b>	<b>1.29</b>	<b>0.54</b>	<b>0.21</b>	<b>0.18</b>	<b>0.22</b>	

(a) The total includes separations for which the remoteness area was not able to be categorised.

(b) Separations with a care type of *Geriatric evaluation and management*, *Psychogeriatric care* and *Maintenance care*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Socioeconomic status

The separation rates varied from 26 per 1,000 population for patients living in areas classified as being the highest SES group to 13 per 1,000 for the lowest SES group (Table 11.8). The SRRs indicate notable differences in the separation rates across SES groups for some care types.

**Table 11.8: Sub- and non-acute separation statistics, by socioeconomic status of area of residence, all hospitals, 2011–12**

	Socioeconomic status of area of residence					Total <sup>(a)</sup>
	1–Lowest	2	3	4	5–Highest	
<b>Rehabilitation</b>						
Separations	43,203	57,962	53,225	60,228	107,137	322,449
Separations per 1,000 population	8.5	10.8	11.2	13.3	22.0	13.0
Separation rate ratio	0.65	0.83	0.86	1.02	1.69	
<b>Palliative care</b>						
Separations	9,232	7,147	7,872	6,425	6,392	37,137
Separations per 1,000 population	1.8	1.3	1.6	1.4	1.3	1.5
Separation rate ratio	1.20	0.88	1.10	0.95	0.87	
<b>Geriatric evaluation and management</b>						
Separations	6,448	6,390	6,715	5,336	5,621	30,575
Separations per 1,000 population	1.2	1.1	1.4	1.2	1.1	1.2
Separation rate ratio	1.02	0.94	1.15	0.98	0.90	
<b>Psychogeriatric care</b>						
Separations	848	872	1,035	2,327	3,494	8,586
Separations per 1,000 population	0.2	0.2	0.2	0.5	0.7	0.3
Separation rate ratio	0.46	0.45	0.63	1.53	2.11	
<b>Maintenance care</b>						
Separations	6,635	6,122	4,465	4,222	3,404	24,969
Separations per 1,000 population	1.3	1.1	0.9	0.9	0.7	1.0
Separation rate ratio	1.29	1.12	0.93	0.93	0.67	
<b>Total sub- and non-acute care</b>						
<b>Separations</b>	<b>66,366</b>	<b>78,493</b>	<b>73,312</b>	<b>78,538</b>	<b>126,048</b>	<b>423,716</b>
<b>Separations per 1,000 population</b>	<b>13.0</b>	<b>14.5</b>	<b>15.3</b>	<b>17.3</b>	<b>25.8</b>	<b>17.0</b>
<b>Separation rate ratio</b>	<b>0.76</b>	<b>0.85</b>	<b>0.90</b>	<b>1.01</b>	<b>1.51</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.

## How did people access these services?

The **mode of admission** records the mechanism by which an admitted patient begins an episode of care.

Over half of all sub- and non-acute separations had a mode of admission of *Other*, the term used to refer to all planned and unplanned admissions except transfers from other hospitals and statistical admissions (Table 11.9). *Statistical admission: care type change* was the most common admission mode for sub- and non-acute separations in public hospitals, accounting for 45% of sub- and non-acute separations. This indicates that the clinical intent of the patient's care had changed (for example, from *Acute* care to *Rehabilitation* care) within the one hospital. Public hospitals recorded higher proportions of *Admitted patient transferred from another hospital* than private hospitals.

**Table 11.9: Sub- and non-acute separations, by mode of admission, public and private hospitals, 2011–12**

	Public hospitals	Private hospitals	Total
Admitted patient transferred from another hospital	51,954	42,212	94,166
Statistical admission: care type change	82,214	16,473	98,687
Other	47,645	180,107	227,752
Not reported	113	2,998	3,111
<b>Total</b>	<b>181,926</b>	<b>241,790</b>	<b>423,716</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 usually be described in terms of the principal diagnosis. In some cases, patients may have extended stays in hospital while waiting for admission to another health care facility, such as a residential aged care service.

### Principal diagnosis

Overall, four out of five sub- and non-acute separations had a principal diagnosis from the ICD-10-AM chapter *Factors influencing health status and contact with health services*. A principal diagnosis within this chapter was reported for 95% of sub- and non-acute separations in private hospitals and 66% in public hospitals (Table 11.10).

*Care involving use of rehabilitation procedures* accounted for 76% of principal diagnoses reported for sub- and non-acute separations (at the 3-character level). This diagnosis is required to be reported as the principal diagnosis for *Rehabilitation* care and lies within the chapter *Factors influencing health status and contact with health services*.

The second most common principal diagnosis chapter reported for sub- and non-acute separations was *Neoplasms*, which includes both benign and malignant tumours, and was particularly associated with separations for *Palliative* care.

For *Palliative* care, neoplasm-related principal diagnoses accounted for 66% of principal diagnoses for *Palliative* care separations. The 5 most common neoplasm-related principal diagnoses are presented in Table 11.11, as are the top 5 non-neoplasm related principal diagnoses for *Palliative* care, which included heart failure and respiratory disorders.



**Table 11.10: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private hospitals	Total
A00–B99	Certain infectious and parasitic diseases	1,245	58	1,303
C00–D48	Neoplasms	21,276	4,662	25,938
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	483	41	524
E00–E89	Endocrine, nutritional and metabolic diseases	1,055	61	1,116
F00–F99	Mental and behavioural disorders	5,261	5,630	10,891
G00–G99	Diseases of the nervous system	3,033	762	3,795
I00–I99	Diseases of the circulatory system	6,510	617	7,127
J00–J99	Diseases of the respiratory system	5,006	483	5,489
K00–K93	Diseases of the digestive system	2,503	185	2,688
L00–L99	Diseases of the skin and subcutaneous tissue	724	40	764
M00–M99	Diseases of the musculoskeletal system and connective tissue	2,282	149	2,431
N00–N99	Diseases of the genitourinary system	2,178	121	2,299
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	3,145	262	3,407
S00–T98	Injury, poisoning and certain other consequences of external causes	6,445	158	6,603
Z00–Z99	Factors influencing health status and contact with health services	120,408	228,514	348,922
	Other ICD-10-AM chapters	187	14	201
	Not reported	185	33	218
<b>Total sub- and non-acute separations</b>		<b>181,926</b>	<b>241,790</b>	<b>423,716</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods. Additional information for states and territories is in tables 11.24 and 11.25 at the end of this chapter.

**Table 11.11: Separations for the 5 most common neoplasm-related and the 5 most common other principal diagnoses in 3-character ICD-10-AM groupings for Palliative care separations, public and private hospitals, 2011–12**

Principal diagnosis		Public hospitals	Private hospitals	Total
<b>Neoplasm-related</b>				
C34	Malignant neoplasm of bronchus and lung	3,439	599	4,038
C79	Secondary malignant neoplasm of other and unspecified sites	2,502	716	3,218
C78	Secondary malignant neoplasm of respiratory and digestive organs	1,709	561	2,270
C25	Malignant neoplasm of pancreas	1,099	254	1,353
C61	Malignant neoplasm of prostate	991	221	1,212
	Other neoplasm-related principal diagnosis	10,318	2,148	12,466
<b>Other</b>				
I50	Heart failure	768	126	894
J44	Other chronic obstructive pulmonary disease	684	78	762
J18	Pneumonia, organism unspecified	578	47	625
J69	Pneumonitis due to solids and liquids	493	39	532
I63	Cerebral infarction	457	25	482
	Other (excludes neoplasm-related principal diagnoses)	8,222	1,063	9,285
<b>Total Palliative care separations</b>		<b>31,260</b>	<b>5,877</b>	<b>37,137</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

For *Geriatric evaluation and management*, the 5 most common principal diagnoses made up 26% of all separations within this care type. They included *Care involving use of rehabilitation procedures*, fracture of the femur (hip) and heart failure (Table 11.12).

For *Psychogeriatric care*, the 5 most common principal diagnoses made up 65% of all separations within this care type. The 5 most common principal diagnoses were from the ICD-10-AM chapter *Mental and behavioural disorders* (Table 11.12).

For *Maintenance care*, the 5 most common principal diagnoses made up almost 89% of all separations within this care type, with *Problems related to medical facilities and other health care* reported as the principal diagnosis for 73% of *Maintenance care* separations (Table 11.12).

**Table 11.12: Separations for the 5 most common principal diagnoses in 3-character ICD-10-AM groupings for other sub- and non-acute care separations, public and private hospitals, 2011-12**

Principal diagnosis	Public hospitals	Private hospitals	Total
<b>Geriatric evaluation and management</b>			
Z50 Care involving use of rehabilitation procedures	3,286	0	3,286
S72 Fracture of femur	1,551	1	1,552
I50 Heart failure	1,071	4	1,075
Z75 Problems related to medical facilities and other health care	987	16	1,003
F05 Delirium, not induced by alcohol and other psychoactive substances	985	8	993
Other	22,571	95	22,666
<i>Total Geriatric evaluation and management separations</i>	<i>30,451</i>	<i>124</i>	<i>30,575</i>
<b>Psychogeriatric care</b>			
F33 Recurrent depressive disorder	238	1,852	2,090
F32 Depressive episode	457	752	1,209
F31 Bipolar affective disorder	308	571	879
F41 Other anxiety disorders	210	509	719
F10 Mental and behavioural disorders due to use of alcohol	42	638	680
Other	1,127	1,882	3,009
<i>Total Psychogeriatric care separations</i>	<i>2,382</i>	<i>6,204</i>	<i>8,586</i>
<b>Maintenance care</b>			
Z75 Problems related to medical facilities and other health care	17,219	1,045	18,264
Z54 Convalescence	963	561	1,524
Z74 Problems related to care-provider dependency	1,308	6	1,314
F33 Recurrent depressive disorder	1	847	848
F20 Schizophrenia	211	0	211
Other	2,569	239	2,808
<i>Total Maintenance care separations</i>	<i>22,271</i>	<i>2,698</i>	<i>24,969</i>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Additional diagnoses

For *Rehabilitation* care, the principal diagnosis is required to be reported as *Care involving use of rehabilitation procedures*, and the first additional diagnosis is usually the reason for that care.

The 10 most common first additional diagnoses reported for *Rehabilitation* care separations included 7 musculoskeletal conditions or injuries (Table 11.13). Over half of rehabilitation separations in private hospitals and almost one-third of rehabilitation separations in public hospitals reported these 10 first additional diagnoses.

**Table 11.13: Separations for the 10 most common first additional diagnoses in 3-character ICD-10-AM groupings for Rehabilitation care separations, public and private hospitals, 2011–12**

First additional diagnosis	Public hospitals	Private hospitals	Total
M17 Gonarthrosis [arthrosis of knee]	3,843	53,027	56,870
M16 Coxarthrosis [arthrosis of hip]	2,006	22,726	24,732
S72 Fracture of femur	8,436	8,684	17,120
I63 Cerebral infarction	6,299	4,188	10,487
M54 Dorsalgia	1,377	9,060	10,437
Z96 Presence of other functional implants	1,561	7,343	8,904
M25 Other joint disorders, not elsewhere classified	702	5,796	6,498
M48 Other spondylopathies	739	5,203	5,942
S32 Fracture of lumbar spine and pelvis	2,381	3,514	5,895
T84 Complications of internal orthopaedic prosthetic devices, implants and grafts	864	4,920	5,784
Other	67,354	102,426	169,780
<b>Total Rehabilitation separations</b>	<b>95,562</b>	<b>226,887</b>	<b>322,449</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## 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 *Older Australians receive appropriate high quality and affordable health and aged services*. The indicator is specified under the National Healthcare Agreement as a 'proxy' measure as it requires data development to ensure that the analysis is better suited to the intent of the indicator.

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 11.14 presents the number of hospital patient days (per 1,000 patient days) for overnight separations with a care type of *Maintenance* and a diagnosis of *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 two lowest socioeconomic status groups.

**Table 11.14: Hospital patient days per 1,000 patient days, used by those eligible and waiting for residential aged care<sup>(a)</sup>, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Indigenous status<sup>(b)</sup></b>									
Indigenous	3.0	0.5	7.9	2.6	1.9	<0.1	13.4	7.4	4.8
Other Australians	7.6	1.9	22.7	9.4	33.2	10.9	10.2	8.8	11.5
<b>Remoteness of residence<sup>(c)</sup></b>									
Major cities	5.4	<0.1	16.3	4.8	24.4	..	12.1	..	7.5
Inner regional	11.3	5.1	18.5	10.7	14.0	12.4	1.3	..	11.3
Outer regional	21.2	13.2	48.8	25.2	36.3	6.4	..	8.5	28.8
Remote	0.8	8.5	29.9	42.7	142.7	30.6	..	11.1	48.8
Very remote	<0.1	..	34.2	2.0	119.6	<0.1	..	6.2	21.2
<b>Socioeconomic status of area of residence<sup>(d)</sup></b>									
1—Lowest	11.1	3.3	28.8	14.4	19.2	13.9	1.6	7.7	14.9
2	7.4	2.6	28.7	12.5	63.4	7.5	8.1	6.9	15.1
3	11.2	3.3	20.3	9.9	34.2	9.2	10.7	11.8	12.0
4	4.0	0.6	15.8	3.4	17.0	3.4	11.6	7.6	7.0
5—Highest	3.6	<0.1	14.6	6.8	13.5	..	10.4	0.4	5.4
<b>Total</b>	<b>7.5</b>	<b>1.9</b>	<b>22.0</b>	<b>8.9</b>	<b>31.9</b>	<b>10.6</b>	<b>10.3</b>	<b>8.0</b>	<b>11.2</b>

(a) Includes patient days for overnight separations with a care type of *Maintenance*, for which the separation mode was not *Other* (was not discharged to their place of usual residence) and had a diagnosis of Z75.11 *Person awaiting admission to residential aged care service*.

(b) *Other Australians* includes separations for which the Indigenous status was not reported.

(c) Not all remoteness areas are represented in each state or territory. However, interstate visitors residing in these remoteness areas may be treated in those states and territories.

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

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 2011–12, 66% of sub- and non-acute admitted patients were reported as *Elective* admissions (treatment could be delayed by at least 24 hours). The proportion of *Elective* admissions varied between public and private hospitals, accounting for 90% of sub- and non-acute separations in private hospitals and 35% in public hospitals. About 30% of sub- and non-acute separations had a *Not assigned* urgency of admission (Table 11.15).

**Table 11.15: Sub- and non-acute separations, by urgency of admission and care type, public and private hospitals, 2011–12**

	Rehabilitation	Palliative	Geriatric evaluation and management	Psycho- geriatric	Maintenance	Total
<b>Public hospitals</b>						
Emergency	3,413	6,626	904	587	1,025	12,555
Elective	39,930	9,989	10,264	584	2,004	62,771
Not assigned	52,215	14,642	19,280	1,208	19,239	106,584
<i>Total public hospitals<sup>(a)</sup></i>	<i>95,562</i>	<i>31,260</i>	<i>30,451</i>	<i>2,382</i>	<i>22,271</i>	<i>181,926</i>
<b>Private hospitals</b>						
Emergency	463	808	6	617	34	1,928
Elective	205,525	4,135	87	5,568	1,959	217,274
Not assigned	20,343	934	31	19	695	22,022
<i>Total private hospitals<sup>(a)</sup></i>	<i>226,887</i>	<i>5,877</i>	<i>124</i>	<i>6,204</i>	<i>2,698</i>	<i>241,790</i>
<b>Total<sup>(a)</sup></b>	<b>322,449</b>	<b>37,137</b>	<b>30,575</b>	<b>8,586</b>	<b>24,969</b>	<b>423,716</b>

(a) The totals include separations for which the urgency of admission was *Not reported*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## What care was provided?

The care that a patient received can be described in a variety of ways. This section presents information on sub- and non-acute separations describing care by the type of surgical or other procedure undertaken.

The type of care is also described by the care type that is used throughout this chapter to categorise the sub- and non-acute separations.

### Palliative care

Although over 37,000 separations were recorded with a care type of *Palliative care*, there were over 57,000 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, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Care type	12,835	7,880	9,338	3,783	1,741	596	671	293	37,137
Diagnosis	16,540	18,783	9,338	3,783	3,869	2,174	752	761	56,000
<b>Care type and/or diagnosis</b>	<b>17,701</b>	<b>18,866</b>	<b>9,338</b>	<b>3,783</b>	<b>4,075</b>	<b>2,249</b>	<b>785</b>	<b>817</b>	<b>57,614</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Procedures and other interventions

In public hospitals, about 18% of sub- and non-acute separations did not report a procedure, while in private hospitals about 5% did not report a procedure (Table 11.17).

About 97% of procedures reported for sub- and non-acute separations, belonged to the ACHI procedure chapter *Non-invasive, cognitive and other interventions, not elsewhere classified*. This chapter includes anaesthesia, allied health interventions (which includes physiotherapy and other rehabilitation-related procedures), dialysis and chemotherapy.

**Table 11.17: Procedures<sup>(a)</sup> reported for sub- and non-acute separations, by ACHI chapter, public and private hospitals, 2011–12**

Procedure	Public hospitals	Private hospitals	Total
1–86 Procedures on nervous system	360	243	603
300–333 Procedures on ear and mastoid process	114	19	133
370–422 Procedures on nose, mouth and pharynx	85	24	109
450–490 Dental services	140	7	147
520–570 Procedures on respiratory system	860	141	1,001
600–777 Procedures on cardiovascular system	202	99	301
800–817 Procedures on blood and blood-forming organs	73	29	102
850–1011 Procedures on digestive system	1,241	310	1,551
1040–1129 Procedures on urinary system	1,577	226	1,803
1360–1579 Procedures on musculoskeletal system	854	387	1,241
1600–1718 Dermatological and plastic procedures	1,915	367	2,282
1786–1799 Radiation oncology procedures	576	40	616
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	149,155	230,157	379,312
1940–2016 Imaging services	325	125	450
Other ACHI chapters	146	33	179
No procedure or not reported	32,208	11,540	43,748
<b>Total sub- and non-acute separations</b>	<b>181,926</b>	<b>241,790</b>	<b>423,716</b>

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

(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. Additional information for states and territories is in tables 11.26 and 11.27 at the end of this chapter.

The most frequently reported procedures for each of the sub- and non-acute care types are presented in tables 11.18 to 11.20.

In 2011–12, 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). The 10 most common allied health interventions reported accounted for over 91% of procedures reported. They included physiotherapy, occupational therapy and social work. Some procedures were predominantly performed in private hospitals, such as hydrotherapy and exercise therapy.

**Table 11.18: Procedures<sup>(a)</sup> reported for the 10 most common ACHI procedures for Rehabilitation care, public and private hospitals, 2011–12**

Procedure code and description		Public hospitals	Private hospitals	Total
95550-03	Allied health intervention, physiotherapy	75,693	203,754	279,447
95550-02	Allied health intervention, occupational therapy	57,578	95,706	153,284
96153-00	Hydrotherapy	1,273	79,079	80,352
95550-01	Allied health intervention, social work	38,695	17,712	56,407
95550-00	Allied health intervention, dietetics	25,413	12,329	37,742
95550-05	Allied health intervention, speech pathology	19,679	10,034	29,713
96129-00	Exercise therapy, total body	97	26,013	26,110
95550-11	Allied health intervention, other	4,071	19,487	23,558
95550-09	Allied health intervention, pharmacy	8,063	6,007	14,070
95550-10	Allied health intervention, psychology	5,125	5,054	10,179
	Other	26,404	41,095	67,499
	No procedure or not reported	12,711	4,873	17,584
<b>Total procedures</b>		<b>262,091</b>	<b>516,270</b>	<b>778,361</b>

ACHI—Australian Classification of Health Interventions.

(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.

For *Palliative* care, 8 of the 10 most common reported procedures were allied health interventions and included social work, physiotherapy and pastoral care (Table 11.19). About 16% of *Palliative* care separations had no procedures reported.

**Table 11.19: Procedures<sup>(a)</sup> reported for the 10 most common ACHI procedures for Palliative care, public and private hospitals, 2011–12**

Procedure code and description		Public hospitals	Private hospitals	Total
95550-01	Allied health intervention, social work	12,507	1,149	13,656
95550-03	Allied health intervention, physiotherapy	11,771	1,589	13,360
95550-02	Allied health intervention, occupational therapy	7,311	420	7,731
95550-12	Allied health intervention, pastoral care	5,760	1,175	6,935
95550-00	Allied health intervention, dietetics	5,954	649	6,603
95550-05	Allied health intervention, speech pathology	4,214	265	4,479
95550-09	Allied health intervention, pharmacy	1,882	191	2,073
13706-02	Administration of packed cells	1,238	368	1,606
95550-11	Allied health intervention, other	1,269	89	1,358
96104-00	Music therapy	755	200	955
	Other	7,552	2,562	10,114
	No procedure or not reported	8,956	2,147	11,103
<b>Total procedures</b>		<b>60,213</b>	<b>8,657</b>	<b>68,870</b>

ACHI—Australian Classification of Health Interventions.

(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.

For *Geriatric evaluation and management*, the 5 most common procedures accounted for about 80% of reported procedures and were allied health interventions and included physiotherapy, occupational therapy and social work (Table 11.20).

For *Psychogeriatric care*, about 29% of separations had no procedures reported. The 5 most common procedures included social work, occupational therapy, physiotherapy and electroconvulsive treatment (Table 11.20).

For *Maintenance care*, about 19% of separations had no procedures reported. The 5 most common procedures included physiotherapy, social work and occupational therapy (Table 11.20).

**Table 11.20: Procedures<sup>(a)</sup> reported for the 5 most common ACHI procedures for other sub- and non-acute care, public and private hospitals, 2011–12**

Procedure code and description		Public hospitals	Private hospitals	Total
<b>Geriatric evaluation and management</b>				
95550-03	Allied health intervention, physiotherapy	24,792	80	24,872
95550-02	Allied health intervention, occupational therapy	21,198	53	21,251
95550-01	Allied health intervention, social work	18,229	47	18,276
95550-00	Allied health intervention, dietetics	13,290	13	13,303
95550-05	Allied health intervention, speech pathology	7,696	12	7,708
	Other	20,324	158	20,482
	No procedure or not reported	3,062	9	3,071
<i>Total procedures for Geriatric evaluation and management separations</i>		<i>105,529</i>	<i>365</i>	<i>105,894</i>
<b>Psychogeriatric care</b>				
92514-99	General anaesthesia, ASA 99	694	1,263	1,957
95550-01	Allied health intervention, social work	1,182	469	1,651
95550-02	Allied health intervention, occupational therapy	946	644	1,590
95550-03	Allied health intervention, physiotherapy	944	641	1,585
93341-01	Electroconvulsive therapy [ECT], 1 treatment	162	465	627
	Other	3,039	3,648	6,687
	No procedure or not reported	406	3,732	4,138
<i>Total procedures for Psychogeriatric care separations</i>		<i>6,967</i>	<i>7,130</i>	<i>14,097</i>
<b>Maintenance care</b>				
95550-03	Allied health intervention, physiotherapy	9,764	707	10,471
95550-01	Allied health intervention, social work	9,235	496	9,731
95550-02	Allied health intervention, occupational therapy	5,534	176	5,710
95550-00	Allied health intervention, dietetics	4,425	136	4,561
95550-05	Allied health intervention, speech pathology	2,787	83	2,870
	Other	6,275	1,458	7,733
	No procedure or not reported	7,081	779	7,860
<i>Total procedures for Maintenance care separations</i>		<i>38,020</i>	<i>3,056</i>	<i>41,076</i>

ACHI—Australian Classification of Health Interventions; ASA—American Society of Anesthesiologists Physical Status Classification; ECT—electroconvulsive therapy.

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.



## How long did patients stay?

Sub- and non-acute separations may involve same-day or overnight episodes. Overall, the average length of stay for sub- and non-acute care was much higher than the average length of stay for acute care (Table 7.20), and was higher in public hospitals than in private hospitals (Table 11.21). For example, the average length of stay for *Rehabilitation* care was 17.0 days in public hospitals, compared to 4.6 days in private hospitals.

**Table 11.21: Patient days and average length of stay for sub- and non-acute separations, by care type, public and private hospitals, 2011–12**

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 care	1,627,134	17.0	1,051,109	4.6	2,678,243	8.3
Palliative care	335,570	10.7	71,216	12.1	406,786	11.0
Geriatric evaluation and management	546,942	18.0	4,335	35.0	551,277	18.0
Psychogeriatric care	93,673	39.3	42,061	6.8	135,734	15.8
Maintenance care	739,993	33.2	58,146	21.6	798,139	32.0
<b>Total</b>	<b>3,343,312</b>	<b>18.4</b>	<b>1,226,867</b>	<b>5.1</b>	<b>4,570,179</b>	<b>10.8</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## Who paid for the care?

About 76% of sub- and non-acute separations from public hospitals were for *Public patients*, and over 79% of sub- and non-acute separations from private hospitals were funded by *Private health insurance* (Table 11.22). The *Department of Veterans' Affairs* funded almost 6% of sub- and non-acute separations in public hospitals and 11% in private hospitals. For private hospitals, about 38% of *Palliative care* separations and 12% of *Maintenance care* separations were *Public patients*.

**Table 11.22: Sub- and non-acute separations, by principal source of funds and care type, public and private hospitals, 2011–12**

Funding source	Rehabilitation	Palliative	Other sub- and non-acute care	Total
<b>Public hospitals</b>				
Public patients <sup>(a)</sup>	72,300	23,448	41,910	137,658
Private health insurance	16,026	5,366	8,149	29,541
Self-funded	707	664	275	1,646
Workers compensation	583	47	28	658
Motor vehicle third party personal claim	1,433	5	172	1,610
Department of Veterans' Affairs	4,190	1,713	4,237	10,140
Other <sup>(b)</sup>	323	17	333	673
<i>Total public hospitals</i>	<i>95,562</i>	<i>31,260</i>	<i>55,104</i>	<i>181,926</i>
<b>Private hospitals</b>				
Public patients <sup>(a)</sup>	855	2,248	401	3,504
Private health insurance	182,447	2,805	6,552	191,804
Self-funded	8,017	23	97	8,137
Workers compensation	8,360	11	55	8,426
Motor vehicle third party personal claim	1,089	48	3	1,140
Department of Veterans' Affairs	24,378	531	1,882	26,791
Other <sup>(b)</sup>	1,741	211	36	1,988
<i>Total private hospitals</i>	<i>226,887</i>	<i>5,877</i>	<i>9,026</i>	<i>241,790</i>
<b>Total</b>	<b>322,449</b>	<b>37,137</b>	<b>64,130</b>	<b>423,716</b>

(a) *Public patients* includes separations for Medicare eligible patients who elected to be treated as a public patient and separations with a funding source of *Reciprocal health care agreements*, *Other hospital or public authority* (with a *Public patient* election status) and *No charge raised* (in public hospitals). The majority of separations with a funding source of *No charge raised* in public hospitals were in Western Australia, reflecting that some public patient services were funded through the Medicare Benefits Schedule.

(b) *Other* includes separations with a funding source of *Other compensation*, *Department of Defence*, *Correctional facilities*, *Other hospital or public authority* (without a *Public patient* election status), *Other*, *No charge raised* (in private hospitals) and not reported.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

## How was the care completed?

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

In 2011–12, the most common mode of separation for sub- and non-acute separations was *Other* (76%), which includes discharge to usual residence/own accommodation/welfare institution (Table 11.23). Over 4% of separations ended with *Discharged or transferred to a residential aged care service* and a further 5% were transferred to another hospital.

*Other* was reported as the separation mode for 91% of private hospital separations for sub- and non-acute care, compared with 56% for public hospitals.

For public hospitals, about 10% of sub- and non-acute separations ended with a *Discharge/transfer to an(other) acute hospital* and a further 10% ended with a *Statistical discharge: type change* (indicating that the patient remained in hospital but the intent of care had changed).

**Table 11.23: Sub- and non-acute separations, by mode of separation, public and private hospitals, 2011–12**

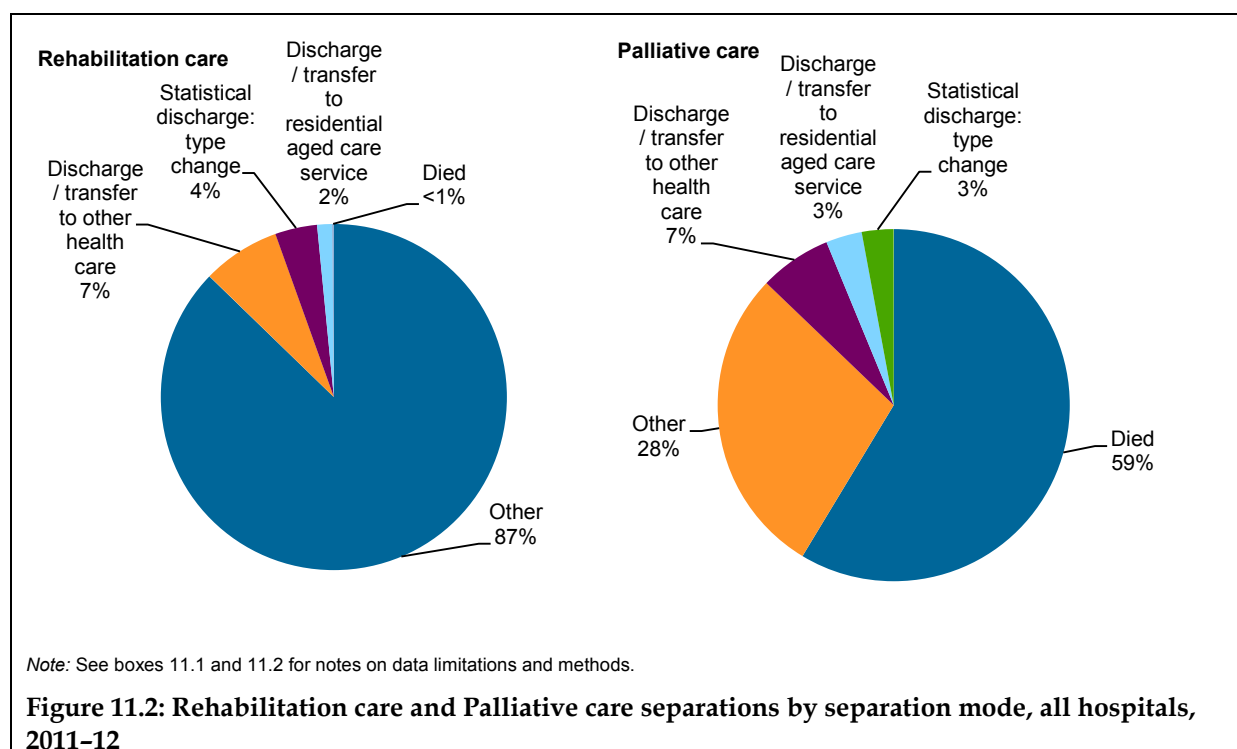
Separation mode	Public hospitals	Private hospitals	Total
Discharge/transfer to an(other) acute hospital	17,844	3,668	21,512
Discharge/transfer to residential aged care service <sup>(a)</sup>	16,280	1,908	18,188
Discharge/transfer to an(other) psychiatric hospital	238	8	246
Discharge/transfer to other health-care accommodation	3,842	9,697	13,539
Statistical discharge: type change	18,741	2,628	21,369
Left against medical advice/discharge at own risk	1,087	255	1,342
Statistical discharge from leave	960	10	970
Died	20,218	3,733	23,951
Other <sup>(b)</sup>	102,711	219,882	322,593
<b>Total</b>	<b>181,926</b>	<b>241,790</b>	<b>423,716</b>

(a) The separation mode *Discharge/transfer to residential aged care service* excludes where this was the usual place of residence.

(b) The separation mode *Other* includes *Discharge to usual residence/own accommodation/welfare institution (including prisons, hostels and group homes providing primarily welfare services)*.

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

There was some variation in the mode of separation by type of sub- and non-acute care. For example, for *Rehabilitation care*, 87% of separations reported a mode of separation of *Other*, compared with 28% of separations for *Palliative care*. About 59% of *Palliative care* separations had a mode of separation of *Died* (Figure 11.2).



**Table 11.24: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, public hospitals, states and territories, 2011-12**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A00-B99	Certain infectious and parasitic diseases	418	470	181	60	55	14	36	11	1,245
C00-D48	Neoplasms	8,601	5,198	4,792	884	991	258	389	163	21,276
D50-D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	114	166	119	24	35	10	12	3	483
E00-E89	Endocrine, nutritional and metabolic diseases	254	435	200	50	56	n.p.	46	n.p.	1,055
F00-F99	Mental and behavioural disorders	1,903	1,136	1,056	605	364	106	86	5	5,261
G00-G99	Diseases of the nervous system	674	1,240	560	283	186	32	48	10	3,033
I00-I99	Diseases of the circulatory system	1,758	2,545	1,226	448	219	126	171	17	6,510
J00-J99	Diseases of the respiratory system	1,475	1,925	883	267	218	64	146	28	5,006
K00-K93	Diseases of the digestive system	745	824	505	169	106	45	93	16	2,503
L00-L99	Diseases of the skin and subcutaneous tissue	214	290	130	26	38	3	20	3	724
M00-M99	Diseases of the musculoskeletal system and connective tissue	463	1,027	285	170	253	n.p.	43	n.p.	2,282
N00-N99	Diseases of the genitourinary system	623	863	370	129	98	17	53	25	2,178
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	665	1,374	423	206	392	19	50	16	3,145
S00-T98	Injury, poisoning and certain other consequences of external causes	1,700	3,127	804	393	204	96	105	16	6,445
Z00-Z99	Factors influencing health status and contact with health services	39,889	18,985	30,877	12,926	12,365	1,305	3,574	487	120,408
	Other ICD-10-AM chapters/not reported	244	56	33	24	6	2	5	2	372
<b>Total sub- and non-acute separations</b>		<b>59,740</b>	<b>39,661</b>	<b>42,444</b>	<b>16,664</b>	<b>15,586</b>	<b>2,148</b>	<b>4,877</b>	<b>806</b>	<b>181,926</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.25: Sub- and non-acute separations, by principal diagnosis in ICD-10-AM chapters, private hospitals, states and territories, 2011–12**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
C00–D48	Neoplasms	346	564	1,590	1,866	207	n.p.	n.p.	n.p.	4,662
F00–F99	Mental and behavioural disorders	4	4,653	871	71	3	n.p.	n.p.	n.p.	5,630
G00–G99	Diseases of the nervous system	3	630	50	49	10	n.p.	n.p.	n.p.	762
I00–I99	Diseases of the circulatory system	20	29	115	420	19	n.p.	n.p.	n.p.	617
J00–J99	Diseases of the respiratory system	26	21	98	316	9	n.p.	n.p.	n.p.	483
K00–K93	Diseases of the digestive system	27	13	55	73	13	n.p.	n.p.	n.p.	185
M00–M99	Diseases of the musculoskeletal system and connective tissue	n.p.	7	21	102	10	n.p.	n.p.	n.p.	149
N00–N99	Diseases of the genitourinary system	10	12	34	52	8	n.p.	n.p.	n.p.	121
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	56	122	23	44	9	n.p.	n.p.	n.p.	262
S00–T98	Injury, poisoning and certain other consequences of external causes	n.p.	8	15	114	5	n.p.	n.p.	n.p.	158
Z00–Z99	Factors influencing health status and contact with health services	141,188	19,228	35,589	2,950	21,743	n.p.	n.p.	n.p.	228,514
	Other ICD-10-AM chapters/not reported	24	42	53	89	20	n.p.	n.p.	n.p.	247
<b>Total sub- and non-acute separations</b>		<b>141,708</b>	<b>25,329</b>	<b>38,514</b>	<b>6,146</b>	<b>22,056</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>241,790</b>

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.26: Procedures<sup>(a)</sup> reported for sub- and non-acute separations, by ACHI chapter, public hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86 Procedures on nervous system	111	57	61	71	39	n.p.	15	n.p.	360
300–333 Procedures on ear and mastoid process	21	23	33	20	12	3	n.p.	n.p.	114
450–490 Dental services	32	4	75	17	3	3	3	3	140
520–570 Procedures on respiratory system	269	145	220	107	67	10	27	15	860
600–777 Procedures on cardiovascular system	70	31	41	28	26	n.p.	n.p.	3	202
850–1011 Procedures on digestive system	403	238	266	141	133	12	29	19	1,241
1040–1129 Procedures on urinary system	705	298	218	172	86	13	47	38	1,577
1360–1579 Procedures on musculoskeletal system	266	215	111	150	78	17	9	8	854
1600–1718 Dermatological and plastic procedures	297	1,130	246	116	70	21	28	7	1,915
1786–1799 Radiation oncology procedures	260	156	60	13	9	11	41	26	576
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	52,286	33,680	28,947	14,687	13,025	1,644	4,387	499	149,155
1940–2016 Imaging services	232	21	36	20	3	n.p.	11	n.p.	325
Other ACHI chapters	116	55	51	38	14	5	18	7	304
<i>Separations with procedures</i>	<i>52,561</i>	<i>33,729</i>	<i>29,083</i>	<i>14,714</i>	<i>13,057</i>	<i>1,655</i>	<i>4,401</i>	<i>518</i>	<i>149,718</i>
No procedure or not reported	7,179	5,932	13,361	1,950	2,529	493	476	288	32,208
<b>Total sub- and non-acute separations</b>	<b>59,740</b>	<b>39,661</b>	<b>42,444</b>	<b>16,664</b>	<b>15,586</b>	<b>2,148</b>	<b>4,877</b>	<b>806</b>	<b>181,926</b>

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

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

**Table 11.27: Procedures<sup>(a)</sup> reported for sub- and non-acute separations, by ACHI chapter, private hospitals, states and territories, 2011–12**

Procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1–86 Procedures on nervous system	100	20	55	54	6	n.p.	n.p.	n.p.	243
520–570 Procedures on respiratory system	11	28	51	45	5	n.p.	n.p.	n.p.	141
850–1011 Procedures on digestive system	48	24	84	113	31	n.p.	n.p.	n.p.	310
1040–1129 Procedures on urinary system	49	26	79	42	16	n.p.	n.p.	n.p.	226
1360–1579 Procedures on musculoskeletal system	89	54	90	118	20	n.p.	n.p.	n.p.	387
1600–1718 Dermatological and plastic procedures	153	25	63	92	19	n.p.	n.p.	n.p.	367
1820–1922 Non-invasive, cognitive and other interventions, n.e.c.	137,703	21,451	36,182	5,073	21,786	n.p.	n.p.	n.p.	230,157
1940–2016 Imaging services	25	n.p.	66	n.p.	18	n.p.	n.p.	n.p.	125
Other ACHI chapters	36	n.p.	65	n.p.	41	n.p.	n.p.	n.p.	251
<i>Separations with procedures</i>	<i>138,214</i>	<i>21,656</i>	<i>36,735</i>	<i>5,623</i>	<i>21,942</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>232,207</i>
No procedure or not reported	3,994	3,875	2,308	1,032	261	n.p.	n.p.	n.p.	11,540
<b>Total sub- and non-acute separations</b>	<b>141,708</b>	<b>25,329</b>	<b>38,514</b>	<b>6,146</b>	<b>22,056</b>	<b>n.p.</b>	<b>n.p.</b>	<b>n.p.</b>	<b>241,790</b>

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

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

Note: See boxes 11.1 and 11.2 for notes on data limitations and methods.

# Appendix A: Database quality statement summaries

This appendix includes data quality summaries and additional detailed information relevant to interpretation of the:

- National Hospital Morbidity Database (NHMD)
- National Public Hospital Establishments Database (NPHED)
- National Elective Surgery Waiting Times Data Collection (NESWTDC)
- National Non-admitted Patient Emergency Department Care Database (NNAPEDCD)
- National Outpatient Care Database (NOCD)
- National *Staphylococcus aureus* bacteraemia Data Collection (NSABDC).

This appendix also contains information on variation in the categorisation of public and private hospitals, and other changes in hospital reporting that may affect interpretation of the data presented in this report.

Complete data quality statements for these databases are available online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## 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 list of such hospitals is in Table A1 with information on how they are reported. The categorisations listed are those used for this report; reports produced by other agencies may categorise these hospitals differently.

For example, Peel and Joondalup hospitals are private hospitals that predominantly treat public patients under contract to the Western Australian Department of Health. From 2006–07, two new reporting units (public hospitals) were created to cover the public health services of these two hospitals, whereas in previous years all activity was reported for the private hospitals.

Another example is the Hawkesbury District Health Service, which was categorised as a private hospital until 2002–03 and has been categorised as a public hospital in AIHW reports since 2003–04.

Lists of all public and private hospitals contributing to this report are in tables A.S1 and A.S2 accompanying this report online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.



**Table A1: Hospitals included in this report that predominantly provide public hospital services that were privately owned and/or operated, 2011–12**

<b>Hospital</b>	<b>How reported</b>
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, Qld	Public hospital
Joondalup Health Campus, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Peel Health Campus, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Southern Districts War Memorial Private Hospital, SA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
May Shaw District Nursing Centre, Tas	Public hospital
Toosey Hospital, Tas	Public hospital
Mersey Community Hospital	Public hospital

## **Mersey Community Hospital**

The Mersey Community Hospital in Tasmania was a public hospital from 2004–05 until the end of October 2007. The Australian Government assumed administration of it in November 2007, predominantly providing public hospital services between November 2007 and June 2012. 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 2012; 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.

## **National Hospital Morbidity Database**

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals.

The data supplied are based on the National Minimum Data Set (NMDS) for Admitted patient care and include demographic, administrative and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

The purpose of the NMDS for Admitted patient care is to collect information about care provided to admitted patients in Australian hospitals. The scope of the NMDS is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free-standing day hospital facilities and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections

authorities and in Australia's off-shore territories are not in scope but some are included.

The reference period for this data set is 2011–12. The data set includes records for admitted patient separations between 1 July 2011 and 30 June 2012.

## Summary of key issues

- The NHMD is a comprehensive dataset that has records for all separations of admitted patients from essentially all public and private hospitals in Australia.
- A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the NHMD.
- For 2011–12, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private day hospital facilities in the ACT and the single private free-standing day hospital facility in the NT.
- Hospitals may be re-categorised as public or private between or within years (see above).
- There is apparent variation between states and territories in the use of statistical discharges and associated assignment of care types.
- There was variation between states and territories in the reporting of separations for *Newborns* (without qualified days):
  - For 2011–12, private hospitals in Victoria did not report most *Newborn* episodes without qualified days, therefore the count of newborn episodes will be underestimated.
  - South Australian private hospitals are not required to provide records for *Newborn* episodes without qualified days.
  - For Tasmania, where a newborn's qualification status was considered qualified at any point during the episode of care, the entire episode was reported as qualified days. As a consequence, the average length of stay for *Newborn* episodes with qualified days only in Tasmanian public hospitals is not directly comparable with that in other states.
  - The private hospital in the Northern Territory reported separations for *Newborn* episodes with qualified days that may not have involved qualified care.
- 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 2011–12, about 20% of separations for Australian Capital Territory hospitals were for patients who resided in New South Wales.
- Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions.
- Caution should be used in comparing diagnosis, procedure and external cause data over time, as the classifications and coding standards for those data can change over time. In particular, between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes and obstetrics and for reporting imaging procedures.

- The Indigenous status data are of sufficient quality for statistical reporting purposes for all hospitalisations. An estimated 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12. Based on the results of the survey data a correction factor of 1.09 was calculated, suggesting that the ‘true’ number of Indigenous persons should be about 9% higher than indicated in the hospital record (AIHW forthcoming).

The list of public hospitals that contributed to the NHMD in 2011–12 is in Table A.S1, which accompanies this report online.

## National Public Hospital Establishments Database

The National Public Hospital Establishments Database (NPHEd) is based on the National Minimum Data Set (NMDS) for Public hospital establishments. It holds establishment-level data for each public hospital in Australia, including public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all states and territories. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by correctional authorities for example, and hospitals located in offshore territories) are not included. The collection does not include data for private hospitals.

The purpose of the NMDS for Public hospital establishments is to collect information on the characteristics of public hospitals and summary information on non-admitted services provided by them. Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure (including depreciation), non-appropriation revenue and services to non-admitted patients.

The reference period for this data set is 2011–12.

### Summary of key issues

- Essentially all public hospitals were included for 2011–12.
- Differences in counting and classification practices across jurisdictions may affect the comparability of these data. There was variation between states and territories in the reporting of expenditure, depreciation, available beds, staffing categories and outpatient occasions of service.
- The number of hospitals reported can be affected by administrative and/or reporting arrangements and is not necessarily a measure of the number of physical hospital buildings or campuses.
- Comparability of bed numbers can be affected by the range and types of patients treated by a hospital (casemix), with, for example, different proportions of beds being available for special and more general purposes.
- Data supply issues in Victoria have resulted in significant under-reporting of non-admitted occasions of service in 2011–12 for *Dental*, *Mental health*, and *Community health*. Consequently, 2011–12 data for Victoria are not directly comparable with previous years.

- For 2011–12, Tasmania were not able to provide outpatient care data for one *Principal referral* hospital, which reported about 180,000 occasions of service to the NPHED in 2010–11.

The list of public hospitals that contributed to the NPHED is available in Table A.S1, which accompanies this report online.

## National Outpatient Care Database

The National Outpatient Care Database (NOCD) is based on the National Minimum Data Set for Outpatient care (OPC NMDS). It contains aggregate data on services provided to non-admitted, non-emergency patients registered for care in outpatient clinics of public hospitals including data on the type of outpatient clinic and counts of individual and group occasions of service.

The scope of the NOCD covers public hospitals that are classified as either peer group A or B (*Principal referral and specialist women's and children's* hospitals or *Large* hospitals) in the *Australian hospital statistics* publication from the preceding financial year.

The reference period for this data set is 2011–12. The data set includes records for outpatient care occasions of service provided between 1 July 2011 and 30 June 2012.

### Summary of key issues

- While the scope of the NOCD covers public hospitals in public hospital peer groups A (*Principal referral and specialist women's and children's* hospitals) and B (*Large* hospitals), data were also provided by some states and territories for hospitals in peer groups other than A and B:
  - Western Australia provided data for 3 *Medium* hospitals, 2 *Small remote acute* hospitals, 1 *Small non-acute* hospital and 1 *Rehabilitation* hospital
  - South Australia provided data for 1 *Medium* hospital
  - Tasmania provided data for 1 *Medium* hospital.
- For 2011–12, the proportion of outpatient occasions of service reported to the NOCD was estimated as 98% for public hospitals in peer groups A and B and 79% for all public hospitals.
- The data in the NOCD are not necessarily representative of the hospitals not included in the NOCD. Hospitals not included do not necessarily have outpatient clinics that are equivalent to those in hospitals in peer groups A and B.
- The data collection does not include care provided to non-admitted patients in emergency departments.
- Although the NOCD is a valuable source of information on services provided to non-admitted, non-emergency patients, the data have limitations. For example, there is variation in admission practices between states and territories and there is variation in the types of services provided for non-admitted patients in a hospital setting.
- Over the 2 reporting periods 2010–11 and 2011–12, the reporting of outpatient clinic care for some jurisdictions was changed in order to align with the reporting requirements for Activity Based Funding. These changes included: the

discontinuation of reporting for some activity; the commencement of reporting for some activity; the re-categorisation of some clinics according to the Tier 2 clinics structure (IHPA 2011). Therefore, these data may not be comparable with data reported for previous years.

- Data supply issues in Victoria have resulted in significant under-reporting of non-admitted occasions of service in 2011–12 for *Dental, Mental health, and Community health*. Consequently, 2011–12 data for Victoria are not directly comparable with previous years.
- For Western Australia, counts of outpatient group sessions reported to the NOCD reflect the number of individuals who attended group sessions. The data for Western Australian group sessions are therefore not directly comparable with the data provided for group sessions presented for other states and territories.
- For 2011–12, Tasmania were not able to provide outpatient care data for one *Principal referral* hospital, which reported about 134,000 occasions of service to the NOCD in 2010–11.

The list of public hospitals that contributed to the NOCD in 2011–12 is in Table A.S1, which accompanies this report online.

## National Non-Admitted Patient Emergency Department Care Database

The 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 (NAPEDC).

The scope of this NMDS is non-admitted patients registered for care in emergency departments in selected public hospitals that are classified as either peer group A or B (*Principal referral and specialist women's and children's hospitals or Large hospitals*) in the *Australian hospital statistics* publication from the preceding financial year.

### Summary of key issues

- Some states and territories also provided data for public hospitals that were classified to peer groups other than A or B. Data were also provided for:
  - 23 *Medium* hospitals, 20 *Small* hospitals and 9 *Unpeered/Other* hospitals in New South Wales
  - 6 *Medium* hospitals in Victoria
  - 4 *Medium* hospitals in Queensland
  - 3 *Small remote acute* hospitals in Western Australia
  - 7 *Medium* hospitals and 1 *Small remote acute* hospital in South Australia
  - 1 *Medium* hospital in Tasmania
  - 3 *Small remote acute* hospitals in the Northern Territory.
- For 2011–12, the proportion of occasions of service in emergency departments reported to the NNAPEDCD was estimated to account for 84% of all emergency occasions of service in public hospitals.

- The data collection does not include care provided to admitted patients in emergency departments.
- Although there are national standards for data on non-admitted patient emergency department services there are some variations in how those services are defined and counted across states and territories and over time. For example, there is variation in:
  - the point at which the commencement of clinical care is reported
  - the point at which the emergency department presentation is reported as completed for those patients subsequently admitted within the emergency department and/or elsewhere in the hospital.
- The quality of the data reported for Indigenous status has not been formally assessed; therefore, caution should be exercised when interpreting these data.

The list of public hospitals that contributed to the NNAPEDCD in 2011–12 is in Table A.S1, which accompanies this report online.

## Variation in reporting

### Triage category

The proportion of presentations by triage category varied by state and territory. New South Wales had the highest proportion of presentations that were *Non-urgent* (13.8%) and South Australia had the highest proportions of presentations that were *Resuscitation* or *Emergency* (1.2% and 12.2%, respectively) (Table A2). This may reflect different triage categorisation, differing mixes of patients or both.

**Table A2: Proportion of *Emergency presentations* by triage category, public hospital emergency departments, states and territories, 2011–12**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	0.6	0.5	0.8	0.7	1.2	0.5	0.4	0.5	0.7
Emergency	9.5	9.1	11.5	11.2	12.2	7.7	10.9	7.4	10.1
Urgent	31.5	32.7	42.0	32.2	36.0	33.8	33.4	28.7	34.2
Semi-urgent	44.3	47.5	40.1	48.2	43.3	48.0	44.4	54.2	44.9
Non-urgent	13.8	10.2	5.6	7.6	7.3	10.0	10.8	9.1	10.0
<b>Total<sup>(a)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

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

Note: Refer to boxes 2.1, 2.2 and 2.3 for more information on terminology, data limitations and methods of analysis. For information on *Emergency presentations* by triage category and peer group for states and territories, see Table S5.1.

### Time of commencement of clinical care

The data element *Non-admitted patient emergency department service episode – service commencement time* was revised in December 2009 (for implementation in the NMDS from the 2010–11 period) to include the commencement of service by ‘other health professionals’, where provided in accordance with established clinical pathways defined by the emergency department. Previously, the time of commencement of service was recorded only when service was commenced by a medical practitioner.

There is evidence that the adoption of the revised definition was not uniform across or within jurisdictions. Therefore, there is possible variation in the recording of the

time of 'commencement of clinical care' in emergency departments. As a consequence, this may have affected the calculation of waiting times and the proportion of patients who commenced clinical care within the clinically recommended time.

### **State and territory comments on variation in time of commencement of clinical care**

For Victoria, the commencement of clinical care time is consistent with the current national definition and was implemented by the majority of hospitals for the 2010–11 period. However, a small number of hospitals may not have been able to report consistently against the definition during 2010–11 and for part of the 2011–12 reporting period.

For Western Australia, metropolitan hospitals follow the previous NAPED NMDS definition of service commencement date/time, not clinical care commencement date/time; where only times that care is commenced by a doctor or nurse practitioner are able to be included. For rural hospitals the calculation of service commencement date/time is the earlier of 'time seen by doctor' or 'time seen by nurse'. Western Australia is working towards the current definition of time of 'commencement of clinical care'; including identification of valid clinical pathways to ensure that an appropriate date/time is being collected. Work is also progressing on development of the data collection systems to enable capture of a clinical care commencement date/time for clinicians other than a doctor or nurse practitioner.

The South Australian Department for Health and Ageing has advised that the current national definition has been implemented in South Australian public hospitals.

The Tasmanian Department of Health and Human Services has advised that the current national definition has been implemented in Tasmanian public hospitals.

The Australian Capital Territory Health Directorate has advised that the current national definition has been implemented in public hospitals in the Australian Capital Territory.

For the Northern Territory, hospitals are only able to record the time that care is commenced by a doctor.

## **National Elective Surgery Waiting Times Data Collection**

The NESWTDC is based on the Elective surgery waiting times (removals data) National Minimum Data Set. It contains records for patients added to and/or removed from waiting lists for elective surgery that are managed by public acute hospitals. This may include public patients treated in private hospitals and other patients treated in public hospitals.

For 2011–12, the data collection covered most public hospitals that undertook elective surgery. Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting lists compared to other hospitals.

For 2011–12, the proportion of public hospital elective surgery covered by the NESWTDC was estimated to be 97%.

## Summary of key issues

- For 2010–11 and 2011–12, Victoria’s data does not include the Albury Base Hospital as the data were not available.
- Although there are national standards for data on elective surgery waiting times, methods to calculate waiting times have varied between states and territories and over time. For example, some states and territories vary in how they report on patients transferred from a waiting list managed by one hospital to that managed by another.
- The quality of the data reported for Indigenous status for the NESWTDC has not been formally assessed; therefore, caution should be exercised when interpreting these data.
- There is an apparent lack of comparability of clinical urgency categories among jurisdictions that may result in statistics that are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics.
- There is apparent variation in recording practices for waiting times for elective surgery for patients awaiting ‘staged’ procedures (such as follow-up care, cystoscopy or the removal of pins or plates), that may result in statistics that are not meaningful or comparable between or within jurisdictions.

The list of public hospitals that contributed to the NESWTDC in 2011–12 is in Table A.S1, which accompanies this report online.

## Variation in reporting

### Clinical urgency categorisation

Data in this report are not presented by clinical urgency category. The apparent lack of comparability of clinical urgency categories among jurisdictions may result in statistics that are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics.

In 2011–12, the proportion of patients admitted from elective surgery waiting lists who were assigned a clinical urgency category of *Category 1* was 23% for Western Australia and 41% for the Victoria. The proportion of patients admitted that were *Category 3* was 14% in Queensland and 43% in New South Wales (Table A3).



**Table A3: Number of admissions<sup>(a)</sup> from waiting lists for elective surgery, by clinical urgency category, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Number admitted</b>									
Category 1 <sup>(b)</sup>	52,113	46,763	47,046	19,206	17,666	6,148	3,449	2,813	195,204
Category 2 <sup>(c)</sup>	68,028	72,360	51,262	28,527	21,725	6,966	5,515	3,003	257,386
Category 3 <sup>(d)</sup>	91,311	34,956	16,020	34,076	25,795	2,688	2,398	1,437	208,681
<b>Total</b>	<b>211,452</b>	<b>154,079</b>	<b>114,328</b>	<b>81,809</b>	<b>65,186</b>	<b>15,802</b>	<b>11,362</b>	<b>7,253</b>	<b>661,271</b>
<b>Per cent</b>									
Category 1 <sup>(b)</sup>	25	30	41	23	27	39	30	39	30
Category 2 <sup>(c)</sup>	32	47	45	35	33	44	49	41	39
Category 3 <sup>(d)</sup>	43	23	14	42	40	17	21	20	32
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

- (a) Records with a reason for removal of *Admitted as an elective patient for the awaited procedure in this hospital or another hospital* or *Admitted as an emergency patient for the awaited procedure in this hospital or another hospital*.
- (b) Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency.
- (c) Admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency.
- (d) Admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency.

### Apparent variation in recording elective surgery waiting times for staged procedures

Currently all states and territories provide elective surgery waiting times data to the AIHW based on the NMDS for Elective Surgery Waiting Times. The NMDS includes metadata which describes ‘staged’ patients as those ‘whose medical condition will not require or be amenable to surgery until some future date; for example, a patient who has had internal fixation of a fractured bone and who will require removal of the fixation device after a suitable time’.

The AIHW has noted some apparently atypical recording practices for waiting times for elective surgery for staged patients in some public hospitals, mostly in New South Wales. For those hospitals, there were a relatively large number of records with a clinical urgency category of 3 and admitted within 5 days for 2011–12. Patients assigned a clinical urgency category of 3 typically have longer waits than patients assigned clinical urgency category 1 (admission within 30 days desirable) or category 2 (admission within 90 days desirable).

The apparent atypical reporting practices could reflect differing waiting list practices for patients awaiting staged procedures. For most staged patients, it appears that they are put on the waiting list (or reassigned to ‘ready for care’) when they are clinically ready for care, and they then wait for a date to be assigned for their surgery. However, for others, the data appear to reflect patients (once becoming clinically ready for care) only being put on the waiting list at the time that a date is assigned for their surgery.

More detailed information on this apparent variation was presented in *Australian hospital statistics 2011–12: elective surgery waiting times* (AIHW 2012d).

## National *Staphylococcus aureus* bacteraemia Data Collection (NSABDC)

The NSABDC includes counts of cases of *Staphylococcus aureus* bacteraemia (SAB) for each public hospital covered by SAB surveillance arrangements, and for private hospitals that choose to provide data. The data for public hospitals are collected in the hospital infection control arrangements by state and territory health authorities. Data on methicillin resistant and methicillin sensitive SAB (MRSA and MSSA) cases for public hospitals are reported separately at a state or territory level.

Data from the NSABDC are used for the NHA performance benchmark and performance indicator about safety and quality in hospital and related care.

If a case is associated with care provided in another jurisdiction, then it may be reported (where known) by the jurisdiction where the care associated with the SAB occurred.

Almost all cases of SAB will be diagnosed when the patient is an admitted patient. However, the intention is that cases are reported whether they were determined to be associated with admitted patient care or non-admitted patient care in public hospitals.

The count of patient days reflects the amount of admitted patient activity, but does not reflect the amount of non-admitted patient activity. The amount of hospital activity that patient days reflect varies among jurisdictions and over time because of variation in admission practices.

### Summary of key issues

- The NSABDC is a data set that includes counts of cases of SAB for each public hospital covered by SAB surveillance arrangements, and for private hospitals that choose to provide data.
- Cases of SAB have been reported by all states and territories using the nationally agreed case definition.
- There may be imprecise exclusion of some SAB cases due to the inherent difficulties in determining the origins of SAB episodes, such as those originating from private hospitals and non-hospital settings.
- For some states and territories there is less than 100 per cent coverage of public hospitals.
- The data for 2011–12 are comparable with the revised data for 2010–11 as published in *Australian hospital statistics 2011–2012: Staphylococcus aureus bacteraemia in Australian public hospitals* (AIHW 2013a). Due to changes in the performance indicator specification, they are not comparable with the data published in the *Australian hospital statistics 2010–11: Staphylococcus aureus bacteraemia in Australian public hospitals* (AIHW 2011d).

# Appendix B: Technical appendix

This appendix covers:

- definitions and classifications used
- the presentation of data in this report
- information on the quality of the data, for specific analyses (where this may affect interpretation)
- analysis methods.

## Definitions

If not otherwise indicated, data elements were defined according to the definitions in the *National health data dictionary, version 16* (NHDD) (AIHW 2012f) (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.

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 Australian Refined Diagnosis Related Groups (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 2011 and for 31 December 2011 (see tables B.S1 to B.S3 accompanying this report online) were used for the observed rates as detailed below:

- Separation rates (by hospital state and by residence state) were directly age standardised, using the estimated resident populations as at 30 June 2011. The estimated resident populations use a highest age group of 85 and over.
- Separation rates by Indigenous status were directly age-standardised, using the projected Indigenous population (low series) as at 30 June 2011 and the estimated resident populations as at 30 June 2011. As the projected estimates use a highest age group of 65 and over and population data for June 2011, 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 2011. The estimated resident populations use a highest age group of 85 and over.
- The crude population rates presented in some tables (for example, average available beds per 1,000 population) were calculated using the population estimates for 31 December 2011.

### 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:

$$\text{Standardised separation rate ratio (SRR)} = \frac{\text{observed rate}}{\text{expected rate}}$$

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 of area of residence, 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.

### **Median and 90th percentiles**

The 50th percentile (the median or the middle value in a group of data arranged from lowest to highest value for days (or minutes) waited) represents the amount of time within which 50% of patients were admitted (or commenced clinical care); 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 (or minutes) within which 90% of patients were admitted (or commenced clinical care).

The 50th percentile and 90th percentile waiting times are calculated using an empirical distribution function with averaging. Using this method, observations are sorted in ascending order.

The calculation is where:

$n$  is the number of observations and

$p$  is the percentile value divided by 100,

then  $n \times p = i + f$  (where  $i$  is an integer and  $f$  is the fractional part of  $n \times p$ ).

If  $n \times p$  is an integer, then the percentile value will correspond to the average of the values for the  $i^{\text{th}}$  and  $(i+1)^{\text{th}}$  observations.

If  $n \times p$  is not an integer, then the percentile value will correspond to the value for the  $(i+1)^{\text{th}}$  observation.

For example, if there were 100 observations, the median waiting time will correspond to the average waiting time for the 50th and 51st observations (ordered according to waiting time). Similarly, the 90th percentile will correspond to the average waiting time for the 90th and 91st observations if there are 100 observations.

If there were 101 observations, then the median waiting time will correspond to the waiting time for the 51st observation and the 90th percentile waiting time will correspond to the waiting time for the 91st observation.

The 50th and 90th percentiles have been rounded to the nearest whole number of days or minutes.

## 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 B1):

- 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 B1: Numbers of public hospitals reported in this report, states and territories, 2011–12**

Hospitals	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(a)</sup>	NT	Total
Chapter 3 (expenditure data)	225	104	170	96	80	23	3	5	706
Chapter 4	225	151	170	96	80	23	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 4, but is not included in the cost per casemix-adjusted separation analysis presented in Chapter 3.

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 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**

### **Estimated proportion of emergency services**

The estimated proportion of emergency occasions of service covered by the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) data is calculated as the number of presentations reported to the NNAPEDCD divided by the number of emergency occasions of service reported to the NPHED, as a percentage.

### **Waiting time statistics calculations**

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) are not presented for patients with a type of visit other than *Emergency presentation*.

### **Waiting time to commencement of clinical care**

The waiting times are determined as the time elapsed between presentation in the emergency department and the commencement of clinical care. The calculation is restricted to presentations with a type of visit of *Emergency presentation*. In addition, presentations were excluded if the waiting time was missing or invalid or the patient *Did not wait* to be attended by a health care professional, or was *Dead on arrival*.

Approximately 48,000 records for which a valid waiting time could not be calculated due to missing or incorrect values (for example, for time of presentation or commencement of clinical care) were not used to derive waiting time statistics.

The 50th percentile represents the amount of time within which 50% of patients commenced clinical care; half the waiting times will have been shorter, and half the waiting times longer, than the median.

The 90th percentile data represent the number of minutes within which 90% of patients commenced clinical care.

### **Proportion of presentations seen on time**

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 National Triage Scale definition. The calculation is restricted to presentations with a type of visit of *Emergency presentation*. In addition, 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 the triage category was *Not reported*.

### **Emergency department length of stay statistics calculations**

Length of stay statistics are calculated for all emergency department *Type of visit* categories.

### **Waiting time for admission**

The length of stay is determined as the time elapsed between presentation and the physical departure of the patient.

### **Proportion of emergency department presentations completed in 4 hours or less**

The proportion of presentations completed in 4 hours or less is determined as the proportion of all emergency presentations with time elapsed between the presentation and the physical departure of the patient of less than or equal to 240 minutes.

Presentations were excluded if either (or both) of the presentation date/time or physical departure date/time were missing or invalid, or if the calculation resulted in an invalid length of stay (that is, missing or negative number of minutes).

### **Proportion of presentations ending in admission**

The proportion of presentations ending in admission is determined as the proportion of all emergency presentations with an episode end status of *Admitted to this hospital*. The calculation is restricted to presentations with a type of visit of *Emergency presentation*.

## **Admitted patient care data analyses**

Records for 2011–12 are for hospital separations (discharges, transfers, deaths or changes in care type) in the period 1 July 2011 to 30 June 2012. Data on patients who were admitted on any date before 1 July 2011 are included, provided that they also separated between 1 July 2011 and 30 June 2012. A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the NHMD.

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 2011 to 30 June 2012), 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 2011–12, but who were admitted before 1 July 2011, will be counterbalanced overall by the patient days for patients in hospital on 30 June 2012 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 2011–12:

- New South Wales reported over 36,000 separations for *Newborn* care with qualified days. This was an increase of 133% compared with the number of separations reported for this care in 2010–11.
- The private hospital in the Northern Territory reported separations for *Newborn* episodes with qualified days that may not have involved qualified care.

Information on reporting practices for *Newborn* episodes before 2011–12 is available in previous *Australian hospital statistics* reports.

### **Counts of separations by groups of diagnoses, procedures and external causes**

For tables with counts of separations by groups of diagnoses, procedures or external causes, a separation is counted once for the group if it has at least one diagnosis/procedure/external cause reported within the group. As more than one diagnosis, procedure or external cause can be reported for each separation, the data are not additive and therefore the totals in the tables may not equal the sum of counts in the rows.

### **Counts of procedures**

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

### **Broad categories of service**

Separations have been categorised as *Childbirth*, *Specialist mental health*, *Medical*, *Surgical* or *Other* based mainly on the AR-DRG recorded for the separation:

- *Childbirth*: separations for which the AR-DRG was associated with childbirth (does not include newborn care). Includes separations for childbirth for which specialised psychiatric care days were reported.
- *Specialist mental health*: separations for which specialised psychiatric care days were reported. Excludes separations for *Childbirth* that also reported specialised psychiatric care days.
- *Surgical*: separations for which the AR-DRG belonged to the *Surgical* partition (involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.
- *Medical*: separations for which the AR-DRG belonged to the *Medical* partition (not involving an operating room procedure), excluding separations for *Childbirth* and *Specialist mental health*.

- *Other*: separations for which the AR-DRG did not belong to the *Surgical* or *Medical* partitions (involving a non-operating room procedure, such as endoscopy), excluding separations for *Childbirth* and *Specialist mental health*.

For Chapter 7, broad categories of service are presented for *standard admitted patient care data analyses*. For chapters 8, 9, and 10, broad categories of service are presented for *acute admitted patient care data analyses*.

### **Standard admitted patient care data analyses**

For chapters 7 and 2, the counts of separations do not include separations for *Newborns* (without qualified days) and records for *Hospital boarders* or *Posthumous organ procurement*, and the patient days are also not included for those records. In addition, patient days for *Newborns* that were not qualified days are excluded from the counts of patient days. For more information on these exclusions, see below.

### **Acute admitted patient care data analyses**

For chapters 8, 9 and 10, and for tables in other chapters that include AR-DRGs and/or cost weight information, separations are included only for *Acute care*, *Newborns* (with qualified days) or where care type was not reported. Patient days for *Newborns* that were not qualified days are excluded from the counts of patient days.

### **Same-day acute admitted patient care data analyses**

For Chapter 8, records are included if the patient had a care type of *Acute*, *Newborn* (with qualified days), or the care type was not reported, and the patient was admitted and separated on the same date.

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.

### **Separations involving surgery**

For Chapter 10, separations involving surgery are defined as acute separations with a 'surgical procedure' reported, based on the procedures used to define 'surgical' AR-DRGs in AR-DRG version 6.0x (DoHA 2010). Separations for *Specialist mental health* care and *Childbirth* were excluded (see Chapter 10).

Separations involving surgery are further disaggregated in Chapter 10 based on the reported urgency of admission as:

- *Emergency admissions involving surgery* – includes separations for which the urgency of admission was reported as *Emergency* (about 295,000 records nationally).
- *Elective admissions involving surgery* – includes separations for which the urgency of admission was reported as *Elective* (about 2.0 million records nationally).

Separations involving surgery for which the urgency of admission was *Not assigned* or not reported are only included in the first table of Chapter 10 (about 27,000 records nationally).

### **Sub- and non-acute admitted patient care data analyses**

For Chapter 11, records are included if the patient had a care type of *Rehabilitation care, Palliative care, Geriatric evaluation and management, Psychogeriatric care* or *Maintenance care*. It includes both same-day and overnight separations for sub- and non-acute care.

### **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, the funding source for the separation has been presented alone. Throughout this report, the category *Public patients* includes separations for which the funding source was reported as:

- Medicare eligible public patients, not charged (see below)
- *Reciprocal health care agreements*
- *No charge raised in public hospitals*
- *Other hospital or public authority* with a patient election status of *Public* (regardless of hospital sector).

It should be noted that although the funding source *Australian Health Care Agreements* was a value in the NHDD definition for 'Principal source of funds' for 2011–12, the Australian Health Care Agreements expired on 30 June 2009. This value is interpreted as the patient being Medicare eligible, elected to be treated as a public patient and was not charged.

In tables presenting information by funding source, the category *Other* includes separations for which the funding source was reported as:

- *Other compensation*
- *Department of Defence*
- *Correctional facility*
- *Other hospital or public authority* with a patient election status of *Private* (or not reported)
- *No charge raised* (in private hospitals)
- *Other*.

### **ICD-10-AM codes used for selected analyses**

A number of tables in this report use ICD-10-AM/ACHI codes to define diagnoses and procedures. The codes are presented in tables B.S4 to B.S8 accompanying this report online and relate to:

- adverse events (Chapter 3)
- unplanned/unexpected readmissions (Chapter 3)
- selected procedures (Chapter 3)

- selected AR-DRGs (Chapter 3)
- potentially preventable hospitalisations (Chapter 7).

## National elective surgery waiting times data analyses

### Estimated coverage of elective surgery

The estimated proportion of elective surgical separations covered by the National Elective Surgery Waiting Times Data Collection (NESWTDC) data is calculated as the number of elective admissions reported to the NESWTDC divided by the number of elective surgical separations (separations with an *Elective* urgency of admission and a *Surgical* AR-DRG) reported to the NHMD, as a percentage.

### Elective surgery care and elective surgical separations

The definition of elective surgery care for the purposes of the NESWTDC, and the definition of separations described as *elective admissions involving surgery* in the NHMD differ. In particular, the procedures defined as surgical differ between those used to define the scope of the NESWTDC and those used to define surgical separations in the NHMD.

For the NESWTDC, elective surgery comprises elective care where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (AIHW 2012f).

### Median and 90th percentile waiting times

The waiting times data presented in this report are for patients who complete their wait and are admitted for their surgery as either an elective or emergency admission. In previous reports this information was presented for elective admissions only. Therefore, the data presented are not directly comparable with the data reported in previous years.

The 50th percentile represents the number of days within which 50% of patients were admitted for the awaited surgery; 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 for the awaited surgery.

## Expenditure and revenue

### Constant prices

Constant price expenditure adjusts current prices for the effects of inflation, that is, it aims to remove the effects of inflation. Hence, expenditures in different years can be compared on a dollar-for-dollar basis, using this measure of changes in the volume of health goods and services.

Constant price estimates for expenditure aggregates have been derived in terms of prices in the reference year 2011–12 with the ABS Government Final Consumption Expenditure, State and Local– Hospitals & Nursing Homes deflator used for public hospitals. The ABS Household Final Consumption Expenditure Hospital Services deflator was used for private hospitals.

## 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 2011–12 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 B2. Details of the derivation of the peer groups are in Appendix 11 of *Australian hospital statistics 1998–99* (AIHW 2000).

A flow chart can be found in *Australian hospital statistics 2002–03* (Figure A4.1 in that report) (AIHW 2004) to illustrate the assignment of peer groups for almost all hospitals. However, on the advice of jurisdictions, hospitals may be assigned a different peer group due to special circumstances, such as the opening or closing of a hospital during the year.

Although not specifically designed for purposes other than the cost per casemix-adjusted separation analysis, the peer group classification is recognised as a useful way to categorise hospitals for other purposes, including the presentation of other data. For example, the classification has been used to present emergency department presentations data in Chapter 5 and elective surgery waiting times data in Chapter 10. They have also been used to specify the scopes for national minimum data sets (NMDSs), for example, as noted in Appendix A for the NMDSs for Non-admitted patient emergency department care and Outpatient care.

The peer group to which each public hospital was assigned for 2011–12 is included in Table A.S1 (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 A.S1.

The peer groups are currently under review.

**Table B2: 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	
Unpeered and other hospitals	Other non-acute	E9	For example, geriatric treatment centres combining rehabilitation and palliative care, with a small number of acute patients.
		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.

## Quality of Indigenous status data

### Indigenous identification in hospital separations data: 2013 quality report

The 2013 AIHW report *Indigenous identification in hospital separations data–2013 quality report*, (AIHW, forthcoming) presents the latest findings on the quality of Indigenous identification in hospital separations data in Australia, based on studies conducted in public hospitals during 2011.

The results of the study indicated that, overall, the quality of Indigenous identification in hospital separations data was similar to that achieved in the previous study (AIHW 2010). However, the 2011–12 survey was performed on larger samples for each jurisdiction/region and is therefore considered more robust than the previous study.

The report recommends that the data for all jurisdictions are used in analysis of Indigenous hospitalisation rates, for hospitalisations in total in national analyses of Indigenous admitted patient care for data from 2010–11 onwards.

Based on the results of the survey data a correction factor of 1.09 was calculated, suggesting that the 'true' number of Indigenous persons should be about 9% higher than indicated in the hospital record. The correction factor is calculated based on a number of possible variables including over-identification or under-identification of Indigenous persons in the hospital record.

### Quality in 2011–12

The following information has been provided by the states and territories to provide some additional insight into the quality of Indigenous status data in the hospitals data provided to the AIHW.

#### New South Wales

The New South Wales Ministry of Health (NSW) noted that NSW had achieved an overall weighted completeness of 80% for Indigenous identification in 2011–12. The low level of completeness for hospitals in major cities (67% compared with 98% in remote areas) revealed that education in Indigenous status data collection should be focused on hospital staff in urban areas. NSW's Data Quality Audit and Assurance Program revealed that individual Local Health Districts have initiated, and are delivering, their own comprehensive programs to staff on cultural sensitivity and innovative methods of Indigenous data collection.

Indigenous status is a mandatory data item collected at all facilities that provide data for the New South Wales Emergency Department Data Collection (EDDC). Local Health Districts undertake regular audits on Aboriginal and Torres Strait Islander identification in the EDDC. NSW believes that Indigenous status data in the EDDC are of an acceptable quality.

NSW includes Indigenous status when collecting data for elective surgery waiting times (ESWL). NSW believes that Indigenous status data in the ESWL collection are of an acceptable quality.

#### Victoria

The Victorian Department of Health reports that Indigenous status data for 2011–12 is of an adequate standard for reporting, but should still be considered to under-count

the number of Aboriginal and Torres Strait Islander patients. There is a continued effort to improve the quality of this data element through data validation processes and communication channels.

### **Queensland**

The Queensland Department of Health noted that for 2011–12, Indigenous status was reported as 'not stated' for 4.0% of admitted patient separations (1.1% of public hospital separations and 7.2% of private hospital separations). The level of non-reporting of Indigenous status has continued to improve for both public and private hospitals compared to the previous financial years.

Queensland Department of Health advised that improving the completeness and coverage of Indigenous status reporting has been a key performance indicator for Queensland hospitals for the past three years.

### **Western Australia**

The Western Australian Department of Health regards its Indigenous status data as being of good quality, with 99.5% of cases having a valid Indigenous status reported in 2011–12. A recent sample survey concluded that Western Australia was collecting Indigenous status with a high degree of accuracy.

### **South Australia**

South Australia considers the quality of Indigenous status data to be acceptable for reporting and analysis purposes. The department contracted the Australian Bureau of Statistics to develop a training package for the collection of Indigenous identifier aimed at frontline staff in hospitals and other healthcare units. The package is based on the best practice guidelines developed by the AIHW. A state-wide training program was completed in 2011. More than 430 staff attended training sessions in 40 locations spread throughout the state. A second training program commenced in late 2012 and is expected to be completed by mid-2013.

### **Tasmania**

The Tasmanian Department of Health and Human Services reports that the quality and the level of Indigenous status identification, across public hospital information collections, are of a high standard. However, as with all data collections, there is constant and continued work on maintaining and improving, where needed, the collection of this data element.

### **Australian Capital Territory**

The Australian Capital Territory Government Health Directorate is continuing to undertake a number of initiatives aligned with local and national developments to improve the quality of collection and reporting of Aboriginal and Torres Strait Islander data.

### **Northern Territory**

The Northern Territory Department of Health participated in the national review of the quality of demographic data, coordinated by AIHW, in 2011. Indigenous status was found to be accurately recorded in 98% of admitted patients, consistent with findings from previous surveys in 1997 and 2008. The department retains historical reporting of Indigenous status. All management and statistical reporting, however, is based on a person's most recently reported Indigenous status.



## Data on geographical location

Data on geographical location are collected on hospitals in the NPHEd and on the area of usual residence of patients in the NHMD and the NAPEDCD. These data have been provided as state or territory and Statistical Local Area (SLA), a small area unit within the Australian Bureau of Statistics (ABS) Australian Standard Geographical Classification (ASGC) and/or postcode, and have been aggregated to remoteness areas.

### Geographical location of hospital

The remoteness area of each public hospital was determined on the basis of its SLA. For 2011–12, the geographical location aligns with the ABS's ASGC Remoteness Structure 2006. Data on the remoteness area of hospitals are presented in Chapter 4.

The ABS's ASGC Remoteness Structure 2006 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 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 NNAPEDCD. The NHDD 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. Most states and territories were able to provide SLA codes both for patients usually resident in the jurisdiction and for patients not usually resident in the jurisdiction. South Australia 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 2011 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 2010 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 2011 SLA codes. For the remaining 0.5% of records, about 50% were for overseas residents, 8% were of no fixed abode, and the remainder not reported.

For the NNAPEDCD, most presentations included data on the area of usual residence with about 98.7% of records assigned 2011 SLA codes. For the remaining 1.3% of records, about 59% were for overseas residents, 3% 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.

The data presented in this report by remoteness areas using the ABS's ASGC Remoteness Structure 2006 are not comparable to the data presented by remoteness areas using the ABS's ASGC Remoteness Structure 2001 in *Australian hospital statistics* reports for 2001–02 to 2005–06 because of differences in the underlying calculation of the Accessibility/Remoteness Index of Australia (ARIA) scores used to determine remoteness areas. Therefore, caution should be used when making comparisons over time as the remoteness areas categories presented are not directly comparable.

### **Socioeconomic status**

The Socio-Economic Indexes For Areas 2006 (known as SEIFA 2006 (ABS 2008)) are generated by the ABS using a combination of 2006 Census data such as income, education, health problems/disability, access to Internet, occupation/unemployment, wealth and living conditions, dwellings without motor vehicles, rent paid, mortgage repayments, and dwelling size. Composite scores are averaged across all people living in areas and defined for areas based on the Census collection districts. However, they are also compiled for higher levels of aggregation including SLA. The SEIFAs are described in detail on the ABS website <[www.abs.gov.au](http://www.abs.gov.au)>.

The SEIFA Index of Relative Socio-Economic Disadvantage is one of the ABS's SEIFA indexes. The relative disadvantage scores indicate the collective socioeconomic status of the people living in an area, with reference to the situation and standards applying in the wider community at a given point in time. A relatively disadvantaged area is likely to have a high proportion of relatively disadvantaged people. However, such an area is also likely to contain people who are not disadvantaged, as well as people who are relatively advantaged.

Separation rates by socioeconomic status were generated by the AIHW using the ABS Index of Relative Socio-Economic Disadvantage (IRSD) scores for the SLA of usual residence of the patient reported for each separation. The 1 – *Lowest* SES group represents the areas containing the 20% of the population with the most disadvantage, and the 5 – *Highest* SES group represents the areas containing the 20% of the population with the least disadvantage.

The following labels for each socioeconomic group have been used throughout the report:

<b>Label</b>	<b>Socioeconomic status group</b>
1 – Lowest	Most disadvantaged
2	Second most disadvantaged
3	Middle
4	Second least disadvantaged
5 – Highest	Least disadvantaged

## **ICD-10-AM/ACHI**

Diagnosis, procedure and external cause data for 2011–12 were reported to the NHMD by all states and territories using the 7th edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2010), incorporating the *Australian classification of health interventions* (ACHI).

The tables and figures presented in chapters 7, 8, 9, 10 and 11 use the codes and abbreviated descriptions of the ICD-10-AM/ACHI classification. Full descriptions of the categories are available in the ICD-10-AM publication (NCCH 2010).

### **Diagnoses**

The ICD-10-AM disease classification is hierarchical, with a small number of summary disease chapters that are divided into a large number of more specific disease groupings (represented by 3-character codes). Most of the 3-character disease groupings can be divided into an even larger number of very specific disease categories represented by 4-character and 5-character codes.

Most of the information about principal diagnoses in chapters 7, 8, 9, 10 and 11 is presented using two methods of grouping records based on the ICD-10-AM disease classification:

- ICD-10-AM disease chapters – these 20 groups provide information aggregated at the ICD-10-AM chapter level
- 3-character ICD-10-AM groupings – 1,674 categories describe the diseases at a specific level. Detailed information is presented for the 20 groupings with the highest number of separations. Summary information is provided for all the groups (for which separations were reported) online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

### **External causes**

The external cause classification (Chapter 20 of ICD-10-AM) is hierarchical, consisting of 377 three-character categories. The information in Chapter 7 is presented by categorising the ICD-10-AM external cause codes into 16 groups to provide an overview of the reported external causes. Additional information on external causes of injury and poisoning, place of occurrence and activity when injured is available online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

## Procedures

One or more procedures can be reported for each separation, but procedures are not undertaken for all hospital admissions, so only some of the separation records include procedure data.

The procedure classification is divided into chapters by anatomical site, and within each chapter by a 'superior' to 'inferior' (head to toe) approach. These subchapters are further divided into more specific procedure blocks, beginning with the least invasive procedure through to the most invasive. The blocks, which are numbered sequentially, group the very specific procedure codes.

The procedure information is presented using three methods of grouping procedures based on the ACHI procedure classification:

- ACHI procedure chapters – these 20 groups provide information aggregated at the ACHI chapter level
- ACHI procedure blocks – these 1,601 categories describe procedures at a specific level. Detailed information is presented for the 10 groups with the highest number of separations and summary information is provided for all the groups (for which separations were reported) online at <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>
- ACHI procedures – there are over 6,300 individual procedures. Chapter 11 presents information for the most common procedures for sub- and non-acute care separations.

## Changes affecting ICD-10-AM/ACHI classifications

The 7th edition of ICD-10-AM was implemented in Australian hospitals from 1 July 2010. Three major changes to the following Australian Coding Standards (ACS) occurred between the 6th and 7th editions of this classification:

1. Deletion of ACS 1505 *Single spontaneous vaginal delivery*.
2. Addition of all procedure codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* (except trans oesophageal echocardiogram (TOE) (block [1942])) to ACS 0042 *Procedures not normally coded*. For more information see *Australian hospital statistics 2010–11* (AIHW 2012a).
3. Expansion of the instructional notes in ACS 0401 *Diabetes mellitus and Impaired glucose regulation* to emphasize that the assignment and sequencing of code(s) for diabetes mellitus or impaired glucose regulation should be determined by firstly following the criteria in ACS 0001 *Principal diagnosis* and ACS 0002 *Additional diagnoses*.

### Deletion of ACS 1505 *Single spontaneous vaginal delivery*

ACS 1505 instructed coders that the diagnosis code O80 *Single spontaneous delivery* was intended for single spontaneous vaginal deliveries without abnormality/ complication classifiable elsewhere in Chapter 15 *Pregnancy, childbirth and the puerperium* and without manipulation or instrumentation (NCCH 2008).

The deletion of ACS 1505 as a specialty standard caused obstetric cases to be coded according to ACS 0001 *Principal Diagnosis* with the specific instruction for obstetrics that:

‘Where the patient is admitted for delivery such as ‘in labour’, ‘for induction’, ‘for caesarean’, and the outcome is delivery, assign a code from category O80–O84 *Delivery* as the principal diagnosis, followed by the reason for any intervention and then any other conditions and/or complications that meet the criteria for assignment as per ACS 0002 *Additional diagnoses*.’

These changes in the standards resulted in changes in principal diagnosis assignment for obstetric episodes of care associated with vaginal delivery.

For hospitals reporting with AR-DRG versions older than version 5.2, episodes with a principal diagnosis of O80 *Single spontaneous delivery* or O83 *Other assisted delivery* would result in either an ‘error DRG’ (for versions 4.1/4.2) or a less specific AR-DRG in version 5.1, which affected private hospital funding arrangements.

Private hospitals in most states and territories delayed the implementation of reporting obstetrics according to the ICD-10-AM 7th edition coding standards until a solution was able to be implemented in the grouping of these records.

### **Effect on reporting**

From 1 July 2010, public hospitals implemented the change in obstetric coding standards and this was reflected in comparable numbers of separations being reported for the obstetric principal diagnoses O80 to O84 during the first and second halves of 2010–11. The numbers of separations for the obstetric principal diagnoses O80 to O84 reported by public hospitals in 2011–12 were similar to those reported in 2010–11.

However, implementation by some private hospitals was delayed until the second half of the 2010–11 reporting period.

For private hospitals, the reporting of obstetric principal diagnoses O80 to O84 was twice as high during the second half of 2010–11 compared to the first half of 2010–11. In 2011–12, the levels of reporting obstetric principal diagnoses O80 to O84 for both July to December 2011 and January to June 2012, were similar to the second half of 2010–11 (Table B3). This suggested that the majority of private hospitals were coding obstetric cases according to ICD-10-AM 7th edition standards from the second half of 2010–11.

**Table B3: Number of separations with obstetric<sup>(a)</sup> principal diagnoses O80–O84, public and private hospitals 2010–11 to 2011–12**

	2010–11			2011–12			Change (per cent) Jul-Dec 2010 to Jan-Jun 2011	Change (per cent) Jul-Dec 2010 to Jan-Jun 2011
	Jul-Dec 2010	Jan-Jun 2011	Total	Jul-Dec 2011	Jan-Jun 2012	Total		
<b>Public hospitals</b>								
O80 Single spontaneous delivery	60,555	62,115	122,670	57,950	60,618	118,568	2.6	–2.4
O81 Single delivery by forceps and vacuum extractor	10,624	11,241	21,865	10,937	11,486	22,423	5.8	2.2
O82 Single delivery by caesarean section	25,786	27,644	53,430	26,768	27,304	54,072	7.2	–1.2
O83 Other assisted single delivery	1,010	1,225	2,235	1,482	1,774	3,256	21.3	44.8
O84 Multiple delivery	1,283	1,354	2,637	1,319	1,411	2,730	5.5	4.2
<i>Total public hospitals (O80–O84)</i>	<i>99,258</i>	<i>103,579</i>	<i>202,837</i>	<i>98,456</i>	<i>102,593</i>	<i>201,049</i>	<i>4.4</i>	<i>–1.0</i>
<b>Private hospitals</b>								
O80 Single spontaneous delivery	5,723	15,570	21,293	15,176	15,135	30,311	172.1	–2.8
O81 Single delivery by forceps and vacuum extractor	3,366	5,773	9,139	5,775	6,021	11,796	71.5	4.3
O82 Single delivery by caesarean section	10,215	15,697	25,912	15,762	16,397	32,159	53.7	4.5
O83 Other assisted single delivery	51	194	245	202	204	406	280.4	5.2
O84 Multiple delivery	370	581	951	514	518	1,032	57.0	–10.8
<i>Total private hospitals (O80–O84)</i>	<i>19,725</i>	<i>37,815</i>	<i>57,540</i>	<i>37,429</i>	<i>38,275</i>	<i>75,704</i>	<i>91.7</i>	<i>1.2</i>
<b>All hospitals</b>								
<b>Total (O80–O84)</b>	<b>118,983</b>	<b>141,394</b>	<b>260,377</b>	<b>135,885</b>	<b>140,868</b>	<b>276,753</b>	<b>18.8</b>	<b>–0.4</b>

(a) For separations with an AR-DRG of O01A *Caesarean delivery with catastrophic or severe complications or comorbidities*, O01B *Caesarean delivery without catastrophic or severe complications or comorbidities*, O02A *Vaginal delivery with operating room procedure with catastrophic or severe complications or comorbidities*, O02B *Vaginal delivery with operating room procedure without catastrophic or severe complications or comorbidities* or O60Z *Vaginal delivery*.

## **Revised instructional notes in ACS 0401 *Diabetes mellitus and Impaired glucose regulation***

ACS 0401 for *Diabetes mellitus and Impaired glucose regulation* has undergone many changes in the last few ICD-10-AM editions. The numbers of separations reporting any diagnosis for diabetes (E10–E14) between 2007–08 and 2011–12 are presented in Table B4.

For ICD-10-AM 5th edition (used 1 July 2006 to 30 June 2008), ACS 0401 instructed coders to fully describe all complications of diabetes mellitus.

The coding practice for classifying diabetes under ICD-10-AM 6th edition (used 1 July 2008 to 30 June 2010) was largely consistent with previous editions of ICD-10-AM. However, clarification of how the coding standard for additional diagnoses (ACS 0002) should be applied under ICD-10-AM 6th edition meant that conditions would only be coded as an additional diagnosis if they were 'significant in terms of treatment required, investigations needed and resources used in each episode of care'. While this clarification resulted in a decrease in the number of conditions being coded as additional diagnoses for all separations, it had a particularly significant impact on the reporting of diabetes as an additional diagnosis for separations that involved a patient with diabetes.

The coding practice for classifying diabetes under ICD-10-AM 7th edition (from 1 July 2010) changed as a result of changes made to ACS 0401. The ACS changes resulted in a further decrease in the reporting of diabetes-related conditions between 2009–10 and 2010–11, due to the condition not meeting the criteria for being assigned as either a principal (ACS 0001) or additional diagnosis (ACS 0002).

During 2011, the National Casemix and Classification Centre's (NCCC) ICD Technical Group (NCCC ITG) and the Diagnosis Related Group Technical Group (NCCC DTG) investigated the effect of the changes to diabetes coding and recommended that 'when documented, diabetes mellitus should always be coded'. It was recommended that this change be implemented as soon as possible, and was formally to be introduced on 1 July 2012. The NCCC conducted education about the change to the standard during early 2012.

### **Effect on reporting**

Between 2007–08 and 2008–09, the numbers of diagnoses reported for diabetes and impaired glucose regulation (E09–E14) decreased by 38%, from 903,000 diagnoses in 2007–08 to 559,000 diagnoses in 2008–09 (Table B4).

Between 2009–10 and 2010–11, the numbers of diagnoses reported for diabetes and impaired glucose regulation (E09–E14) decreased by a further 38% from 533,000 diagnoses in 2009–10 to 330,000 diagnoses in 2010–11.

Between 2010–11 and 2011–12, there were increases in the numbers of diagnoses reported for diabetes (E10–E14) that may be unrelated to coding changes.

**Table B4: Diabetes mellitus and impaired glucose regulation, reporting 2007–08 to 2011–12**

	2007–08	2008–09	2009–10	2010–11	2011–12	Change (per cent)		
						2007–08 to 2008–09	2009–10 to 2010–11	2010–11 to 2011–12
E09	4,241	2,471	2,184	1,393	1,382	–41.7	–36.2	–0.8
E10	63,642	46,862	47,822	38,030	40,975	–26.4	–20.5	7.7
E11	825,041	502,947	476,856	285,870	314,002	–39.0	–40.1	9.8
E13	5,469	4,268	4,173	3,389	4,188	–22.0	–18.8	23.6
E14	4,234	2,215	1,960	1,065	1,125	–47.7	–45.7	5.6
<b>E09–E14</b>	<b>902,627</b>	<b>558,763</b>	<b>532,995</b>	<b>329,747</b>	<b>361,672</b>	<b>–38.1</b>	<b>–38.1</b>	<b>9.7</b>

E09—Impaired glucose regulation; E10—Type 1 diabetes mellitus; E11—Type 2 diabetes mellitus; E13—Other specified diabetes mellitus; E14—Unspecified diabetes mellitus; E09–E14—Impaired glucose regulation and diabetes mellitus.

Source: National Hospital Morbidity Database.

## Quality of coded data

The comparability of the coded diagnosis, procedure and external cause data can be affected by variations in the quality of the coding, the numbers of diagnoses and/or procedures reported and can also be influenced by state-specific coding standards.

The quality of coded diagnosis, procedure and external cause data can be assessed using coding audits in which, in general terms, selected records are independently recoded and the resulting codes compared with the codes originally assigned for the separation. There are no national standards for this auditing, so it is not possible to use information on coding audits to make quantitative assessments of data quality on a national basis.

The quality and comparability of the coded data can, however, be gauged by information provided by the states and territories on the quality of the data and by assessment of apparent variation in the reporting of additional diagnoses.

## State-specific coding standards

The ACSs 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 ACS, 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 ACS requires a place of occurrence code to be reported if an external cause code in the range V00–Y89 has been reported, and requires an activity when injured code to be recorded if the external cause code is in the range V00–Y34. The Western Australian coding standard requires the mandatory recording of a place of occurrence and activity when injured code for all records with a diagnosis code in the range S00–T98, regardless of the external cause code reported. The Victorian coding standard does not require the recording of external cause, place of occurrence or activity when injured for separations where the care type is *Rehabilitation care*.



## **State and territory comments on the quality of the data**

The following information has been provided by the states and territories to provide some insight into the quality of the coded data in the NHMD.

### **New South Wales**

For New South Wales, hospitals perform formal audits on ICD-10-AM coded data at a local level. Data edits are monitored regularly and consistent errors are identified and rectified by individual hospitals.

All NSW public hospital coded data is routinely processed, monitored and validated using Performance Indicators for Coding Quality (PICQ™) by the Ministry of Health and disseminated back to the Local Health Districts and individual hospitals. The data from PICQ is also used to benchmark Local Health Districts/Networks performance.

### **Victoria**

As part of a comprehensive health data integrity audit program, the Victorian Department of Health continues to conduct state-wide external audits of admitted patient data across public sites. These audits review the ICD-10-AM/ACHI coding and the application of ACSs along with some key demographic data. A total of 10,000–13,000 case records are audited within each audit cycle. The rate of AR-DRG change in records subject to audit is consistently under 10%, indicating a high quality of coding. Coded data is also validated using Performance Indicators for Coding Quality (PICQ™) with published state-wide results for both public and private hospitals.

### **Queensland**

Hospitals in Queensland conduct their own coding quality audits, and ICD-10-AM/ACHI validations are automatically executed as part of the general processing of morbidity data in the corporate data collection. Results from a corporate audit program that ran between 2006–07 and 2011–12 financial years show a change in AR-DRGs of less than 10%. The Department of Health supports the use of a state-wide coding tool to assist coding consistency. A newly formed Statewide Health Information Management Clinical Coding Network Steering Committee has been established to aid the improvement of health information management and clinical coding services state-wide and foster appropriate education and development.

### **Western Australia**

The Western Australian Department of Health conducts in-house data quality activities and regular comprehensive external audits of hospital medical records and inpatient data reporting processes. The Edit Protocol for Hospital Morbidity Data System and the Clinical Information Audit Program aims to provide assurances of data quality and integrity, promoting confidence in the use of health information by hospitals and throughout the system.

### **South Australia**

The South Australian Department for Health and Ageing completed a major audit of coding practices in 2011. The rate of AR-DRG change for metropolitan hospitals was marginally above 10%. A result of less than 10% is generally regarded as an indication of high quality coding.

The Department conducts a number of other coding improvement activities, aimed at improving compliance with national and state coding standards. For example, desktop audits of coded data are regularly run. Individual hospitals are followed-up as required and results are reported to all coders in quarterly newsletters. A coding educator has been appointed to assist hospitals in further developing their coding knowledge.

### **Tasmania**

In Tasmania, hospitals continue to conduct coding quality improvement activities using the Australian Coding Benchmark Audit tool and PICQ™. Validation of ICD-10-AM data also occurs routinely as the data are processed from the hospitals. A state-wide coding auditor/educator has been appointed and that position will assume the responsibility of managing state-wide coding audits and education in relation to findings from them. Also the position will manage changes/updates to coding classifications and grouping systems.

### **Australian Capital Territory**

The Australian Capital Territory conducts regular coding data quality improvement and integrity activities including analysis using the PICQ™ tool to ensure a high standard of coding quality. Validations are automatically undertaken as part of the processing data flow in the hospital level and corporate level data collections and further education and training supports these quality improvement activities.

### **Northern Territory**

The Northern Territory is committed to the continual improvement of clinical coding across the Northern Territory Hospitals Network, and in the past has experienced challenges in recruiting suitably experienced staff. In the last 12 months off-site coding has discontinued and recruitment to vacant coding positions has been successful. With the introduction of integrated clinical coding software, there have been gains in coding quality, consistency and timeliness.

## **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).

### **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.

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 four groups of adjacent AR-DRGs:

1. all applicable adjacent AR-DRGs (that is, excluding adjacent AR-DRGs with other factors affecting partitioning)
2. adjacent AR-DRGs where the lowest split was without complications or comorbidities
3. adjacent AR-DRGs where the lowest split was without catastrophic or severe complications or comorbidities
4. Vaginal and caesarean deliveries.

Categories 2, 3 and 4 are subsets of category 1. The category *Vaginal and caesarean deliveries* is included as it represents a sub-group of patients for which there is limited scope for differences in the admission threshold. Therefore, it is expected that differences in the proportions in the lowest resource AR-DRGs for this group are likely to reflect variation in reporting additional diagnoses.

Table B5 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.

### **Standardised proportion**

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. 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 considered comparable.

See tables accompanying this report online for additional detail on this analysis and the list of AR-DRGs included.

**Table B5: Standardised proportion in lowest resource level AR-DRG<sup>(a)</sup> for selected adjacent AR-DRGs version 6.0x, public and private hospitals, states and territories, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>All adjacent AR-DRGs split by complications only</b>									
<b>Public hospitals</b>									
Separations	690,028	571,035	410,598	219,739	165,174	40,273	36,282	32,418	2,165,547
Standardised proportion in lowest resource level	0.74	0.71	0.74	0.76	0.73	0.75	0.73	0.70	0.73
<b>Private hospitals</b>									
Separations	221,613	219,190	212,267	93,878	70,841	n.p.	n.p.	n.p.	851,036
Standardised proportion in lowest resource level	0.77	0.76	0.76	0.78	0.78	n.p.	n.p.	n.p.	0.77
<b>Adjacent AR-DRGs with 'without complication' as the lowest resource level AR-DRG</b>									
<b>Public hospitals</b>									
Separations	224,248	185,139	134,765	73,820	51,238	13,025	13,460	11,496	707,191
Standardised proportion in lowest resource level	0.63	0.61	0.64	0.64	0.62	0.64	0.62	0.56	0.63
<b>Private hospitals</b>									
Separations	80,826	78,177	73,515	37,592	24,638	n.p.	n.p.	n.p.	306,996
Standardised proportion in lowest resource level	0.64	0.63	0.64	0.66	0.65	n.p.	n.p.	n.p.	0.64
<b>Adjacent DRGs with 'without catastrophic or severe complication' as the lowest resource level AR-DRG</b>									
<b>Public hospitals</b>									
Separations	465,780	385,896	275,833	145,919	113,936	27,248	22,822	20,922	1,458,356
Standardised proportion in lowest resource level	0.79	0.76	0.79	0.82	0.79	0.80	0.79	0.77	0.79
<b>Private hospitals</b>									
Separations	140,787	141,013	138,752	56,286	46,203	n.p.	n.p.	n.p.	544,040
Standardised proportion in lowest resource level	0.83	0.82	0.81	0.84	0.85	n.p.	n.p.	n.p.	0.83
<b>Adjacent DRGs for Vaginal and caesarean delivery</b>									
<b>Public hospitals</b>									
Separations	72,862	54,363	43,432	21,614	15,144	3,855	4,409	3,186	218,865
Standardised proportion in lowest resource level	0.39	0.36	0.41	0.36	0.38	0.43	0.38	0.38	0.39
<b>Private hospitals</b>									
Separations	23,258	20,481	17,674	10,284	4,801	n.p.	n.p.	n.p.	80,781
Standardised proportion in lowest resource level	0.37	0.36	0.38	0.37	0.35	n.p.	n.p.	n.p.	0.37

AR-DRG—Australian Refined Diagnosis Related Group.

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

## 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 (COF) 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 2011–12**

Overall, the provision of COF data for 2011–12 was very similar to that provided for 2008–09 to 2010–11.

The quality of the COF data for 2011–12 was not considered to be sufficient for analytical purposes and presentation in the body of this report. This was for two main reasons:

- The data were not provided for all separations, with major gaps for public hospitals for New South Wales, and for private hospitals for New South Wales and the Northern Territory.
- There was variation in the proportion of separations for which there was a report of a condition with onset during the episode of care, among states and territories for both the public and private sectors. Although some variation could be expected, it was considered that further investigation of the data quality was warranted at this stage.

### **Coverage**

Incomplete coverage of the COF data continues to limit its application for national reporting.

The coverage of COF data increased for public hospitals, from 88% in 2010–11 to 91% in 2011–12. (Table B6). For private hospitals, coverage decreased from 77% in 2010–11 to 71% in 2011–12.

### **Proportion of separations for which there was a report of a condition with onset during the episode of care**

The proportions of separations for which there was a report of a condition with onset during the episode of care were calculated using records for which COF data were not missing.

#### *Public hospitals*

About 8.6% of public hospital separations for which COF data were provided reported at least one condition that arose during the episode of care (for separations for which a COF value of 1 or 2 was provided for at least one diagnosis) (Table B7).

There was marked variation between states and territories, with the overall proportion ranging from 5.1% to 10.8%. 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 COF values.

**Table B6: Proportion of separations with Condition onset flag reported<sup>(a)</sup> (%), public and private hospitals, states and territories, 2011–12**

	Public hospitals	Private hospitals
	Separations with onset flag reported (%)	Separations with onset flag reported (%)
New South Wales	71.1	0.0
Victoria	100.0	100.0
Queensland	100.0	100.0
Western Australia	100.0	100.0
South Australia	100.0	100.0
Tasmania	100.0	93.3
Australian Capital Territory	100.0	99.6
Northern Territory	100.0	0.0
<b>Total</b>	<b>91.3</b>	<b>70.9</b>

(a) 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.

The proportion of same-day separations that recorded a condition with onset during the episode was 0.9%, with state/territory proportions ranging from 0.5% to 1.7% (Table B7).

About 17% of public hospital overnight separations recorded a diagnosis with onset during the episode of care. There was variation by jurisdiction, ranging from 9.9% to 23.9%. For overnight separations with an *Elective* urgency of admission, the proportion reported with a condition with onset during the episode ranged from 10.6% to 25.6%.

**Table B7: Proportion of separations<sup>(a)</sup> with condition onset during episode of care, by same-day/overnight status and urgency of admission, public hospitals, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Emergency	1.1	1.0	1.5	0.5	2.0	1.3	1.6	0.7	1.2
Elective	0.4	0.8	2.1	0.7	2.7	0.8	1.9	0.5	0.8
Other	2.5	4.2	0.6	0.2	0.4	0.7	0.4	0.3	0.6
<i>Total</i>	<i>0.6</i>	<i>0.9</i>	<i>1.2</i>	<i>0.5</i>	<i>1.7</i>	<i>0.8</i>	<i>1.0</i>	<i>0.5</i>	<i>0.9</i>
<b>Overnight separations</b>									
Emergency	6.9	18.3	13.3	10.0	14.4	18.7	15.4	9.0	12.0
Elective	10.6	25.6	21.0	16.7	19.4	24.1	20.0	12.4	19.3
Other	19.1	45.1	37.6	40.5	38.4	23.3	31.5	31.8	31.0
<i>Total</i>	<i>9.9</i>	<i>23.9</i>	<i>18.8</i>	<i>15.2</i>	<i>18.5</i>	<i>20.7</i>	<i>19.0</i>	<i>14.0</i>	<i>16.6</i>
<b>Total</b>	<b>5.8</b>	<b>10.7</b>	<b>9.9</b>	<b>7.3</b>	<b>10.7</b>	<b>10.8</b>	<b>9.4</b>	<b>5.1</b>	<b>8.6</b>

(a) Proportion of separations with onset during the episode of care is calculated only for separations for which Condition onset flag was reported.

### Private hospitals

For private hospitals, COF data were not available for New South Wales and Northern Territory.

About 3.8% of private hospital separations for which COF data were provided reported at least one condition that arose during the episode of care (Table B8). There was marked variation between states and territories, with the overall proportion ranging from 2.5% to 7.0%. As for public hospitals, this variation may indicate that there are differences in the allocation of COF values.

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 0.9% (Table B8).

About 12% of private hospital overnight separations recorded a diagnosis with onset during the episode of care.

**Table B8: 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, 2011–12**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Same-day separations</b>									
Emergency	n.a.	1.3	1.4	0.5	1.0	0.0	50.0	n.a.	1.0
Elective	n.a.	0.4	0.3	0.3	0.8	0.2	0.2	n.a.	0.2
Other	n.a.	0.9	0.2	0.1	1.0	0.3	0.0	n.a.	0.3
<i>Total</i>	<i>n.a.</i>	<i>0.4</i>	<i>0.3</i>	<i>0.2</i>	<i>0.9</i>	<i>0.2</i>	<i>0.2</i>	<i>n.a.</i>	<i>0.3</i>
<b>Overnight separations</b>									
Emergency	n.a.	20.4	12.0	13.1	17.4	0.2	5.7	n.a.	13.5
Elective	n.a.	17.3	10.0	11.7	16.6	6.6	13.6	n.a.	9.9
Other	n.a.	39.3	23.7	42.6	51.1	16.0	42.9	n.a.	21.0
<i>Total</i>	<i>n.a.</i>	<i>19.8</i>	<i>11.4</i>	<i>15.2</i>	<i>18.6</i>	<i>7.1</i>	<i>16.7</i>	<i>n.a.</i>	<i>11.6</i>
<b>Total</b>	<b>n.a.</b>	<b>7.0</b>	<b>3.8</b>	<b>4.8</b>	<b>6.5</b>	<b>2.5</b>	<b>6.7</b>	<b>n.a.</b>	<b>3.8</b>

(a) Proportion of separations is calculated for separations for which the Condition onset flag was reported only.

## Australian Refined Diagnosis Related Groups

AR-DRG is an Australian admitted patient classification system which provides a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources expected to be used by the hospital. This system categorises acute admitted patient episodes of care into groups with similar conditions and similar expected use of hospital resources, based on information in the hospital morbidity record such as the diagnoses, procedures and demographic characteristics of the patient. This report uses AR-DRG version 6.0x (DoHA 2011) to classify separations, and the most recent cost weights based on version 6.0x (Round 14, 2009–10 DOHA 2012).

The AR-DRG classification is partly hierarchical, with 23 Major Diagnostic Categories (MDCs), divided into *Surgical*, *Medical* and *Other* partitions, and then into 698 individual AR-DRGs.

The MDCs are mostly defined by body system or disease type, and correspond with particular medical specialties. In general, episodes are assigned to MDCs on the basis of the principal diagnosis. Some episodes involving procedures that are particularly resource intensive may be assigned to the Pre-MDC category (AR-DRGs A01Z to A41B), irrespective of the principal diagnosis (including most organ and bone marrow transplants). Episodes that contain clinically atypical or invalid information are assigned *Error DRGs* (AR-DRGs 801A–801C and 960Z–963Z), even if they were assigned to an MDC (*Error DRGs* are included within *Other DRG* in the Surgical/Medical/Other DRG partition).

Episodes are assigned to AR-DRGs within MDCs, mainly on the basis of the procedure codes (in the *Surgical DRG* partition) or the diagnosis codes (in the *Medical DRG* partition). Additional variables including the patient's age, complicating diagnoses/procedures and/or patient clinical complexity level, the length of stay, and the mode of separation are also used for AR-DRG assignment.

Following receipt of the data from states and territories, the AIHW regrouped the data to ensure that the same grouping method was used for all data. The AR-DRGs that resulted from this regrouping are reported here, and may differ slightly from the AR-DRGs derived by the states and territories.

The information in chapters 7, 8, 9 and 10 is presented using different methods of grouping the AR-DRG classification:

- Separations have been categorised as *Childbirth*, *Medical*, *Surgical* or *Other* based on the AR-DRG recorded for the separation
- MDCs – these 23 groups are used to provide information at a high level of aggregation
- AR-DRGs – detailed information is presented for the 20 AR-DRGs having the largest number of separations.

## AR-DRG versions

For 2011–12, each separation in the NHMD was classified to AR-DRG version 6.0x (DoHA 2011) on the basis of demographic and clinical characteristics of the patient.

Each AR-DRG version is based on a specific edition of the ICD-10-AM/ACHI (Table B9). However, AR-DRGs can be mapped from other ICD-10-AM/ACHI editions.

**Table B9: ICD-10-AM and AR-DRG versions, 2007–08 to 2011–12**

Year	ICD-10-AM edition	Relevant AR-DRG version	AR-DRG version reported in Australian hospital statistics
2007–08	Fifth edition	Version 5.2	Version 5.1
2008–09	Sixth edition	Version 6.0	Version 5.2
2009–10	Sixth edition	Version 6.0	Version 5.2
2010–11 <sup>(a)</sup>	Seventh edition	Version 6.0	Version 6.0
2011–12	Seventh edition	Version 6.0	Version 6.0x

(a) For analyses where cost weights were required, AR-DRG version 5.2 Round 13 cost weights (2008–09) were applied to AR-DRG version 5.2.



For the purpose of making AR-DRG-based time series comparisons, the coded clinical data for 2007–08 to 2009–10 were grouped to AR-DRG version 6.0 using the mapping facility in the DRGroup™ software. Due to the mapping necessary to generate the AR-DRG versions, the data presented in these tables may not be comparable to those reported by the states and territories for a small number of AR-DRGs.

### **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 2012). 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.

For 2009–10, the average cost for public hospital separations was \$4,500. 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 AR-DRG version 6.0x for 2009–10 (DoHA 2012). Private cost weights were not available for AR-DRG version 6.0x. When the NHCDC 2011–12 results become available, updated information using those data will be provided in the tables accompanying this report online at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)>.

#### **Average cost weight**

Average cost weight information provides a guide to the expected resource use for separations, with a value of 1.00 representing the average cost for all separations.

The average cost weight for a hospital (or group of hospitals) is calculated as the sum of the average cost weights for each separation, divided by the total number of separations for the hospital. It represents in a single number the overall relative expected use of resources by a hospital. For example, a hospital with an average cost weight of 1.08 has an 8% more costly casemix than the national average (equal to 1.00).

## **Analysis methods**

### **Cost per casemix-adjusted separation analysis**

The cost per casemix-adjusted separation (Chapter 3) is an indicator of the efficiency of public acute care hospitals. It is a measure of the average recurrent expenditure for each admitted patient, adjusted using AR-DRG cost weights for the resources expected to be used for the separation. A synopsis of the methods used in this analysis is presented below, and more detail is available in *Australian hospital statistics 2000–01* (AIHW 2002).

## Definition

The formula used to calculate the cost per casemix-adjusted separation is:

$$\frac{\text{Recurrent expenditure} \times \text{IFRAC}}{\text{Total separations} \times \text{Average cost weight}}$$

where:

- recurrent expenditure is as defined by the recurrent expenditure data elements in the NHDD (AIHW 2012f)
- 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 tables 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 2011–12, 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 acute non-psychiatric 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 B10). 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 acute non-psychiatric care) as for all care types (where they reported more than 1,000 patient days for non-acute separations).

The estimated cost per **acute** care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

- \$5,075 in New South Wales, 3.9% less than the cost per casemix-adjusted separation for all separations
- \$4,101 in Victoria, 12.6% less than for all separations
- \$5,440 in Western Australia, 4.8% less than for all separations (Figure B1 and Table B10).

The estimated cost per **acute non-psychiatric** care casemix-adjusted separation (excluding depreciation) for the selected hospitals was:

- \$4,983 in New South Wales, 5.6% less than the cost per casemix-adjusted separation for all separations
- \$4,038 in Victoria, 14.0% less than for all separations
- \$5,497 in Western Australia, 3.8% less than for all separations.

The estimated cost per acute care casemix-adjusted separation, including depreciation and cost per acute non-psychiatric casemix-adjusted separation, including depreciation is available in tables accompanying this report online.

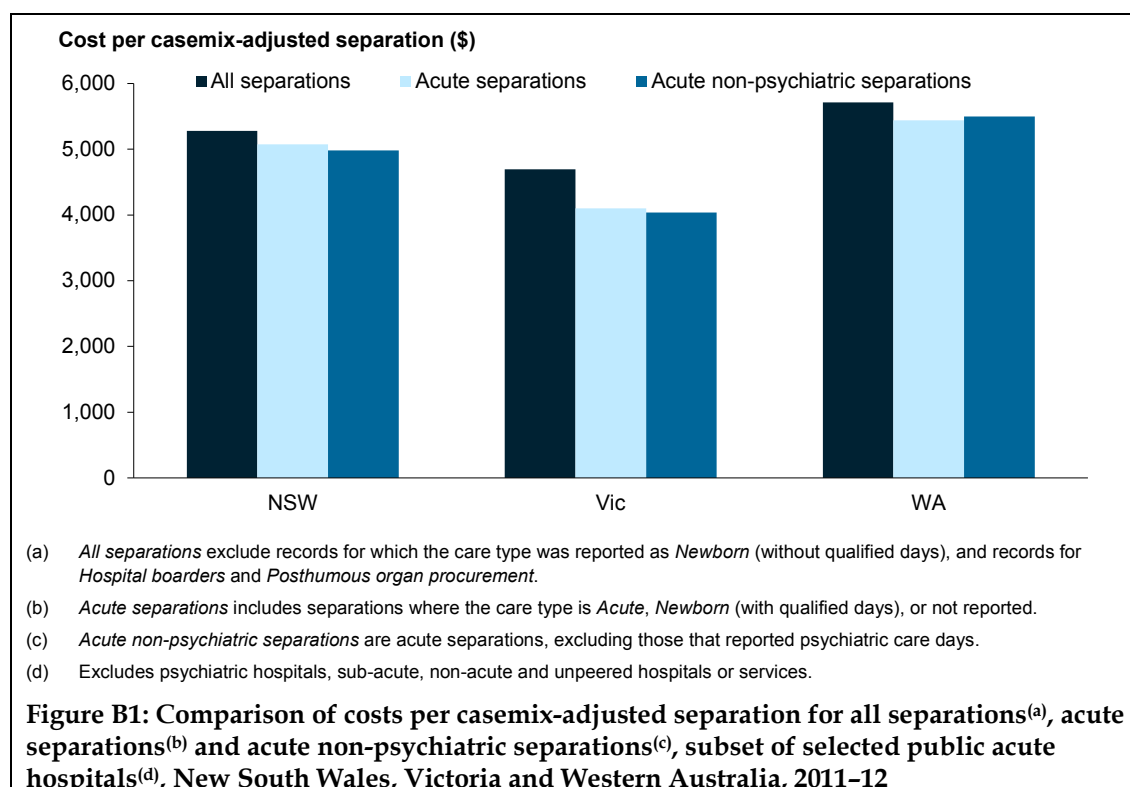
**Table B10: Cost per casemix-adjusted separation (\$) for acute and acute non-psychiatric separations, subset of selected public acute hospitals<sup>(a)</sup>, New South Wales, Victoria and Western Australia, 2011–12**

	NSW	Vic	WA
<b>Cost per casemix-adjusted separation excluding depreciation</b>	<b>5,280</b>	<b>4,693</b>	<b>5,713</b>
Cost per casemix-adjusted <b>acute</b> separation excluding depreciation <sup>(b)</sup>	5,075	4,101	5,440
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	-3.9%	-12.6%	-4.8%
Cost per casemix-adjusted <b>acute non-psychiatric</b> separation excluding depreciation <sup>(c)</sup>	4,983	4,038	5,497
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	-5.6%	-14.0%	-3.8%
<b>Cost per casemix-adjusted separation including depreciation</b>	<b>5,455</b>	<b>4,984</b>	<b>5,866</b>
Cost per casemix-adjusted <b>acute</b> separation including depreciation <sup>(b)</sup>	5,244	4,357	4,357
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	-3.9%	-12.6%	-4.8%
Cost per casemix-adjusted <b>acute non-psychiatric</b> separation including depreciation <sup>(c)</sup>	5,149	4,289	5,644
Percentage this exceeds cost per casemix-adjusted separation for subset hospitals	-5.6%	-13.9%	-3.8%

(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 tables accompanying this report online.

(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.



**Figure B1: Comparison of costs per casemix-adjusted separation for all separations<sup>(a)</sup>, acute separations<sup>(b)</sup> and acute non-psychiatric separations<sup>(c)</sup>, subset of selected public acute hospitals<sup>(d)</sup>, New South Wales, Victoria and Western Australia, 2011–12**

## Cost per casemix-adjusted separation, including capital

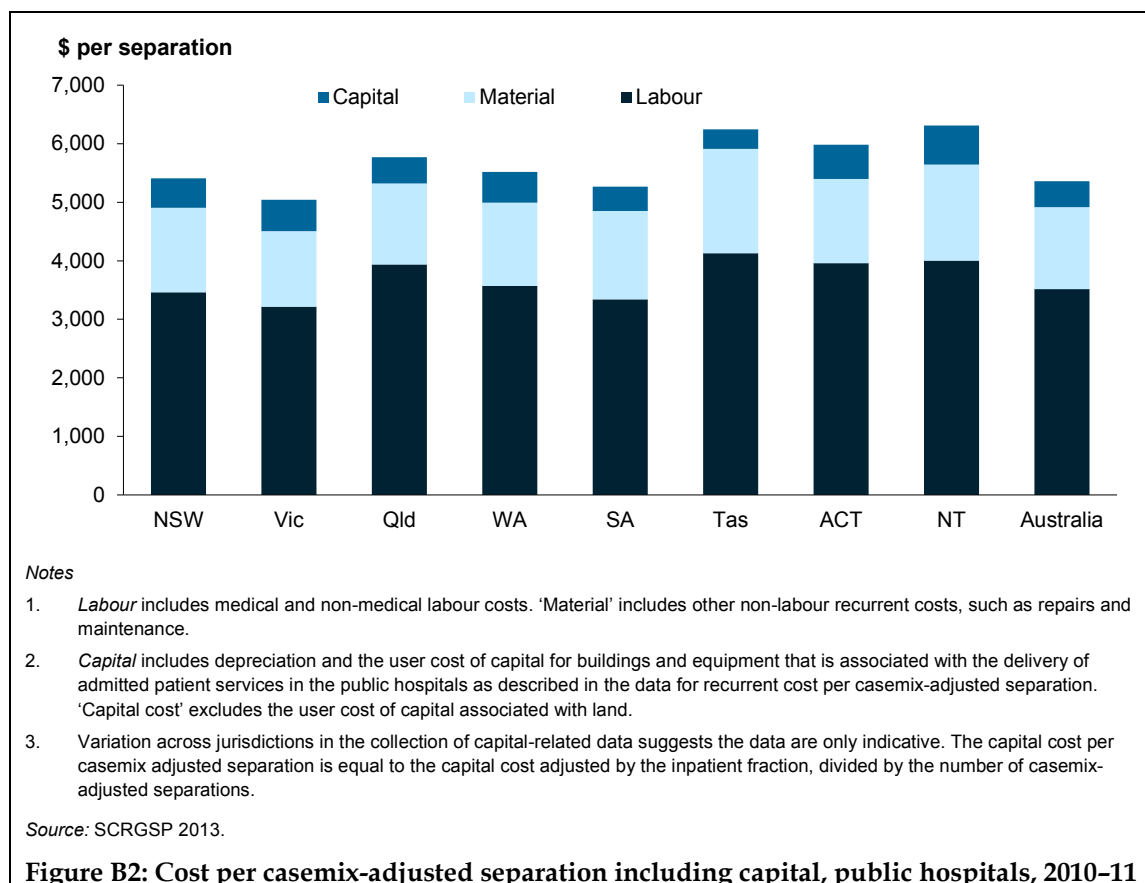
The cost per casemix-adjusted separation analysis includes recurrent expenditure and depreciation for those states that reported it (see Chapter 3).

The Steering Committee for the Review of Government Service Provision (SCRGSP) reported 'total costs per casemix-adjusted separation' by state and territory for 2010–11 (SCRGSP 2013). 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 services or to retire debt. Interest payments represent a user cost of capital, so are deducted from capital costs to avoid double counting' (SCRGSP 2013).

In 2010–11, excluding the user cost of capital for land, the total cost per casemix-adjusted separation ranged from \$5,044 in Victoria to \$6,312 in the Northern Territory (SCRGSP 2013) (Figure B2).

Further details about the SCRGSP calculation of total cost per casemix-adjusted separation are available in the *Report on government services, 2013* (SCRGSP 2013).



## Relative stay index analysis

Relative stay indexes (RSIs) have been identified as indicators of efficiency and are presented in Chapter 3. They are calculated as the number of 'observed patient days' for separations in selected AR-DRGs, divided by the number of 'expected patient days', standardised for casemix (based on national figures). An RSI greater than 1.0 indicates that an average patient's length of stay is higher than expected given the casemix for the group of separations of interest. An RSI of less than 1.0 indicates that the length of stay was less than expected.

The standardisation for casemix (based on AR-DRG version 6.0x 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 or the remoteness area of the patient's residence or of the hospital.

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 tables accompanying this report online)
- *Error* AR-DRGs.

Comparisons with RSIs presented in earlier reports should be made with caution, because the indexes for reports from 2004–05 to 2009–10 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 RSI method applies the national average length of stay (ALOS) for each AR-DRG to the relevant population of interest (number of separations for each AR-DRG in the hospital group) to derive the expected number of patient days. This method is generally used when rate information (ALOS for each AR-DRG in this analysis) for the population of interest is unknown or subject to fluctuation because of small population sizes. It provides a measure of efficiency for a hospital, or group of hospitals, based on their actual activity.

However, an indirectly standardised rate compares a group with a 'standard population rate' so, using this method, rates for different groups are not strictly comparable because each group has a different casemix to which the national ALOS data have been applied. Therefore, the indirectly standardised data for hospital groups should be compared with the national average of 1.00.

### **Direct relative stay index**

For the direct RSI 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.

For those jurisdictions and sectors for which RSI statistics are presented in Table 3.17, there were between 502 and 672 AR-DRGs represented, meaning that ALOS data was estimated for up to 170 AR-DRGs.

Due to the issues with the direct RSI 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.

For public hospitals in the Northern Territory, about 500 of the 672 DRGs used in the national RSI analysis are represented, so results are likely to have been affected by estimation of the missing ALOS data. Therefore the data presented for the direct standardised method in the public sector for the Northern Territory in Table 3.17 should be interpreted with caution.

Table B.S10, 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.

# Appendix C: 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 6.0x (DoHA 2012) to the AR-DRGs reported in version 6.0x.

The NHCDC comprises a voluntary collection of hospital cost and activity data covering the financial year before the collection period, and is coordinated by the Department of Health and Ageing. Both public and private hospital data are usually 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 2009–10 financial year (Round 14) for public hospitals only (DoHA 2012).

For 2009–10, the NHCDC involved arrangements whereby the hospital data were collected by the individual hospitals, and checked and validated by state/territory coordinators before being passed on to the Department of Health and Ageing. The production and publication of the final cost weights and associated tables followed extensive quality assurance procedures undertaken by the department and endorsement of the results by the states and territories.

In 2009–10, the total number of public hospital separations reported to the NHCDC was approximately 95% of total acute separations within the year (DoHA 2012). The average cost per separation for public hospitals was estimated at \$4,500 for 2009–10. The public hospitals' estimate includes an estimate for depreciation.

Further information is provided in the NHCDC report for 2009–10 (DoHA 2012). 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 D: Service Related Groups

## Introduction

The Service Related Group (SRG) classification categorises admitted patient episodes into groups representing clinical divisions of hospital activity, based on aggregations of AR-DRGs. SRGs are used to assist in planning services, analysing and comparing hospital activity, examining patterns of service needs and access, and projecting potential trends in services.

The AR-DRG system was not considered appropriate for this purpose as it contains too many classes. Both the Major Diagnostic Categories (MDC) and the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) were also considered unsuitable as they generally relate to body systems rather than services.

An example illustrating the assignment of selected procedures to SRGs is shown below. These examples illustrate the differences between categorising procedures on the basis of ICD-10-AM chapters, MDCs and SRGs.

Procedure	ICD-10-AM chapter	MDC	SRG
Extraction of wisdom teeth	Diseases of the digestive system	MDC 3: Ear, nose and throat	Dentistry
Endoscopic retrograde cholangiopancreatography (ERCP)	Diseases of the digestive system	MDC 6: Digestive system	Gastroenterology
Excision of haemorrhoids	Diseases of the digestive system	MDC 6: Digestive system	Colorectal surgery

For the *Australian hospital statistics* 2001–02 to 2004–05 reports, this analysis used a method based on AR-DRG version 4.2, originally developed by the New South Wales Department of Health and the Australian Government Department of Health and Ageing.

A different methodology was used in *Australian hospital statistics* from 2005–06 to 2009–10, which assigned SRGs based on AR-DRG versions 5.0, 5.1 and 5.2 and was developed by the New South Wales Department of Health (unpublished).

The SRG version used for both the 2010–11 and this report assigns service related group based mostly on AR-DRGs version 6.0, also developed by the New South Wales Ministry of Health (adapted for AR-DRG version 6.0x). For more information on the methodology used to assign SRGs, see Table D6 (which accompanies this report online).

SRGs were allocated using the data in the NHMD. 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 NPHED (see Chapter 4). An 'unallocated' SRG is assigned for separations with an *Error DRG*.

The classification also incorporates non-specialist SRGs, which are used for smaller hospitals that do not have the specialist services or specialist equipment. There are 46 SRGs, and the 20 most common were presented in Chapter 4.

## State and territory overview

Tables D1 to D5 (which accompany this report online) present more detailed SRG information by state and territory.

Table D1 contains the number of public hospitals establishments that, in 2011–12, reported more than 50 separations or more than 360 patient days in each SRG by state and territory and by remoteness area. 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), 97 hospitals provided more than 50 separations per year and 244 hospitals provided more than 360 patient days, while for *Gastroenterology* (SRG 15) these measures were 380 and 221 hospitals respectively. *Cardiothoracic surgery* (SRG 42) showed very little difference between the two different measures, with 38 hospitals providing more than 50 separations per year and 42 hospitals providing more than 360 patient days.

*Non subspecialty – medicine* (SRG 27) had the greatest number of establishments, with 404 hospitals with more than 50 separations per year and 359 hospitals with more than 360 patient days per year.

Tables D2 and D3 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 1,022,000. This was followed by *Obstetrics* (SRG 72) with 325,000 (Table D2). In the private sector, *Diagnostic gastrointestinal endoscopy* (SRG 16) recorded the highest number of separations with over 416,000, followed by *Orthopaedics* (SRG 49) with 319,000 (Table D3).

Tables D4 and D5 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 1,890,000, followed by *Psychiatry – acute* (SRG 82) with 1,760,000 (Table D4). For private hospitals, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 1,060,000, followed by *Orthopaedics* (SRG 49) with 873,000 (Table D5).

# 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 16* (AIHW 2012f).

**Activity when injured:** the type of activity being undertaken by a person at the time of injury. METeOR identifier: 391320.

**Acute:** having a short and relatively severe course.

**Acute care:** see *Care type*.

**Acute care hospital:** see *Establishment type*.

**Additional diagnosis:** a condition or complaint either coexisting with the principal diagnosis or arising during the episode of care. METeOR identifier: 391322.

**Administrative and clerical staff:** 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.

**Administrative expenditure:** all expenditure incurred by establishments (but not central administrations) of a management expenses/administrative support nature, such as any rates and taxes, printing, telephone, stationery and insurance (including workers compensation). METeOR identifier: 270107.

**Admitted patient:** a patient who undergoes a hospital's 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.

**Admitted patient cost proportion:** 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 inpatient fraction or IFRAC.

**Adverse event:** an incident in which harm resulted to a person receiving health care. They include infections, falls and other injuries, and reactions or complications due to surgery and other procedures, medical devices or medication. Some of which may be preventable.

**Age standardisation:** a set of techniques used to remove, as far as possible, the effects of differences in age when comparing two or more populations.

**Alcohol and drug treatment centre:** see *Establishment type*.

**Arrival mode – transport:** the mode of transport by which the person arrives at the emergency department. METeOR identifier: 471921.

**Australian Classification of Health Interventions (ACHI):** ACHI was developed by the National Centre for Classification in Health. The 7th edition was used for the 2011–12 procedures data for admitted patients in Australian hospitals.

**Australian Refined Diagnosis Related Groups (AR-DRGs):** 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.

**Available beds:** the average number of beds which are immediately available for use by an admitted patient within the establishment. METeOR identifier: 270133.

From 1 July 2009, superseded by:

- Average available beds for same-day patients and
- Average available beds for overnight-stay patients.

**Average available beds for overnight-stay patients:** average available beds for overnight-stay patients are the number of beds available to provide overnight accommodation for patients (other than neonatal cots (non-special-care) and beds occupied by hospital-in-the-home patients), averaged over the counting period. METeOR identifier: 374151.

**Average available beds for same-day patients:** the number of beds, chairs or trolleys available to provide accommodation for same-day patients, averaged over the counting period. METeOR identifier: 373966.

**Average length of stay:** the average number of patient days for admitted patient episodes. Patients admitted and separated on the same date are allocated a length of stay of 1 day.

**Capital expenditure:** 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.

**Care type:** 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). METeOR identifier: 270174. Admitted patient care consists of the following categories:

- Acute care
- Rehabilitation care
- Palliative care
- Geriatric evaluation and management
- Psychogeriatric care
- Maintenance care
- Newborn care

- Other admitted patient care – this is where the principal clinical intent does not meet the criteria for any of the above.

Other services include:

- Posthumous organ procurement
- Hospital boarder.

**Casemix:** 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.

**Chronic:** persistent and long-lasting.

**Clinical urgency:** a clinical assessment of the urgency with which a patient requires elective hospital care. METeOR identifier: 270008.

**Compensable patient:** an individual who is entitled to receive or has received a compensation payment with respect to an injury or disease. Compensable patient excludes eligible beneficiaries (Department of Veterans' Affairs), Defence Force personnel and persons covered by the Motor Accident Compensation Scheme, NT. METeOR identifier: 270100.

**Condition onset flag:** a means of differentiating those conditions which arise during, or arose before, an admitted patient episode of care. Having this information can provide an insight into the kinds of conditions patients already have when entering hospital and what arises during the episode of care. A better understanding of those conditions arising during the episode of care may inform prevention strategies, particularly in relation to complications of medical care. METeOR identifier: 354816.

**Constant prices:** constant price expenditure adjusts current prices for the effects of inflation, that is, it aims to remove the effects of inflation. Hence, expenditures in different years can be compared on a dollar-for-dollar basis, using this measure of changes in the volume of health goods and services.

**Cost weight:** the costliness of an AR-DRG relative to all other AR-DRGs such that the average cost weight for all separations is 1.00. A separation for an AR-DRG with a cost weight of 5.0, therefore, on average costs 10 times as much as a separation with a cost weight of 0.5.

There are separate cost weights for AR-DRGs in the public and private sectors, reflecting the differences in the range of costs in the different sectors. In this report, average cost weights using public cost weights are based on AR-DRG version 6.0x 2009–10 public sector estimated cost weights (DoHA 2012). These were applied to AR-DRG version 6.0/6.0x DRGs for the 2007–08 to 2011–12 reference years.

**Current prices:** expenditures reported for a particular year, unadjusted for inflation.

**Department of Veterans' Affairs patient:** a person whose charges for the hospital admission are met by the Department of Veterans' Affairs (DVA). These patients include eligible veterans and war widows/widowers. The data are supplied by the states and territories and the eligibility to receive hospital treatment as a DVA patient may not necessarily have been confirmed by the DVA. METeOR identifier: 270092.

**Diagnosis related group (DRG):** 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, AR-DRGs are used. METeOR identifier: 391295.

**Diagnostic and allied health professionals:** 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). METeOR identifier: 270495.

**Domestic and other staff:** 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). METeOR identifier: 270498.

**Domestic services expenditure:** 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. METeOR identifier: 270283.

**Drug supplies expenditure:** the cost of all drugs, including the cost of containers. METeOR identifier: 270282.

**Elective care:** 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.

**Elective surgery:** 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. METeOR identifier: 335048.

**Elective admissions involving surgery:** separation for which the urgency of admission was reported as *Elective* (admission could be delayed by at least 24 hours) and where the assigned AR-DRG was *Surgical* (excluding childbirth-related AR-DRGs).

**Emergency department waiting time to commencement of clinical care:** the time elapsed for each patient from presentation to the emergency department to the commencement of the emergency department service event. It is calculated by deducting the date and time the patient presents from the date and time of the commencement of the service event. METeOR identifier: 390412.

An emergency department service event can be commenced by a doctor, nurse, mental health practitioner or other health professional, when investigation, care and/or treatment is provided in accordance with an established clinical pathway defined by the emergency department.

**Emergency occasion of service:** a non-admitted patient occasion of service reported to the National Public Hospital Establishments Database with an *Emergency services* Type of non-admitted patient occasion of service.

**Enrolled nurses:** enrolled nurses are division 2 nurses who are registered with the Australian Health Practitioner Regulation Agency – Nursing and Midwifery Board of

Australia. Includes general enrolled nurses and specialist enrolled nurses (for example, mothercraft nurses in some states). METeOR identifier: 270497.

**Episode end status:** the status of the patient at the end of the non-admitted patient emergency department service episode. METeOR identifier: 322641.

**Episode of care:** 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 *Care type* and *Separation*). METeOR identifier: 270174 (Care type), METeOR identifier: 268956 (Episode of admitted patient care).

**Error DRGs:** AR-DRGs to which separations are grouped if their records contain clinically inconsistent or invalid information.

**Establishment type:** type of establishment (defined in terms of legislative approval, service provided and patients treated) for each separately administered establishment. METeOR identifier: 269971.

**External cause:** the environmental event, circumstance or condition as the cause of injury, poisoning and other adverse effect. METeOR identifier: 391330.

**Full-time equivalent staff:** 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). METeOR identifier: 270543. For more detailed information see the glossary entries for the staffing categories:

- Salaried medical officers
- Registered nurses
- Enrolled nurses
- Student nurses
- Other personal care staff
- Diagnostic and allied health professionals
- Administrative and clerical staff
- Domestic and other staff.

**Funding source for hospital patient:** the principal source of funds for an admitted patient episode or non-admitted patient service event. METeOR identifier: 339080.

**Geriatric evaluation and management:** see *Care type*.

**Group session:** a non-admitted occasion of service provided to two or more patients, where all individuals are not members of the same family. METeOR identifier: 269674.

**HASAC (Health and Allied Services Advisory Council) ratio:** for hospitals where the IFRAC is not available or is clearly inconsistent with the data, admitted patient costs are estimated by the HASAC ratio.

**Hospice:** see *Establishment type*.

**Hospital:** 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.

**Hospital boarder:** see *Care type*.

**Hospital-in-the-home care:** 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.

**IFRAC (inpatient fraction):** see *Admitted patient cost proportion*.

**Index of Relative Socio-Economic Disadvantage (IRSD):** one of the set of Socio-Economic Indexes for Areas for ranking the average socioeconomic conditions of the population in an area. It summarises attributes of the population such as low income, low educational attainment, high unemployment and jobs in relatively unskilled occupations.

**Indicator procedure:** 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.

**Indigenous status:** 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.

**Inpatient:** see *Admitted patient*. METeOR identifier: 268957.

**Interactive data cubes:** a multidimensional representation of data which provides fast retrieval from multiple layers of information.

**International Classification of Diseases (ICD):** 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.

**Inter-hospital contracted care:** 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 of hospital care (contracting hospital) and a provider of an admitted service (contracted hospital) and for which the activity is recorded by both hospitals. METeOR identifier: 270409.

**Length of stay:** 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.

**Licensed bed:** a bed in a private hospital, licensed by the relevant state or territory health authority.



**Maintenance care:** see *Care type*.

**Major Diagnostic Categories (MDCs):** the category into which the patient's diagnosis and the AR-DRG falls. They correspond generally to the major organ systems of the body. METeOR identifier: 391298.

**Medical and surgical supplies expenditure:** the cost of all consumables of a medical or surgical nature (excluding drug supplies) but not including expenditure on equipment repairs. METeOR identifier: 270358.

**Mode of admission:** the mechanism by which a person begins an episode of admitted patient care. METeOR identifier: 269976.

**Mode of separation:** status at separation of a person (discharge/transfer/death) and place to which a person is released (where applicable). METeOR identifier: 270094.

**National health data dictionary (NHDD):** a biennial publication of all the standardised and accepted terms and protocols used for the collection of health information.

**Newborn care:** see *Care type*.

**Non-admitted patient:** a patient who receives care from a recognised non-admitted patient service/clinic of a hospital. METeOR identifier: 268973.

**Non-admitted patient occasion of service:** 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.

**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.

**Number of days of hospital-in-the-home care:** the number of hospital-in-the-home days occurring within an episode of care for an admitted patient. See *Hospital-in-the-home care*. METeOR identifier: 270305.

**Occasion of service:** see *Non-admitted patient occasion of service*.

**Other care:** see *Care type*.

**Other personal care staff:** 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.

**Other recurrent expenditure:** expenditure incurred by organisations on a recurring basis, for the provision of health goods and services that excludes salary and wages; payments to visiting medical officers; superannuation payments; drug supplies; medical and surgical supplies; food supplies; domestic services; repairs and maintenance; patient transport; administrative expenses; interest payments and depreciation. METeOR identifier: 270126.

**Other revenue:** 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.

**Outpatient:** see *Non-admitted patient*. METeOR identifier: 268973.

**Outpatient clinic service:** 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.

**Outpatient clinic type:** the nature of services which are provided by Outpatient clinic services. METeOR identifier: 291073.

**Overnight-stay patient:** 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).

**Palliative care:** see *Care type*.

**Patient days:** 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.

**Patient election status:** accommodation chargeable status elected by patient on admission. METeOR identifier: 326619. The categories are:

- **Public patient:** A person 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.
- **Private patient:** A person 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.

**Patient presentation at emergency department:** the presentation of a patient at an emergency department. It is the earliest occasion of being registered clerically or triaged. METeOR identifier: 270393.

**Patient revenue:** revenue received by, and due to, an establishment in respect of individual patient liability for accommodation and other establishment charges. METeOR identifier: 364797.

**Patient transport cost:** the direct cost of transporting patients, excluding salaries and wages of transport staff where payment is made by an establishment. METeOR identifier: 270048.

**Payments to visiting medical officers:** all payments made by an institutional health care establishment to visiting medical officers for medical services provided to hospital (public) patients on an honorary, sessionally paid or fee-for-service basis. METeOR identifier: 270049.

**Peer group:** groupings of hospitals into broadly similar groups in terms of their type and volume of admitted patient activity and their geographical location.

**Percentile:** any one of 99 values that divide the range of probability distribution or sample into 100 intervals of equal probability or frequency.

**Performance indicator:** 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.

**Place of occurrence of external cause:** the place where the external cause of injury, poisoning or adverse effect occurred. METeOR identifier: 391334.

**Posthumous organ procurement:** see *Care type*.

**Potentially preventable hospitalisation (selected):** those conditions where hospitalisation is thought to be avoidable if timely and adequate non-hospital care is provided.

**Pre-MDC (Pre-Major Diagnostic Category):** 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).

**Principal diagnosis:** the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care. METeOR identifier: 391326.

**Private hospital:** 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 *Establishment type*.

**Procedure:** 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. METeOR identifier: 391349.

**Psychiatric hospital:** see *Establishment type*.

**Psychogeriatric care:** see *Care type*.

**Public hospital:** 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 *Establishment type*.

**Public patient:** 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).

**Qualified days:** 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. METeOR identifier: 268957 (Admitted patient). METeOR identifier: 270033 (Newborn qualification status). A newborn day is acute (qualified) when a newborn meets at least one of the following criteria:

- is the second or subsequent live born infant of a multiple birth, whose mother is currently an admitted patient

- 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
- remains in hospital without its mother
- is admitted to the hospital without its mother.

**Recoveries:** 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.

**Recurrent expenditure:** expenditure incurred by organisations on a recurring basis, for the provision of health goods and services. This includes, for example, salaries and wages expenditure and non-salary expenditure such as payments to visiting medical officers. This excludes capital expenditure. METeOR identifier: 269132.

**Registered nurses:** registered nurses must be registered as division 1 nurses with the Australian Health Practitioner Regulation Agency – Nursing and Midwifery Board of Australia. METeOR identifier: 270500.

This is a comprehensive category and includes community mental health, general nurse, intellectual disability nurse, psychiatric nurse, senior nurse, charge nurse (now unit manager), supervisory nurse and nurse educator. It may also include registered midwives (including pupil midwife). 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.

**Rehabilitation care:** see *Care type*.

**Relative stay index (RSI):** the actual number of patient days for acute care separations in selected AR-DRGs divided by the expected number of patient days adjusted for casemix. An RSI greater than 1 indicates that an average patient's length of stay is higher than would be expected given the jurisdiction's casemix distribution. An RSI of less than 1 indicates that the number of patient days used was less than would have been expected. See Appendix B for further information.

**Remoteness area:** 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:

- Major cities
- Inner regional
- Outer regional
- Remote
- Very remote
- Migratory.

**Removal from waiting list:** the reason a patient is removed from an elective surgery waiting list. METeOR identifier: 471735. The reason-for-removal categories are:

- Admitted as an elective patient for awaited procedure by or on behalf of this hospital or the state/territory
- Admitted as an emergency patient for awaited procedure by or on behalf of this hospital or the state/territory
- Could not be contacted (includes patients who have died while waiting whether or not the cause of death was related to the condition requiring treatment)
- Treated elsewhere for awaited procedure, but not on behalf of this hospital or the state/territory
- Surgery not required or declined
- Transferred to another hospital's waiting list
- Not known.

**Repairs and maintenance expenditure:** the costs incurred in maintaining, repairing, replacing and providing additional equipment; maintaining and renovating buildings and minor additional works. METeOR identifier: 269970.

**Salaried medical officers:** 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.

**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.

**Same-day patient:** an admitted patient who is admitted and separated on the same date.

**Separation:** 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.

**Separation rate:** 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 Appendix B).

**Separation rate ratio:** the separation rate for one population divided by the separation rate of another.

**Separations:** 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.

**Service Related Group (SRG):** a classification based on AR-DRG aggregations for categorising admitted patient episodes into groups representing clinical divisions of hospital activity.

**Specialised service:** 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.

**Student nurses:** 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.

**Superannuation employer contributions:** contributions paid on behalf of establishment employees either by the establishment or a central administration such as a state health authority to a superannuation fund providing retirement and related benefits to establishment employees. METeOR identifier: 270371.

**Surgical procedure:** a procedure used to define surgical AR-DRGs in version 6.0x (DoHA 2010).

**Surgical specialty:** the area of clinical expertise held by the doctor who will perform the surgery of interest. METeOR identifier: 270146.

**Trainee nurse:** 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. METeOR identifier: 270493.

**Triage category:** 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 National Triage Scale. The triage category is allocated by an experienced registered nurse or medical practitioner. METeOR identifier: 390392.

**Type of non-admitted patient occasion of service:** 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 services. METeOR identifiers: 270395, 270502-270514.

**Visiting medical officer:** 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: 327170.

**Waiting time at admission:** 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 2011–12*, 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.

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 presented as additional tables online. See <[www.aihw.gov.au/hospitals/](http://www.aihw.gov.au/hospitals/)>.

Accompanying the release of *Australian hospital statistics 2011–12* is *Australia's hospitals 2011–12 at a glance*.

The following AIHW publications relating to hospitals, hospital service utilisation and hospital resources might also be of interest:

- AIHW 2013. Australian hospital statistics: national emergency access and elective surgery targets 2012. Cat. no. HSE 131. Canberra: AIHW.
- AIHW 2013. Australian hospital statistics 2011–12: *Staphylococcus aureus* bacteraemia in Australian hospitals. Cat. no. HSE 129. Canberra: AIHW.
- AIHW 2012. Australian hospital statistics 2011–12: emergency department care. Cat. no. HSE 126. Canberra: AIHW.
- AIHW 2012. Australian hospital statistics 2011–12: elective surgery waiting times. Cat. no. HSE 127. Canberra: AIHW.
- AIHW 2012. Australian hospital statistics 2010–11. Cat. no. HSE 117. Canberra: AIHW.
- AIHW 2011. Australian hospital statistics 2010–11: emergency department care and elective surgery waiting times. Cat. no. HSE 115. Canberra: AIHW.
- AIHW 2011. Australian hospital statistics 2009–10. Cat. no. HSE 107. Canberra: AIHW.
- AIHW 2010. Australian hospital statistics 2009–10: emergency department care and elective surgery waiting times. Cat. no. HSE 93. Canberra: AIHW.
- AIHW 2010. Australian hospital statistics 2008–09. Cat. no. HSE 84. Canberra: AIHW.
- AIHW 2009. Australian hospital statistics 2007–08. Cat. no. HSE 71. Canberra: AIHW.

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*Australian hospital statistics 2011–12* presents a detailed overview of Australia's public and private hospitals. In 2011–12, there were about 9.3 million separations from hospitals, including:

- 5.5 million same-day acute separations
- 3.7 million overnight acute separations
- about 423,000 sub-acute and non-acute separations.

There were also 7.8 million non-admitted patient emergency services and more than 45 million outpatient services provided by public hospitals.

