



Australian Government

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# Emergency department care

2015–16



Australian hospital statistics





**Australian Government**

**Australian Institute of  
Health and Welfare**

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

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# **Emergency department care 2015–16**

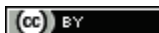
## **Australian hospital statistics**

Australian Institute of Health and Welfare  
Canberra

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Director

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# Foreword

I am pleased to present this report on emergency department care in Australian public hospitals for the period July 2015 to June 2016.

As in previous reports, *Emergency department care 2015–16: Australian hospital statistics* answers questions about the number of presentations to emergency departments, the amount of time that patients waited for clinical care and the length of stay in the emergency department. Comparative information for the past 4 years is also presented.

The information in this report is presented in short, self-contained sections on specific topics. This should make it easy for readers to find and use the information they are interested in.

This report is one of a series of products released by the Australian Institute of Health and Welfare (AIHW) to report performance indicators and other information on Australia's hospitals each year. Reports on elective surgery waiting times and on hospital-associated *Staphylococcus aureus* bacteraemia cases in 2015–16 are scheduled for release later in 2016. Reports on care provided for admitted patients, non-admitted patients and on hospital resources for 2015–16, as well as a summary overview of Australia's hospitals for 2015–16, will be published in early 2017.

The *Australian hospital statistics* reports are based on the AIHW's comprehensive national hospitals databases. These databases are also the source of data for nationally agreed hospital-level performance indicators reported by the AIHW on its *MyHospitals* website. As well, the Steering Committee for the Review of Government Service Provision uses these data for its *Report on Government Services*.

The AIHW is committed to working with stakeholders to improve the national statistical information base on hospitals and its relevance to contemporary public policy debate on hospital service delivery. We look forward to continuing to work with data users and data providers to improve the quality and usefulness of the national data collections and to enhance the presentation of information in our hospitals products.

Barry Sandison

Director

November 2016

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The AIHW's Australian Hospital Statistics Advisory Committee was also of great assistance. Particular thanks are due to the representatives of the state and territory health authorities who contributed to the report. Members of the committee are:

- Jenny Hargreaves (AIHW) (Chair)
- Cheryl Harkins (Australian Capital Territory Health Directorate)
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# Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ASGS	Australian Statistical Geography Standard
DSS	Data set specification
GP	general practitioner
ICD-9-CM	International Classification of Diseases, 9th Revision, Clinical Modification
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification
IHPA	Independent Hospital Pricing Authority
MDB	major diagnostic block
METeOR	Metadata Online Registry
NAPEDC	non-admitted patient emergency department care
NHA	National Healthcare Agreement
NHPF	National Health Performance Framework
NMDS	national minimum data set
NNAPEDCD	National Non-admitted Patient Emergency Department Care Database
NPHEd	National Public Hospital Establishments Database
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
SA2	Statistical Area Level 2
SLA	Statistical local area
SNOMED CT-AU (EDRS)	Systematized Nomenclature of Medicine – Clinical Terms – Australian version, Emergency Department Reference Set
Tas	Tasmania
URG	urgency related group

Vic	Victoria
WA	Western Australia

## Symbols

..	not applicable
n.a.	not available
n.p.	not published
<	less than

# Summary

Emergency departments are a critical component of Australia's health-care system, providing care for patients who require urgent attention. This report presents information on the Australian public hospitals that have purpose-built emergency departments staffed 24 hours a day, which reported to the National Non-Admitted Patient Emergency Department Care Database. Data for 2015–16 for the Australian Capital Territory were not available at the time of publication.

## How much emergency department activity was there?

In 2015–16, there were 7.5 million presentations to emergency departments across Australia (excluding the Australian Capital Territory), or more than 20,000 presentations each day.

Between 2011–12 and 2015–16, presentations to emergency departments increased by 3.8% on average each year. After adjusting for coverage changes (including the absence of data for the Australian Capital Territory for 2015–16), it is estimated that presentations increased by about 2.7% on average each year.

## Who used emergency department services?

In 2015–16, people who used emergency department services most commonly were aged 15–24 years and 25–34 years (13.7% and 13.8% respectively). Patients aged 65 years and over (who make up about 15% of the population) accounted for about 20% of emergency department presentations in 2015–16.

## Why were emergency department services used?

About 27% (almost 1.9 million) of emergency department presentations in 2015–16 had a principal diagnosis in the ICD-10-AM chapter *Injury, poisoning and certain other consequences of external causes*. The two most common diagnoses reported in 2015–16 were *Abdominal and pelvic pain* and *Pain in the throat and chest* (4.2% and 3.4% respectively).

## How long did people wait?

In 2015–16, about 74% of *Emergency presentations* were 'seen on time' (within the clinically recommended time). This was the same proportion as in 2014–15. It had increased between 2011–12 and 2013–14 from 72% to 75%.

In 2015–16, the proportion of patients seen on time ranged from 61% in the Northern Territory to 81% in New South Wales. Almost 100% of *Resuscitation* patients, 77% of *Emergency* patients and 93% of *Non-urgent* patients were seen on time.

## How long did people stay?

In 2015–16, the proportion of emergency department visits completed in 4 hours or less was 73% – compared with 64% in 2011–12. In 2015–16, Western Australia had the highest proportion completed in 4 hours or less (76%) and the Northern Territory had the lowest (64%).

About 29% of patients were admitted to hospital after their emergency department care. For these patients, 49% were admitted in 4 hours or less and 90% were admitted within 10 hours and 43 minutes.



# 1 Introduction

*Emergency department care 2015–16: Australian hospital statistics* focuses on information about emergency department care provided by Australia’s public hospitals. It continues the Australian Institute of Health and Welfare’s (AIHW) *Australian hospital statistics* series of annual reports describing the characteristics and activity of Australia’s hospitals.

This report presents information on care provided in public hospital emergency departments for the period 1 July 2015 to 30 June 2016. It includes information on overall activity, nationally agreed performance indicators on waiting times for care and time spent in the emergency department, and other waiting times statistics. It also includes comparative information for the previous 4 reporting periods.

Data for the Australian Capital Territory were not available at the time of publication of this report. The report tables will be updated on the AIHW website after the 2015–16 data for Australian Capital Territory are available.

Reports on elective surgery waiting times in 2015–16 (*Elective surgery waiting times 2015–16: Australian hospital statistics*) – and hospital-associated *Staphylococcus aureus* bacteraemia cases (*Staphylococcus aureus bacteraemia in Australian public hospitals 2015–16: Australian hospital statistics*) are scheduled for release later in 2016. Reports on care provided for admitted patients, non-admitted patients and on hospital resources for 2015–16, and a summary overview of Australia’s hospitals for 2015–16 will be published in early 2017.

## 1.1 What’s in this report?

### Structure of the report

This introduction provides contextual information on the data presented in this report and its limitations, along with a description of the key terms used. Other chapters provide information on the following subjects:

- ‘Chapter 2 – How much emergency department activity was there?’ – presents information on the number of emergency departments reporting and the numbers of presentations to public hospital emergency departments.
- ‘Chapter 3 – Who used emergency departments?’ – presents information about the patients who presented to emergency departments, including their age, sex and Indigenous status, and the remoteness of their area of usual residence.
- ‘Chapter 4 – How and why were services accessed?’ – presents information on arrival mode, triage category, time of presentation and type of visit. It also includes information about the reason for the patient’s visit and how the episode ended.
- ‘Chapter 5 – How long did people wait for emergency department care?’ – presents waiting times information, including the proportion of patients seen on time and the median and 90th percentile waiting times.
- ‘Chapter 6 – How long did people stay in the emergency department?’ – presents information on how long patients stayed in the emergency department including the proportion of emergency department stays that were completed within 4 hours and the 90th percentile length of emergency department stay for patients subsequently admitted to hospital.

Appendix A presents data quality information. It includes information on apparent variations in the reporting of the data used in this report and on the quality of Indigenous identification.

Appendix B presents technical notes on the methods used in this report.

Appendix C includes information on the public hospital peer groups used in this report.

The Glossary provides definitions for many of the common terms used in this report.

## Hospital performance indicators

Performance measurement is an important way in which we assess the health of our population and the success of health services and of the health system (AIHW 2016b).

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

This report presents data on the following National Healthcare Agreement (NHA) performance indicators relevant to emergency department care:

- Waiting times for emergency hospital care – proportion seen on time – see ‘Chapter 5 – How long did people wait for emergency department care?’
- Waiting times for emergency hospital care – proportion of patients whose length of emergency department stay is less than or equal to four hours – see ‘Chapter 6 – How long did people stay in the emergency department?’

Previously, reports in this series had reported on the NHA performance indicator: *Selected potentially avoidable GP-like presentations in emergency departments*, using an ‘interim’ specification. The AIHW has not reported this indicator because recent work on it has demonstrated major limitations in the methodology used with the available data.

Another NHA indicator previously referred to in this report was *Admission to hospital from emergency departments* (at the 90th percentile). While ongoing reporting requirements for this indicator have ceased, equivalent data are still reported in this report.

## 1.2 What data are reported?

This section presents information on the data used in this report and their limitations.

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

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.

The data supplied by state and territory health authorities were used by the AIHW to assemble the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD). The data cover waiting times and other characteristics of presentations to public hospital emergency departments.

For 2015–16, jurisdictions were able to provide data for the NNAPEDCD using either the NAPEDC National Minimum Data Set (NMDS) specification or the NAPEDC Data Set Specification (DSS). The main differences in data provided for the NMDS as opposed to the

DSS is in the scope of the data sets. For example, the following episodes are included in the NMDS, but are excluded for the DSS:

- where only a clerical service is provided to people supporting a pre-arranged admission
- where people are awaiting transit to another facility and receive no clinical care.

These differences in scope are reflected in the domain values for the data elements *Type of visit* and *Episode end status*.

For *Type of visit*, the DSS does not include a category for *Patient in transit*; patients awaiting transit to another facility who receive clinical care in the emergency department are recorded as an *Emergency presentation* for the DSS. For the NMDS, patients awaiting transport to another facility are included regardless of whether or not they receive clinical care in the emergency department and are recorded as *Patient in transit*.

For *Episode end status*, the DSS category *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or other admitted patient care unit)* does not include patients who died or otherwise left the emergency department. For the NMDS, the category of *Admitted to this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)* can include patients who died in the emergency department.

For 2015–16, Queensland provided data to the NNAPEDCD using the DSS, while all other states and territories provided data to the NNAPEDCD using the NMDS specification. Therefore, Queensland data may not be entirely comparable with data provided for other states and territories.

Detailed information about the NNAPEDCD is in the data quality statement at Appendix A and accompanying this report online at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

### **What are the limitations of the data?**

Overall, the quality of the data in the NNAPEDCD is sufficient to be published in this report. However, the limitations of the data (as outlined in Appendix A) should be taken into consideration when data are interpreted.

States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these edit queries. The AIHW does not adjust data to account for possible data errors or missing values, except where stated.

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.

### **How has the scope of the collection changed?**

From 2013–14 onwards, the scope of the NAPEDC NMDS (and for the DSS in 2015–16) has been patients registered for care in emergency departments in public hospitals where the emergency department meets the following criteria:

- purposely designed and equipped area with designated assessment, treatment and resuscitation areas
- ability to provide resuscitation, stabilisation and initial management of all emergencies
- availability of medical staff in the hospital 24 hours a day

- designated emergency department nursing staff 24 hours per day 7 days per week, and a designated emergency department nursing unit manager.

For 2012–13 and earlier years, the scope of the NAPEDC NMDS was public hospitals that were classified using the AIHW's previous peer group classification to peer groups A and B, for *Australian hospital statistics* for the previous financial year period. Therefore, comparisons of the non-admitted patient emergency care data provided between 2013–14 and 2015–16 with data provided for earlier periods should take into consideration changes in the scope of the collection. For more information, see <http://meteor.aihw.gov.au/content/index.phtml/itemId/612346>.

### **How has data coverage changed over time?**

Because the scope of the NAPEDC NMDS was restricted to either certain hospital peer groups (2003–04 to 2012–13), or to formal emergency departments (2013–14 to 2015–16), the number of emergency department presentations reported to the NNAPEDCD did not include all emergency or urgent care provided by public hospitals.

Between 2003–04 and 2013–14, the data coverage of the NNAPEDCD was estimated by comparing the number of emergency department presentations reported to the NNAPEDCD with the number of non-admitted patient emergency occasions of service reported to the National Public Hospital Establishments Database (NPHEd). The NPHEd estimate was considered to be a more complete count of emergency care services because it included emergency care data for all public hospitals, regardless of whether they had a formal emergency department, or other arrangements for providing emergency care. This therefore provides an estimate but not an exact measure of the coverage.

Emergency occasions of service were not reported to the NPHEd from 2014–15 onwards which meant it was no longer possible to calculate the proportion of all emergency occasions of service that were reported to the NNAPEDCD using the previous method.

For 2014–15, an approximate estimate of coverage was calculated based on emergency occasions of service that were reported to the NNAPEDCD in 2013–14. Using this approach coverage was estimated at around 88% in 2014–15. Using this estimate for 2014–15, between 2011–12 and 2014–15, the estimated proportion of emergency occasions of service reported to the NNAPEDCD increased from 85% to 88% (*Emergency department care 2014–15: Australian hospital statistics* [AIHW 2015b]).

An estimate of coverage for 2015–16 has not been calculated as the most recent data on emergency services were for 2013–14, and are hence now two years out of date.

Data for 2015–16 for the Australian Capital Territory were not available at the time of publication of this report.

Between 2014–15 and 2015–16, apart from the absence of data for the Australian Capital Territory, there was no change in the coverage of the NNAPEDCD (assessed by the hospitals included).

In 2013–14, New South Wales commenced reporting data to the NNAPEDCD for an additional 85 hospitals, increasing from 95 hospitals in 2012–13 (88% coverage) to 180 hospitals in 2013–14 (99% coverage).

For Western Australia in 2014–15, Busselton Hospital commenced reporting emergency department care data after the hospital was redeveloped with a larger emergency department.



Coverage of the NNAPEDCD by remoteness area of the hospital was also previously calculated using emergency occasions of service data reported to the NPHED. In 2014–15, coverage varied and it was estimated to range from 100% in *Major Cities* to 18% in *Very remote* areas (AIHW 2015b).

See Appendix A for more information on issues affecting data quality.

## 1.3 What terms and methods are used?

This section presents the main calculation methods and common terms used throughout this report. Terms relevant to the data on emergency department care are summarised in Box 1.1, and more terms are included in the Glossary.

### Changes over time

Time series data in this report show average annual changes from 2011–12 to 2015–16, and the annual change between 2014–15 and 2015–16.

The rate of annual change for counts of emergency presentations in time series tables excludes the Australian Capital Territory data (because the Australian Capital Territory 2015–16 data were not available at the time of publication). The rates were not adjusted for other changes in data coverage, except where noted in the text.

### Public hospital peer groups

Public hospital peer groups are used to classify hospitals that share similar characteristics to provide a basis for meaningful comparisons.

This report presents analyses by hospital peer group, including the NHA performance indicators, using the AIHW's peer group classification. The Steering Committee for the Review of Government Service Provision will also use these peer groups for reporting the NHA performance indicators in the *Report on government services 2017*.

Before 2014–15, this information was presented using the AIHW's previous peer group classification. Therefore, the data presented here by public hospital peer group are not directly comparable with those presented in AIHW reports before 2014–15.

See Appendix C and the AIHW publication *Australian hospital peer groups* (AIHW 2015a) for more information.

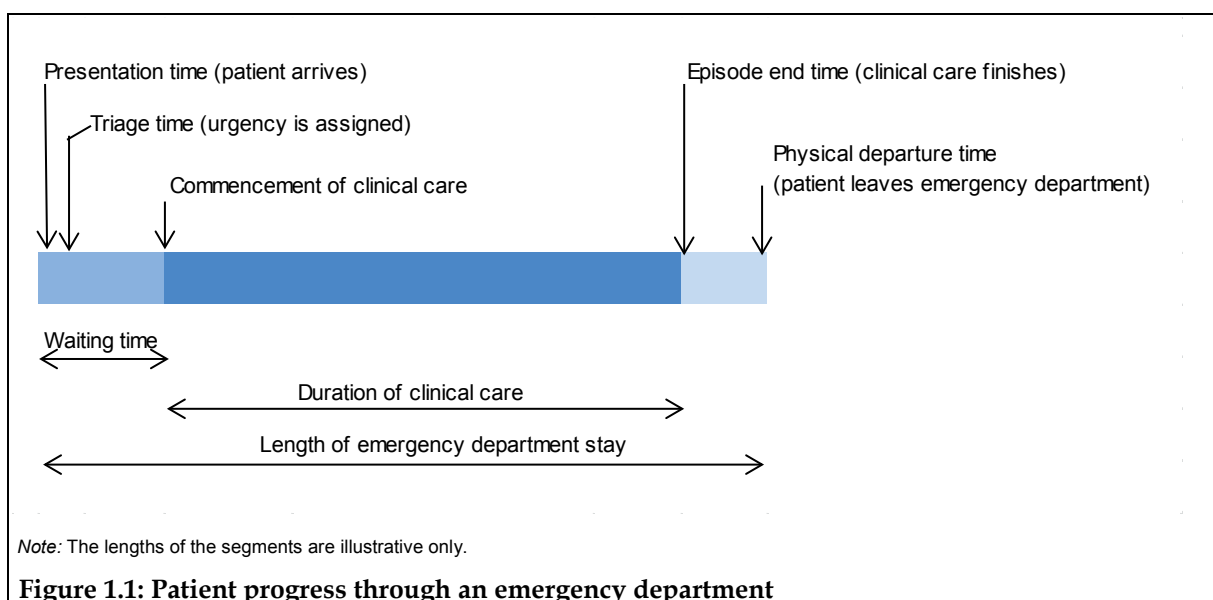
### Measurement of time in the emergency department

The progress of the patient through the emergency department is recorded in the NNAPEDCD with 5 different time points:

- *presentation time* – the time of first recorded contact with an emergency department staff member. This may be at the commencement of clerical registration or of the triage process
- *triage time* – the time at which the patient was assigned a triage category
- *clinical care commencement* – the time at which care commenced by a doctor, nurse, mental health practitioner or other health professional
- *episode end time* – the time at which the non-admitted patient emergency department service episode ended

- *physical departure time* – the time at which the patient departed the emergency department.

These time points are used to derive the patient’s waiting time to commencement of clinical care (see Chapter 5), the duration of clinical care and the length of the emergency department stay (Chapter 6). The patient’s progress through an emergency department is represented in Figure 1.1.



**Figure 1.1: Patient progress through an emergency department**

### Missing or invalid data

In some cases, the data provided may include missing values (for example, the date/time of physical departure was not recorded), or invalid values (for example, if the time of episode end was recorded as occurring before the time of presentation or if the age of the patient was recorded as 999 years).

A valid waiting time could not be calculated for about 93,000 records (excluding records with an episode end status of *Did not wait* or *Dead on arrival*) due to missing or invalid values (for example, for time of presentation or time of commencement of clinical care). These records were not used in the derivation of waiting time statistics.

Duration of clinical care could not be calculated for about 117,000 records (excluding records with an episode end status of *Did not wait*) due to missing or invalid values (for example, for time of commencement of clinical care or time of episode end).

The length of emergency department stay could not be calculated for about 4,400 records due to missing, or invalid values (for example, for time of presentation or time of physical departure).

### **Box 1.1: Summary of terms relating to emergency department care**

An emergency department **presentation** occurs following the arrival of the patient at the emergency department and is the earliest occasion of being registered clinically or triaged. The presentation is also used as a counting unit.

The **type of visit** to the emergency department indicates the reason the patient presented to the emergency department, it includes *Emergency presentations; Return visit, planned; Pre-arranged admissions; Patient in transit* (NMDS only) and *Dead on arrival*.

**Emergency presentation** refers to attendance for an actual or suspected condition that is sufficiently serious to require acute unscheduled care.

An **emergency department stay** is the period between when a patient presents at an emergency department and when that person is recorded as having physically departed the emergency department.

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

The **triage category** indicates the urgency of the patient's need for medical and nursing care. It is usually assigned by an experienced registered nurse or medical practitioner at, or shortly after, the time of presentation to the emergency department. The triage category assigned is in response to the question: 'This patient should wait for medical assessment and treatment no longer than...?'.

The Australasian Triage Scale has 5 categories – as defined in the *National health data dictionary, version 16* (AIHW 2012) – 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 ATS 1 to ATS 5, respectively (ACEM 2013).

**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. Presentations were excluded if the waiting time could not be calculated or the patient *Did not wait to be attended by a health care professional*, or was *Dead on arrival*.

**Proportion seen on time** is 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, usually represented as a percentage.

For the purpose of this report, a patient with a triage category of *Resuscitation* was considered to be seen on time if the waiting time to commencement of clinical care was less than or equal to 2 minutes.

(continued)

### **Box 1.1: Summary of terms relating to emergency department care**

There is some variation among jurisdictions in the criteria used to determine the proportion of *Resuscitation* patients seen on time; therefore, the proportions of *Resuscitation* patients seen on time presented in this report may differ from those reported by individual jurisdictions.

**Proportion ending in admission** is the proportion of presentations for which the episode end status was reported as *Admitted to this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)* (NMDS only) or *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)* (DSS only), usually represented as a percentage. This includes being admitted either to a short stay unit, hospital-in-the-home or other admitted patient care unit.

See appendixes A and B for more information.

## **1.4 Additional information**

This report is available on the AIHW website at <[www.aihw.gov.au/hospitals](http://www.aihw.gov.au/hospitals)> in PDF format and all tables are available as downloadable Excel spread sheets.

Emergency department performance information is available on the AIHW's *MyHospitals* website for individual public hospitals at <<http://www.myhospitals.gov.au/>>.

The information includes:

- number of presentations to the emergency departments
- percentage of patients seen on time
- percentage of patients who departed the emergency department within 4 hours
- median time patients spent in the emergency department
- time until most patients (90%) had departed from the emergency department.

Although the peer groupings used in this report and on the *MyHospitals* website are founded on the same peer grouping classification (AIHW 2015a) there are some differences in the names and the groupings. For example, Principal referral hospitals are described as Major hospitals on the *MyHospitals* web site.

Also note that 'patients discharged from the emergency department' do not refer to the same group of patients as those in this report who were 'not subsequently admitted to the same hospital'. For an explanation of these differences, see <<http://www.myhospitals.gov.au/about-the-data>>.

### **Private hospital emergency department activity**

Information about emergency occasions of service provided by private hospitals is reported to the Australian Bureau of Statistics' (ABS) Private Health Establishments Collection and is presented in the ABS' *Private hospitals, Australia* reports.

In 2014–15, about 533,400 accident and emergency services were provided by 37 acute and psychiatric private hospitals. These hospitals included those that did not have a formal accident and emergency unit but treated accident and emergency patients (ABS 2016).

There were 25 private hospitals with emergency departments that provided levels 4 to 6 of emergency services as defined by the *Guide to the role delineation of health services* (NSW Health 2002).

## Patient experience in emergency departments

The ABS Patient Experience Survey collects national data on access and barriers to a range of health care services, including emergency visits for persons aged 15 years and over (ABS 2015).

The 2014–15 survey found that approximately 2.7 million people aged 15 and over reported visiting an emergency department in the previous 12 months. Of these, 18% thought their care could have been provided by a general practitioner (GP).

The main reasons respondents presented at emergency departments instead of their GP on the most recent occasion was because they were taken there by ambulance (44%), their GP was unavailable (23%), their GP did not have required equipment or facilities (13%), they were sent by their GP (10%) and waiting time for a GP was too long (2%).

The survey found that 67% of respondents reported that doctors and specialists always listened carefully and 74% reported that emergency department nurses always showed respect.

## Updates

Online tables and interactive data are updated in the event of errors being found in the report after publication.

The report tables will be updated on the AIHW website after the data for 2015–16 for the Australian Capital Territory are available.

### Where to go for more information

More information on Australia's hospitals is available in:

- *Elective surgery waiting times 2014–15: Australian hospital statistics* (AIHW 2015b)
- *Staphylococcus aureus bacteraemia in Australian public hospitals 2014–15: Australian hospital statistics* (AIHW 2015c)
- *Admitted patient care 2014–15: Australian hospital statistics* (AIHW 2016a)
- *Australia's hospitals 2014–15: at a glance* (AIHW 2016c)
- *Hospital resources 2014–15: Australian hospital statistics* (AIHW 2016d)
- *Non-admitted patient care 2014–15: Australian hospital statistics* (AIHW 2016e).

## 2 How much emergency department activity was there?

This chapter focuses on public hospitals that reported emergency department activity to the NNAPEDCD, their total activity in 2015–16, and over time including:

- the number and type of public hospitals that provided emergency department care
- the number of presentations to public hospital emergency departments.

### Key findings

#### How many public hospital emergency departments were there?

In 2015–16, 285 of Australia's 287 public hospital emergency departments reported emergency department presentations to the NNAPEDCD (data were not available for 2 hospitals in the Australian Capital Territory). These included the major public hospitals – classified as *Principal referral and women's and children's hospitals*, *Public acute group A hospitals* and *Public acute group B hospitals* – as well as some smaller hospitals located in regional and remote areas.

#### How many emergency department presentations were there?

In 2015–16, there were almost 7.5 million presentations to Australia's public hospital emergency departments (excluding the Australian Capital Territory), corresponding to more than 20,000 presentations each day.

About 33% of emergency department presentations (2.5 million) occurred in *Principal referral and women's and children's hospitals* and 37% (2.7 million) occurred in *Public acute group A hospitals*.

#### How has activity changed over time?

Between 2011–12 and 2015–16, the number of presentations to public hospital emergency departments increased by 3.8% on average each year (excluding the Australian Capital Territory). However, after adjusting for changes in the number of hospitals reporting to the NNAPEDCD, it is estimated that presentations increased by about 2.7% on average.

Emergency department presentations increased by 3.2% between 2014–15 and 2015–16 (excluding the Australian Capital Territory).

## 2.1 How many public hospitals had emergency departments?

The NNAPEDCD provides information on the care provided (including waiting times for care) for non-admitted patients registered for care in emergency departments in public hospitals where the emergency department meets the following criteria:

- purposely designed and equipped area with designated assessment, treatment and resuscitation areas
- ability to provide resuscitation, stabilisation and initial management of all emergencies
- availability of medical staff in the hospital 24 hours a day
- designated emergency department nursing staff 24 hours per day 7 days per week, and a designated emergency department nursing unit manager.

### Changes over time

In 2015–16, there were 285 public hospitals that reported emergency department care information to the NNAPEDCD compared with 203 in 2011–12 (Table 2.1). These included the major public hospitals in all states and territories (excluding the two in the Australian Capital Territory).

The increase in the number of hospitals reporting emergency department presentations between 2012–13 and 2013–14 was mostly due to an increase in reporting for hospitals other than *Principal referral and women's and children's hospitals, Public acute group A hospitals* or *Public acute group B hospitals*.

Between 2013–14 and 2015–16, the number of hospitals that reported emergency department presentations to the NNAPEDCD was relatively stable for most states and territories (Table 2.2).

Interpretation of changes over time should take these changes in coverage into account, as noted in Section 1.2.

**Table 2.1: Public hospitals emergency departments, by public hospital peer group, 2011–12 to 2015–16<sup>(a)</sup>**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
Principal referral and women's and children's hospitals	39	39	39	41	39
Public acute group A hospitals	60	60	60	60	60
Public acute group B hospitals	44	45	45	45	45
Public acute group C hospitals	38	38	55	55	55
Other hospitals <sup>(c)</sup>	22	22	90	89	88
<b>All hospitals</b>	<b>203</b>	<b>204</b>	<b>289</b>	<b>290</b>	<b>287</b>

(a) Interpretation of all changes over time presented in this report should take into account changes in coverage as noted in Section 1.2.

(b) Includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication.

(c) Includes hospitals not included in the specified hospital peer groups. See appendix C for more information about peer groups.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

**Table 2.2: Public hospital emergency departments, by state and territory, 2011–12 to 2015–16<sup>(a)</sup>**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
New South Wales <sup>(c)</sup>	95	95	180	178	177
Victoria	40	40	40	40	40
Queensland <sup>(d)</sup>	26	27	27	28	26
Western Australia <sup>(e)</sup>	17	17	17	19	19
South Australia	14	14	14	14	14
Tasmania	4	4	4	4	4
Australian Capital Territory	2	2	2	2	2
Northern Territory	5	5	5	5	5
<b>Total</b>	<b>203</b>	<b>204</b>	<b>289</b>	<b>290</b>	<b>287</b>

(a) Interpretation of all changes over time presented in this report should take into account changes in coverage as noted in Section 1.2.

(b) Includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication.

(c) Between 2012–13 and 2013–14, an additional 85 hospitals reported emergency department care data. Byron Central Hospital commenced providing emergency department care in 2015–16, replacing emergency department care previously provided by both Mullumbimby Hospital and Byron Bay Hospital.

(d) Data for the Royal Children's Hospital and the Mater Children's Hospital were included from 2011–12 to 2014–15. During 2014–15, they were replaced by the Lady Cilento Children's Hospital and all 3 hospitals reported emergency department care data in that year.

(e) During 2014–15, the Fremantle Hospital's emergency department was replaced by the Fiona Stanley Hospital emergency department and both hospitals were reported for 2014–15. Busselton Hospital reported emergency department care data for the first time in 2014–15. In November 2015, the St John of God Midland Public Hospital opened and the Swan District Hospital closed, and both hospitals were reported in 2015–16.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## Hospitals that provided emergency department care in 2015–16

In 2015–16, 285 public hospitals reported emergency department presentations to the NNAPEDCD. Data for the Australian Capital Territory for 2015–16 were not available at the time of publication.

For New South Wales, Byron Central Hospital commenced providing emergency department care in 2015–16, replacing emergency department care previously provided by both Mullumbimby Hospital and Byron Bay Hospital. For Western Australia, the St John of God Hospital Midland Public Hospital commenced reporting emergency department care and Swan District Hospital closed in 2015–16.

Emergency department presentations were reported for:

- 38 of the 41 *Principal referral and women's and children's hospitals* (excludes data for 1 hospital in the Australian Capital Territory) (Table 2.3) – these hospitals are mainly located in *Major cities* and provide a very broad range of specialist services
- 59 of the 62 *Public acute group A hospitals* (excludes data for 1 hospital in the Australian Capital Territory) – about half of these hospitals are located in regional and remote areas and they provide a wide range of specialist services
- all 45 *Public acute group B hospitals* – these hospitals provide a narrower range of services than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals*
- 55 of the 143 *Public acute group C hospitals* – these are small hospitals. Most small hospitals do not have a formal emergency department, but may provide emergency services under other arrangements.



Emergency department presentations were also reported for 88 other hospitals, including 59 *Public acute group D hospitals* and 22 *Very small hospitals*.

**Table 2.3: Public hospital emergency departments, by public hospital peer group, states and territories, 2015–16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Principal referral and women's and children's hospitals	13	9	6	5	3	1	1	1	39
Public acute group A hospitals	22	15	12	4	3	2	1	1	60
Public acute group B hospitals	17	9	8	6	4	1	..	..	45
Public acute group C hospitals	38	6	0	4	4	0	..	3	55
Other hospitals <sup>(b)</sup>	87	1	0	0	0	0	..	..	88
<b>All hospitals</b>	<b>177</b>	<b>40</b>	<b>26</b>	<b>19</b>	<b>14</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>287</b>

(a) Includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication.

(b) Includes hospitals not included in the specified hospital peer groups. See appendix C for more information about peer groups.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

### Where to go for more information

Information on data limitations and methods is available in appendixes A and B. See Appendix C for more information on public hospital peer groups.

## 2.2 How many emergency department presentations were there?

This section presents information on the numbers of presentations to public hospital emergency departments for 2015–16, and over time.

### Changes over time

Between 2011–12 and 2015–16, the number of emergency department presentations reported to the NNAPEDCD increased by 14%, with an average annual increase of 3.8% (Table 2.4).

However, between 2012–13 and 2013–14, there was a large increase in presentations for New South Wales, coinciding with a large number of additional hospitals commencing reporting in 2013–14.

After adjusting for coverage changes between 2012–13 and 2013–14 for New South Wales, between 2013–14 and 2014–15 for Western Australia and excluding the Australian Capital Territory, it is estimated that the number of emergency department presentations increased by 2.7% on average each year between 2011–12 and 2015–16.

Emergency department presentations reported by *Principal referral and women's and children's hospitals* increased on average by 4.1% per year between 2011–12 and 2015–16 (Table 2.4).

Between 2014–15 and 2015–16, the overall number of emergency department presentations increased by 3.2%; it increased by 5.7% for *Principal referral and women's and children's hospitals* and 3.8% for *Public acute group A hospitals*.

**Table 2.4: Emergency department presentations, by public hospital peer group, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>	Change (%) <sup>(a)</sup>	
						Average since 2011–12	Average since 2014–15
Principal referral and women's and children's hospitals	2,183,328	2,216,387	2,323,147	2,426,058	2,486,675	4.1	5.7
Public acute group A hospitals	2,502,189	2,557,682	2,626,188	2,680,370	2,723,863	2.7	3.8
Public acute group B hospitals	1,296,203	1,372,759	1,382,088	1,399,080	1,406,639	2.1	0.5
Public acute group C hospitals	455,704	460,405	594,398	604,331	625,810	8.3	3.6
Other hospitals <sup>(c)</sup>	109,918	105,124	270,082	256,603	222,882	19.3	–13.1
<b>All hospitals</b>	<b>6,547,342</b>	<b>6,712,357</b>	<b>7,195,903</b>	<b>7,366,442</b>	<b>7,465,869</b>	<b>3.8</b>	<b>3.2</b>

(a) Interpretation of all changes over time presented in this report should take into account changes in coverage. Percentage change over time excludes data for the Australian Capital Territory for all reporting periods. Changes have not been adjusted for the increase in coverage of hospitals in New South Wales between 2012–13 and 2013–14, or between 2013–14 and 2014–15 for Western Australia.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) Includes hospitals not included in the specified hospital peer groups. See appendix C for more information about peer groups.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

Between 2011–12 and 2015–16, Queensland had the highest average annual increase in emergency department presentations (3.8%, Table 2.5).

Between 2014–15 and 2015–16, the greatest percentage increases in emergency department presentations were reported for the Northern Territory and Queensland (both 4.4%) and Victoria (4.3%).

## Activity in 2015–16

There were almost 7.5 million presentations to public hospital emergency departments in 2015–16.

About 33% of presentations (2.5 million) to public hospital emergency departments occurred in *Principal referral and women's and children's hospitals*, 37% in *Public acute group A hospitals* and 19% in *Public acute group B hospitals* (Table 2.6).

### Where to go for more information

More information on emergency department presentations by peer group is available in 'Table S5.1: Emergency department presentation statistics, by triage category and public hospital peer group, 2015–16' (which accompanies this report online).

Information on data limitations and methods is available in appendixes A and B.

**Table 2.5: Emergency department presentations, states and territories, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(c)</sup>	Change (%) <sup>(a)</sup>		Adjusted change (%) <sup>(b)</sup>	
						Average since 2011–12	Since 2014–15	Average since 2011–12	Since 2014–15
New South Wales	2,235,455	2,278,591	2,646,415	2,681,466	2,733,520	5.2	1.9	2.3	2.1
Victoria	1,509,065	1,528,609	1,572,787	1,610,623	1,679,886	2.7	4.3	2.7	4.3
Queensland	1,238,522	1,284,158	1,351,573	1,378,883	1,439,143	3.8	4.4	3.8	4.4
Western Australia	732,351	754,252	742,615	803,821	829,431	3.2	3.2	2.4	3.0
South Australia <sup>(d)</sup>	427,011	455,220	463,171	469,368	481,889	3.1	2.7	3.1	2.7
Tasmania	141,700	147,064	148,278	150,076	153,541	2.0	2.3	2.0	2.3
Australian Capital Territory	118,396	118,931	125,888	129,961	n.a.	n.a.	n.a.	n.a.	n.a.
Northern Territory	144,842	145,532	145,176	142,244	148,459	0.6	4.4	0.6	4.4
<b>Total</b>	<b>6,547,342</b>	<b>6,712,357</b>	<b>7,195,903</b>	<b>7,366,442</b>	<b>7,465,869</b>	<b>3.8</b>	<b>3.2</b>	<b>2.7</b>	<b>3.2</b>

(a) Interpretation of all changes over time presented in this report should take into account changes in coverage as noted in Section 1.2. Percentage change over time excludes data for the Australian Capital Territory.

(b) Adjusted for changes in coverage between 2012–13 and 2013–14 for New South Wales, between 2013–14 and 2014–15 for Western Australia, and between 2014–15 and 2015–16 for the Australian Capital Territory.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(d) For South Australia, data for 6 additional country hospitals were included from September 2011. Therefore, the number of emergency department presentations is undercounted for 2011–12.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 2.6: Emergency department presentations, by public hospital peer group, states and territories, 2015–16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>	Total (%)
Principal referral and women's and children's hospitals	832,119	534,576	468,268	319,851	203,649	59,504	n.a.	68,708	2,486,675	33.3
Public acute group A hospitals	877,976	678,359	656,632	247,065	150,337	68,110	n.a.	45,384	2,723,863	36.5
Public acute group B hospitals	463,389	339,392	314,243	179,593	84,095	25,927	..	..	1,406,639	18.8
Public acute group C hospitals	376,902	87,811	0	82,922	43,808	0	..	34,367	625,810	8.4
Other hospitals <sup>(b)</sup>	183,134	39,748	0	0	0	0	..	..	222,882	3.0
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>	<b>100.0</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(b) Includes hospitals not included in the specified hospital peer groups. See appendix C for more information about peer groups.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

## 3 Who used emergency department services?

This chapter presents information on the patients who received care in Australia's public hospital emergency departments. The information in this chapter includes:

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

### Key findings

#### Age group and sex of patient

In 2015–16, 51% of emergency department presentations (excluding the Australian Capital Territory) were for males.

In 2015–16, the most common 10 year age groups reported for emergency department presentations were 15–24 and 25–34 (13.7% and 13.8%, respectively).

Patients aged 4 and under (who account for less than 7% of the population) accounted for more than 11% of all emergency department presentations in 2015–16.

Patients aged 65 and over (who make up about 15% of the population) accounted for about 20% of all emergency department presentations in 2015–16.

#### Aboriginal and Torres Strait Islander people

In 2015–16, about 6.1% of emergency department presentations (462,000) (excluding the Australian Capital Territory) were reported for people of Aboriginal and Torres Strait Islander origin. For the Northern Territory, 45% of emergency department presentations were for Aboriginal and Torres Strait Islander people.

#### Remoteness

About 63% of emergency department presentations (excluding the Australian Capital Territory) were reported for people living in *Major cities*, who account for about 70% of the Australian population. People living in *Very remote* areas (who account for almost 1% of the population) accounted for about 1% of presentations. This was despite the apparent lack of coverage of the data for the more remote areas of Australia.

## 3.1 Age group and sex

In 2015–16, males accounted for just over half (50.5%) of emergency department presentations (Table 3.1) (excluding the Australian Capital Territory).

Substantially more boys than girls aged 0–14 presented to emergency departments (56% and 44%, respectively).

The most common 10 year age groups reported for emergency department presentations were 15–24 and 25–34 (13.7% and 13.8% respectively). Females accounted for a higher proportion of presentations in these age groups than males.

Patients aged 4 and under (who account for less than 7% of the population), accounted for about 11% of all emergency department presentations in 2015–16. Males accounted for about 56% of presentations for patients aged 4 and under.

Patients aged 65 and over (who make up about 15% of the population) accounted for about 20% of all emergency department presentations in 2015–16.

## 3.2 Aboriginal and Torres Strait Islander people

In 2015–16, about 462,000 emergency department presentations (6.1%) (excluding the Australian Capital Territory) were reported for people of Aboriginal and Torres Strait Islander origin (Table 3.2), who represent about 3.1% of the Australian population.

The Northern Territory, the jurisdiction with the highest proportion of Indigenous residents (30.0%), had the highest proportion of emergency department presentations for Indigenous Australians (45.2%). Victoria, the state with the lowest proportion of Indigenous residents (0.9%), recorded the lowest proportion of emergency department presentations for Indigenous Australians (1.8%).

See Box 3.1 for information on the quality of Indigenous status data.

### Box 3.1: Quality of Indigenous status data

The quality of the data reported for Indigenous status in emergency departments has not been formally assessed – therefore, caution should be exercised when interpreting these data.

All states and territories reported that the quality of their data for Indigenous status is acceptable for reporting purposes. South Australia and Tasmania reported ongoing work to improve the collection of the data element.

See Appendix A for comments provided by states and territories on the perceived quality of Indigenous status data provided for the NNAPEDCD.

### Where to go for more information

Information on waiting times for emergency department presentations by Indigenous status is available in ‘Chapter 4 – How long did people wait for emergency department care?’.

Information on data limitations and methods is available in appendixes A and B.

Table 3.1: Emergency department presentations by age group and sex, states and territories, 2015–16

Sex	Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
<b>Males</b>										
	0–4	174,611	109,682	91,496	57,945	30,821	7,789	n.a.	8,731	481,075
	5–14	157,588	89,350	85,344	51,786	26,212	8,057	n.a.	7,027	425,364
	15–24	177,310	101,227	100,295	54,399	29,529	11,396	n.a.	8,921	483,077
	25–34	170,242	102,554	93,192	57,324	28,394	9,625	n.a.	12,401	473,732
	35–44	152,065	91,645	82,204	46,475	25,244	8,533	n.a.	10,924	417,090
	45–54	143,918	85,603	75,608	42,330	25,599	8,396	n.a.	11,455	392,909
	55–64	134,221	78,477	65,574	35,532	22,877	8,101	n.a.	7,933	352,715
	65–74	130,559	73,606	60,528	31,861	21,330	7,682	n.a.	4,841	330,407
	75–84	108,013	63,667	46,228	25,450	19,122	5,965	n.a.	1,938	270,383
	85 and over	57,717	33,745	22,952	14,361	11,998	2,661	n.a.	533	143,967
	<i>Total males<sup>(b)</sup></i>	<i>1,406,394</i>	<i>829,571</i>	<i>723,526</i>	<i>417,466</i>	<i>241,127</i>	<i>78,228</i>	<i>n.a.</i>	<i>74,711</i>	<i>3,771,023</i>
<b>Females</b>										
	0–4	135,877	84,325	70,960	45,319	24,128	5,920	n.a.	6,855	373,384
	5–14	123,251	71,875	69,734	42,173	21,892	6,785	n.a.	5,862	341,572
	15–24	186,390	118,172	119,727	61,260	34,127	12,101	n.a.	10,852	542,629
	25–34	182,207	142,380	107,480	67,087	32,299	10,324	n.a.	14,102	555,879
	35–44	142,864	100,127	83,500	48,379	24,823	8,339	n.a.	12,386	420,418
	45–54	129,976	82,131	73,205	40,249	23,336	8,184	n.a.	10,917	367,998
	55–64	121,093	71,711	59,813	33,122	21,021	7,244	n.a.	6,713	320,717
	65–74	114,432	67,286	53,594	28,386	20,627	6,790	n.a.	3,672	294,787
	75–84	108,601	64,909	45,889	26,077	21,050	5,839	n.a.	1,790	274,155
	85 and over	82,251	47,349	31,531	19,805	17,434	3,767	n.a.	590	202,727
	<i>Total females<sup>(b)</sup></i>	<i>1,327,013</i>	<i>850,275</i>	<i>715,496</i>	<i>411,865</i>	<i>240,739</i>	<i>75,299</i>	<i>n.a.</i>	<i>73,746</i>	<i>3,694,433</i>
<b>All persons<sup>(c)</sup></b>		<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(b) Includes 471 presentations for which the age group of the patient was not reported.

(c) Includes 413 presentations for which the sex of the patient was not reported and 471 presentations for which the age group of the patient was not reported.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



**Table 3.2: Emergency department presentations by Indigenous status, states and territories, 2015–16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Aboriginal but not Torres Strait Islander origin	161,118	25,998	83,130	65,967	21,866	6,804	n.a.	65,586	430,469
Torres Strait Islander but not Aboriginal origin	2,472	741	7,690	413	196	251	n.a.	401	12,164
Aboriginal and Torres Strait Islander origin	4,941	3,054	7,742	1,126	391	557	n.a.	1,135	18,946
<i>Indigenous Australians</i>	<i>168,531</i>	<i>29,793</i>	<i>98,562</i>	<i>67,506</i>	<i>22,453</i>	<i>7,612</i>	n.a.	<i>67,122</i>	<i>461,579</i>
Neither Aboriginal nor Torres Strait Islander origin	2,519,686	1,639,577	1,334,980	758,382	440,779	144,446	n.a.	81,259	6,919,109
Not reported	45,303	10,516	5,601	3,543	18,657	1,483	n.a.	78	85,181
<i>Other Australians<sup>(b)</sup></i>	<i>2,564,989</i>	<i>1,650,093</i>	<i>1,340,581</i>	<i>761,925</i>	<i>459,436</i>	<i>145,929</i>	n.a.	<i>81,337</i>	<i>7,004,290</i>
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

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

Note: See boxes 1.1 and 3.1 and appendixes A and B for more information on terminology, data limitations and methods.

### 3.3 Remoteness area of usual residence

In 2015–16, 63% of emergency department presentations were reported for people living in *Major cities*, who account for about 70% of the Australian population. People living in *Very remote* areas (who account for almost 1% of the population) accounted for about 1% of presentations, despite the apparent lack of coverage of the data for more remote areas of Australia (Table 3.3).

About 52% of emergency department presentations reported for people living in *Major cities* were assigned to the 3 most urgent triage categories (*Resuscitation*, *Emergency* and *Urgent*), compared with about 36% of emergency department presentations reported for people living in *Remote* areas.

The coverage of the NNAPEDCD is not complete and varied by remoteness area of the hospital (see Section 1.2 for more information).

The information presented in Table 3.3 is based on the remoteness area of the patient’s usual residence, and this may differ from the remoteness area of the hospital. Therefore, the information presented should be interpreted with caution.

**Table 3.3: Emergency department presentations by triage category and remoteness area of usual residence, 2015–16<sup>(a)</sup>**

	Remoteness area of usual residence					Total <sup>(b)</sup>
	Major cities	Inner regional	Outer regional	Remote	Very remote	
Resuscitation	35,321	9,296	5,040	773	581	52,718
Emergency	616,483	171,353	79,058	12,422	7,883	899,906
Urgent	1,772,107	555,296	255,883	40,981	24,316	2,686,516
Semi-urgent	1,895,838	712,457	339,630	73,315	37,893	3,110,520
Non-urgent	348,207	193,650	109,661	23,681	14,056	712,021
<b>Total<sup>(b)(c)</sup></b>	<b>4,669,623</b>	<b>1,643,386</b>	<b>789,937</b>	<b>151,244</b>	<b>84,777</b>	<b>7,465,869</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(b) Includes about 131,000 presentations for which the remoteness area was unknown.

(c) Includes about 4,200 presentations for which the triage category was not reported.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

#### Where to go for more information

Information on waiting times for emergency department presentations by remoteness of area of usual residence is available in ‘Chapter 4 – How long did people wait for emergency department care?’.

Information on data limitations and methods is available in Section 1.2 and in appendixes A and B.

## 4 How and why were services accessed?

This chapter presents information on how and why patients presented to emergency departments. The information in this chapter includes:

- the type of visit – whether for emergency treatment or another reason
- the urgency of care – the triage category indicates the urgency of the patient’s need for medical and nursing care
- the mode of arrival – whether by ambulance, or another form of transport
- the principal diagnosis – the diagnosis chiefly responsible for occasioning the presentation to the emergency department
- the episode end status – including whether the patient was subsequently admitted.

Data for the Australian Capital Territory for 2015–16 were not available at the time of publication.

### Key findings

#### How urgently was care required and how did people arrive?

In 2015–16, about 78% of emergency department presentations (excluding the Australian Capital Territory) were assigned a triage category of either *Urgent* or *Semi-urgent*. Fewer than 1% of patients were assigned a triage category of *Resuscitation*.

In 2015–16, about 24% of emergency department presentations arrived by *Ambulance, air ambulance or helicopter rescue service*. About 83% of *Resuscitation* patients (who need to be treated immediately) arrived by *Ambulance, air ambulance or helicopter rescue service*.

#### When did people present to the emergency department?

There were more emergency department presentations on the weekends and on Mondays compared with other days of the week. About 69% of presentations occurred between 8:00 am and 8:00 pm.

#### Why did people receive care?

In 2015–16, about 27% of emergency department presentations (almost 1.9 million, excluding the Australian Capital Territory) had a principal diagnosis in the ICD-10-AM chapter *Injury, poisoning and certain other consequences of external causes*.

The ICD-10-AM chapter *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* was reported for about 20% of presentations. This chapter includes the diagnoses *Abdominal and pelvic pain* and *Pain in the throat and chest* – which were the 2 most common principal diagnoses reported in 2015–16 (4.2% and 3.4%, respectively).

#### How was care completed?

In 2015–16, almost two-thirds (63%) of presentations reported an episode end status of *Departed without being admitted or referred*. About 29% of all presentations were *Admitted to this hospital* at the conclusion of clinical care in the emergency department. About 4% of presentations *Did not wait* for treatment.

## 4.1 What types of visit occur in emergency departments?

The reason that a patient presents to the emergency department can be described in terms of the **type of visit**. This can be reported as:

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

Of the 7.5 million presentations reported to the NNAPEDCD for 2015–16 (excluding the Australian Capital Territory, see Table 4.1), about 98% were *Emergency presentations*, about 2% were *Return visit, planned* and the remaining types of visit accounted for about 0.3%.

Queensland provided 2015–16 data for the NNAPEDCD using the DSS, for which *Patient in transit* is not a valid category – these patients are included in the category *Emergency presentation*. In addition, for the DSS, patients who were dead on arrival, but for which resuscitation or other clinical care is attempted are not assigned to the category *Dead on arrival*. In 2014–15, Queensland reported 745 records for patients in transit and 43 patients dead on arrival.

The reporting of information about patients who were *Dead on arrival* varies among states and territories.

For South Australia, patients who are *Dead on arrival* are not managed or reported by emergency departments.

For Western Australia, emergency departments only occasionally manage and report patients who are *Dead on arrival*, because the majority of these patients are taken directly to the state morgue.

Between 2014–15 and 2015–16, there was a notable decrease in the number of presentations for *Dead on arrival* for Victoria, reflecting a change in practice with certification of death by a coroner for deceased persons brought to emergency departments, rather than certification by an emergency department physician.

**Table 4.1: Emergency department presentations by type of visit, states and territories, 2015–16**

Type of visit	NSW	Vic	Qld <sup>(a)</sup>	WA <sup>(b)</sup>	SA <sup>(c)</sup>	Tas	ACT	NT	Total <sup>(d)</sup>
Emergency presentation	2,618,138	1,665,042	1,423,905	821,392	476,855	150,179	n.a.	145,174	7,300,685
Return visit, planned	98,817	14,089	13,378	7,177	4,768	2,947	n.a.	3,175	144,351
Pre-arranged admission	12,684	341	1,860	343	95	0	n.a.	0	15,323
Patient in transit	419	303	0	0	0	0	n.a.	19	741
Dead on arrival	3,308	111	0	..	..	414	n.a.	3	3,836
Not reported	154	0	0	519	171	1	n.a.	88	933
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Queensland provided 2015–16 data for the NNAPEDCD using the DSS, for which *Patient in transit* is not a valid category, these patients are included in the category *Emergency presentation*. In addition, for the DSS, patients who were dead on arrival, but for which resuscitation or other clinical care is attempted are included in the category *Emergency presentation*.

(b) Western Australian emergency departments only occasionally manage and report patients who are *Dead on arrival*, because the majority of these patients are taken directly to the state morgue. In Western Australia, some hospitals reported all presentations as *Emergency presentation*.

(c) For South Australia, patients who are *Dead on arrival* are not managed or reported by emergency departments.

(d) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

*Note:* See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## 4.2 How urgently was care required and how did people arrive at the emergency department?

The **triage category** (assigned to the patient at, or soon after, the time of presentation) indicates the urgency of the patient's need for medical and nursing care (see Box 1.1 for more information).

The **arrival mode – transport** indicates the mode of transport by which the patient arrived at the emergency department.

### Triage category

Of the 7.5 million emergency department presentations in 2015–16 (excluding the Australian Capital Territory):

- 0.7% were assigned a triage category of *Resuscitation*
- 12.1% were assigned to *Emergency*
- 36.0% were assigned to *Urgent*
- 41.7% were assigned to *Semi-urgent*
- 9.5% were assigned to *Non-urgent* (Table 4.2).

New South Wales had the highest proportion of presentations that were assigned a triage category of *Non-urgent* (13.7%) and Queensland had the lowest proportion (4.8%). South Australia had the highest proportion of presentations assigned as *Resuscitation* (1.4%) and Queensland had the highest proportion of presentations assigned as *Urgent* (44.0%).

### Arrival mode

In 2015–16, the majority of presentations to emergency departments (75%) had an arrival mode of *Other* – indicating that the patient either walked into the emergency department or came by private transport, public transport, community transport or taxi. About 24% of presentations arrived by *Ambulance, air ambulance or helicopter rescue service* (Table 4.2).

The proportion of patients who arrived by *Ambulance, air ambulance or helicopter rescue service* fell with decreasing urgency. About 83% of *Resuscitation* patients (who need to receive care immediately) arrived by *Ambulance, air ambulance or helicopter rescue service* compared with fewer than 4% of *Non-urgent* patients (who need to receive care within 2 hours).

The proportion of patients who arrived by *Ambulance, air ambulance or helicopter rescue service* ranged from 18.3% in Western Australia to 32.0% in Queensland.

#### Where to go for more information

Information on waiting times for emergency department presentations by triage category is available in:

- 'Chapter 5 – How long did people wait for emergency department care?'
- tables S5.1 and S5.2: 'Emergency presentation statistics by public hospital peer group and triage category, 2015–16' (which accompany this report online).

Information on data limitations and methods is available in appendixes A and B.

**Table 4.2: Emergency department presentations, by triage category and arrival mode, states and territories, 2015–16**

<b>Triage category and arrival mode</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<sup>(a)</sup></b>
<b>Resuscitation</b>									
Ambulance, air ambulance or helicopter rescue service	14,688	6,988	9,937	5,198	5,548	850	n.a.	571	43,780
Police/correctional services vehicle	120	78	116	54	21	18	n.a.	17	424
Other <sup>(b)</sup>	2,751	1,481	1,811	918	1,028	99	n.a.	377	8,465
Not reported	29	0	0	4	2	14	n.a.	0	49
<i>Total</i>	<i>17,588</i>	<i>8,547</i>	<i>11,864</i>	<i>6,174</i>	<i>6,599</i>	<i>981</i>	<i>n.a.</i>	<i>965</i>	<i>52,718</i>
<b>Emergency</b>									
Ambulance, air ambulance or helicopter rescue service	132,628	80,715	102,677	36,332	33,799	7,935	n.a.	6,571	400,657
Police/correctional services vehicle	2,142	2,318	2,805	1,582	558	198	n.a.	545	10,148
Other <sup>(b)</sup>	178,261	96,552	96,619	66,144	33,602	5,825	n.a.	11,668	488,671
Not reported	140	0	0	72	7	211	n.a.	0	430
<i>Total</i>	<i>313,171</i>	<i>179,585</i>	<i>202,101</i>	<i>104,130</i>	<i>67,966</i>	<i>14,169</i>	<i>n.a.</i>	<i>18,784</i>	<i>899,906</i>
<b>Urgent</b>									
Ambulance, air ambulance or helicopter rescue service	270,581	200,679	247,265	71,625	70,438	20,635	n.a.	11,254	892,477
Police/correctional services vehicle	4,608	4,376	6,988	4,701	1,546	831	n.a.	1,355	24,405
Other <sup>(b)</sup>	605,771	398,572	378,996	209,123	112,518	30,842	n.a.	32,581	1,768,403
Not reported	312	0	0	115	13	791	n.a.	0	1,231
<i>Total</i>	<i>881,272</i>	<i>603,627</i>	<i>633,249</i>	<i>285,564</i>	<i>184,515</i>	<i>53,099</i>	<i>n.a.</i>	<i>45,190</i>	<i>2,686,516</i>
<b>Semi-urgent</b>									
Ambulance, air ambulance or helicopter rescue service	153,446	109,359	96,538	36,773	32,376	11,975	n.a.	8,129	448,596
Police/correctional services vehicle	3,322	1,367	2,832	2,982	1,243	542	n.a.	2,199	14,487
Other <sup>(b)</sup>	987,166	629,938	423,739	335,199	155,720	55,753	n.a.	58,653	2,646,168
Not reported	121	0	0	137	20	991	n.a.	0	1,269
<i>Total</i>	<i>1,144,055</i>	<i>740,664</i>	<i>523,109</i>	<i>375,091</i>	<i>189,359</i>	<i>69,261</i>	<i>n.a.</i>	<i>68,981</i>	<i>3,110,520</i>

*(continued)*

**Table 4.2 (continued): Emergency department presentations, by triage category and arrival mode, states and territories, 2015–16**

Triage category and arrival mode	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
<b>Non-urgent</b>									
Ambulance, air ambulance or helicopter rescue service	12,873	4,245	4,246	1,575	2,094	590	n.a.	814	26,437
Police/correctional services vehicle	2,225	268	946	520	403	1,967	n.a.	411	6,740
Other <sup>(b)</sup>	358,555	142,840	63,628	56,320	30,944	12,935	n.a.	13,314	678,536
Not reported	148	0	0	26	9	125	n.a.	0	308
<i>Total</i>	<i>373,801</i>	<i>147,353</i>	<i>68,820</i>	<i>58,441</i>	<i>33,450</i>	<i>15,617</i>	<i>n.a.</i>	<i>14,539</i>	<i>712,021</i>
<b>All triage categories<sup>(c)</sup></b>									
<b>Ambulance, air ambulance or helicopter rescue service</b>	<b>584,483</b>	<b>402,047</b>	<b>460,663</b>	<b>151,507</b>	<b>144,255</b>	<b>42,037</b>	<b>n.a.</b>	<b>27,339</b>	<b>1,812,331</b>
<b>Police/correctional services vehicle</b>	<b>12,433</b>	<b>8,407</b>	<b>13,687</b>	<b>9,839</b>	<b>3,771</b>	<b>3,556</b>	<b>n.a.</b>	<b>4,527</b>	<b>56,220</b>
<b>Other<sup>(b)</sup></b>	<b>2,135,764</b>	<b>1,269,432</b>	<b>964,793</b>	<b>667,725</b>	<b>333,812</b>	<b>105,647</b>	<b>n.a.</b>	<b>116,593</b>	<b>5,593,766</b>
<b>Not reported</b>	<b>840</b>	<b>0</b>	<b>0</b>	<b>360</b>	<b>51</b>	<b>2,301</b>	<b>n.a.</b>	<b>0</b>	<b>3,552</b>
<b><i>Total</i></b>	<b><i>2,733,520</i></b>	<b><i>1,679,886</i></b>	<b><i>1,439,143</i></b>	<b><i>829,431</i></b>	<b><i>481,889</i></b>	<b><i>153,541</i></b>	<b><i>n.a.</i></b>	<b><i>148,459</i></b>	<b><i>7,465,869</i></b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(b) *Other* includes presentations where patients either walked into the emergency department or came by private transport, public transport, community transport or taxi.

(c) Includes almost 4,200 presentations for which the triage category was not reported.

*Note:* See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



## 4.3 When did people present to the emergency department?

The time of presentation at the emergency department is defined as the earliest occasion of being registered clerically or triaged.

Table 4.3 presents the day of the week and the time of day that presentations occurred. In 2015–16, there were more presentations on the weekends and on Mondays compared with other days.

Figure 4.1 presents the number of presentations by triage category and hour of presentation. This figure highlights the uneven use of emergency department resources throughout the average day. Over two-thirds (69%) of emergency department presentations occurred between 8:00 am and 8:00 pm.

Figure 4.2 illustrates the relative distribution of presentations within each triage category across the 24-hour period. The figure shows that, for the triage category *Resuscitation*, presentations are more evenly distributed throughout the day than for other triage categories. The highest proportions of *Non-urgent* presentations occurred between 8:00 am and 11:00 am.

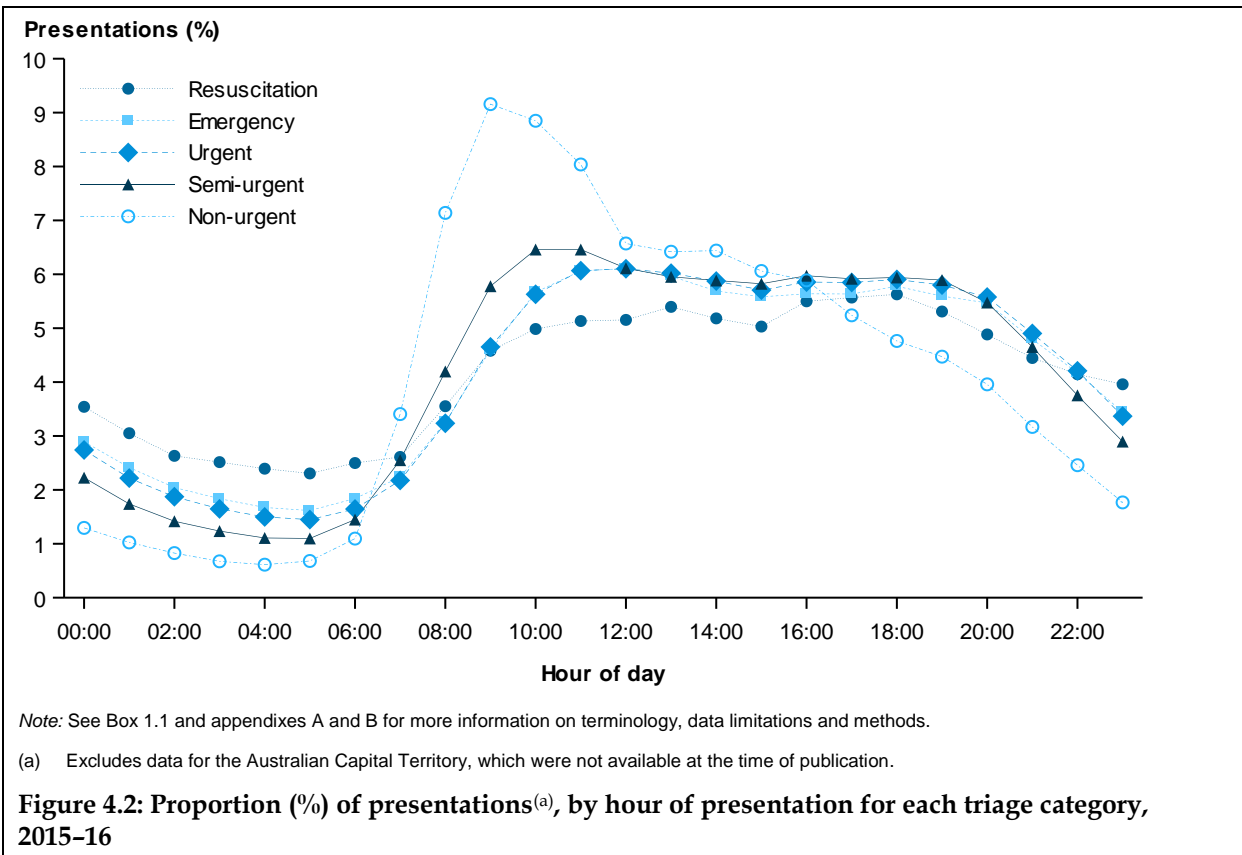
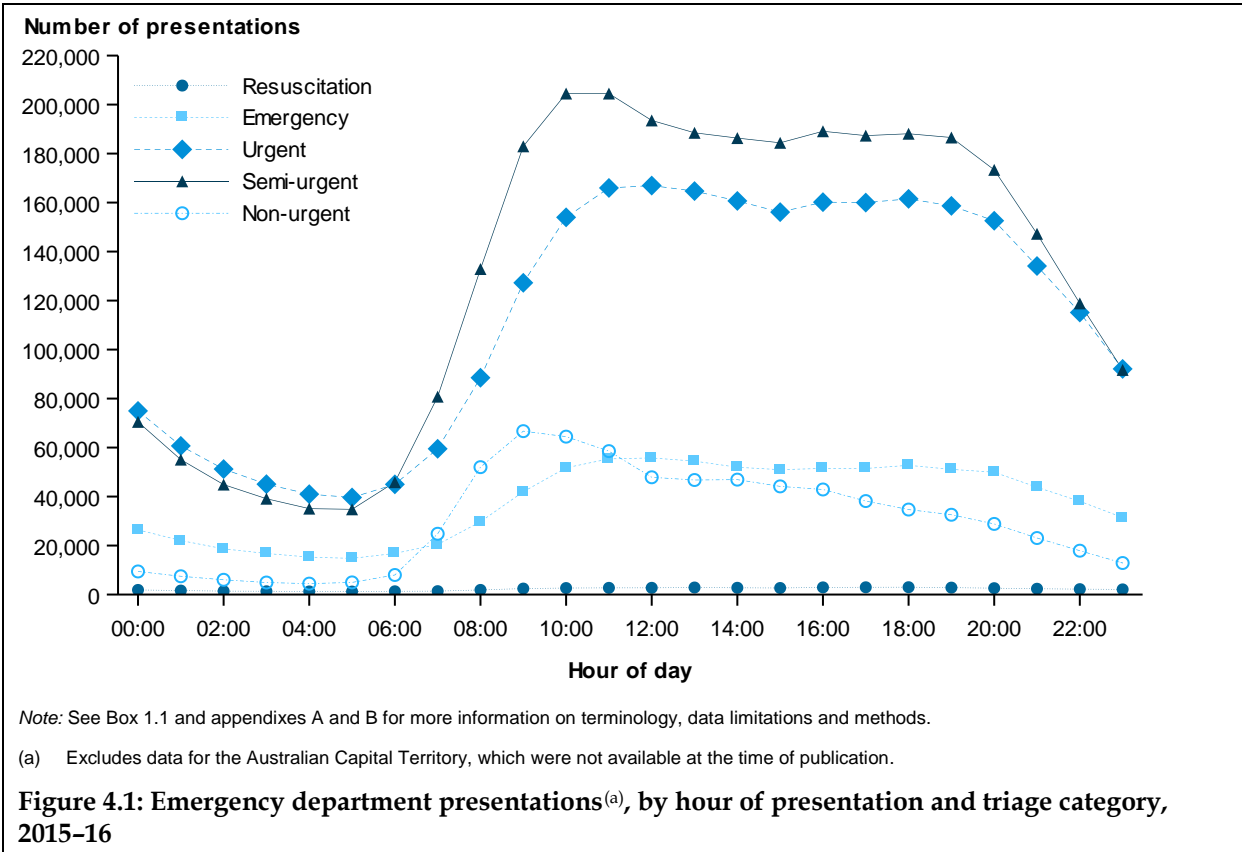
**Table 4.3: Proportion (%) of presentations<sup>(a)</sup> by day of week and time of presentation, 2015–16<sup>(b)</sup>**

Time of presentation	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight to 1:59 am	4.9	4.0	4.1	4.1	4.2	4.3	4.7	4.3
2 am to 3:59 am	3.5	2.8	2.8	2.9	2.9	2.9	3.3	3
4 am to 5:59 am	2.8	2.5	2.4	2.4	2.5	2.5	2.6	2.5
6 am to 7:59 am	4.0	4.1	4.0	4.0	4.1	4.0	3.9	4.0
8 am to 9:59 am	9.5	10.2	9.7	9.6	9.5	9.5	8.9	9.6
10 am to 11:59 am	12.9	13.3	12.7	12.5	12.5	12.5	12.5	12.7
Midday to 1:59 pm	12.2	12.3	12.0	12.0	12.1	12.1	12.5	12.2
2 pm to 3:59 pm	11.8	11.5	11.4	11.4	11.5	11.7	12.3	11.7
4 pm to 5:59 pm	11.4	11.7	11.7	11.8	11.7	11.9	11.7	11.7
6 pm to 7:59 pm	11.0	11.5	12.0	12.0	11.8	11.4	10.8	11.5
8 pm to 9:59 pm	9.5	9.8	10.4	10.5	10.3	10.0	9.5	10.0
10 pm to 11:59 pm	6.5	6.3	6.9	6.9	6.9	7.3	7.3	6.9
<b>Total</b>	<b>15.1</b>	<b>15.1</b>	<b>14.0</b>	<b>14.0</b>	<b>13.8</b>	<b>13.7</b>	<b>14.3</b>	<b>100</b>
<b>Presentations<sup>(a)</sup></b>	<b>1,129,772</b>	<b>1,128,759</b>	<b>1,046,999</b>	<b>1,042,297</b>	<b>1,027,946</b>	<b>1,022,155</b>	<b>1,067,930</b>	<b>7,465,858</b>

(a) The date and time of presentation were not reported for 11 records.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



## 4.4 Why did people receive care?

This section presents information on the reason for the emergency department presentation, described by the diagnoses reported for presentations.

It includes diagnosis information presented using:

- ICD-10-AM diagnoses presented using:
  - principal diagnosis chapters, by state and territory, triage category and admission status
  - the 20 most common ICD-10-AM principal diagnoses at the 3-character level, by state and territory and, for patients subsequently admitted, by triage category.
- major diagnostic block, by state and territory, triage category and admission status.

In 2015–16, principal diagnosis information was reported using a variety of classifications. For the purpose of this report, the AIHW mapped the provided information to ICD-10-AM 3-character codes, where necessary (see Appendix B for more information).

In 2015–16, about 95% of records reported to the NNAPEDCD included diagnosis information; about 361,000 records did not contain a principal diagnosis. The quality of the information provided for emergency department principal diagnosis data has not yet been fully assessed. Therefore, these data should be interpreted with caution. See Appendix A for more information on data quality.

### Principal diagnosis

The principal diagnosis is the diagnosis established at the conclusion of the patient's attendance in an emergency department to be mainly responsible for occasioning the attendance.

### ICD-10-AM chapters

In 2015–16, *Injury, poisoning and certain other consequences of external causes* was the most common ICD-10-AM principal diagnosis chapter reported (27% of presentations for which the principal diagnosis was reported), followed by *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (20%) (Table 4.4).

The ICD-10-AM diagnosis chapter *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* includes the diagnoses of *Fever, Nausea and vomiting, Syncope and collapse (fainting), Abdominal and pelvic pain* and *Pain in throat or chest*.

There is variation in the proportion of presentations by ICD-10-AM chapter among states and territories. For example, *Injury, poisoning and certain other consequences of external causes* ranged from 22% of presentations in the Northern Territory to 30% in Western Australia (for presentations for which the principal diagnosis was reported).

### Triage category

The principal diagnoses reported for emergency department presentations varied by triage category.

In 2015–16, *Injury, poisoning and certain other consequences of external causes* was the most common ICD-10-AM principal diagnosis chapter reported for presentations with a triage category of *Resuscitation* (28.6%), *Semi-urgent* (34.0%) and *Non-urgent* (36.7%) (Table 4.5).

*Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* was the most common ICD-10-AM principal diagnosis chapter reported for patients with a triage category of *Emergency* and *Urgent* (31.3% and 25.0%, respectively).

The proportion of presentations that were reported for *Diseases of the circulatory system* varied by triage category; it ranged from 24.0% for *Resuscitation* presentations to less than 1% of *Non-urgent* presentations.

### **Admission status**

Principal diagnoses reported for emergency department presentations varied depending on whether the patient was subsequently admitted to the same hospital or not.

In 2015–16, about 29% of emergency department presentations were subsequently admitted to the hospital (see Section 4.5).

For patients who were subsequently admitted to hospital, the most common ICD-10-AM principal diagnosis chapters were *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (25.6%), *Injury, poisoning and certain other consequences of external causes* (15.0%) and *Diseases of the respiratory system* (10.4%) (Table 4.6).

About 73% of patients who presented with a principal diagnosis in the chapter *Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism*, and 66% of patients who presented with a principal diagnosis in the chapter *Diseases of the circulatory system* (66.0%) were subsequently admitted.

### **Most common principal diagnoses**

In 2015–16, the 20 most common 3-character ICD-10-AM principal diagnoses accounted for about 32% of principal diagnoses reported. The most common 3-character ICD-10-AM principal diagnoses were *Abdominal and pelvic pain* (R10, 4.2%) followed by *Pain in throat and chest* (R07, 3.4%) (Table 4.7).

The 20 most common principal diagnoses for patients who were subsequently admitted to hospital differ from the 20 most common principal diagnoses overall. For example, *Angina pectoris* (I20), *Acute myocardial infarction* (I21) and *Heart failure* (I50) are included in the top 20 principal diagnoses for patients subsequently admitted (Table 4.8) but do not appear in the top 20 principal diagnoses overall (Table 4.7).

For *Resuscitation* patients who were subsequently admitted, 5.3% had a principal diagnosis of *Acute myocardial infarction* (I21) and 2.9% had a principal diagnosis of *Other chronic obstructive pulmonary disease* (J44) (Table 4.8).

For *Emergency* patients who were subsequently admitted, 14.2% had a principal diagnosis of *Pain in throat and chest* (R07) and 6.5% had a principal diagnosis of *Angina pectoris* (I20).

**Table 4.4: Emergency department presentations<sup>(a)</sup> by principal diagnosis in ICD-10-AM<sup>(b)</sup> chapters, states and territories, 2015–16**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
A00–B99	Certain infectious and parasitic diseases	130,884	80,457	77,453	37,038	21,262	7,023	n.a.	7,503	361,620
C00–D48	Neoplasms	10,409	5,349	5,927	1,842	1,461	1,053	n.a.	296	26,337
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	11,597	10,936	6,318	2,841	2,601	667	n.a.	394	35,354
E00–E90	Endocrine, nutritional and metabolic diseases	22,698	14,198	12,384	4,940	4,705	1,352	n.a.	2,861	63,138
F00–F99	Mental and behavioural disorders	98,024	53,211	56,965	29,827	23,003	5,922	n.a.	6,486	273,438
G00–G99	Diseases of the nervous system	29,273	30,615	23,685	10,749	8,257	2,995	n.a.	2,061	107,635
H00–H59	Diseases of the eye and adnexa	51,556	31,110	13,295	8,613	4,789	1,468	n.a.	2,423	113,254
H60–H95	Diseases of the ear and mastoid process	32,641	22,274	19,507	7,743	4,402	1,402	n.a.	2,484	90,453
I00–I99	Diseases of the circulatory system	93,600	73,775	89,736	26,248	18,331	7,383	n.a.	3,971	313,044
J00–J99	Diseases of the respiratory system	222,250	122,480	113,514	53,919	36,517	11,607	n.a.	12,270	572,557
K00–K93	Diseases of the digestive system	142,168	94,213	81,162	44,485	27,093	9,650	n.a.	7,845	406,616
L00–L99	Diseases of the skin and subcutaneous tissue	94,535	49,993	49,576	24,580	13,103	4,454	n.a.	9,646	245,887
M00–M99	Diseases of the musculoskeletal system and connective tissue	154,755	72,490	38,143	26,203	18,995	5,974	n.a.	9,676	326,236
N00–N99	Diseases of the genitourinary system	102,964	71,278	64,325	29,918	17,053	5,733	n.a.	6,097	297,368
O00–O99	Pregnancy, childbirth and the puerperium	28,459	38,660	16,562	11,141	4,816	1,751	n.a.	1,062	102,451
P00–P96	Certain conditions originating in the perinatal period	1,618	4,783	3,076	960	457	201	n.a.	102	11,197
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	669	382	530	182	203	66	n.a.	19	2,051
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	596,127	335,510	213,494	116,115	110,244	23,844	n.a.	21,887	1,417,221
S00–T98	Injury, poisoning and certain other consequences of external causes	657,830	415,880	419,244	203,116	113,936	42,450	n.a.	29,906	1,882,362
U50–Y98	External causes of morbidity and mortality	17,489	131	16,279	1,450	1,495	175	n.a.	1,096	38,115
Z00–Z99	Factors influencing health status and contact with health services	140,257	65,514	110,210	47,471	31,691	13,459	n.a.	10,287	418,889
	Not reported	93,717	86,647	7,758	140,050	17,475	4,912	n.a.	10,087	360,646
<b>Total</b>		<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Principal diagnoses were reported using various ICD-10-AM editions, ICD-9-CM, and SNOMED-CT-AU, and were mapped to ICD-10-AM 3-character diagnosis codes.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 4.5: Emergency department presentations<sup>(a)</sup> by principal diagnosis in ICD-10-AM<sup>(b)</sup> chapters and triage category, 2015–16**

Principal diagnosis	Triage category					Total <sup>(c)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
A00–B99 Certain infectious and parasitic diseases	1,190	25,577	147,049	171,577	16,206	361,620
C00–D48 Neoplasms	200	3,261	13,397	7,683	1,790	26,337
D50–D89 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	78	7,197	17,931	8,567	1,578	35,354
E00–E90 Endocrine, nutritional and metabolic diseases	794	12,717	33,119	14,314	2,184	63,138
F00–F99 Mental and behavioural disorders	2,366	35,039	128,206	83,736	24,039	273,438
G00–G99 Diseases of the nervous system	2,036	14,977	59,286	28,501	2,828	107,635
H00–H59 Diseases of the eye and adnexa	36	4,090	28,564	56,851	23,696	113,254
H60–H95 Diseases of the ear and mastoid process	12	1,317	19,191	55,085	14,832	90,453
I00–I99 Diseases of the circulatory system	12,522	137,595	115,866	41,784	5,258	313,044
J00–J99 Diseases of the respiratory system	6,506	107,038	264,465	177,327	17,179	572,557
K00–K93 Diseases of the digestive system	899	32,976	196,419	159,106	17,183	406,616
L00–L99 Diseases of the skin and subcutaneous tissue	74	6,303	51,441	149,330	38,697	245,887
M00–M99 Diseases of the musculoskeletal system and connective tissue	202	14,431	87,270	187,536	36,756	326,236
N00–N99 Diseases of the genitourinary system	442	29,804	141,350	114,247	11,501	297,368
O00–O99 Pregnancy, childbirth and the puerperium	358	4,667	41,501	46,400	9,516	102,451
P00–P96 Certain conditions originating in the perinatal period	71	2,743	5,926	2,230	227	11,197
Q00–Q99 Congenital malformations, deformations and chromosomal abnormalities	17	389	924	566	155	2,051
R00–R99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	7,815	276,544	651,035	432,981	48,243	1,417,221
S00–T98 Injury, poisoning and certain other consequences of external causes	14,873	144,624	494,418	992,778	235,488	1,882,362
U50–Y98 External causes of morbidity and mortality	380	4,251	12,405	16,233	4,840	38,115
Z00–Z99 Factors influencing health status and contact with health services	1,200	19,215	95,783	171,643	130,315	418,889
Not reported	647	15,151	80,970	192,045	69,510	360,646
<b>Total</b>	<b>52,718</b>	<b>899,906</b>	<b>2,686,516</b>	<b>3,110,520</b>	<b>712,021</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Principal diagnoses were reported using various ICD-10-AM editions, ICD-9-CM, and SNOMED-CT-AU and were mapped to ICD-10-AM 3-character diagnosis codes.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 4.6: Emergency department presentations<sup>(a)</sup> by principal diagnosis in ICD-10-AM<sup>(b)</sup> chapters, and admission status, 2015–16**

Principal diagnosis		Patient subsequently admitted	Patient not admitted	Total <sup>(c)</sup>
A00–B99	Certain infectious and parasitic diseases	81,633	279,987	361,620
C00–D48	Neoplasms	16,678	9,659	26,337
D50–D89	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	25,684	9,670	35,354
E00–E90	Endocrine, nutritional and metabolic diseases	40,697	22,441	63,138
F00–F99	Mental and behavioural disorders	87,383	186,055	273,438
G00–G99	Diseases of the nervous system	48,986	58,649	107,635
H00–H59	Diseases of the eye and adnexa	7,462	105,792	113,254
H60–H95	Diseases of the ear and mastoid process	8,628	81,825	90,453
I00–I99	Diseases of the circulatory system	206,850	106,194	313,044
J00–J99	Diseases of the respiratory system	225,600	346,957	572,557
K00–K93	Diseases of the digestive system	183,323	223,293	406,616
L00–L99	Diseases of the skin and subcutaneous tissue	77,795	168,092	245,887
M00–M99	Diseases of the musculoskeletal system and connective tissue	71,786	254,450	326,236
N00–N99	Diseases of the genitourinary system	122,154	175,214	297,368
O00–O99	Pregnancy, childbirth and the puerperium	29,384	73,067	102,451
P00–P96	Certain conditions originating in the perinatal period	4,102	7,095	11,197
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	792	1,259	2,051
R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	554,739	862,482	1,417,221
S00–T98	Injury, poisoning and certain other consequences of external causes	324,793	1,557,569	1,882,362
U50–Y98	External causes of morbidity and mortality	8,028	30,087	38,115
Z00–Z99	Factors influencing health status and contact with health services	36,545	382,344	418,889
	Not reported	32,796	327,850	360,646
<b>Total</b>		<b>2,195,838</b>	<b>5,270,031</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Principal diagnoses were reported using various ICD-10-AM editions, ICD-9-CM, and SNOMED-CT-AU and were mapped to ICD-10-AM 3-character diagnosis codes.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 4.7: The 20 most common principal diagnoses<sup>(a)</sup> (3-character level) for emergency department presentations<sup>(b)</sup>, states and territories, 2015–16**

Principal diagnosis		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(c)</sup>
R10	Abdominal and pelvic pain	117,556	78,119	59,403	27,799	19,876	5,398	n.a.	4,223	312,374
R07	Pain in throat and chest	107,577	67,748	23,941	24,902	21,353	5,508	n.a.	5,142	256,171
Z53	Persons encountering health services for specific procedures, not carried out	53,702	1,691	57,470	8,945	10,282	1,375	n.a.	0	133,465
B34	Viral infection of unspecified site	35,991	34,677	34,537	16,939	5,613	2,781	n.a.	2,509	133,047
L03	Cellulitis	47,152	21,608	22,771	12,115	5,393	2,050	n.a.	5,319	116,408
S01	Open wound of head	34,279	25,790	22,137	13,794	7,573	2,485	n.a.	2,373	108,431
T14	Injury of unspecified body region	85,326	8,295	3,768	3,326	4,782	170	n.a.	706	106,373
A09	Other gastroenteritis and colitis of infectious and unspecified origin	45,890	28,106	16,246	5,760	5,350	2,012	n.a.	1,187	104,551
M54	Dorsalgia	50,226	28,817	5,444	8,213	6,198	2,781	n.a.	2,393	104,072
J06	Acute upper respiratory infections of multiple and unspecified sites	44,056	15,230	19,801	9,214	5,753	1,056	n.a.	2,624	97,734
S61	Open wound of wrist and hand	34,427	24,242	17,498	9,059	6,452	2,154	n.a.	1,455	95,287
N39	Other disorders of urinary system	35,628	20,302	20,431	9,121	5,698	56	n.a.	1,664	92,900
S93	Dislocation, sprain and strain of joints and ligaments at ankle and foot level	24,860	20,700	25,949	10,339	4,882	2,314	n.a.	1,295	90,339
S62	Fracture at wrist and hand level	26,237	24,687	17,161	11,578	4,220	1,735	n.a.	1,376	86,994
R55	Syncope and collapse	25,623	20,002	19,395	6,916	7,798	1,408	n.a.	768	81,910
S52	Fracture of forearm	29,114	12,131	18,617	8,371	5,488	1,976	n.a.	1,411	77,108
R11	Nausea and vomiting	35,130	15,820	13,525	5,958	4,671	667	n.a.	992	76,763
J18	Pneumonia, organism unspecified	25,110	13,430	20,037	8,705	3,718	2,186	n.a.	399	73,585
M79	Other soft tissue disorders, not elsewhere classified	37,883	23,147	2,274	3,202	3,608	801	n.a.	494	71,409
J45	Asthma	27,823	18,692	12,134	1,599	5,536	1,447	n.a.	1,250	68,481
S00	Superficial injury of head	7,500	12,937	32,755	6,068	2,398	1,785	n.a.	388	63,831
<b>Total</b>		<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Principal diagnoses reported using various ICD-10-AM editions, ICD-9-CM, and SNOMED-CT-AU were mapped to ICD-10-AM 3-character codes.

(b) Presentations include all types of visit.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



**Table 4.8: The 20 most common principal diagnoses<sup>(a)</sup> (3-character level) for patients subsequently admitted to the hospital<sup>(b)</sup>, by triage category, 2015–16**

Principal diagnosis	Triage category					Total <sup>(c)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
R10 Abdominal and pelvic pain	166	10,643	74,238	32,407	726	118,182
R07 Pain in throat and chest	389	74,092	27,719	4,873	231	107,311
J18 Pneumonia, organism unspecified	967	17,061	27,900	6,498	184	52,612
L03 Cellulitis	28	2,446	17,332	27,035	2,102	48,945
I20 Angina pectoris	124	33,983	9,563	827	36	44,533
R55 Syncope and collapse	628	8,675	25,125	4,914	76	39,419
N39 Other disorders of urinary system	184	4,958	18,409	8,946	269	32,768
R06 Abnormalities of breathing	619	9,554	17,206	3,809	122	31,311
R50 Fever of other and unknown origin	125	9,786	16,189	4,783	100	30,983
J44 Other chronic obstructive pulmonary disease	1,128	10,965	15,330	2,423	53	29,899
A09 Other gastroenteritis and colitis of infectious and unspecified origin	64	2,503	16,785	10,173	209	29,734
M54 Dorsalgia	64	1,837	12,934	14,101	488	29,428
J45 Asthma	551	11,737	14,499	2,013	49	28,852
I50 Heart failure	858	7,828	14,521	3,429	110	26,746
K35 Acute appendicitis	3	903	15,674	7,655	118	24,353
I48 Atrial fibrillation and flutter	220	13,252	9,117	1,016	82	23,687
N23 Unspecified renal colic	8	4,311	14,954	4,128	83	23,485
R11 Nausea and vomiting	29	2,017	12,896	7,782	226	22,950
I21 Acute myocardial infarction	2,069	14,047	5,226	794	68	22,206
R29 Other symptoms and signs involving the nervous and musculoskeletal systems	123	3,376	11,085	6,088	246	20,918
R51 Headache	51	2,793	12,623	4,912	139	20,519
<b>Total</b>	<b>39,357</b>	<b>523,456</b>	<b>1,088,326</b>	<b>510,178</b>	<b>34,419</b>	<b>2,195,838</b>

(a) Principal diagnoses were reported using various ICD-10-AM editions, ICD-9-CM, and SNOMED-CT-AU and were mapped to ICD-10-AM 3-character codes.

(b) Presentations include all type of visits, for which the episode end status was *Admitted to this hospital*.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## Major diagnostic block

Major diagnostic blocks (MDBs) is a classification that groups emergency department presentations based on diagnosis information.

They form part of the Independent Hospital Pricing Authority's (IHPA) Urgency Related Groups (URG) emergency care classification, developed for activity-based funding purposes (IHPA 2014).

For 2015–16, diagnosis information was provided by states and territories in several different classifications, including SNOMED CT-AU, ICD-9-CM and various editions of ICD-10-AM (for more information, see appendixes A and B). These diagnoses were used by the AIHW (using URG grouper version 1.4) to derive the information on MDBs.

In 2015–16, *Injury, single site, major* was the most common MDB reported for emergency department presentations (16.3%) followed by *Digestive system illness* (11.3%) (Table 4.9).

*Injury, single site, major* was the most common MDB reported for all states and territories and *Digestive system illness* was the second-most common MDB for most states and territories. The second-most common MDB reported for Queensland was *Injury, single site, minor*.

### Triage category

The most common MDB reported for presentations with a triage category of *Resuscitation* was *Circulatory system illness* (22.0%) followed by *Neurological system illness* (16.6%) and *Injury, single site, major* (16.5%) (Table 4.10).

For presentations with a triage category of *Semi-urgent*, the most common MDB was *Injury, single site, major* (21.0%) followed by *Digestive system illness* (11.1%) and *Injury, single site, minor* (9.8%).

### Admission status

For emergency department presentations that were subsequently admitted to hospital in 2015–16, the most common MDBs were *Circulatory system illness* (15.2%) and *Digestive system illness* (14.7%) (Table 4.11). For presentations that were not admitted, the most common MDBs were *Injury, single site, major* (19.1%) and *Digestive system illness* (9.9%).

About 68% of presentations with an MDB of *Hepatobiliary system illness* (disorders of the liver, gallbladder or bile ducts) were subsequently admitted to the hospital.

**Table 4.9: Emergency department presentations<sup>(a)</sup> by major diagnostic block, states and territories, 2015–16**

Major diagnostic block	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
Poisoning	27,730	15,080	14,324	9,992	4,689	1,741	n.a.	941	74,497
Drug reaction	7	0	125	15	22	0	n.a.	0	169
Alcohol/drug abuse and alcohol/drug induced mental disorders	30,519	14,681	14,724	9,480	6,040	1,145	n.a.	3,801	80,390
Injury, multiple sites	2,644	11,376	703	1,764	219	480	n.a.	173	17,359
Injury, single site, major	489,157	273,786	218,566	116,219	75,045	23,261	n.a.	22,208	1,218,242
Injury, single site, minor	117,307	92,503	171,402	86,603	29,188	14,559	n.a.	6,279	517,841
Circulatory system illness	226,022	148,811	130,838	64,187	45,979	13,774	n.a.	9,009	638,620
Respiratory system illness	223,153	118,690	106,347	60,846	37,421	9,790	n.a.	12,211	568,458
Digestive system illness	305,877	197,240	161,691	93,020	55,338	15,547	n.a.	12,826	841,539
Urological system illness	89,841	56,685	51,709	28,252	15,201	5,101	n.a.	4,355	251,144
Neurological system illness	150,826	90,466	64,675	37,722	25,576	7,697	n.a.	5,588	382,550
Illness of the eyes	53,859	31,599	14,314	12,671	5,063	1,534	n.a.	2,672	121,712
Illness of the ear, nose and throat	123,777	66,877	58,595	37,927	17,420	6,204	n.a.	7,263	318,063
Musculoskeletal/connective tissue system illness	158,452	79,958	45,033	46,944	20,935	6,533	n.a.	10,920	368,775
Illness of skin, subcutaneous tissue, breast	128,239	60,985	62,704	41,839	17,635	5,470	n.a.	11,608	328,480
Blood/immune system illness	16,430	14,058	8,921	5,308	3,372	938	n.a.	696	49,723
Obstetric illness	31,823	46,377	19,992	15,427	5,148	1,958	n.a.	1,236	121,961
Gynaecological illness	24,376	23,482	12,984	7,900	3,329	1,196	n.a.	1,732	74,999
Male reproductive system illness	10,812	6,872	5,686	4,132	1,951	548	n.a.	563	30,564
System infection/parasites	98,032	62,133	54,233	34,585	15,351	5,169	n.a.	5,037	274,540
Illness of other and unknown systems	1,575	1,009	1,669	916	251	297	n.a.	49	5,766
Newborn/neonate illness	2,687	6,260	3,333	1,668	840	282	n.a.	257	15,327
Hepatobiliary system illness	25,738	16,479	14,950	7,776	4,926	1,981	n.a.	1,480	73,330
Endocrine, nutritional and metabolic system illness	27,884	16,642	14,216	6,319	5,564	1,596	n.a.	2,941	75,162
Allergy	22,456	11,896	11,948	4,298	3,639	1,139	n.a.	517	55,893
Psychiatric illness	76,579	42,240	50,203	24,604	18,354	4,213	n.a.	3,316	219,509
Social problem	4,538	5,208	2,971	6,574	131	596	n.a.	827	20,845
Other presentation	169,103	85,989	114,509	48,025	45,805	15,309	n.a.	9,865	488,605
Not stated/inadequately described	94,077	82,504	7,778	14,418	17,457	5,483	n.a.	10,089	231,806
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 4.10: Emergency department presentations<sup>(a)</sup> by major diagnostic block and triage category, 2015–16**

Major diagnostic block	Triage category					Total <sup>(b)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
Poisoning	3,315	19,995	32,178	15,723	3,286	74,497
Drug reaction	0	12	78	73	6	169
Alcohol/drug abuse and alcohol/drug induced mental disorders	1,348	10,488	29,925	22,345	16,284	80,390
Injury, multiple sites	875	4,127	6,626	4,840	891	17,359
Injury, single site, major	8,703	83,689	309,395	652,576	163,879	1,218,242
Injury, single site, minor	1,305	23,696	120,975	305,135	66,730	517,841
Circulatory system illness	11,585	299,638	242,704	76,854	7,839	638,620
Respiratory system illness	7,300	117,730	268,756	158,536	16,136	568,458
Digestive system illness	1,095	54,245	420,772	345,153	20,274	841,539
Urological system illness	411	21,435	124,354	95,293	9,651	251,144
Neurological system illness	8,773	56,043	201,984	106,913	8,837	382,550
Illness of the eyes	37	4,217	30,198	62,004	25,256	121,712
Illness of the ear, nose and throat	639	17,790	100,532	167,184	31,918	318,063
Musculoskeletal/connective tissue system illness	225	15,866	94,403	208,665	49,616	368,775
Illness of skin, subcutaneous tissue, breast	125	8,854	69,259	197,185	53,057	328,480
Blood/immune system illness	98	8,152	23,474	15,362	2,637	49,723
Obstetric illness	396	5,460	49,320	54,250	12,535	121,961
Gynaecological illness	45	2,702	32,074	35,519	4,659	74,999
Male reproductive system illness	16	8,351	11,781	9,000	1,416	30,564
System infection/parasites	1,286	33,408	114,398	114,801	10,647	274,540
Illness of other and unknown systems	44	727	3,075	1,665	255	5,766
Newborn/neonate illness	147	3,258	7,778	3,762	382	15,327
Hepatobiliary system illness	219	8,483	44,003	19,095	1,530	73,330
Endocrine, nutritional and metabolic system illness	821	14,494	40,005	17,262	2,580	75,162
Allergy	1,030	14,053	22,577	16,132	2,101	55,893
Psychiatric illness	974	30,122	115,274	65,061	8,078	219,509
Social problem	136	1,700	6,566	7,467	4,976	20,845
Other presentation	1,563	26,009	122,298	209,019	129,716	488,605
Not stated/inadequately described	207	5,162	41,754	123,646	56,849	231,806
<b>Total</b>	<b>52,718</b>	<b>899,906</b>	<b>2,686,516</b>	<b>3,110,520</b>	<b>712,021</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 4.11: Emergency department presentations<sup>(a)</sup> by major diagnostic block and admission status, 2015–16**

<b>Major diagnostic block</b>	<b>Patient subsequently admitted</b>	<b>Patient not admitted</b>	<b>Total<sup>(b)</sup></b>
Poisoning	29,490	45,007	74,497
Drug reaction	15	154	169
Alcohol/drug abuse and alcohol/drug induced mental disorders	22,068	58,322	80,390
Injury, multiple sites	7,711	9,648	17,359
Injury, single site, major	212,907	1,005,335	1,218,242
Injury, single site, minor	47,030	470,811	517,841
Circulatory system illness	333,544	305,076	638,620
Respiratory system illness	252,800	315,658	568,458
Digestive system illness	322,075	519,464	841,539
Urological system illness	112,472	138,672	251,144
Neurological system illness	191,881	190,669	382,550
Illness of the eyes	7,650	114,062	121,712
Illness of the ear, nose and throat	49,826	268,237	318,063
Musculoskeletal/connective tissue system illness	75,908	292,867	368,775
Illness of skin, subcutaneous tissue, breast	90,910	237,570	328,480
Blood/immune system illness	30,498	19,225	49,723
Obstetric illness	34,903	87,058	121,961
Gynaecological illness	19,513	55,486	74,999
Male reproductive system illness	8,583	21,981	30,564
System infection/parasites	81,715	192,825	274,540
Illness of other and unknown systems	3,988	1,778	5,766
Newborn/neonate illness	4,962	10,365	15,327
Hepatobiliary system illness	50,178	23,152	73,330
Endocrine, nutritional and metabolic system illness	47,105	28,057	75,162
Allergy	14,220	41,673	55,893
Psychiatric illness	67,263	152,246	219,509
Social problem	5,982	14,863	20,845
Other presentation	63,024	425,581	488,605
Not stated/inadequately described	7,617	224,189	231,806
<b>Total</b>	<b>2,195,838</b>	<b>5,270,031</b>	<b>7,465,869</b>

(a) Presentations include all types of visit.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

### Where to go for more information

Information on the principal diagnoses provided for emergency department presentations is available in appendixes A and B.

Information on data limitations and methods is available in appendixes A and B.

## 4.5 How was care completed?

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

- *Admitted to this hospital* (either short stay unit, hospital-in-the-home or other admitted patient care unit)
- *Departed without being admitted or referred*: emergency department stay completed – departed without being transferred to a short stay unit, hospital-in-the-home or other admitted patient care unit in this hospital or referred to another hospital
- *Referred to another hospital for admission*: emergency department stay completed – referred to another hospital for admission
- *Did not wait* to be attended by a health-care professional
- *Left at own risk* after being attended by a health-care professional but before the non-admitted patient emergency department service episode was completed
- *Died in emergency department*
- *Dead on arrival*; emergency department clinician certified the death of the patient.

The DSS category *Transferred for admitted patient care in this hospital* has been mapped to the NMDS category *Admitted to this hospital* in tables 4.12–4.14.

For the NMDS, patients who are admitted to the hospital and subsequently die before leaving the emergency department are included in the NMDS *Episode end status* category of *Admitted to this hospital*. As noted in Chapter 1, Queensland provided 2015–16 data for the NNAPEDCD using the DSS, for which patients who were awaiting admission, but who died or otherwise left the emergency department are not included in the DSS category *Transferred for admitted patient care in this hospital*. Therefore, Queensland data may not be entirely comparable with data provided for other states and territories.

In addition, a change in practice in the certification of death in Victoria between 2014–15 and 2015–16 is reflected in the decrease in the number of presentations with an episode end status of *Dead on arrival*.

For 2015–16, almost two-thirds (63%) of presentations (for all types of visit) reported an episode end status of *Departed without being admitted or referred*, and this proportion was higher for less urgent triage categories (Table 4.12). For example, 11% of *Resuscitation* patients *Departed without being admitted or referred*, compared with 85% of *Non-urgent* patients.

About 29% of all presentations were *Admitted to this hospital* at the conclusion of treatment in the emergency department, and this proportion was lower for less urgent triage categories – ranging from 75% for *Resuscitation* patients to 5% for *Non-urgent* patients.

About 4% of presentations had an episode end status of *Did not wait*. This proportion varied by triage category, and was highest (7%) for *Non-urgent* patients.

**Table 4.12: Emergency department presentations by triage category and episode end status, 2015–16<sup>(a)</sup>**

Episode end status	Triage category					Total <sup>(b)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
Admitted to this hospital <sup>(c)</sup>	39,357	523,456	1,088,326	510,178	34,419	2,195,838
Departed without being admitted or referred	5,797	323,494	1,437,611	2,353,351	606,948	4,728,352
Referred to another hospital for admission	4,193	39,478	63,926	27,301	2,417	137,359
Did not wait	6	2,042	52,309	159,999	51,062	267,567
Left at own risk	371	10,212	43,566	59,165	13,560	126,909
Died in emergency department	2,891	1,077	413	71	16	4,469
Dead on arrival	93	6	16	18	3,458	4,118
Not reported	10	141	349	437	141	1,257
<b>Total<sup>(d)</sup></b>	<b>52,718</b>	<b>899,906</b>	<b>2,686,516</b>	<b>3,110,520</b>	<b>712,021</b>	<b>7,465,869</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

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

(c) Includes presentations for which the DSS *Episode end status* was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(d) Includes presentations for which the episode end status was not reported.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

New South Wales, Western Australia and Tasmania had higher proportions than the national average (63.3%) of presentations with an episode end status of *Departed without being admitted or referred* (67.7%, 67.8% and 68.2%, respectively) (Table 4.13). New South Wales and Western Australia had the lowest proportion of presentations where the patient *Did not wait* (3.0% and 2.6%) and the highest proportion of presentations where the patient was *Referred to another hospital for admission* (both 2.2%). The Northern Territory had the highest proportion of presentations that *Did not wait* (6.9%).

There is a difference between the number of presentations with a type of visit of *Dead on arrival* (3,836, Table 4.1) and the number of presentations with an episode end status of *Dead on arrival* (4,118, Table 4.13). All presentations with a type of visit of *Dead on arrival* had an episode end status of *Dead on arrival*. The majority of presentations with a type of visit of *Dead on arrival* or with an episode end status of *Dead on arrival* occurred in New South Wales (3,308 and 3,517, respectively).

Before 2012–13, New South Wales did not report against the episode end status *Died in emergency department*. Therefore, caution should be used when making comparisons over time.

**Table 4.13: Emergency department presentations by episode end status, states and territories, 2015–16**

<b>Episode end status</b>	<b>NSW<sup>(a)</sup></b>	<b>Vic</b>	<b>Qld<sup>(b)</sup></b>	<b>WA<sup>(c)</sup></b>	<b>SA<sup>(d)</sup></b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total<sup>(e)</sup></b>
Admitted to this hospital	672,720	571,113	483,632	219,988	158,576	40,548	n.a.	49,261	2,195,838
Departed without being admitted or referred	1,851,641	975,777	855,441	561,991	291,413	104,727	n.a.	87,362	4,728,352
Referred to another hospital for admission	59,811	25,412	22,637	18,098	9,804	1,440	n.a.	157	137,359
Did not wait	82,940	82,949	46,204	21,662	17,799	5,708	n.a.	10,305	267,567
Left at own risk	60,111	23,603	30,579	6,821	3,865	582	n.a.	1,348	126,909
Died in emergency department	1,917	921	617	710	194	87	n.a.	23	4,469
Dead on arrival	3,517	110	33	42	..	414	n.a.	2	4,118
Not reported	863	1	0	119	238	35	n.a.	1	1,257
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) In New South Wales, the *Not reported* category includes some records for patients who were triaged and chose to attend a GP clinic (including GP clinics located within the hospital).

(b) Includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*. This category does not include patients who died or otherwise left the emergency department.

(c) Western Australian emergency departments only occasionally manage and report patients who are *Dead on arrival*, because the majority of these patients are taken directly to the state morgue.

(d) For South Australia, patients who are *Dead on arrival* are not managed or reported by emergency departments.

(e) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

*Note:* See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



## Proportion of presentations ending in admission

The comparability of triage categorisation between states and territories may be influenced by how states and territories assign triage categories. Although triage category is not a measure of the need for admission to hospital, the proportion of presentations in each category that had an episode end status of *Admitted to this hospital* can be used to indicate the comparability of the triage categorisation. The proportion of patients subsequently admitted does not include patients referred to another hospital for admission.

Nationally (excluding the Australian Capital Territory), 30% of presentations with a type of visit of *Emergency presentation* had an episode end status of *Admitted to this hospital* (Table 4.14). New South Wales had the lowest proportion of patients subsequently admitted (25%).

The proportion of patients subsequently admitted varied by triage category between states and territories, indicating that the assignment of triage categories may not be comparable (see Appendix A for more information). For example, for *Resuscitation* patients, the proportion subsequently admitted was 69% in Western Australia and 83% in South Australia. New South Wales and Western Australia had the lowest proportion of patients subsequently admitted for *Emergency*, *Semi-urgent* and *Non-urgent* patients.

**Table 4.14: Proportion (%) of *Emergency presentations* with an episode end status of *Admitted to this hospital*, by triage category, states and territories, 2015–16**

Triage category	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
Resuscitation	70	74	79	69	83	81	n.a.	87	75
Emergency	53	63	63	53	61	58	n.a.	64	58
Urgent	36	47	42	37	41	38	n.a.	48	40
Semi-urgent	14	22	15	14	17	15	n.a.	19	16
Non-urgent	4	6	5	4	8	5	n.a.	9	5
<b>Total</b>	<b>25</b>	<b>34</b>	<b>34</b>	<b>27</b>	<b>33</b>	<b>27</b>	<b>n.a.</b>	<b>34</b>	<b>30</b>

(a) Includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital* (either short stay unit, hospital-in-the-home or non-emergency department hospital ward).

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

### Where to go for more information

More information on emergency department presentations that end in admission to the same hospital is available in 'Chapter 6—How long did people stay in the emergency department?'.  
Information on data limitations and methods is available in appendixes A and B.

## 5 How long did people wait for emergency department care?

Emergency department waiting time is ‘the time elapsed for each patient from presentation in the emergency department to commencement of clinical care’ (see Figure 1.1).

The waiting times in this chapter (see Box 5.1) are for presentations with a type of visit of *Emergency presentation* only. Patients who present to the emergency department for other types of visit (*Return visit, planned; Pre-arranged admission; Patient in transit* and *Dead on arrival*) 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.

This chapter also includes information for the NHA performance indicator ‘Waiting times for emergency hospital care – proportion seen on time’.

Data for the Australian Capital Territory for 2015–16 were not available at the time of publication.

### Box 5.1: Measures of emergency department waiting times

The **proportion of presentations seen on time** are presented according to the urgency of a patient's need for care (their triage category – see Box 1.1).

The **median waiting time** is the time within which 50% of all patients commenced clinical care. Half of the patients waited a shorter time, and half waited longer.

The **90th percentile waiting time** is the time within which 90% of all patients commenced clinical care – the remaining 10% of patients waited longer.

Records were also excluded from the calculation of waiting time statistics if:

- the triage category was not reported
- the patient did not wait or was dead on arrival – about 265,000 presentations were excluded in 2015–16
- the waiting time could not be calculated – about 93,000 presentations were excluded in 2015–16.

## Key findings

### How have waiting times changed over time?

In 2015–16, about 74% of *Emergency presentations* were ‘seen on time’. This was the same proportion as in 2014–15. It had increased between 2011–12 and 2013–14 from 72% to 75%.

Between 2011–12 and 2014–15, the median waiting time for *Emergency presentations* decreased from 21 minutes to 18 minutes. It increased to 19 minutes between 2014–15 and 2015–16.

Between 2011–12 and 2014–15, the time by which 90% of presentations were seen decreased from 108 minutes to 93 minutes; it remained at 93 minutes in 2015–16.

### How long did people wait for care in 2015–16?

In 2015–16, the proportion of *Emergency presentations* seen on time ranged from 61% in the Northern Territory to 81% in New South Wales.

Almost 100% of *Resuscitation* patients, 77% of *Emergency* patients and 93% of *Non-urgent* patients were seen on time.

## 5.1 How have waiting times changed over time?

For 2015–16, the date and time of commencement of clinical care was missing for 93,000 presentations and therefore waiting times information could not be calculated. These included about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia. The remainder were distributed across multiple hospitals and jurisdictions.

Therefore, the waiting times data for Western Australia for *Public acute group B hospitals* should be interpreted with caution.

### Proportion seen on time

The proportion seen on time is 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 (see Box 1.1 for more information).

The proportion of *Emergency presentations* that were seen on time increased between 2011–12 and 2013–14 from 72% to 75%, and fell to 74% 2014–15. It remained stable at 74% in 2015–16 (Table 5.1).

Between 2011–12 and 2013–14, the proportion of *Emergency presentations* seen on time in each state and territory generally increased.

However, between 2013–14 and 2015–16, the proportion of *Emergency presentations* seen on time decreased in most states and territories, with the exception of New South Wales where it remained stable (81%), and the Northern Territory, where it increased from 57% to 61%.

### Median waiting time

The median waiting time (also known as the 50th percentile waiting time) is the time within which 50% of presentations commenced clinical care. Half of the patients had a shorter waiting time and half had a longer waiting time.

Between 2011–12 and 2014–15, the median waiting time for *Emergency presentations* decreased from 21 minutes to 18 minutes (Table 5.1). However, between 2014–15 and 2015–16, the median waiting time increased from 18 minutes to 19 minutes.

The median waiting time generally decreased in most states and territories between 2011–12 and 2013–14. The Northern Territory was the only jurisdiction to record a decrease in median waiting time between 2013–14 and 2015–16. Between 2013–14 and 2015–16, the median waiting times were stable in New South Wales (15 minutes) and Victoria (19 minutes).

### 90th percentile waiting time

The 90th percentile waiting time is the time within which 90% of presentations commenced clinical care. For the remaining 10% of patients, the waiting time was longer.

The time by which 90% of presentations were seen decreased from 108 minutes to 93 minutes between 2011–12 and 2014–15 and remained stable at 93 minutes between 2013–14 and 2015–16 (Table 5.1). For New South Wales, Victoria and the Northern Territory, the 90th percentile waiting time decreased between 2011–12 and 2015–16.

**Table 5.1: Emergency presentation waiting time statistics, states and territories, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(a)</sup>
<b>New South Wales</b>					
Median waiting time (minutes)	19	17	15	15	15
90th percentile waiting time (minutes)	103	92	80	78	78
Proportion seen on time (%)	76	78	81	81	81
<b>Victoria</b>					
Median waiting time (minutes)	21	20	19	19	19
90th percentile waiting time (minutes)	113	109	100	97	96
Proportion seen on time (%)	72	73	75	75	74
<b>Queensland</b>					
Median waiting time (minutes)	22	18	19	20	20
90th percentile waiting time (minutes)	103	91	91	93	95
Proportion seen on time (%)	69	74	73	71	70
<b>Western Australia<sup>(b)</sup></b>					
Median waiting time (minutes)	29	26	24	25	27
90th percentile waiting time (minutes)	104	108	95	99	106
Proportion seen on time (%)	65	66	70	68	65
<b>South Australia</b>					
Median waiting time (minutes)	15	16	16	20	20
90th percentile waiting time (minutes)	90	90	93	113	109
Proportion seen on time (%)	76	75	73	66	66
<b>Tasmania</b>					
Median waiting time (minutes)	24	24	23	25	27
90th percentile waiting time (minutes)	109	102	98	107	120
Proportion seen on time (%)	71	71	72	70	66
<b>Australian Capital Territory</b>					
Median waiting time (minutes)	38	44	33	37	n.a.
90th percentile waiting time (minutes)	187	197	152	147	n.a.
Proportion seen on time (%)	55	51	61	59	n.a.
<b>Northern Territory</b>					
Median waiting time (minutes)	39	35	34	31	30
90th percentile waiting time (minutes)	158	152	151	130	123
Proportion seen on time (%)	54	57	57	60	61
<b>Total</b>					
<b>Median waiting time (minutes)</b>	<b>21</b>	<b>19</b>	<b>18</b>	<b>18</b>	<b>19</b>
<b>90th percentile waiting time (minutes)</b>	<b>108</b>	<b>101</b>	<b>93</b>	<b>93</b>	<b>93</b>
<b>Proportion seen on time (%)</b>	<b>72</b>	<b>73</b>	<b>75</b>	<b>74</b>	<b>74</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(b) For 2015–16, waiting times information could not be calculated for about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## 5.2 How long did people wait for care in 2015–16?

In 2015–16, the proportion of patients seen on time ranged from 61% in the Northern Territory to 81% in New South Wales (Table 5.2).

In general, the proportion seen on time was higher for the more urgent triage categories, with almost 100% of *Resuscitation* and 77% of *Emergency* patients seen on time (clinically recommended times of immediately [within seconds] and within 10 minutes, respectively). For *Non-urgent* patients – for which the clinically recommended time is within 2 hours – 93% were seen on time. For *Urgent* presentations (which account for 36% of presentations, see Table 4.2), the proportion seen on time ranged from 53% for Western Australia and the Northern Territory to 76% for New South Wales.

The time within which 50% of patients commenced clinical care (the median waiting time) ranged from 15 minutes in New South Wales to 30 minutes in the Northern Territory.

The 90th percentile waiting time to commencement of clinical care also varied, from 78 minutes in New South Wales to 123 minutes in the Northern Territory.

**Table 5.2: Emergency presentation waiting time statistics<sup>(a)</sup>, states and territories, 2015–16**

Triage category	NSW	Vic	Qld	WA <sup>(b)</sup>	SA	Tas	ACT	NT	Total <sup>(c)</sup>
Emergency presentations	2,618,138	1,665,042	1,423,905	821,392	476,855	150,179	n.a.	145,174	7,300,685
<b>Proportion seen on time (%)</b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	82	78	74	77	70	80	n.a.	63	77
Urgent	76	71	61	53	56	59	n.a.	53	67
Semi-urgent	80	72	74	67	70	64	n.a.	60	74
Non-urgent	94	89	94	93	92	87	n.a.	89	93
Total	81	74	70	65	66	66	n.a.	61	74
<b>Waiting time (minutes)<sup>(a)</sup></b>									
Median waiting time	15	19	20	27	20	27	n.a.	30	19
90th percentile waiting time	78	96	95	106	109	120	n.a.	123	93

(a) Records were excluded from the calculation of waiting time if the patient *Did not wait* or was *Dead on arrival*, or if the waiting time could not be calculated. Records were also excluded from the calculation of proportion seen on time if the triage category was missing.

(b) Waiting times information could not be calculated for about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

*Note:* See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## How did waiting times vary by Indigenous status?

Almost 449,000 *Emergency presentations* (6%) were reported for patients identified as being of Aboriginal and/or Torres Strait Islander origin (excluding the Australian Capital Territory). Nationally, the median waiting time for Indigenous Australians (18 minutes) was similar to that for other Australians (19 minutes) (Table 5.3).

The national median waiting times for Indigenous Australians were shorter than those for other Australians for *Urgent*, *Semi-urgent* and *Non-urgent* patients and were the same for *Resuscitation* and *Emergency* patients.

It should be noted that differences in waiting times may have been influenced by differences in the mix of triage categories for Indigenous Australians compared with other Australians. For example, a higher proportion of Indigenous Australians were assigned to the *Semi-urgent* and *Non-urgent* triage categories compared with other Australians, nationally.

Because the quality of the Indigenous status data in the NNAPEDCD has not been formally assessed, these data should be interpreted with caution. See Box 3.1 and Appendix A for information on the quality of Indigenous status data.

**Table 5.3: Median waiting time<sup>(a)</sup> (minutes) for *Emergency presentations*, by Indigenous status and triage category, states and territories, 2015–16**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>	Emergency presentations <sup>(c)</sup>
<b>Indigenous</b>										
Resuscitation	0	0	0	0	0	0	n.a.	0	0	3,112
Emergency	5	6	6	4	5	6	n.a.	8	6	47,735
Urgent	15	19	19	17	21	24	n.a.	24	18	151,649
Semi-urgent	19	30	27	28	21	42	n.a.	44	26	198,501
Non-urgent	15	24	26	25	18	26	n.a.	32	20	47,464
<b>Total<sup>(d)</sup></b>	<b>14</b>	<b>20</b>	<b>19</b>	<b>20</b>	<b>17</b>	<b>27</b>	<b>n.a.</b>	<b>27</b>	<b>18</b>	<b>448,795</b>
<b>Other Australians<sup>(e)</sup></b>										
Resuscitation	0	0	0	0	0	0	n.a.	0	0	49,447
Emergency	5	6	7	5	6	6	n.a.	8	6	849,500
Urgent	16	18	23	29	25	24	n.a.	32	19	2,522,389
Semi-urgent	20	29	29	40	30	41	n.a.	48	28	2,866,435
Non-urgent	16	29	25	31	22	34	n.a.	32	22	561,042
<b>Total<sup>(d)</sup></b>	<b>15</b>	<b>19</b>	<b>20</b>	<b>28</b>	<b>21</b>	<b>27</b>	<b>n.a.</b>	<b>32</b>	<b>19</b>	<b>6,851,890</b>

(a) Records were excluded from the calculation if the triage category was unknown, if the patient *Did not wait* or was *Dead on arrival*, or if the waiting time could not be calculated.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) The total number of emergency presentations includes records for which waiting times could not be calculated.

(d) The total number of emergency presentations includes records for which triage category was unknown.

(e) *Other Australians* includes records for which Indigenous status was *Not reported*.

Note: See boxes 1.1 and 3.1 and appendixes A and B for more information on terminology, data limitations and methods.

## How did waiting times vary by remoteness of usual residence?

In 2015–16 (excluding data for the Australian Capital Territory), median waiting times varied by remoteness area (Table 5.4). Overall, median waiting times were highest for people living in *Major cities* (20 minutes) and *Very remote* areas (19 minutes).

*Outer regional* areas had the shortest median waiting times for *Semi-urgent* and *Non-urgent* patients. The longest median waiting times for *Urgent*, *Semi-urgent* and *Non-urgent* patients was in *Major cities*.

The information presented in Table 5.4 is based on the remoteness area of the patient's usual residence, and this may differ from the remoteness area of the hospital. Therefore, the information presented should be interpreted with caution.

**Table 5.4: Median waiting time<sup>(a)</sup> for *Emergency presentations*, by remoteness area of usual residence and triage category, 2015–16<sup>(b)</sup>**

Triage category	Remoteness area of usual residence					Total <sup>(c)</sup>
	Major cities	Inner regional	Outer regional	Remote	Very remote	
Resuscitation	0	0	0	0	0	0
Emergency	6	5	6	5	6	6
Urgent	21	18	16	14	17	19
Semi-urgent	29	26	21	23	28	27
Non-urgent	26	20	15	18	20	22
<b>Total</b>	<b>20</b>	<b>18</b>	<b>15</b>	<b>16</b>	<b>19</b>	<b>19</b>

(a) Records were excluded from the calculation if the triage category was unknown, if the patient *Did not wait* or was *Dead on arrival*, or if the waiting time could not be calculated.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) Includes presentations for which the remoteness area was unknown.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

### 5.3 Performance indicator: waiting times for emergency department care—proportion seen on time

The NHA performance indicator: 'Waiting time for emergency hospital care – proportion seen on time' can be related to the National Health Performance Framework (NHPF) dimension 'Accessibility' within the domain 'Health system performance'. Under the NHA, it relates to the outcome area of *Australians receive appropriate high quality and affordable hospital and hospital-related care*.

Before 2014–15, this information was presented using the AIHW's previous peer group classification, and was limited to hospitals in the peer groups *Principal referral and specialist women's and children's hospitals* and *Large hospitals*.

From 2014–15, the scope of this indicator changed to include all public hospitals reporting to the NAPEDC NMDS. Therefore, the 2015–16 indicator includes information for hospitals that were excluded from the calculation before 2014–15.

In addition, the change from the previous AIHW peer group classification to the current AIHW peer group classification has resulted in a 'break in series' for data disaggregated by peer group. Therefore, the information presented here by public hospital peer group is not directly comparable with those presented in AIHW reports before 2014–15.

In 2015–16, 74% of *Emergency presentations* were seen on time (Table 5.5). The proportion of presentations seen on time ranged from 61% in the Northern Territory, to 81% in New South Wales.

The proportion of presentations seen on time varied by triage category – more urgent presentations were generally more likely to be seen on time. Overall, almost all *Resuscitation* patients and 77% of *Emergency* patients were seen on time. For *Non-urgent* patients, the proportion seen on time (within 2 hours) was 87% or over for all states and territories (Table 5.5).

*Principal referral and women's and children's hospitals* had the lowest overall proportion of presentations seen on time (70%) and *Other hospitals* had the highest proportion (87%) (Table 5.5).

The waiting times data for Western Australia for *Public acute group B hospitals* should be interpreted with caution. See Section 5.1 for more information.

#### How did the proportion seen on time vary by Indigenous status?

The proportion of presentations seen on time for Indigenous Australians (75%) was similar to the proportion of presentations seen on time for other Australians (74%) (Table 5.6).

There was some variation among the states and territories, with Queensland, Western Australia, South Australia and the Northern Territory all reporting a higher proportion of Indigenous Australians seen on time compared with other Australians.

Because the quality of the Indigenous status data in the NNAPEDCD has not been formally assessed, these data should be interpreted with caution.



**Table 5.5: Proportion<sup>(a)</sup> (%) of *Emergency presentations* seen on time, by triage category, states and territories, 2015–16**

<b>Peer group and triage category</b>	<b>NSW</b>	<b>Vic</b>	<b>Qld</b>	<b>WA<sup>(b)</sup></b>	<b>SA</b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total<sup>(c)</sup></b>
<b>Principal referral and women's and children's hospitals</b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	76	76	72	77	67	77	n.a.	57	74
Urgent	71	70	61	52	54	42	n.a.	36	64
Semi-urgent	75	70	77	65	66	52	n.a.	52	71
Non-urgent	91	88	96	93	92	84	n.a.	81	90
<i>Total</i>	<i>75</i>	<i>72</i>	<i>71</i>	<i>65</i>	<i>63</i>	<i>55</i>	<i>n.a.</i>	<i>49</i>	<i>70</i>
<b>Public acute group A hospitals</b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	84	79	75	75	73	82	n.a.	78	79
Urgent	76	72	62	39	51	71	n.a.	67	66
Semi-urgent	80	75	72	58	59	70	n.a.	59	73
Non-urgent	94	92	92	89	86	91	n.a.	89	92
<i>Total</i>	<i>81</i>	<i>76</i>	<i>69</i>	<i>54</i>	<i>61</i>	<i>73</i>	<i>n.a.</i>	<i>66</i>	<i>73</i>
<b>Public acute group B hospitals<sup>(c)</sup></b>									
Resuscitation	100	100	99	100	100	98	..	..	100
Emergency	84	77	76	80	69	80	..	..	79
Urgent	77	68	60	67	58	68	..	..	68
Semi-urgent	81	68	73	74	75	73	..	..	75
Non-urgent	94	87	94	92	97	94	..	..	93
<i>Total</i>	<i>82</i>	<i>71</i>	<i>69</i>	<i>74</i>	<i>70</i>	<i>73</i>	<i>..</i>	<i>..</i>	<i>74</i>
<b>Other hospitals</b>									
Resuscitation	100	100	..	100	100	..	..	100	100
Emergency	87	89	..	81	96	..	..	65	86
Urgent	85	85	..	86	94	..	..	74	85
Semi-urgent	88	78	..	85	94	..	..	77	86
Non-urgent	97	90	..	97	98	..	..	92	95
<i>Total</i>	<i>89</i>	<i>83</i>	<i>..</i>	<i>87</i>	<i>95</i>	<i>..</i>	<i>..</i>	<i>78</i>	<i>87</i>
<b>All hospitals</b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	82	78	74	77	70	80	n.a.	63	77
Urgent	76	71	61	53	56	59	n.a.	53	67
Semi-urgent	80	72	74	67	70	64	n.a.	60	74
Non-urgent	94	89	94	93	92	87	n.a.	89	93
<b>Total</b>	<b>81</b>	<b>74</b>	<b>70</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>n.a.</b>	<b>61</b>	<b>74</b>

(a) Records were excluded from the calculation of waiting time statistics if the triage category was unknown, if the patient *Did not wait* or was *Dead on arrival*, or if the waiting time could not be calculated.

(b) Waiting times information could not be calculated for about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

**Table 5.6: Proportion<sup>(a)</sup> (%) of *Emergency presentations seen on time*, by triage category and Indigenous status, states and territories, 2015–16**

	NSW	Vic	Qld	WA <sup>(b)</sup>	SA	Tas	ACT	NT	Total <sup>(c)</sup>
<b>Indigenous Australians</b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	82	77	77	80	71	78	n.a.	65	77
Urgent	75	68	67	68	61	60	n.a.	59	68
Semi-urgent	81	71	76	76	77	64	n.a.	61	75
Non-urgent	94	91	94	95	93	89	n.a.	87	93
<b>Total<sup>(d)</sup></b>	<b>81</b>	<b>73</b>	<b>73</b>	<b>76</b>	<b>73</b>	<b>66</b>	<b>n.a.</b>	<b>63</b>	<b>75</b>
<b>Other Australians<sup>(e)</sup></b>									
Resuscitation	100	100	100	100	100	100	n.a.	100	100
Emergency	82	78	74	77	70	80	n.a.	62	78
Urgent	76	71	61	51	56	59	n.a.	49	67
Semi-urgent	80	73	74	66	70	64	n.a.	59	74
Non-urgent	94	89	94	93	92	87	n.a.	90	92
<b>Total<sup>(d)</sup></b>	<b>81</b>	<b>74</b>	<b>69</b>	<b>64</b>	<b>66</b>	<b>66</b>	<b>n.a.</b>	<b>59</b>	<b>74</b>

(a) Records were excluded from the calculation of waiting time statistics if the triage category was unknown, if the patient *Did not wait* or was *Dead on arrival*, or if the waiting time could not be calculated.

(b) Waiting times information could not be calculated for about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia.

(c) Data for the Australian Capital Territory were not available at the time of publication.

(d) Does not include records for which the triage category was unknown.

(e) *Other Australians* includes records for which Indigenous status was *Not reported*.

*Note:* See boxes 1.1 and 3.1 and appendixes A and B for more information on terminology, data limitations and methods.

### Where to go for more information

More information on emergency department waiting times is available in tables S5.1, S5.2 and S5.3 which accompany this report online for:

- triage category and remoteness of usual residence
- triage category and socioeconomic status of usual residence.

Information on data limitations and methods is available in appendixes A and B.

## 6 How long did people stay in the emergency department?

This chapter presents information on the amount of time spent in the emergency department including:

- length of stay – measured from the time of presentation of the patient to the emergency department to the time of physical departure. This includes any time spent as an admitted patient in the emergency department, except the time spent in ‘short stay units’ (see Figure 1.1)
- duration of clinical care – measured as the time from the commencement of clinical care to the conclusion of the non-admitted component of care (episode end). This is a measure of the amount of time during which the patient receives clinical care (is treated and/or observed), excluding any time spent as an admitted patient in the emergency department (see Figure 1.1).
- the NHA performance indicator: ‘Waiting times for emergency department care – proportion completed within 4 hours’.

Because there is interest in how long patients wait in the emergency department before being admitted to hospital, these measures are presented separately for patients who were subsequently admitted to the hospital, and those who were not.

Data for the Australian Capital Territory for 2015–16 were not available at the time of publication.

### Key findings

#### How long did patients stay?

In 2015–16, the proportion of emergency department visits completed in 4 hours or less was 73% (excluding the Australian Capital Territory) – compared with 64% in 2011–12 and 73% in 2014–15. Western Australia had the highest proportion of presentations completed in 4 hours or less (76%) and the Northern Territory had the lowest (64%).

Between 2011–12 and 2014–15, the median length of stay in emergency departments decreased from 2 hours and 58 minutes to 2 hours and 41 minutes, and it increased to 2 hours and 44 minutes between 2014–15 and 2015–16.

About 29% of emergency department patients were admitted to hospital after their emergency department care. For these patients, 49% were admitted in 4 hours or less and 90% were admitted within 10 hours and 43 minutes. Queensland had the highest proportion (56%) of emergency department patients admitted in 4 hours or less and the Northern Territory had the lowest (27%).

#### How long did clinical care take?

Generally, the duration of clinical care was longer for patients subsequently admitted to the hospital than for other patients.

In 2015–16, 32% of *Emergency presentations* for patients who were not subsequently admitted to the same hospital had a duration of clinical care of less than 1 hour compared with 9% for patients who were subsequently admitted to the same hospital.

## 6.1 How long did patients stay?

The length of emergency department stay can be different for patients subsequently admitted to the same hospital compared with those not subsequently admitted to the same hospital. As a result, summary length of stay statistics are presented separately for patients subsequently admitted to the same hospital (those with an episode end status of *Admitted to this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*, which is labelled *Admitted to this hospital* in tables 6.1–6.5, 6.7 and 6.9) and for patients not subsequently admitted to the same hospital (including those referred to another hospital).

For Queensland, the DSS *Episode end status* category *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or other admitted patient care unit)* has been mapped to the category *Admitted to this hospital* in tables 6.1–6.5, 6.7 and 6.9.

The length of stay measures (tables 6.1 to 6.9) include all emergency department *Type of visit* categories (that is, for *Emergency presentations; Return visit, planned; Pre-arranged admission; Patient in transit* and *Dead on arrival*). Therefore, the data presented in this report may not be comparable with data presented in *Australian hospital statistics* reports before 2011–12, where this information was presented only for the *Type of visit* category of *Emergency presentation*.

The length of emergency department stay could not be calculated for about 4,400 records due to missing or invalid values (for example, for time of presentation or physical departure).

### Median length of stay

The median length of stay represents the amount of time spent in the emergency department at the 50th percentile. Half of the patients had a shorter length of stay and half had a longer stay.

#### How has the median length of stay changed over time?

Between 2011–12 and 2014–15, the median length of stay in emergency departments decreased from 2 hours and 58 minutes to 2 hours and 41 minutes, and it increased to 2 hours and 44 minutes between 2014–15 and 2015–16 (excluding the Australian Capital Territory) (Table 6.1).

For patients subsequently admitted, the median length of stay decreased from 5 hours and 47 minutes to 4 hours and 6 minutes between 2011–12 and 2015–16.

Between 2014–15 and 2015–16, the median length of stay decreased in South Australia and the Northern Territory. The median length of stay increased in other states and territories over the same period.

#### What was the median length of stay in 2015–16?

The overall median length of stay varied across states and territories from 2 hours and 33 minutes in New South Wales to 3 hours in South Australia (Table 6.2).

For patients who were subsequently admitted to hospital, the median length of stay in emergency departments ranged from 3 hours and 50 minutes in Queensland to 6 hours and 17 minutes in the Northern Territory.

For patients who were not subsequently admitted, the median lengths of stay were generally shorter for the less urgent triage categories.

**Table 6.1: Median length of emergency department stay<sup>(a)(b)</sup> by admission status, states and territories, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(c)</sup>
<b>Presentations ending in admission (hours: minutes)</b>					
New South Wales	06:25	05:48	04:45	04:43	04:37
Victoria	05:31	05:08	04:23	04:05	03:56
Queensland <sup>(d)</sup>	06:34	04:47	03:56	03:50	03:50
Western Australia	03:58	04:15	03:55	03:53	03:58
South Australia	05:05	04:55	05:05	05:12	04:28
Tasmania	06:10	06:13	06:02	06:05	05:59
Australian Capital Territory	05:42	06:03	05:28	05:21	n.a.
Northern Territory	06:13	06:43	07:06	07:08	06:17
<b>Total</b>	<b>05:47</b>	<b>05:15</b>	<b>04:27</b>	<b>04:16</b>	<b>04:06</b>
<b>Presentations not ending in admission (hours: minutes)</b>					
New South Wales	02:24	02:19	01:52	01:53	02:01
Victoria	02:11	02:29	02:24	02:23	02:25
Queensland	02:25	02:17	02:10	02:13	02:17
Western Australia	01:56	02:02	01:59	02:03	02:10
South Australia	02:24	02:21	02:28	02:29	02:30
Tasmania	02:10	02:11	02:08	02:15	02:14
Australian Capital Territory	02:56	02:55	02:41	02:41	n.a.
Northern Territory	02:19	02:21	02:23	02:17	02:12
<b>Total</b>	<b>02:17</b>	<b>02:19</b>	<b>02:07</b>	<b>02:08</b>	<b>02:13</b>
<b>All presentations (hours: minutes)</b>					
New South Wales	03:14	03:04	02:30	02:30	02:33
Victoria	03:02	03:02	02:56	02:54	02:56
Queensland	02:59	02:43	02:38	02:42	02:47
Western Australia	02:20	02:27	02:23	02:28	02:36
South Australia	02:55	02:52	02:59	03:02	03:00
Tasmania	02:42	02:41	02:41	02:49	02:50
Australian Capital Territory	03:27	03:28	03:11	03:10	n.a.
Northern Territory	02:53	02:59	03:06	03:02	02:59
<b>Total</b>	<b>02:58</b>	<b>02:53</b>	<b>02:40</b>	<b>02:41</b>	<b>02:44</b>

(a) Includes presentations for all types of visit.

(b) Length of stay is calculated as the length of time between presentation to the emergency department and physical departure.

(c) Excludes data for the Australian Capital Territory for 2015–16, which were not available at the time of publication.

(d) Includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 6.2: Emergency department presentations<sup>(a)</sup> median length of stay<sup>(b)</sup>, by triage category and admission status, states and territories, 2015–16**

<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<sup>(c)</sup></b>
<b>Presentations ending in admission (hours: minutes)<sup>(d)</sup></b>									
Resuscitation	3:57	3:43	3:38	3:10	3:17	3:29	n.a.	4:20	3:41
Emergency	4:31	3:55	3:47	3:42	4:22	5:22	n.a.	6:15	4:00
Urgent	4:53	3:59	3:53	4:09	4:46	6:22	n.a.	6:36	4:17
Semi-urgent	4:25	3:54	3:46	4:01	4:15	6:06	n.a.	6:01	4:00
Non-urgent	3:17	3:31	3:21	3:41	2:39	4:14	n.a.	5:21	3:25
<b>Total<sup>(e)</sup></b>	<b>4:37</b>	<b>3:56</b>	<b>3:50</b>	<b>3:58</b>	<b>4:28</b>	<b>5:59</b>	<b>n.a.</b>	<b>6:17</b>	<b>4:06</b>
<b>Presentations not ending in admission (hours: minutes)</b>									
Resuscitation	3:27	4:14	3:44	3:33	3:28	3:43	n.a.	3:00	3:38
Emergency	3:06	3:11	2:54	2:53	3:06	3:15	n.a.	2:56	3:02
Urgent	2:41	2:53	2:43	2:41	3:04	2:52	n.a.	2:38	2:45
Semi-urgent	1:55	2:17	2:00	1:58	2:13	2:04	n.a.	2:08	2:02
Non-urgent	0:57	1:34	1:24	1:23	1:28	1:22	n.a.	1:25	1:12
<b>Total<sup>(e)</sup></b>	<b>2:01</b>	<b>2:25</b>	<b>2:17</b>	<b>2:10</b>	<b>2:30</b>	<b>2:14</b>	<b>n.a.</b>	<b>2:12</b>	<b>2:13</b>
<b>All presentations (hours: minutes)</b>									
Resuscitation	3:50	3:49	3:40	3:16	3:20	3:33	n.a.	4:03	3:40
Emergency	3:47	3:41	3:26	3:20	3:45	4:17	n.a.	4:34	3:39
Urgent	3:22	3:27	3:12	3:14	3:36	3:48	n.a.	3:57	3:21
Semi-urgent	2:09	2:36	2:12	2:11	2:27	2:21	n.a.	2:29	2:18
Non-urgent	1:00	1:38	1:26	1:25	1:30	1:25	n.a.	1:33	1:16
<b>Total<sup>(e)</sup></b>	<b>2:33</b>	<b>2:56</b>	<b>2:47</b>	<b>2:36</b>	<b>3:00</b>	<b>2:50</b>	<b>n.a.</b>	<b>2:59</b>	<b>2:44</b>

(a) Includes presentations for all types of visit.

(b) Length of stay is calculated as the length of time between presentation to the emergency department and physical departure.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(d) For Queensland, includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(e) The total includes presentations for which the triage category was not reported.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## 90th percentile length of stay

The 90th percentile length of stay represents the amount of time spent in the emergency department for 90% of patients. For the remaining 10% of patients, the length of stay was longer.

### How has the 90th percentile length of stay changed over time?

Between 2011–12 and 2015–16, the 90th percentile length of stay for emergency department presentations decreased from 8 hours and 28 minutes to 6 hours and 53 minutes (excluding the Australian Capital Territory, see Table 6.3).

Queensland had the largest reduction in the 90th percentile emergency department length of stay (from 8 hours and 47 minutes in 2011–12 to 6 hours and 18 minutes in 2015–16). For the Northern Territory, the 90th percentile length of stay increased from 8 hours and 47 minutes

in 2011–12 to 10 hours and 26 minutes in 2014–15, and then decreased to 9 hours and 27 minutes in 2015–16.

Between 2014–15 and 2015–16, South Australia had the largest reduction in the 90th percentile length of stay overall (from 8 hours 38 minutes to 7 hours 31 minutes).

For patients subsequently admitted, South Australia and the Northern Territory had the largest reductions in the 90th percentile length of stay between 2014–15 and 2015–16 (decreasing by 3 hours and 41 minutes and 3 hours and 37 minutes, respectively).

**Table 6.3: Emergency department presentations<sup>(a)</sup> 90th percentile length of emergency department stay<sup>(b)</sup> by admission status, states and territories, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(c)</sup>
<b>Presentations ending in admission (hours: minutes)</b>					
New South Wales	15:28	14:30	12:28	12:34	11:50
Victoria	13:29	14:07	11:54	11:58	11:00
Queensland <sup>(d)</sup>	16:00	11:40	9:19	8:47	8:50
Western Australia	9:02	9:42	8:55	8:19	8:17
South Australia	13:11	13:37	14:01	14:34	10:53
Tasmania	16:53	20:47	19:33	21:34	19:24
Australian Capital Territory	14:09	16:55	15:12	15:28	n.a.
Northern Territory	16:13	17:53	19:44	19:33	15:56
<b>Total</b>	<b>14:23</b>	<b>13:41</b>	<b>11:49</b>	<b>11:41</b>	<b>10:43</b>
<b>Presentations not ending in admission (hours: minutes)</b>					
New South Wales	6:11	5:45	4:43	4:29	4:53
Victoria	4:48	5:53	5:35	5:29	5:22
Queensland	5:59	5:11	4:36	4:36	4:45
Western Australia	4:15	4:30	4:23	4:29	4:49
South Australia	6:01	5:46	5:52	5:48	5:38
Tasmania	6:00	5:44	5:23	5:30	5:21
Australian Capital Territory	7:08	7:05	6:18	6:01	n.a.
Northern Territory	5:40	5:41	5:51	5:35	5:04
<b>Total</b>	<b>5:39</b>	<b>5:34</b>	<b>5:01</b>	<b>4:54</b>	<b>5:01</b>
<b>All presentations (hours: minutes)</b>					
New South Wales	9:11	8:32	7:03	6:55	6:52
Victoria	8:12	8:10	7:34	7:36	7:19
Queensland	8:47	7:04	6:16	6:10	6:18
Western Australia	5:42	6:00	5:45	5:48	6:03
South Australia	8:22	8:12	8:25	8:38	7:31
Tasmania	8:25	8:23	8:28	8:52	8:41
Australian Capital Territory	9:12	9:40	8:45	8:32	n.a.
Northern Territory	8:47	9:13	10:05	10:26	9:27
<b>Total</b>	<b>8:28</b>	<b>7:55</b>	<b>7:05</b>	<b>7:02</b>	<b>6:53</b>

(a) Includes presentations for all types of visit.

(b) Length of stay is calculated as the length of time between presentation to the emergency department and physical departure.

(c) Excludes data for the Australian Capital Territory for 2015–16, which were not available at the time of publication.

(d) For Queensland, includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

## What was the 90th percentile length of stay in 2015–16?

Nationally, 90% of emergency department presentations were completed within 6 hours and 53 minutes, ranging from 6 hours and 3 minutes in Western Australia to 9 hours and 27 minutes in the Northern Territory (Table 6.4).

For patients who were subsequently admitted, 90% of presentations were completed within 10 hours and 43 minutes, ranging from 8 hours and 17 minutes in Western Australia to 19 hours 24 minutes in Tasmania. For patients who were not subsequently admitted, the emergency department lengths of stay were shortest for *Resuscitation* and *Non-urgent* patients.

For patients who were not subsequently admitted, 90% of presentations were completed within 5 hours and 1 minute, ranging from 4 hours and 45 minutes in Queensland to 5 hours and 38 minutes in South Australia. For patients who were not subsequently admitted, the lengths of stay were generally longer for patients in the more urgent triage categories.

**Table 6.4: Emergency department presentations<sup>(a)</sup> 90th percentile length of stay<sup>(b)</sup>, by triage category and admission status, states and territories, 2015–16**

<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<sup>(c)</sup></b>
<b>Presentations ending in admission (hours: minutes)<sup>(d)</sup></b>									
Resuscitation	11:01	10:10	8:36	7:08	9:19	11:02	n.a.	12:48	9:36
Emergency	12:15	11:37	9:10	7:52	11:04	18:28	n.a.	16:12	10:57
Urgent	12:22	11:22	8:53	8:34	11:22	20:08	n.a.	16:31	11:00
Semi-urgent	10:50	10:13	8:12	8:11	10:03	19:03	n.a.	15:01	10:08
Non-urgent	7:55	8:02	8:04	7:00	7:32	13:14	n.a.	10:48	8:11
<b>Admission to hospital from emergency departments— emergency department length of stay at the 90th percentile</b>									
<b>Total<sup>(e)</sup></b>	<b>11:50</b>	<b>11:00</b>	<b>8:50</b>	<b>8:17</b>	<b>10:53</b>	<b>19:24</b>	<b>n.a.</b>	<b>15:56</b>	<b>10:43</b>
<b>Presentations not ending in admission (hours: minutes)</b>									
Resuscitation	8:44	9:57	8:47	8:46	9:16	6:53	n.a.	6:12	9:00
Emergency	7:03	7:48	6:12	6:47	6:56	7:08	n.a.	6:01	6:57
Urgent	5:56	6:13	5:20	5:49	6:28	6:17	n.a.	5:38	5:52
Semi-urgent	4:23	4:57	4:04	4:06	5:05	4:52	n.a.	4:49	4:31
Non-urgent	3:06	3:48	3:22	3:10	3:55	3:37	n.a.	4:03	3:22
<b>Total<sup>(e)</sup></b>	<b>4:53</b>	<b>5:22</b>	<b>4:45</b>	<b>4:49</b>	<b>5:38</b>	<b>5:21</b>	<b>n.a.</b>	<b>5:04</b>	<b>5:01</b>
<b>All presentations (hours: minutes)</b>									
Resuscitation	10:22	10:04	8:39	7:43	9:19	10:05	n.a.	12:03	9:28
Emergency	9:49	10:14	8:12	7:25	9:36	13:27	n.a.	13:23	9:20
Urgent	8:27	8:41	6:58	7:05	8:38	11:32	n.a.	11:56	8:07
Semi-urgent	5:30	6:06	4:48	4:58	6:01	6:39	n.a.	7:09	5:33
Non-urgent	3:19	3:59	3:35	3:22	4:10	3:57	n.a.	4:59	3:36
<b>Total<sup>(e)</sup></b>	<b>6:52</b>	<b>7:19</b>	<b>6:18</b>	<b>6:03</b>	<b>7:31</b>	<b>8:41</b>	<b>n.a.</b>	<b>9:27</b>	<b>6:53</b>

(a) Includes presentations for all types of visit.

(b) Length of stay is calculated as the length of time between presentation to the emergency department and physical departure.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(d) For Queensland, includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(e) The total includes presentations for which the triage category was not reported.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



## 6.2 How many visits were completed within 4 hours?

The calculation of the proportion of emergency department presentations completed within 4 hours includes all types of visits (not just *Emergency presentations*) and all episode end types. Patients are considered to have completed their visit to the emergency department when they physically leave (regardless of whether they were admitted to the hospital, referred to another hospital, were discharged or left at their own risk), not when the non-admitted component of care ends.

About 4,400 records were excluded from the calculation of proportion completed within 4 hours because the length of emergency department stay could not be calculated due to missing or invalid values (for example, for the time of presentation or physical departure).

### How has the proportion of presentations completed within 4 hours changed over time?

Between 2011–12 and 2014–15 (excluding the Australian Capital Territory), the proportion of presentations completed within 4 hours increased from 64% to 73%, and it remained stable at 73% between 2014–15 and 2015–16 (Table 6.5).

Between 2011–12 and 2015–16, New South Wales had the largest increase in the proportion of presentations completed within 4 hours (from 60% to 75%) while the proportion in Western Australia decreased (from 80% to 76%).

For patients subsequently admitted (excluding the Australian Capital Territory), the proportion of presentations that were completed within 4 hours increased from 30% in 2011–12 to 49% in 2015–16 (Table 6.5). Over that period, the proportion increased in New South Wales, Victoria, Queensland and Tasmania; it fluctuated in Western Australia, South Australia and the Northern Territory.

### What proportion of presentations was completed within 4 hours in 2015–16?

The proportion of emergency department presentations completed within 4 hours is an NHA performance indicator.

#### Performance indicator: Waiting times for emergency department care—proportion completed within four hours

The NHA performance indicator: 'Waiting time for emergency hospital care: proportion completed within four hours' can be related to the NHPF dimensions 'Accessibility' and 'Effectiveness' within the domain 'Health system performance'. Under the NHA, it relates to the outcome area of *Australians receive appropriate high quality and affordable hospital and hospital-related care*.

The scope of this indicator is all public hospitals reporting to the NAPEDC NMDS.

In 2015–16 (excluding the Australian Capital Territory), Western Australia had the highest proportion (76%) of emergency department visits completed within 4 hours and the Northern Territory had the lowest (64%) (Table 6.5). New South Wales and Queensland also had high proportions of emergency department visits completed within 4 hours (both 75%).

In general, presentations for patients who required more urgent treatment (reflected by the triage category) were not as likely to be completed within 4 hours. For example, 57% of *Resuscitation* and 59% of *Emergency* visits were completed within 4 hours, compared with 81% of *Semi-urgent* visits and 93% of *Non-urgent* visits (Table 6.6).

*Public acute group B hospitals* generally achieved a higher proportion of visits completed within 4 hours (78%) than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals* (68% and 70%, respectively) (Table 6.6).

**Table 6.5: Proportion (%) of presentations<sup>(a)</sup> to emergency departments with a length of stay of 4 hours or less, for all patients and patients subsequently admitted<sup>(b)</sup>, states and territories, 2011–12 to 2015–16**

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(c)</sup>
<b>Waiting times for emergency department care—proportion completed within 4 hours</b>					
New South Wales	59.7	63.6	74.0	75.0	74.9
Victoria	64.6	65.6	69.0	69.9	71.2
Queensland	63.7	71.8	76.3	76.7	75.2
Western Australia	79.7	77.2	79.5	78.7	76.0
South Australia	64.6	65.9	64.5	63.8	66.0
Tasmania	66.4	67.3	67.7	66.6	66.3
Australian Capital Territory	57.7	57.3	61.8	63.1	n.a.
Northern Territory	65.2	63.6	61.6	62.1	63.6
<b>Total</b>	<b>64.4</b>	<b>67.3</b>	<b>72.7</b>	<b>73.3</b>	<b>73.3</b>
<b>Admission to hospital from emergency departments— percentage of presentations where length of stay is less than or equal to 4 hours</b>					
New South Wales	23.6	30.1	42.5	42.9	43.8
Victoria	31.2	37.8	46.0	49.3	52.7
Queensland <sup>(d)</sup>	22.6	40.8	52.9	56.6	56.2
Western Australia	51.9	46.3	53.0	54.6	51.5
South Australia	38.4	40.0	38.2	37.2	43.8
Tasmania	24.6	25.3	28.4	29.0	28.2
Australian Capital Territory	31.6	29.4	34.3	35.7	n.a.
Northern Territory	29.1	24.3	21.9	22.7	26.8
<b>Total</b>	<b>29.6</b>	<b>35.9</b>	<b>45.2</b>	<b>47.2</b>	<b>48.9</b>

(a) Includes presentations for all types of visit.

(b) For patients with an episode end status of *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(c) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(d) For Queensland, includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 6.6: Proportion (%) of presentations<sup>(a)</sup> to emergency departments with a length of stay of 4 hours or less, by triage category and public hospital peer group, states and territories, 2015–16**

Peer group and triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Principal referral and women's and children's hospitals</b>									
Resuscitation	52	58	64	67	57	59	n.a.	55	58
Emergency	48	55	65	67	51	47	n.a.	44	55
Urgent	54	63	70	68	55	49	n.a.	48	61
Semi-urgent	74	76	84	84	72	67	n.a.	69	77
Non-urgent	87	89	92	93	88	88	n.a.	84	89
<i>Total<sup>(c)</sup></i>	<i>64</i>	<i>70</i>	<i>75</i>	<i>76</i>	<i>62</i>	<i>62</i>	<i>n.a.</i>	<i>59</i>	<i>68</i>
<b>Public acute group A hospitals</b>									
Resuscitation	53	50	51	57	58	60	n.a.	39	53
Emergency	57	58	59	60	54	42	n.a.	37	57
Urgent	64	60	68	61	50	51	n.a.	48	62
Semi-urgent	80	76	84	80	65	76	n.a.	73	79
Non-urgent	93	91	93	92	81	92	n.a.	76	92
<i>Total<sup>(c)</sup></i>	<i>73</i>	<i>69</i>	<i>74</i>	<i>70</i>	<i>58</i>	<i>66</i>	<i>n.a.</i>	<i>60</i>	<i>70</i>
<b>Public acute group B hospitals</b>									
Resuscitation	61	57	59	62	80	40	..	..	60
Emergency	61	66	70	67	62	56	..	..	65
Urgent	70	69	72	69	63	66	..	..	70
Semi-urgent	86	77	87	83	81	88	..	..	83
Non-urgent	95	89	96	94	95	97	..	..	94
<i>Total<sup>(c)</sup></i>	<i>80</i>	<i>75</i>	<i>79</i>	<i>77</i>	<i>75</i>	<i>78</i>	<i>..</i>	<i>..</i>	<i>78</i>
<b>All hospitals<sup>(d)</sup></b>									
Resuscitation	54	55	58	63	59	57	n.a.	49	57
Emergency	56	58	63	65	54	46	n.a.	44	59
Urgent	64	63	69	66	57	53	n.a.	51	64
Semi-urgent	82	77	85	84	75	75	n.a.	73	81
Non-urgent	95	90	94	95	89	90	n.a.	85	93
<b>Performance indicator: Waiting times for emergency department care— proportion completed within four hours</b>									
<b>Total<sup>(c)(d)</sup></b>	<b>75</b>	<b>71</b>	<b>75</b>	<b>76</b>	<b>66</b>	<b>66</b>	<b>n.a.</b>	<b>64</b>	<b>73</b>

(a) Includes presentations for all types of visit.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) The total includes presentations for which the triage category was not reported.

(d) *All hospitals* includes *Principal referral and women's and children's hospitals*, *Public acute group A hospitals*, *Public acute group B hospitals* and hospitals in other peer groups that reported to the NNAPEDCD.

*Note:* See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

### **How did the proportion completed within 4 hours vary for patients subsequently admitted?**

For patients subsequently admitted, the length of stay indicates the amount of time spent in the emergency department before being moved to another ward in the hospital. The proportion of presentations for patients subsequently admitted where the length of the emergency department stay is less than, or equal to 4 hours, can be used to assess 'Access block' – or how long patients wait for an admitted patient bed to become available.

Nationally (excluding the Australian Capital Territory), about 49% of emergency department visits for patients subsequently admitted were completed within 4 hours. The proportion ranged from 27% in the Northern Territory to 56% in Queensland (Table 6.7).

The proportion of emergency department stays completed within 4 hours varied by triage category. For patients subsequently admitted, *Resuscitation* and *Non-urgent* patients were generally reported as having higher proportions of emergency department stays completed within 4 hours than other triage categories.

*Public acute group B hospitals* generally achieved a higher proportion of visits (for patients subsequently admitted) completed within 4 hours (58%) than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals* (47% and 45%, respectively).

### **How did the proportion completed within 4 hours vary for patients not subsequently admitted?**

In 2015–16 (excluding the Australian Capital Territory), about 83% of presentations for patients who were not subsequently admitted were completed within 4 hours. The highest proportion completed within 4 hours was for *Non-urgent* patients (95%) (Table 6.8).

The proportion of emergency department stays completed within 4 hours for patients who were not subsequently admitted ranged from 77% in South Australia to 85% in New South Wales, Queensland and Western Australia.

*Public acute group B hospitals* generally achieved a higher proportion of visits (for patients not subsequently admitted) completed within 4 hours (84%) than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals* (81% and 82%, respectively).

**Table 6.7: Proportion (%) of presentations<sup>(a)</sup> to emergency departments with a length of stay of 4 hours or less, for patients subsequently admitted to the hospital<sup>(b)</sup>, by triage category and public hospital peer group, states and territories, 2015–16**

Peer group and triage category	NSW	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Principal referral and women's and children's hospitals</b>									
Resuscitation	51	61	65	69	58	58	n.a.	52	59
Emergency	39	50	57	61	44	38	n.a.	28	47
Urgent	34	53	56	53	38	26	n.a.	25	45
Semi-urgent	41	57	57	55	43	29	n.a.	30	49
Non-urgent	56	64	61	58	69	39	n.a.	39	59
<i>Total<sup>(e)</sup></i>	<i>38</i>	<i>54</i>	<i>57</i>	<i>56</i>	<i>42</i>	<i>30</i>	<i>n.a.</i>	<i>28</i>	<i>47</i>
<b>Public acute group A hospitals</b>									
Resuscitation	50	52	50	56	57	61	n.a.	37	52
Emergency	45	51	53	50	39	25	n.a.	22	48
Urgent	39	45	54	34	28	18	n.a.	18	43
Semi-urgent	43	50	58	37	29	22	n.a.	17	46
Non-urgent	64	67	66	45	44	57	n.a.	24	61
<i>Total<sup>(e)</sup></i>	<i>42</i>	<i>48</i>	<i>54</i>	<i>39</i>	<i>32</i>	<i>22</i>	<i>n.a.</i>	<i>19</i>	<i>45</i>
<b>Public acute group B hospitals</b>									
Resuscitation	61	60	57	63	89	33	..	..	60
Emergency	53	65	66	65	66	44	..	..	62
Urgent	49	61	60	53	58	36	..	..	56
Semi-urgent	53	60	61	51	59	47	..	..	57
Non-urgent	76	62	74	67	79	81	..	..	71
<i>Total<sup>(e)</sup></i>	<i>52</i>	<i>61</i>	<i>62</i>	<i>55</i>	<i>61</i>	<i>40</i>	<i>..</i>	<i>..</i>	<i>58</i>
<b>All hospitals<sup>(f)</sup></b>									
Resuscitation	52	57	59	66	59	58	n.a.	46	57
Emergency	45	53	56	58	45	34	n.a.	28	50
Urgent	41	51	55	48	40	24	n.a.	25	47
Semi-urgent	46	55	58	50	47	28	n.a.	28	50
Non-urgent	66	65	65	60	67	48	n.a.	36	64
<b>Total<sup>(e)</sup></b>	<b>44</b>	<b>53</b>	<b>56</b>	<b>51</b>	<b>44</b>	<b>28</b>	<b>n.a.</b>	<b>27</b>	<b>49</b>

(a) Includes presentations for all types of visit.

(b) For patients with an episode end status of *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(c) For Queensland, includes presentations for which the DSS *Episode end status* category was *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(d) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(e) The total includes presentations for which the triage category was not reported.

(f) *All hospitals* includes *Principal referral and women's and children's hospitals, Public acute group A hospitals, Public acute group B hospitals* and hospitals in other peer groups that reported to the NNAPEDCD.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

**Table 6.8: Proportion (%) of presentations<sup>(a)</sup> to emergency departments with a length of stay of 4 hours or less for patients not subsequently admitted to the hospital<sup>(b)</sup>, by triage category and public hospital peer group, states and territories, 2015–16**

Peer group and triage category	NSW	Vic	Qld <sup>(c)</sup>	WA	SA	Tas	ACT	NT	Total <sup>(d)</sup>
<b>Principal referral and women's and children's hospitals</b>									
Resuscitation	53	46	58	56	52	69	n.a.	71	54
Emergency	65	66	79	77	69	74	n.a.	71	71
Urgent	70	75	82	80	71	71	n.a.	70	75
Semi-urgent	81	82	89	91	80	79	n.a.	81	84
Non-urgent	90	91	94	96	91	91	n.a.	88	92
<i>Total<sup>(e)</sup></i>	<i>77</i>	<i>81</i>	<i>86</i>	<i>87</i>	<i>76</i>	<i>79</i>	<i>n.a.</i>	<i>78</i>	<i>81</i>
<b>Public acute group A hospitals</b>									
Resuscitation	62	46	54	58	61	55	n.a.	71	56
Emergency	73	68	72	67	73	56	n.a.	78	70
Urgent	79	73	78	72	64	68	n.a.	81	76
Semi-urgent	88	84	89	86	73	84	n.a.	87	86
Non-urgent	95	93	95	94	83	94	n.a.	92	94
<i>Total<sup>(e)</sup></i>	<i>85</i>	<i>80</i>	<i>84</i>	<i>80</i>	<i>71</i>	<i>78</i>	<i>n.a.</i>	<i>85</i>	<i>82</i>
<b>Public acute group B hospitals</b>									
Resuscitation	60	54	62	61	71	46	..	..	60
Emergency	66	67	75	70	60	66	..	..	68
Urgent	77	74	79	77	64	76	..	..	76
Semi-urgent	89	81	90	88	84	91	..	..	87
Non-urgent	96	91	97	95	96	97	..	..	95
<i>Total<sup>(e)</sup></i>	<i>86</i>	<i>80</i>	<i>85</i>	<i>84</i>	<i>78</i>	<i>85</i>	<i>..</i>	<i>..</i>	<i>84</i>
<b>All hospitals<sup>(f)</sup></b>									
Resuscitation	61	48	57	57	59	55	n.a.	71	57
Emergency	70	67	75	72	69	62	n.a.	72	70
Urgent	77	74	80	77	69	71	n.a.	76	76
Semi-urgent	88	83	90	89	81	74	n.a.	84	87
Non-urgent	96	92	95	96	91	93	n.a.	90	95
<b>Total<sup>(e)</sup></b>	<b>85</b>	<b>81</b>	<b>85</b>	<b>85</b>	<b>77</b>	<b>79</b>	<b>n.a.</b>	<b>82</b>	<b>83</b>

(a) Includes presentations for all types of visit.

(b) For patients whose episode end status was other than *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(c) For Queensland, includes presentations for which the DSS *Episode end status* category was other than *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(d) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(e) The total includes presentations for which the triage category was not reported.

(f) *All hospitals* includes *Principal referral and women's and children's hospitals, Public acute group A hospitals, Public acute group B hospitals* and hospitals in other peer groups that reported to the NNAPEDCD.

Note: See Box 1.1 and appendixes A, B and C for more information on terminology, data limitations and methods.

## 6.3 How long did clinical care take?

The duration of clinical care is calculated as the time between when a patient commences clinical care and end of the non-admitted patient emergency department episode (the end of clinical care) (see Figure 1.1).

The duration of clinical care can be different for patients subsequently admitted to the same hospital compared with patients not subsequently admitted to the same hospital. As a result, duration of clinical care statistics are presented separately for patients who were subsequently admitted to the same hospital and for patients not subsequently admitted to the hospital.

The duration of clinical care measures presented in tables 6.9 and 6.10 are for *Emergency presentations* only. The calculations exclude presentations for which the measures of time could not be calculated due to missing or invalid values (for example, if the time of episode end was recorded as occurring before the time of commencement of clinical care).

For about 313,000 records, the duration of clinical care could not be calculated. Of these, about 196,000 had an episode end status of *Did not wait* or *Dead on arrival*, for which a time of episode end is not applicable. For about 23,000 records the duration of clinical care could not be calculated because the date and time of episode end were missing. For about 93,000 records (including 43,000 records in Western Australia) the duration of clinical care could not be calculated because the date and time of commencement of clinical care was missing.

### Duration of clinical care for patients subsequently admitted to the same hospital

For patients subsequently admitted to the same hospital (excluding the Australian Capital Territory), about 9% of *Emergency presentations* had a duration of clinical care of less than 1 hour, 55% had a duration of clinical care ranging from 1 hour to less than 4 hours, and 35% had a duration of clinical care of 4 hours or more (Table 6.9). Almost 1 in 4 (24%) *Non-urgent* patients had a duration of clinical care of less than 1 hour.

Generally, the duration of clinical care was greater for patients subsequently admitted to the same hospital than for other patients (Table 6.10).

### Duration of clinical care for patients not subsequently admitted to the same hospital

For patients who were not subsequently admitted to the same hospital (excluding the Australian Capital Territory), about 32% of presentations had a duration of clinical care of less than 1 hour, 52% had a duration of clinical care ranging from 1 hour to less than 4 hours, and 11% had a duration of clinical care of 4 hours or more (Table 6.10).

Around 37% of *Resuscitation* patients had a duration of clinical care of 4 hours or more, while 55% of *Non-urgent* patients had a duration of clinical care of less than 1 hour.

The duration of clinical care could not be calculated for about 6% of records for patients who were not subsequently admitted to the same hospital because either the time of commencement of clinical care or the time of episode end was not reported. Almost 67% of these records had an episode end status of *Did not wait* indicating that the patient had not received care.

**Table 6.9: Duration of clinical care statistics for *Emergency presentations* for patients subsequently admitted to this hospital<sup>(a)</sup> by triage category, 2015–16**

	Triage category					Total <sup>(b)(c)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
<b>Number of presentations</b>						
Less than 1 hour	5,756	32,094	90,546	59,336	7,342	195,091
1 hour to <2 hours	7,329	82,900	169,872	89,424	6,143	355,679
2 hours to <3 hours	7,318	111,514	216,602	100,706	5,651	441,798
3 hours to <4 hours	6,449	106,111	207,096	87,953	4,467	412,080
4 hours or more	12,325	186,025	389,976	159,393	6,418	754,150
<b>Total<sup>(d)</sup></b>	<b>39,249</b>	<b>521,588</b>	<b>1,081,653</b>	<b>502,720</b>	<b>30,817</b>	<b>2,176,127</b>
<b>Proportion of presentations (%)</b>						
Less than 1 hour	15	6	8	12	24	9
1 hour to <2 hours	19	16	16	18	20	16
2 hours to <3 hours	19	21	20	20	18	20
3 hours to <4 hours	16	20	19	17	14	19
4 hours or more	31	36	36	32	21	35
<b>Total<sup>(d)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

(a) For patients with an episode end status of *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) Includes records for which triage category was unknown.

(d) Total includes approximately 17,300 records (less than 1%) for which the duration of clinical care could not be calculated.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.

**Table 6.10: Duration of clinical care statistics for *Emergency presentations* for patients not subsequently admitted to this hospital<sup>(a)</sup>, by triage category, 2015–16**

	Triage category					Total <sup>(b)(c)</sup>
	Resuscitation	Emergency	Urgent	Semi-urgent	Non-urgent	
<b>Number of presentations</b>						
Less than 1 hour	1,620	32,387	304,812	967,028	317,962	1,624,209
1 hour to <2 hours	1,964	75,739	395,732	679,420	116,787	1,269,713
2 hours to <3 hours	2,282	92,369	351,471	381,362	45,649	873,174
3 hours to <4 hours	2,339	72,667	230,340	192,780	18,566	516,711
4 hours or more	4,925	96,987	257,416	172,721	13,288	545,379
<b>Total<sup>(d)</sup></b>	<b>13,310</b>	<b>375,647</b>	<b>1,592,385</b>	<b>2,562,216</b>	<b>577,689</b>	<b>5,124,558</b>
<b>Proportion of presentations (%)</b>						
Less than 1 hour	12	9	19	38	55	32
1 hour to <2 hours	15	20	25	27	20	25
2 hours to <3 hours	17	25	22	15	8	17
3 hours to <4 hours	18	19	14	8	3	10
4 hours or more	37	26	16	7	2	11
<b>Total<sup>(d)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

(a) For patients with an episode end status other than *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

(b) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) Includes records for which triage category was unknown.

(d) Includes approximately 295,000 records (6%) for which the duration of clinical care could not be calculated.

Note: See Box 1.1 and appendixes A and B for more information on terminology, data limitations and methods.



# Appendix A: Data quality information

This appendix includes a data quality statement and additional detailed information relevant to the interpretation of the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD).

Included is information on changes to the national minimum data set specifications and information on variations in hospital reporting that may affect interpretation of the data presented in this report.

The data quality statement for the NNAPEDCD is also available online at <[www.aihw.gov.au](http://www.aihw.gov.au)>.

## Data quality statement: National Non-admitted Patient Emergency Department Care Database 2015–16

The NNAPEDCD provides information on the care provided (including waiting times for care) for non-admitted patients registered for care in emergency departments in public hospitals where the emergency department meets the following criteria:

- purposely designed and equipped area with designated assessment, treatment and resuscitation areas
- ability to provide resuscitation, stabilisation and initial management of all emergencies
- availability of medical staff in the hospital 24 hours a day
- designated emergency department nursing staff 24 hours per day 7 days per week, and a designated emergency department nursing unit manager.

Patients who were dead on arrival are in scope if an emergency department clinician certified the death of the patient. Patients who leave the emergency department after being triaged and then advised of alternative treatment options are in scope.

The scope includes only physical presentations to emergency departments. Advice provided by telephone or video conferencing is not in scope, although it is recognised that advice received by telehealth may form part of the care provided to patients physically receiving care in the emergency department. Also excluded from the scope of the NMDS is care provided to patients in general practitioner co-located units.

The NNAPEDCD includes data for each year from 2003–04 to 2015–16.

Data for the NNAPEDCD are reported annually. The most recent reference period for this data set includes records for Non-admitted patient emergency department service episodes between 1 July 2015 and 30 June 2016.

For 2015–16, jurisdictions were able to provide data for the NNAPEDCD using the NAPEDC NMDS or the NAPEDC Data Set Specification (DSS). The following episodes are included in the NMDS, but are excluded for the DSS:

- where only a clerical service is provided to people supporting a pre-arranged admission
- where people are awaiting transit to another facility and receive no clinical care.

## Summary of key data quality issues

- The NNAPEDCD is a compilation of episode-level data for emergency department presentations in public hospitals.
- For 2015–16, Australian Capital Territory emergency department care information was not available at the time of publication.
- For 2015–16, Queensland provided data to the NNAPEDCD using the DSS specification, while all other states and territories provided data to the NNAPEDCD using the NMDS specification. Therefore, the data for Queensland may not be entirely comparable with data provided for other states and territories.
- For 2015–16, waiting times information could not be calculated for about 93,000 emergency department presentations (for which waiting times are applicable), including about 43,000 presentations for 1 *Public acute group B hospital* in Western Australia. The remainder were distributed across multiple hospitals and jurisdictions.
- For 2015–16, the length of emergency department stay could not be calculated for about 4,400 emergency department presentations, mostly in New South Wales.
- The scope of the national minimum data set for Non-admitted patient emergency department care (NAPEDC NMDS) changed between 2012–13 and 2013–14.
- Changes in data set specifications in the second half of 2011–12 may affect the comparability of these data with data for other reporting periods.
- 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.
- The quality of the data reported for Indigenous status has not been formally assessed; therefore, caution should be exercised when interpreting these data.
- A principal diagnosis was not reported for about 352,000 records.

## Variation in reporting

### Possible variation in triage categorisation

The proportion of presentations by triage category varied by state or territory. New South Wales had the highest proportion of presentations that were *Non-urgent* (11.2%) and South Australia had the highest proportions of presentations that were *Resuscitation* (1.4%). Queensland and South Australia had the highest proportions of presentations that were *Emergency* (14.2%) (Table A1). This may reflect different triage categorisation, differing mixes of patients or both.

Variation in the proportion of patients admitted to the hospital by triage category may indicate variation in emergency department triage categorisation of patients. For example, nationally, around 30% of *Emergency presentations* had an episode end status of *Admitted to this hospital*. Victoria had the highest proportion of patients subsequently *Admitted to this hospital* (34%) and New South Wales had the lowest proportion (25%) (Table 4.14). For *Resuscitation* patients, around 75% had an episode end status of *Admitted to this hospital*, and the proportion ranged from 69% in Western Australia to 87% in the Northern Territory.

**Table A1: Proportion (%) of *Emergency presentations* by triage category, states and territories, 2015–16**

<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<sup>(a)</sup></b>
Resuscitation	0.7	0.5	0.8	0.8	1.4	0.7	n.a.	0.7	0.7
Emergency	11.9	10.8	14.2	12.7	14.2	9.4	n.a.	12.9	12.3
Urgent	33.4	36.2	44.3	34.6	38.6	35.2	n.a.	31.0	36.6
Semi-urgent	42.8	44.1	36.2	45.3	39.4	45.3	n.a.	46.8	42.0
Non-urgent	11.2	8.5	4.4	6.6	6.4	9.4	n.a.	8.6	8.3
<b>Total<sup>(b)</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>n.a.</b>	<b>100</b>	<b>100</b>

(a) Excludes data for the Australian Capital Territory, which were not available at the time of publication.

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

Note: See Box 1.1 for more information on terminology.

## Variation in reporting diagnosis information

For the 2015–16 NAPEDC NMDS, diagnosis information was not reported using a uniform classification. The classifications that were reported were:

- Systematized Nomenclature of Medicine – Clinical Terms – Australian version, Emergency Department Reference Set (SNOMED CT-AU [EDRS])
- International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) 2nd edition
- International Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) 6th edition, 7th edition 8th edition or 9th edition.

The majority of records (67%) were reported using one edition or another of ICD-10-AM.

Table A2 presents information on the numbers of presentations for which diagnosis information was reported, by the type of classification used. Most states and territories reported patients' diagnoses using a single type of classification. A principal diagnosis was not reported for about 352,000 records.

About 161,000 records in Victoria, Queensland and the Northern Territory included a first additional diagnosis, and about 25,000 of these records also included a second additional diagnosis.

**Table A2: Provision of diagnosis information for emergency presentations by diagnosis classification type, states and territories, 2015–16<sup>(a)</sup>**

Classification	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
SNOMED-CT-AU (EDRS)	2,091,976	0	0	0	0	0	n.a.	0	2,091,976
ICD-9-CM, 2nd ed.	0	33,181	0	0	0	0	n.a.	0	33,181
ICD-10-AM, 6th ed.	0	0	0	583,617	0	23,971	n.a.	0	607,588
ICD-10-AM, 7th ed.	0	0	0	0	0	124,658	n.a.	138,372	263,030
ICD-10-AM, 8th ed.	0	1,565,553	1,431,392	105,791	0	0	n.a.	0	3,102,736
ICD-10-AM, 9th ed.	518,427	0	0	0	464,448	0	n.a.	0	982,875
ICD-10-AM edition not specified <sup>(b)</sup>	32,564	0	0	0	0	0	n.a.	0	32,564
Principal diagnosis not reported	90,553	81,152	7,751	140,023	17,441	4,912	n.a.	10,087	351,919
<b>Total</b>	<b>2,733,520</b>	<b>1,679,886</b>	<b>1,439,143</b>	<b>829,431</b>	<b>481,889</b>	<b>153,541</b>	<b>n.a.</b>	<b>148,459</b>	<b>7,465,869</b>

(a) Data for the Australian Capital Territory were not available at the time of publication.

(b) The edition of ICD-10-AM provided was not specified by the jurisdiction, and these appeared to be provided in either ICD-10-AM 6th edition or 7th edition.

## Quality of Indigenous status data

The quality of the data reported for Indigenous status in emergency departments has not been formally assessed. In addition, the scope of the NNAPEDCD may not include some emergency services provided in areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Therefore, the information on Indigenous status presented in this report should be used with caution.

Indigenous status was not reported for about 1% of emergency department presentations in 2015–16 (Table 3.2).

The following information has been provided by the states and territories to provide some insight into the quality of Indigenous status data in the NNAPEDCD.

### New South Wales

Indigenous status is a mandatory data item collected by all facilities that provide data to the New South Wales Ministry of Health's Emergency Department Data Collection. In 2015–16, Indigenous status was not reported for about 2% of emergency department records. This is a decrease from the 3% not reported for 2014–15. New South Wales considers that Indigenous status identification in its emergency department data is acceptable.

### Victoria

The Victorian Department of Health reports that, despite data quality improvement in recent years, the Indigenous status in admitted patient data for 2015–16 should still be considered to undercount the number of Aboriginal and Torres Strait Islander patients. The quality of Indigenous status data in emergency department data is improving but is less accurate than data for admitted patients in public hospitals.

## Queensland

Queensland Health notes that the quality of reporting of Indigenous status has improved compared to previous years. However, the available evidence continues to suggest that the number of Indigenous patients is understated in the Queensland hospital data due to non-reporting as well as misreporting of Indigenous status. Despite this, Queensland Health regards the Indigenous status data used in this report to be of a quality appropriate for publication.

## Western Australia

The Western Australian Department of Health regards the recording of Indigenous status for non-admitted patient emergency department data as being substantially complete, with 99.5% of data identified by Indigenous status in 2015–16.

A recent sample survey of WA admitted patient records concluded that WA was collecting Indigenous status with a high degree of accuracy, and the data element is well recorded in emergency departments.

## South Australia

The South Australian Department for Health and Ageing reports that the Indigenous status data in its emergency department collection is of sufficient quality, appropriate for publication. Although the number of *Not stated* has improved over recent years, it is still considered too high and work is planned for 2016–17 to develop targeted training packages aimed at improving the recording and quality of Indigenous Status data in the emergency department setting.

## 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 to be done in maintaining and improving, where needed, the collection of this data element.

## Northern Territory

The Northern Territory Department of Health reported that the quality of its Indigenous status data for emergency department patients is considered to be acceptable. The department retains historical reporting of Indigenous status. All management and statistical reporting, however, is based on a person's most recently reported Indigenous status.

## Other factors affecting interpretation of the NNAPEDCD data

This section presents other information about the quality of the data provided for the NNAPEDCD and factors that may affect the interpretation of the information presented in this report.

### Geographic detail

The NAPEDC NMDS for the 2015–16 period specified that states and territories should provide the Statistical Area level 2 (SA2) of usual residence of patient. The SA2 is a

geographical unit under the Australian Statistical Geography Standard (ASGS). The ASGS was introduced in 2011 by the Australian Bureau of Statistics (ABS) and was designed to be useful and relevant for data dissemination.

### **Remoteness area of usual residence**

The AIHW mapped the supplied SA2 area of usual residence information for each presentation to remoteness area categories based on the ABS ASGS Remoteness Structure for 2011. This mapping was done on a probabilistic basis.

Before 2012–13, remoteness area was based on the ABS's ASGC. Comparisons of the data over time should therefore be interpreted with caution.

### **Variation in provision of geographic data**

In 2015–16, New South Wales provided all records with the area of usual residence of the patient as a Statistical Local Area (SLA) 2011. The SLA is a geographical unit under the previous ABS Australian Standard Geographical Classification (ASGC). The AIHW mapped the supplied SLA of usual residence data for each presentation to the SA2 2011 version. This mapping was done on a probabilistic basis.

Because of the probabilistic nature of the mapping, the derived SA2 and remoteness of usual residence data for individual records may not be accurate; however, the overall distribution of records by geographical area is considered useful. Approximately 60,000 New South Wales records (2%) did not contain a valid SLA, and therefore could not be mapped to an SA2 or remoteness area of usual residence.

### **Variation in practices**

Although there are national standards for data on emergency department care, statistics may be affected by variations in practices across states and territories.

### **Type of visit**

Not all states and territories reported presentations for all types of visit category. In particular, the category *Dead on arrival* is not used in Western Australia or South Australia because these patients are usually managed outside the emergency department.

For 2015–16, Queensland provided data for the NNAPEDCD using the DSS specifications, for which *Patient in transit* is not a valid type of visit category. In 2014–15, Queensland reported 745 presentations with a type of visit of *Patient in transit*. Under the DSS specification, patients in transit are included in the type of visit category *Emergency presentation*.

### **Episode end status**

The reporting of *Episode end status* by state or territory varied. For example, South Australia did not use the *Episode end status* value – *Dead on arrival*.

For the NMDS, patients who are admitted to the hospital and subsequently die before leaving the emergency department are included in the NMDS *Episode end status* category of *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*. As noted in Chapter 1, Queensland provided 2015–16 data for the NNAPEDCD using the DSS specifications, for which patients who died or otherwise left the emergency department are not included in the DSS category *Transferred for admitted patient*

care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward). Therefore, Queensland data may not be entirely comparable with data provided for other states and territories.

The DSS episode end status category *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)* was mapped to the NMDS episode end status category *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)*.

Between 2014–15 and 2015–16, a change in practice in the certification of death in Victoria resulted in a decrease in the number of presentations with an episode end status of *Dead on arrival*, from 1,313 in 2014–15 to 111 in 2015–16. Therefore, caution should be used when making comparisons over time.

Before 2012–13, New South Wales did not report against the episode end status *Died in emergency department*. Therefore, caution should be used when making comparisons over time.

## **Quality of waiting times and length of stay data**

### **Waiting time**

For 2015–16, about 93,000 records that should have been included in the calculation of waiting times statistics were excluded as they did not have a valid commencement of clinical care time recorded. These included about 43,000 emergency department presentations for a *Public acute group B hospital* in Western Australia. The majority (about 49,000) of the remainder were distributed across multiple hospitals in New South Wales.

### **Emergency department length of stay**

For about 4,400 records, the emergency department length of stay could not be calculated as the date and time of physical departure were missing. These records were distributed across multiple hospitals, mainly from New South Wales. Of the 4,400 records, about 100 had an episode end status of *Did not wait* or *Dead on arrival*.

### **Emergency department duration of clinical care**

For about 23,000 records the duration of clinical care could not be calculated as the date and time of episode end were missing. For about 93,000 records (including 49,000 records in New South Wales and 44,000 records in Western Australia) the duration of clinical care could not be calculated because the date and time of commencement of clinical care was missing.

# Appendix B: Technical notes

## Definitions

If not otherwise indicated, data elements were defined according to the 2015–16 definitions in the *National health data dictionary, version 16* (AIHW 2012) (summarised in the Glossary).

## Data presentation

Data are presented by the state or territory of the hospital, not by the state or territory of usual residence of the patient.

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 report, percentages may not add up to 100.0 because of rounding. Percentages and rates printed as 0.0 or 0 generally indicate a zero. The symbol '<0.1' has been used to denote less than 0.05, but greater than 0.

Data on waiting times (50th and 90th percentiles) and the proportion seen on time have been suppressed if there were fewer than 100 presentations in the category being presented. The abbreviation 'n.p.' has been used to denote these suppressions. For these tables, the totals include the suppressed information.

## Methods

### 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 minutes waited) represents the number of minutes within which 50% of patients commenced clinical care (or completed their episode or were admitted); half the waiting times will have been shorter, and half longer, than the median.

The 90th percentile data represent the number of minutes (or hours and minutes) within which 90% of patients commenced clinical care (or completed their episode or were admitted).

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, 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, 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, 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 minutes.

## Principal diagnosis reporting

For the 2015–16, diagnosis information was reported for the NNAPEDCD using the following classifications:

- Systematized Nomenclature of Medicine – Clinical Terms – Australian version, Emergency Department Reference Set (SNOMED CT-AU (EDRS))
- International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) 2nd edition
- International Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) 6th edition, 7th edition 8th edition or 9th edition.

See Table A2 for information on the numbers of presentations for which diagnosis information was reported, by the type of classification used.

The AIHW undertook to map all diagnosis information to a single classification.

### Method of mapping provided diagnosis codes to a single classification

The AIHW used mapping files to assign diagnosis information provided in the different classifications to a single classification (to 3-character categories in ICD-10-AM 8th edition). This mapping involved the use of:

- ICD-9-CM to ICD-10-AM historical mapping files
- ICD-10-AM to ICD-10-AM edition mapping files
- SNOMED CT-AU (EDRS) to ICD-10-AM 6th edition mapping file.

#### Step one: mapping SNOMED-CT-AU (EDRS) to ICD-10-AM 6th edition

The principal diagnosis data coded in SNOMED-CT-AU (EDRS) were mapped to ICD-10-AM 6th edition codes using the mapping file provided by the IHPA.

There were over 2 million presentations provided by establishments that used SNOMED-CT-AU (EDRS).

About 3,000 presentations with valid SNOMED-CT-AU (EDRS) codes did not map to an ICD-10-AM 6th edition diagnosis code. These corresponded to about 900 unique SNOMED-CT-AU (EDRS) codes, and for more than 1,400 records the code translated as *Left against medical advice*.

The principal diagnoses for the remaining presentations were mapped to 2,777 unique ICD-10-AM 6th edition codes.

### **Step two: assigning ICD-10-AM codes to diagnosis data provided in ICD-9-CM**

There were about 33,000 presentations provided by establishments that reported coding diagnoses using ICD-9-CM. Of these about 5,600 records did not have a valid ICD-9-CM code – the majority had truncated ICD-9-CM codes (for example, an invalid 3-digit code was provided, for a condition that required a 4-digit code). The principal diagnoses for the remaining 27,400 presentations were mapped to ICD-10-AM codes.

### **Step three: assigning ICD-10-AM 8th edition codes**

#### *Records provided using ICD-10-AM*

There were more than 3 million presentations provided by establishments that reported coding diagnoses using ICD-10-AM 8th edition.

For the data coded using the ICD-10-AM 6th edition, 7th edition and edition not specified (about 2 million presentations); the majority of diagnosis codes were identical with the corresponding diagnosis codes in ICD-10-AM 8th edition. A small number of diagnosis codes were subsequently mapped to the 8th edition.

#### *Records provided using ICD-9-CM or SNOMED-CT-AU (EDRS)*

Following the mapping undertaken in steps one and two, a relatively small number of ICD-10-AM 6th edition diagnosis codes were subsequently mapped to ICD-10-AM 8th edition.

Some records could not be assigned an ICD-10-AM 8th edition diagnosis code. For example, a small percentage of records provided in SNOMED CT-AU (EDRS) contained concepts that did not have equivalent codes in ICD-10-AM (for example, for dressing of wound, preparation of medical certificate and left against medical advice). In addition, invalid codes were reported for a small percentage of records provided in either ICD-9-CM or ICD-10-AM, and these could not be mapped to an ICD-10-AM 8th edition diagnosis code.

Following mapping, about 95% of principal diagnoses were mapped to 3-character categories in ICD-10-AM 8th edition.

## **Waiting times (Chapter 5)**

### **Waiting time to commencement of clinical care**

The waiting times are determined as the time elapsed between presentation to 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 if the patient *Did not wait* to be attended by a health-care professional, or was *Dead on arrival*.

See Appendix A for information on the completeness of the data provided for waiting times calculations.

### **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 Australasian Triage Scale definition.

For the purpose of this report, a patient with a triage category of *Resuscitation* was considered to be seen on time if the waiting time to commencement of clinical care was less than or equal to 2 minutes.

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*.

### **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 (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)* (for the NMDS) or *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)* (for the DSS). The calculation is restricted to presentations with a type of visit of *Emergency presentation*.

## **Emergency department length of stay (Chapter 6)**

### **Emergency department length of stay**

The length of stay is determined as the time elapsed between presentation and the physical departure of the patient.

Length of stay statistics are calculated for all emergency department type of visit categories.

### **Proportion of 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 a negative number of minutes).

### **Admission to hospital from emergency departments**

'Admission to hospital from emergency departments' (for patients subsequently admitted) is calculated using the emergency department length of stay for presentations with an episode end status of *Admitted to this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)* (for the NMDS) or *Transferred for admitted patient care in this hospital (either short-stay unit, hospital-in-the-home or non-emergency department hospital ward)* (for the DSS).

### **Duration of clinical care**

The duration of clinical care (previously reported as 'treatment time') is determined as the time elapsed between commencement of clinical care and the end of the non-admitted patient emergency department episode (the end of clinical care). See Appendix A for information on the completeness of the data provided for the calculation of duration of clinical care.

Duration of clinical care statistics are calculated for presentations with a type of visit of *Emergency presentation*.

### **Age and sex of patient**

All states and territories supplied the date of birth of the patient, from which the age of the patient at the date of presentation was calculated.

For 471 records, the age of the patient could not be calculated as date of birth was missing.

For 413 records, the sex of the patient was reported as either *Intersex or indeterminate* or *Not stated/inadequately described*.

# Appendix C: Public hospital peer groups

This report uses the AIHW's public hospital peer group classification, which was published in *Australian hospital peer groups* (AIHW 2015a). A summary of the peer group classification is presented in Table C.1.

**Table C.1: Public hospital peer groups**

Group	Description
<b>Acute public hospitals</b>	<b>Are identified according to the hospital's service profile:</b>
<b>Principal referral hospitals</b>	Provide a very broad range of services, including some very sophisticated services, and have very large patient volumes. Most include an intensive care unit, a cardiac surgery unit, a neurosurgery unit, an Infectious diseases unit and a 24-hour emergency department.
<b>Public acute group A hospitals</b>	Provide a wide range of services to a large number of patients and are usually situated in metropolitan centres or inner regional areas. Most have an intensive care unit and a 24-hour emergency department. They are among the largest hospitals, but provide a narrower range of services than the Principal referral group. They have a range of specialist units, potentially including bone marrow transplant, coronary care and oncology units.
<b>Public acute group B hospitals</b>	Most have a 24-hour emergency department and perform elective surgery. They provide a narrower range of services than the Principal referral and Public acute group A hospitals. They have a range of specialist units, potentially including obstetrics, paediatrics, psychiatric and oncology units.
<b>Public acute group C hospitals</b>	These hospitals usually provide an obstetric unit, surgical services and some form of emergency facility. They are generally smaller than the Public acute group B hospitals.
<b>Public acute group D hospitals</b>	Often situated in regional and remote areas and offer a smaller range of services relative to the other public acute hospitals (groups A-C). Hospitals in this group tend to have a greater proportion of non-acute separations compared with the larger acute public hospitals.
<b>Very small hospitals</b>	Generally have less than 200 admitted patient separations each year.
<b>Specialist hospital groups</b>	<b>Perform a readily identified role within the health system</b>
<b>Women's and children's hospitals</b>	
Children's hospitals	Specialise in the treatment and care of children.
Women's hospitals	Specialise in treatment of women.
Women's and children's hospitals	Specialise in the treatment of both women and children.
<b>Early parenting centres</b>	Specialise in care and assistance for mothers and their very young children.
<b>Drug and alcohol hospitals</b>	Specialise in the treatment of disorders relating to drug or alcohol use.

(continued)

**Table C.1 (continued): Public hospital peer groups**

<b>Group</b>	<b>Description</b>
<b>Psychiatric hospitals</b>	Specialise in providing psychiatric care and/or treatment for people with a mental disorder or psychiatric disability.
Psychogeriatric hospitals	Specialise in the psychiatric treatment of older people.
Child, adolescent and young adult psychiatric hospitals	Specialise in the psychiatric treatment of children and young people.
General acute psychiatric hospitals	Provide acute psychiatric treatment.
General non-acute psychiatric hospitals	Provide non-acute psychiatric treatment—mainly to the general adult population.
Forensic psychiatric hospitals	Provide assessment and treatment of people with a mental disorder and a history of criminal offending, or those who are at risk of offending.
<b>Same-day hospitals</b>	Treat patients on a same-day basis. The hospitals in the same-day hospital peer groups tend to be highly specialised.
Other day procedure hospitals	Provide a variety of specialised services on a same-day basis.
<b>Other acute specialised hospitals</b>	Specialise in a particular form of acute care, not grouped elsewhere. This group is too diverse to be considered a peer group for comparison purposes. It includes hospitals that specialise in the treatment of cancer, rheumatology, eye, ear and dental disorders.
<b>Subacute and non-acute hospitals</b>	
Rehabilitation and geriatric evaluation and management hospitals	Primarily provide rehabilitation and/or geriatric evaluation and management in which the clinical purpose or treatment goal is improvement in the functioning of a patient.
Mixed subacute and non-acute hospitals	Primarily provide a mixture of subacute (rehabilitation, palliative care, geriatric evaluation and management, psychogeriatric care) and non-acute (maintenance) care that is not covered by the hospitals in the rehabilitation and geriatric evaluation and management hospital peer group.
<b>Outpatient hospitals</b>	Provide a range of non-admitted patient services. They generally do not admit patients.
<b>Unpeered hospitals</b>	Could not be placed in one of the other peer groups.

# Glossary

Most definitions in this 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 topics related to health and community services, and specifications for related NMDs. METeOR can be viewed on the AIHW website at <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 2012).

**admitted patient:** A patient who undergoes a hospital's formal admission process to receive treatment and/or care. This treatment and/or care is provided over a period of time and can occur in hospital and/or in the person's home (for hospital-in-the-home patients). METeOR id: 268957.

**diagnosis classification type:** The type of classification used for recording emergency department diagnoses. METeOR id: 590662.

**duration of clinical care:** The period between when clinical care commences and the end of the non-admitted patient emergency department episode.

**emergency department stay:** The period between when a patient presents at an emergency department and when that person is recorded as having physically departed the emergency department. METeOR id: 472757.

**emergency department waiting time to admission:** Time elapsed for each patient from presentation to the emergency department to admission to hospital. This is calculated from physical departure date and time minus presentation date and time for those emergency department patients who are admitted.

**emergency department waiting time to clinical care:** Time elapsed in minutes for each patient from presentation in the emergency department to the commencement of the emergency department non-admitted clinical care. METeOR id: 621840.

**episode:** See **emergency department stay**.

**episode end status:** The status of the patient at the end of the non-admitted patient emergency department service episode. METeOR id: 551305 (NMDs), METeOR id: 616654 (DSS).

**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 id: 404245.

**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 id: 602543

**major diagnostic block:** The urgency related group (URG) major diagnostic block category into which the patient's emergency department diagnosis is grouped. METeOR id: 547612.

**non-admitted patient:** A patient who does not undergo a hospital's formal admission process. There are three categories of non-admitted patient: emergency department patient, outpatient and other non-admitted patient (treated by hospital employees of the hospital site – includes community/ outreach services). METeOR id: 268973.

**non-admitted patient emergency department service episode:** The treatment or care between when a patient presents at an emergency department and when the non-admitted patient emergency department clinical care ends. METeOR id: 474114.

**patient presentation at emergency department:** The presentation of a patient at an emergency department occurs following the arrival of the patient at the emergency department. It is the earliest occasion of being registered clerically, or triaged. METeOR id: 471889.

**peer group:** A classification of hospitals into broadly similar groups in terms of characteristics METeOR id: 584661.

**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.

**presentation:** See **patient presentation at emergency department**. Also used as the counting unit for emergency department care.

**principal diagnosis:** The diagnosis established at the conclusion of the patient's attendance in an emergency department to be mainly responsible for occasioning the attendance following consideration of clinical assessment. METeOR id: 590664.

**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.

**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.

**remoteness area:** A classification of the remoteness of a location using the Australian Statistical Geography Standard Remoteness Structure (2011). The Australian Statistical Geography Standard-Remoteness Area is a geographical classification which defines locations in terms of remoteness, that is, the physical distance of a location from the nearest urban centre. METeOR id: 531713.

**triage category:** A category used in the emergency departments of hospitals to indicate the urgency of the patient's need for medical and nursing care. Patients will be triaged into one of five categories on the Australasian Triage Scale. The triage category is allocated by an experienced registered nurse or medical practitioner. METeOR id: 474185.

**type of visit:** The reason the patient presents to an emergency department. METeOR id: 495958 (NMDS), METeOR id: 550725 (DSS).



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## Related publications

This report, *Emergency department care 2015–16: Australian hospital statistics* is part of an annual series. The earlier editions and any published subsequently can be downloaded for free from the Australian Institute of Health and Welfare (AIHW) website <[www.aihw.gov.au/hospitals-publications/](http://www.aihw.gov.au/hospitals-publications/)>. The website also includes information on ordering printed copies.

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In 2015–16:

- there were about 7.5 million presentations to public hospital emergency departments
- 74% of patients received treatment within an appropriate time for their urgency (triage) category
- 73% of patients spent 4 hours or less in the emergency department
- 2.2 million patients were admitted to hospital from the emergency department, and 49% of these were admitted within 4 hours.