Australian Government



Australian Institute of Health and Welfare

## **Elective surgery waiting times** 2015–16

## Australian hospital statistics



Authoritative information and statistics to promote better health and wellbeing

HEALTH SERVICES SERIES Number 73

## **Elective surgery waiting times 2015–16**

## **Australian hospital statistics**

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#### Australian Institute of Health and Welfare

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Please note that there is the potential for minor revisions of data in this report. Please check the online version at <www.aihw.gov.au> for any amendments.

## Foreword

I am pleased to present this report on elective surgery waiting times for Australian public hospitals for the period July 2015 to June 2016.

As in previous reports, *Elective surgery waiting times* 2015–16: *Australian hospital statistics* answers questions about the number of patients admitted from public hospital elective surgery waiting lists, the type of surgery they were waiting for, how long they waited and whether waiting times have changed over time.

The information in this report is presented in short, self-contained sections on specific topics. This should make it easier 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. *Emergency department care 2015–16: Australian hospital statistics* was released in November, and a report on hospital-associated *Staphylococcus aureus* bacteraemia cases in 2015–16 is also scheduled for release in December 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.

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

December 2016

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Within the AIHW, the report was prepared by Katrina Burgess and Tony Mole. Data compilation and validation were undertaken by Brett Henderson. The contributions of Jenny Hargreaves, Liz Clout and George Bodilsen are gratefully acknowledged.

## **Abbreviations**

ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ESWT NMDS	Elective surgery waiting times (removals and census data) national minimum data set
GP	general practitioner
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification
METeOR	Metadata Online Registry
NESWTDC	National Elective Surgery Waiting Times Data Collection
NHA	National Healthcare Agreement
NHMD	National Hospital Morbidity Database
NMDS	national minimum data set
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RACS	Royal Australasian College of Surgeons
SA	South Australia
Tas	Tasmania
Vic	Victoria
WA	Western Australia

## Symbols

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

## Summary

### How much elective surgery was provided?

In 2015–16, Australia's public hospitals admitted almost 712,000 patients from elective surgery waiting lists (as either elective or emergency admissions). Data for 2015–16 for the Australian Capital Territory were not available at the time of publication.

Between 2011–12 and 2015–16 (excluding the Australian Capital Territory), admissions from public hospital elective surgery waiting lists increased by 2.4% on average each year. After adjusting for coverage changes in Queensland, it is estimated that admissions would have increased by about 1.7% on average each year.

Between 2014–15 and 2015–16 (excluding the Australian Capital Territory), admissions from public hospital elective surgery waiting lists increased by 3.8%. After adjusting for the changes in Queensland, they increased by an estimated 1.6%.

### What elective surgery was provided?

In 2015–16 (excluding the Australian Capital Territory), the most common surgical specialties for patients admitted from public hospital waiting lists were *General surgery* (surgery on organs of the abdomen) and *Orthopaedic surgery* (surgery on bones, joints, ligaments and tendons, including knee and hip replacements), which accounted for 23% (161,000 admissions) and 15% (108,000) of admissions from waiting lists, respectively.

In 2015–16, the most common surgical procedure for admissions from public hospital elective surgery waiting lists was *Cataract extraction* (68,000 admissions).

Between 2011–12 and 2015–16, there were relatively large annual average increases in admissions for *Total hip replacement* (5.6% per year) and *Total knee replacement* (4.8% per year). Over the same period, admissions for *Myringotomy* decreased by 3.6% on average each year.

### How long did people wait for elective surgery?

Between 2011–12 and 2015–16 (excluding the Australian Capital Territory), the overall median waiting time (the time within which 50% of all patients were admitted) was relatively stable. In 2015–16, the median waiting time was 37 days – compared with 36 days from 2011–12 to 2013–14 and 35 days in 2014–15.

Between 2011–12 and 2015–16, the 90th percentile waiting time increased from 250 days to 260 days. Over the same period, the proportion of patients who waited longer than 365 days to be admitted for their procedure decreased from 2.7% to 2.0%.

The surgical specialties with the longest median waiting times in 2015–16 were *Ophthalmology, Ear, nose and throat surgery,* and *Orthopaedic surgery* (78, 74, and 67 days, respectively). *Cardio-thoracic surgery* had the shortest median waiting times (17 days).

*Coronary artery bypass graft* was the procedure with the shortest median waiting time (13 days) and *Septoplasty* (to fix a deviated septum) had the longest (209 days).

The median waiting time for Indigenous Australians (43 days) was higher than for other Australians (37 days) and a higher proportion of Indigenous Australians waited more than a year for elective surgery than other Australians (2.3% and 2.0%, respectively).

## 1 Introduction

*Elective surgery waiting times 2015–16: Australian hospital statistics* focuses on information about public hospital elective surgery waiting lists. 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 elective surgery waiting times for public hospitals for the period 1 July 2015 to 30 June 2016. It includes information on overall activity and nationally agreed waiting times performance indicators. 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. Data for this report will be updated on the AIHW website after the 2015–16 Australian Capital Territory data become available.

Data for the same period for emergency department care was released in November in *Emergency department care 2015–16: Australian hospital statistics* (AIHW 2016d). A report on hospital-associated *Staphylococcus aureus* bacteraemia cases – Staphylococcus aureus *bacteraemia in Australian public hospitals 2015–16: Australian hospital statistics* – is also scheduled for release in December 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.

Admitted patient care 2015–16: Australian hospital statistics will present additional information about surgery in Australia's hospitals not available for this report. Information on all elective and emergency admissions involving surgery (including those in private hospitals); the age and sex of the patient; as well as the remoteness and the socioeconomic status of their area of usual residence, will be included.

## 1.1 What's in this report?

### Structure of the report

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

- 'Chapter 2 How much elective surgery was provided?' presents information on the number of hospitals reporting elective surgery activity and the numbers of patients added to or removed from elective surgery waiting lists
- 'Chapter 3 What elective surgery was provided?' presents information on admissions by the specialty of the surgeon and for selected surgical procedures
- 'Chapter 4 How long did people wait for elective surgery?' presents performance indicator information on how long patients waited for elective surgery in public hospitals, median and 90th percentile waiting times and how waiting times differed by clinical urgency category
- 'Chapter 5 What was the safety and quality of the care?' presents information on adverse events and unplanned readmissions following admission for elective surgery.

Where possible these chapters consistently present information on:

- changes over time
- activity in 2015–16
- where to go for more information.

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 indicator relevant to elective surgery waiting times:

• Waiting times for elective surgery – waiting time in days – see 'Chapter 4 How long did people wait for elective surgery?'

It also includes information for the following safety and quality indicators previously reported for the National Health Reform Agreement:

- adverse events following admission for elective surgery see 'Chapter 5 What was the safety and quality of care?'
- readmissions following admission for elective surgery see 'Chapter 5 What was the safety and quality of care?'.

### 1.2 What data are reported?

This section presents information on the data used in this report and their limitations, plus a summary of the key terms used throughout the report.

### **National Elective Surgery Waiting Times Data Collection**

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 Elective Surgery Waiting Times Data Collection (NESWTDC), covering waiting times and other characteristics of elective surgery in all public hospitals.

Detailed information about the AIHW's NESWTDC is in the Data Quality Statement, which is summarised at Appendix A and accompanies this report online at <www.aihw.gov.au>.

Overall, the quality of the data in the NESWTDC is sufficient for them to be published in this report. However, the limitations of the data should be taken into consideration when they are interpreted.

### What are the limitations of the data?

States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data, checking for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked against data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these queries. Except as noted, the AIHW does not adjust data to account for possible data errors or missing or incorrect values.

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 NESWTDC covers most public hospitals that undertake elective surgery. Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting list characteristics to those of reporting hospitals. Some smaller remote hospitals may have different patterns of service delivery to those of other hospitals because specialists providing elective surgery services visit these hospitals only periodically.

Caution should be used when interpreting the data presented in this report, as they have not been confirmed against the data on elective surgery in the National Hospital Morbidity Database (NHMD) because those data are not yet available. The NHMD includes information on patient characteristics and on the procedures performed, which can be used to check the data in the NESWTDC. These data will be reported in early 2017.

### How has data coverage changed over time?

For the purposes of this report, the coverage of the NESWTDC is estimated by comparing admissions for elective surgery reported to the NESWTDC with elective surgical separations reported to the NHMD, expressed as a percentage. For more information on elective surgical separations and the estimate of coverage, see Appendix B.

The coverage of the data collection has fluctuated between 91% and 93% over the last 5 years. Coverage was highest for *Principal referral and women's and children's hospitals* and for *Public acute group A and B hospitals* (Table 1.1).

As 2015–16 NHMD data are not yet available, the estimates of the coverage are preliminary, based on 2014–15 NHMD data. For 2015–16, the preliminary estimate of public hospital elective surgery covered by the NESWTDC was 92% (excluding the Australian Capital Territory from the numerator only); if the Australian Capital Territory was excluded from both the numerator and denominator, it was 94%. The estimated coverage was 100% in New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory. For Victoria and South Australia, the majority of public hospital elective surgery was covered by the NESWTDC (81% and 96%, respectively).

For 2015–16, Queensland was able to report data for an additional 15 smaller hospitals for the first time. For 2014–15, Queensland was not able to provide data for 2 hospitals (which

reported about 9,300 admissions from elective surgery waiting lists in 2015–16) and 5 months of data for a third hospital (which closed in late 2014 and had reported about 3,700 admissions in 2013–14). In 2011–12, Queensland was not able to provide data for the same 3 hospitals and these hospitals reported data for only 3 of the 4 quarterly periods in 2012–13. The 3 hospitals comprised 2 *Principal referral and women's and children's hospitals* and 1 *Public acute group A hospital*.

For 2015–16 for Victoria, the Women's Hospital at Sandringham reported elective surgery data separately, whereas in previous years this data was reported with elective surgery data for the Royal Women's Hospital. This change in organisational arrangements did not represent an increase in coverage over this period.

For Western Australia, the Fiona Stanley Hospital opened in October 2014, replacing the Royal Perth Hospital (Shenton Park campus) and Kaleeya Hospital. All 3 of these hospitals are included for 2014–15 in tables 2.1 and 2.2. In November 2015, the St John of God Midland Public Hospital opened, replacing Swan District Hospital, and both hospitals are included for 2015–16 in tables 2.1 and 2.2. All these changes in organisational arrangements did not represent an increase in coverage over this period.

For South Australia, 4 small hospitals (that accounted for a total of 141 admissions in 2011–12) ceased reporting between 2011–12 and 2015–16. This did not represent a significant decrease in coverage over this period.

A list of all public hospitals contributing to this report is available in Table S1.1, which accompanies this report online at <www.aihw.gov.au/hospitals>.

Table 1.1: Estimated proportion (%) of elective surgery reported to the NESWTDC, by public	
hospital peer group, 2011–12 to 2015–16	

Hospital peer group	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(a)</sup>
Principal referral and women's and children's hospitals	98	100	100	99	97
Public acute group A hospitals	94	96	96	94	95
Public acute group B hospitals	96	96	96	96	96
Other hospitals <sup>(b)</sup>	74	74	73	72	75
Total <sup>(a)</sup>	92	94	94	92	93
Total (excluding Australian Capital Territory from both					
the numerator and denominator)	92	94	93	92	94

(a) For 2015–16, excludes data for the Australian Capital Territory from the numerator only.

(b) Includes hospitals not included in the specified hospital peer groups. See Appendix C for details.

Note: See appendixes A, B and C for notes on data limitations and methods.

State/territory	2011–12	2012–13	2013–14	2014–15	2015–16
New South Wales	100	100	100	100	100
Victoria	79	79	80	79	81
Queensland	89	98	98	91	100
Western Australia	100	100	100	100	100
South Australia	97	97	96	97	96
Tasmania	100	100	100	100	100
Australian Capital Territory	100	100	100	100	n.a.
Northern Territory	100	100	100	100	100
Total <sup>(a)</sup>	92	94	94	92	93
Total (excluding Australian Capital Territory from					
numerator and denominator)	92	94	93	92	94

Table 1.2: Estimated proportion (%) of elective surgery reported to the NESWTDC, states and
territories, 2011-12 to 2015-16

(a) For 2015–16, excludes data for the Australian Capital Territory from the numerator only.

Note: See appendixes A and B for notes on data limitations and methods.

### 1.3 What terms and methods are used?

This section gives a brief description of some of the terms and methods used in this report. For more information, see Appendix B and the Glossary.

### Terms

For the NESWTDC, **surgery** is where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, excluding specific procedures frequently done by non-surgical clinicians (AIHW 2012; METeOR id: 604410).

**Elective surgery** describes planned surgery that can be booked in advance as a result of a specialist clinical assessment resulting in placement on an elective surgery waiting list (METeOR id: 568780).

The term **admissions from elective surgery waiting lists** has been used to describe episodes for patients who were admitted for elective surgery as either an elective or emergency admission.

The **waiting times** data presented in this report represent the time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were removed from the waiting list.

The number of days waited does not include days when the patient was not ready for care or the time waited for the initial appointment with the specialist after referral by the patient's general practitioner.

### Changes over time

Tables presenting the numbers of admissions from elective surgery waiting lists over time show the average annual changes from 2011–12 to 2015–16 and from 2014–15 to 2015–16.

The rate of annual change for counts of additions, admissions and other removals presented in time series tables have excluded the Australian Capital Territory data, as 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 for the changes in coverage for Queensland, as described in Section 1.2.

In tables presenting waiting times over the previous 4 reporting periods, national waiting times data for 2011–12 to 2014–15 are presented as previously published including the Australian Capital Territory.

### Public hospital peer groups

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

This report presents analyses by hospital peer group, including the National Healthcare Agreement (NHA) performance indicator *Waiting times for elective surgery – waiting time in days*, using the AIHW's *Australian hospital statistics* peer group classification as detailed in *Australian hospital peer groups* (AIHW 2015a) and Appendix C. The Steering Committee for the Review of Government Service Provision will also use these peer groups for reporting against the NHA performance indicator in the *Report on government services* 2017.

In earlier reports, this information was presented using the 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.

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. For an explanation of these differences see <a href="http://www.myhospitals.gov.au/about-the-data">http://www.myhospitals.gov.au/about-the-data</a>.

### 1.4 Additional information

This report is available on the AIHW website at <www.aihw.gov.au/hospitals> in PDF format and all tables are available as downloadable Excel spreadsheets.

Elective surgery performance information for individual public hospitals is available on the AIHW's *MyHospitals* website: <a href="http://www.myhospitals.gov.au/">http://www.myhospitals.gov.au/</a>.

The information is presented for all surgeries combined and also grouped by specialty of surgeon and presented for selected procedures. Reported measures include:

- median waiting time
- percentage of patients who received their surgery within the recommended time
- percentage of patients who waited longer than 365 days.

The website includes changes in these performance measures over the past five years and comparisons with the performance of the hospital peer group.

### Interactive data

Also on the AIHW website are interactive data from the NESWTDC, including summary statistics for elective surgery waiting times by reason for removal, surgical specialty and surgical (indicator) procedure.

### Updates

Online tables will be updated in the event of errors being found in this report after publication.

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

### Where to go for more information

More information on Australia's public hospitals is available in:

- *Emergency department care 2015–16: Australian hospital statistics (AIHW 2016d)*
- Staphylococcus aureus *bacteraemia in Australia's public hospitals 2014–15: Australian hospital statistics* (AIHW 2015d)
- 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 2016e)
- Non-admitted patient care 2014–15: Australian hospital statistics (AIHW 2016f).

# 2 How much elective surgery was provided?

This chapter presents information on additions to and removals from public hospital elective surgery waiting lists in 2015–16, as well as information for the 4 previous periods. It includes the number of:

- public hospitals that admitted patients from elective surgery waiting lists
- patients added to and removed from waiting lists
- patients admitted for their awaited procedure.

The term **'admissions from elective surgery waiting lists'** has been used to describe episodes for patients whose reason for removal from a waiting list was either *Admitted as an elective patient for the awaited procedure by or on behalf of this hospital or state/territory* or *Admitted as an emergency patient for the awaited procedure by or on behalf of this hospital or state/territory*.

This chapter does not include information related to total elective surgery activity in public and private hospitals or information on patient characteristics and diagnoses sourced from the NHMD, which will be presented in *Admitted patient care 2015–16: Australian hospital statistics* (to be published in early 2017).

## Key findings

### How many hospitals provided elective surgery?

In 2015–16, 257 of Australia's public hospitals reported admissions from elective surgery waiting lists to the NESWTDC). These included the major public hospitals in each state and territory (excluding the Australian Capital Territory, for which data were not available), classified as *Principal referral and women's and children's hospitals* and *Public acute group A hospitals*, as well as other hospitals located in regional and remote areas.

### How many additions to and removals from waiting lists were there?

In 2015–16, about 821,000 patients were added to and 828,000 patients removed from public hospital elective surgery waiting lists (excluding the Australian Capital Territory). Most patients (86%) removed from waiting lists were admitted for their awaited procedure; some patients were removed for other reasons.

### How many admissions were reported?

In 2015–16, Australia's public hospitals admitted almost 712,000 patients from elective surgery waiting lists as either elective or emergency admissions (excluding the Australian Capital Territory). *Principal referral and women's and children's hospitals* and *Public acute group A hospitals* accounted for three-quarters of these admissions (40% and 35%, respectively).

### How have admissions changed over time?

Between 2011–12 and 2015–16 (excluding the Australian Capital Territory), the number of admissions from public hospital elective surgery waiting lists increased by 2.4% on average each year. After adjusting for a change in reporting for Queensland, it is estimated that admissions increased by 1.7% on average each year. Between 2014–15 and 2015–16, after adjusting for a change in reporting in Queensland, admissions increased by 1.6%.

## 2.1 How many public hospitals provided elective surgery?

This section presents information on the number of public hospitals that reported admissions from elective surgery waiting lists, over time and for 2015–16.

### Changes over time

Between 2014–15 and 2015–16, there was an increase in the number of public hospitals that reported admissions from elective surgery waiting lists, from 241 hospitals in 2014–15 to 259 in 2015–16 (includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication, tables 2.1 and 2.2).

This increase was mostly due to the increase in reporting hospitals in Queensland. These additional hospitals were not classified as *Principal referral and women's and children's hospitals*, *Public acute group A hospitals* or *Public acute group B hospitals* and accounted for about 3,000 admissions from waiting lists (see Section 1.2 for more information).

For Queensland, the Lady Cilento Children's Hospital in Queensland opened in November 2014, replacing the Royal Children's Hospital and the Mater Children's Hospital. The Lady Cilento Children's Hospital and the Royal Children's Hospital are both included in the 2014–15 data in tables 2.1 and 2.2, but this did not represent an increase in coverage.

For 2015–16 for Victoria, the Women's Hospital at Sandringham reported elective surgery data separately, whereas in previous years this data was reported with elective surgery data for the Royal Women's Hospital. This change in organisational arrangements did not represent an increase in coverage over this period.

For Western Australia, the Fiona Stanley Hospital opened in October 2014, replacing the Royal Perth Hospital (Shenton Park campus) and Kaleeya Hospital. All 3 of these hospitals are included for 2014–15 in tables 2.1 and 2.2. In November 2015, the St John of God Midland Public Hospital opened, replacing Swan District Hospital, and both hospitals are included for 2015–16 in tables 2.1 and 2.2. All these changes in organisational arrangements did not represent an increase in coverage over this period.

For South Australia, 4 small hospitals (that accounted for a total of 141 admissions in 2011–12) ceased reporting between 2011–12 and 2015–16. This did not represent a significant decrease in coverage over this period.

The numbers of hospitals reported here may underestimate the number of hospitals with elective surgery waiting lists, because the coverage of the data collection is incomplete, as detailed in Section 1.2.

## Table 2.1: Number of hospitals reporting admissions from waiting lists for elective surgery, by public hospital peer group, 2011–12 to 2015–16

Hospital peer group	2011–12	2012–13	2013–14	2014–15	<b>2015–16</b> <sup>(a)</sup>
Principal referral and women's and children's hospitals	39	41	41	41	41
Public acute group A hospitals	58	59	59	58	59
Public acute group B hospitals	41	42	42	42	42
Other hospitals <sup>(b)</sup>	106	104	102	100	117
Total	244	246	244	241	259

(a) Includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication. 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 hospitals not included in the specified hospital peer groups. See Appendix C for details

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

## Table 2.2: Number of hospitals reporting admissions from waiting lists for elective surgery, states and territories, 2011–12 to 2015–16

State/territory	2011–12	2012–13	2013–14	2014–15	2015–16
New South Wales	96	96	96	95	96
Victoria <sup>(a)</sup>	32	32	32	32	33
Queensland <sup>(b)</sup>	29	33	33	31	50
Western Australia <sup>(c)</sup>	36	35	34	35	33
South Australia <sup>(d)</sup>	40	39	38	37	36
Tasmania	4	4	4	4	4
Australian Capital Territory <sup>(e)</sup>	2	2	2	2	2
Northern Territory	5	5	5	5	5
Total <sup>(e)</sup>	244	246	244	241	259

(a) For 2015–16 for Victoria, the Women's Hospital at Sandringham reported elective surgery data separately, whereas in previous years this data was reported with elective surgery data for the Royal Women's Hospital.

(b) For 2011–12 and 2014–15, Queensland did not provide data for 3 hospitals and these hospitals reported data for only 3 of the 4 quarterly periods in 2012–13. The Lady Cilento Children's Hospital in Queensland opened in November 2014, replacing the Royal Children's Hospital and the Mater Children's Hospital. For 2014–15, the Lady Cilento Children's Hospital and the Royal Children's Hospital are both included in this table. For 2015–16, Queensland provided data for an additional 18 small hospitals which accounted for about 3,000 admissions from waiting lists.

- (c) During 2014–15, Kaleeya Hospital and Royal Perth Hospital Shenton Park Campus closed, and Fiona Stanley Hospital opened; all three hospitals were reported for 2014–15. In 2015–16, Swan District Hospital closed and St John of God Midland Public Hospital opened; both hospitals were reported for 2015–16.
- (d) For South Australia, 4 small hospitals (that accounted for a total of 141 admissions in 2011–12) ceased reporting between 2011–12 and 2015–16.

(e) For 2015–16, includes public hospitals for the Australian Capital Territory, for which data were not available at the time of publication. *Note:* See Section 1.2 and appendixes A and B for notes on data limitations and methods.

### Hospitals reporting elective surgery in 2015–16

In 2015–16, admissions from elective surgery waiting lists were provided by:

- all 41 *Principal referral and women's and children's hospitals* (including the Australian Capital Territory, for which data were not available, Table 2.3) mainly located in *Major cities* and providing a very broad range of specialist services
- 59 of the 62 *Public acute group A hospitals* (including the Australian Capital Territory) about half of which are located in regional and remote areas and provide a wide range of specialist services

• 42 of the 45 *Public acute group B hospitals*—hospitals which provide a narrower range of services than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals*.

Admissions from elective surgery waiting lists were also reported for 117 other hospitals. For more information on public hospital peer groups, see Appendix C.

Table 2.3: Number of hospitals providing admissions from public hospital elective surgery waiting lists, by public hospital peer group, states and territories, 2015–16

State/territory	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Principal referral and women's and children's hospitals	14	9	7	5	3	1	1	1	41
Public acute group A hospitals	22	12	12	5	4	2	1	1	59
Public acute group B hospitals	17	7	8	5	4	1		0	42
Other hospitals	43	5	23	18	25	0	0	3	117
Total	96	33	50	33	36	4	2	5	259

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

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

## 2.2 How many patients were added to or removed from elective surgery waiting lists?

This section presents information on the numbers of additions to and removals from elective surgery waiting lists, for 2015–16 and over time. Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2.

### Changes over time

Between 2011–12 and 2015–16 (excluding the Australian Capital Territory), the number of additions to public hospital elective surgery waiting lists increased by an average of 2.1% each year; it increased by 1.9% between 2014–15 and 2015–16 (Table 2.4).

After adjusting for changes in coverage for Queensland, additions to waiting lists were estimated to have increased by 2.0% on average each year between 2011–12 and 2015–16 and by 1.5% between 2014–15 and 2015–16.

Between 2011–12 and 2015–16, the number of removals from public hospital elective surgery waiting lists increased by an average of 2.7% each year, with a higher than average increase of 4.1% between 2014–15 and 2015–16. After adjusting for the change in coverage for Queensland, removals were estimated to have increased by 2.0% on average each year, increasing by 1.9% between 2014–15 and 2015–16.

						Chang	l <b>e (%)</b> <sup>(a)</sup>
	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>	Average since 2011–12	Since 2014–15
Additions	758,961	763,358	794,401	810,223	820,825	2.1	1.9
Removals							
Elective admission	656,166	667,294	695,099	693,486	707,039	2.3	3.7
Emergency admission	3,544	3,739	3,924	4,107	4,815	8.4	19.4
Total admissions	659,710	671,033	699,023	697,593	711,854	2.4	3.8
Other reasons for removal							
Not contactable/died	6,676	7,504	7,868	7,311	7,295	2.6	1.2
Treated elsewhere	20,432	20,622	21,944	21,502	23,214	3.9	9.7
Surgery not required	55,842	61,370	65,029	62,470	65,701	4.7	6.9
Transferred	9,280	11,609	15,177	16,412	15,622	15.3	-2.1
Not reported	5,850	4,384	4,595	3,838	3,896	-9.7	6.4
Total removals	757,790	776,522	813,636	809,126	827,582	2.7	4.1

Table 2.4: Numbers of additions to, and removals from, public hospital elective surgery waiting lists, 2011–12 to 2015–16

(a) Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2. Percentage changes over time exclude data for the Australian Capital Territory.

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

### Additions and removals in 2015–16

In 2015–16, there were around 821,000 additions to elective surgery waiting lists and about 828,000 removals (excluding the Australian Capital Territory, Table 2.5). Most patients were admitted after waiting; however, about 14% of patients were removed from waiting lists for reasons other than admission for the awaited procedure.

*Emergency admissions* accounted for 0.7% of admissions from public hospital elective surgery waiting lists, ranging from about 0.2% in Victoria to 1.2% in Queensland.

About 65,700 (8%) were removed for *Surgery not required or declined* and 23,200 patients (3%) were removed from waiting lists because they were *Treated elsewhere*. About 15,600 patients (2%) were *Transferred to another hospital's waiting list;* these patients could appear as more than 1 addition and/or more than 1 removal during the year. There was some variation in the proportion of patients *Transferred to another hospital's waiting list;* waiting list, ranging from 0.5% in Tasmania to 4.6% in Queensland. New South Wales and the Northern Territory did not report the number of patients who were *Transferred to another hospital's waiting list*.

### Where to go for more information

Information on time to removal from waiting list by reason for removal is available in 'Table S4.1: Additions to waiting lists, and waiting time statistics for patients removed from waiting lists, by reason for removal, states and territories, 2015–16' which accompanies this report online.

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

Table 2.5: Numbers of additions to and removals from public hospital elective surgery waiting lists, by reason for removal, states and territories,2015-16

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Additions	247,445	203,386	171,169	103,748	66,494	19,224	n.a.	9,359	820,825
Removals									
Elective admission	216,245	178,540	139,550	86,470	59,402	18,842	n.a.	7,990	707,039
Emergency admission	1,572	392	1,700	655	336	131	n.a.	29	4,815
Total admissions	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854
Other reasons for removal									
Not contactable/died	2,234	2,234	703	1,003	611	369	n.a.	141	7,295
Treated elsewhere	13,072	3,284	2,184	2,796	1,273	450	n.a.	155	23,214
Surgery not required or declined	19,589	18,093	13,964	8,040	3,631	1,284	n.a.	1,100	65,701
Transferred to another hospital's waiting list	n.a.	2,222	7,593	4,184	1,516	107	n.a.	n.a.	15,622
Not reported	0	281	147	1,830	1,083	547	n.a.	8	3,896
Total removals	252,712	205,046	165,841	104,978	67,852	21,730	n.a.	9,423	827,582

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

## 2.3 How many admissions were there from waiting lists?

This section presents the number of admissions from public hospital elective surgery waiting lists, over time and for 2015–16 as collected in the NESWTDC.

### Changes over time

Excluding the Australian Capital Territory, between 2011–12 and 2015–16 the number of admissions from public hospital elective surgery waiting lists increased by an average of 2.4% each year, and by 3.8% between 2014–15 and 2015–16 (Table 2.6). After adjusting for the change in coverage for Queensland, admissions were estimated to have increased by 1.7% on average each year, increasing by 1.6% between 2014–15 and 2015–16.

The majority of public hospital elective surgery is performed in the larger public hospitals. Between 2011–12 and 2015–16, three-quarters of admissions from elective surgery waiting lists each year were reported for *Principal referral and women's and children's hospitals* and *Public acute group A hospitals*.

						Change (%) <sup>(a)</sup>		
	2011–12	2012–13	2013–14	2014–15	<b>2015–16</b> <sup>(b)</sup>	Average since 2011–12	Since 2014–15	
Principal referral and women's and								
children's hospitals	272,549	274,082	283,552	281,215	281,266	1.4	2.4	
Public acute group A hospitals	224,839	230,300	242,192	243,896	250,394	3.3	4.9	
Public acute group B hospitals	91,801	95,018	100,104	101,222	103,305	3.0	2.1	
Other hospitals	70,521	71,633	73,175	71,260	76,889	2.2	7.9	
Total	659,710	671,033	699,023	697,593	711,854	2.4	3.8	

Table 2.6: Admissions from public hospital elective surgery waiting lists, by public hospital peer group, 2011–12 to 2015–16

(a) Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2. Percentage changes over time exclude data for the Australian Capital Territory.

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

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

Between 2011–12 and 2015–16, the numbers of admissions from elective surgery waiting lists increased in all states and territories except South Australia (Table 2.7). For Queensland, the increase was 5.4%; after adjusting for coverage changes, it was estimated to be about 1.8% each year.

Between 2014–15 and 2015–16, admissions for elective surgery increased substantially in several states and territories, most notably in Tasmania (21.6%). The Tasmanian Department of Health and Human Services has advised that the increase in Tasmania's admissions was largely attributable to an effort to admit patients who had been waiting the longest, with large increases in the numbers of patients admitted for *Ear*, *nose and throat surgery*, *Ophthalmology*, *Urology* and *Orthopaedic surgery*, and related increases in Tasmania's median and 90th percentile waiting times, and in the percentage of patients who had waited more than 365 days (see Chapter 4).

Admissions for elective surgery decreased for South Australia by 4.3% between 2014–15 and 2015–16. After adjusting for coverage changes, admissions for elective surgery in Queensland decreased by about 0.3% between 2014–15 and 2015–16.

Between 2011–12 and 2015–16, admissions per 1,000 population were relatively stable, ranging from 29.3 to 29.7 per 1,000 (Table 2.7). For Tasmania, admissions per 1,000 population increased from 30.3 to 36.7 between 2014–15 and 2015–16.

## Table 2.7: Admissions from public hospital elective surgery waiting lists, states and territories, 2011–12 to 2015–16

						Change (%) <sup>(a)</sup>		
	0044 40	0040 40	0040 44	0044.45		Average since	Since	
Now Couth Walso	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>	2011–12	2014–15	
New South Wales	000 450	040 700	040.075	047 707	047.047	1.0	-0.4	
Number of admissions	209,452	213,799	216,675	217,727	217,817	1.0	<0.1	
Admissions per 1,000 population <sup>(c)</sup>	28.8	29.1	29.0	28.8	28.4	-0.4	–1.3	
Victoria	454.070	450 445	170.044	470.007	170.000			
Number of admissions	154,079	153,415	170,314	173,307	178,932	3.8	3.2	
Admissions per 1,000 population <sup>(c)</sup>	27.6	27.0	29.4	29.4	29.8	2.0	1.4	
Queensland								
Number of admissions	114,328	119,767	127,494	126,275	141,250	5.4	11.9	
Admissions per 1,000 population <sup>(c)</sup>	25.3	26.0	27.2	26.6	29.4	3.8	10.5	
Western Australia								
Number of admissions	82,248	84,981	86,882	82,742	87,125	1.5	5.3	
Admissions per 1,000 population <sup>(c)</sup>	34.4	34.3	34.3	32.2	33.5	-0.7	4.0	
South Australia								
Number of admissions	65,186	64,136	62,968	62,429	59,738	-2.2	-4.3	
Admissions per 1,000 population <sup>(c)</sup>	39.6	38.6	37.6	36.9	35.1	-3.0	-4.9	
Tasmania								
Number of admissions	15,802	15,487	15,315	15,598	18,973	4.7	21.6	
Admissions per 1,000 population <sup>(c)</sup>	30.9	30.2	29.8	30.3	36.7	4.4	21.1	
Australian Capital Territory								
Number of admissions	11,362	11,640	11,781	11,881	n.a.	n.a.	n.a.	
Admissions per 1,000 population <sup>(c)</sup>	30.6	30.8	30.7	30.6	n.a.	n.a.	n.a.	
Northern Territory								
Number of admissions	7,253	7,808	7,594	7,634	8,019	2.5	5.0	
Admissions per 1,000 population <sup>(c)</sup>	31.2	32.6	31.3	31.4	32.9	1.3	4.7	
Total								
Number of admissions	659,710	671,033	699,023	697,593	711,854	2.4	3.8	
Admissions per 1,000 population <sup>(c)</sup>	29.3	29.3	30.0	29.5	29.7	0.8	2.4	

(a) Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2. Percentage changes over time exclude data for the Australian Capital Territory.

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

(c) Crude rate based on the estimated resident population as at 31 December during the reference period.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

### Admissions in 2015–16

In 2015–16, there were around 712,000 admissions from public hospital elective surgery waiting lists (excluding the Australian Capital Territory; see Table 2.7).

The number of admissions per 1,000 population varied among states and territories, ranging from 28.4 per 1,000 in New South Wales to 36.7 per 1,000 in Tasmania. Differences in these rates should be interpreted with care, taking into account the differences in coverage; coverage was not complete for Victoria (81%) and South Australia (96%; see Table 1.2).

In 2015–16, the majority of elective surgery was performed in the larger public hospitals, with *Principal referral and women's and children's hospitals* accounting for 40% of admissions and *Public acute group A hospitals* accounting for a further 35% (Table 2.8).

For South Australia and Western Australia, hospitals in peer groups other than *Principal referral and women's and children's hospitals* and *Public acute group A hospitals* and *Public acute group B hospitals* accounted for about 20% of admissions from elective surgery waiting lists.

### Aboriginal and Torres Strait Islander people

In 2015–16, about 3.5% of admissions from public hospital elective surgery waiting lists (24,800) were reported for people of Aboriginal and Torres Strait Islander origin (excluding the Australian Capital Territory, Table 2.9) who represent about 3.0% of the Australian population. See Box 2.1 for information on the quality of Indigenous status data.

Indigenous Australians accounted for about 30% of admissions from public hospital elective surgery waiting lists in the Northern Territory.

For admissions for persons reported as Indigenous Australians, 91% were reported as being of *Aboriginal but not Torres Strait Islander origin*, about 4% as *Torres Strait Islander but not Aboriginal origin* and about 5% as *Aboriginal and Torres Strait Islander origin*.

### Box 2.1: Limitations of data provided for Indigenous status

The quality of the data reported for Indigenous status in elective surgery waiting lists has not been formally assessed. Therefore, the information on Indigenous status presented in this report should be interpreted with caution.

See Appendix A for more information.

### Where to go for more information

Information on waiting times is available in:

- 'Chapter 4 How long did people wait for elective surgery?'
- 'Table S4.1: Additions to waiting lists and waiting time statistics for patients removed from waiting lists, by reason for removal, states and territories, 2015–16' (which accompanies this report online).

Additional information on surgery for both emergency and elective admissions in public and private hospitals, as well as additional public hospital waiting times information, will be available in *Admitted patient care 2015–16: Australian hospital statistics*, to be released in early 2017. Information on data limitations and methods is available in appendixes A and B.

Table 2.8: Admissions from	public hospital	elective surgery wait	ing lists, by pub	olic hospital peer g	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	87,632	64,055	62,839	32,045	22,002	7,579	n.a.	5,114	281,266
Public acute group A hospitals	71,357	66,129	62,089	21,445	17,978	9,100	n.a.	2,296	250,394
Public acute group B hospitals	37,625	26,893	12,501	16,464	7,528	2,294	n.a.		103,305
Other hospitals	21,203	21,855	3,821	17,171	12,230	0	n.a.	609	76,889
Total	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854

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

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

#### Table 2.9: Admissions from public hospital elective surgery waiting lists, by Indigenous status, states and territories, 2015-16

	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Total <sup>(a)</sup>
Aboriginal but not Torres Strait Islander origin	7,637	1,414	5,783	3,265	1,420	811	n.a.	2,275	22,605
Torres Strait Islander but not Aboriginal origin	150	53	653	26	20	46	n.a.	28	976
Aboriginal and Torres Strait Islander origin	278	204	515	72	39	58	n.a.	70	1,236
Indigenous Australians	8,065	1,671	6,951	3,363	1,479	915	n.a.	2,373	24,817
Neither Aboriginal nor Torres Strait Islander origin	209,225	175,227	133,601	83,754	56,450	17,740	n.a.	5,644	681,641
Not reported	527	2,034	698	8	1,809	318	n.a.	2	5,396
Other Australians <sup>(b)</sup>	209,752	177,261	134,299	83,762	58,259	18,058	n.a.	5,646	687,037
Total	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854

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

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

## **3 What elective surgery was provided?**

This chapter presents information on the types of elective surgery provided by public hospitals in 2015–16, and over time. It includes information on the numbers of admissions from elective surgery waiting lists by:

- surgical specialty (the area of clinical expertise held by the doctor performing the surgery)
- surgical procedure (for selected procedures only).

Between 2011–12 and 2015–16, the coverage of the data collection was relatively stable, except for Queensland (see Section 1.2 for more information).

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

### Key findings

### Surgical specialty

Between 2011–12 and 2015–16 (excluding data for the Australian Capital Territory), the largest annual average increases in admissions were for *Urology* (increasing by 4.5% per year) and *Plastic surgery* (4.0% per year).

In 2015–16, around 23% of patients were admitted for *General surgery* (surgery on organs of the abdomen) and about 15% were admitted for *Orthopaedic surgery* (surgery on bones, joints, ligaments and tendons, including knee and hip replacements).

### Surgical (indicator) procedure

In 2015–16, the most common surgical procedure for admissions from public hospital elective surgery waiting lists was *Cataract extraction* (68,000 admissions).

Between 2011–12 and 2015–16, there were large average annual increases in admissions for *Total hip replacement* (increasing by 5.6% per year), and *Total knee replacement* (4.8% per year).

Between 2011–12 and 2015–16, admissions for *Myringotomy* (a procedure on the eardrum or tympanic membrane) decreased by 3.6% on average each year.

## 3.1 Surgical specialties

The surgical specialty describes the area of clinical expertise held by the doctor performing the elective surgery.

For the NESWTDC, 10 categories of surgical specialty are specified and these are presented in this report. There is also an 'other' category which contains data for surgeons whose specialty was not one of the 10 specific categories.

### Changes over time

Between 2011–12 and 2015–16, *Urology* (which includes the majority of *Cystoscopy* procedures) had the largest increase in the number of admissions from waiting lists, with an average increase of 4.5% each year (Table 3.1). *Plastic surgery* (which includes reconstructive surgery, craniofacial surgery, hand surgery, microsurgery and the treatment of burns, but excludes cosmetic surgery in this report, 4.0% per year), *Neurosurgery* and *Ophthalmology* (which includes *Cataract extraction*) also had large increases in admissions (both 3.2% per year).

### Admissions by surgical specialty in 2015–16

In 2015–16, around 23% of patients were admitted for *General surgery* (surgery on organs of the abdomen) and about 15% were admitted for *Orthopaedic surgery* (surgery on bones, joints, ligaments and tendons, including knee and hip replacements) (Table 3.2).

The proportion of patients admitted for *General surgery* ranged from 18% in Western Australia to 37% in the Northern Territory.

						Change	e (%) <sup>(a)</sup>
Surgical specialty	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>	Average since 2011–12	Since 2014–15
Cardio-thoracic surgery	12,111	12,243	12,609	12,212	12,233	0.6	0.9
Ear, nose and throat surgery	54,770	55,995	58,477	58,562	59,416	2.6	3.2
General surgery	156,068	157,042	162,507	160,072	161,492	1.2	2.0
Gynaecology	84,726	82,981	86,824	85,627	87,850	1.3	4.1
Neurosurgery	10,680	11,007	11,887	11,801	11,913	3.2	3.3
Ophthalmology	80,291	83,232	85,165	86,052	89,440	3.2	5.9
Orthopaedic surgery	99,930	100,826	105,111	105,563	107,680	2.3	3.4
Plastic surgery	45,564	47,002	49,411	50,175	52,510	4.0	6.3
Urology	79,540	83,736	89,295	90,943	93,149	4.5	4.8
Vascular surgery	14,967	15,332	16,068	16,057	16,281	3.1	4.8
Other <sup>(c)</sup>	21,063	21,637	21,669	20,529	19,890	-0.2	3.2
Total	659,710	671,033	699,023	697,593	711,854	2.4	3.8

## Table 3.1: Admissions from public hospital elective surgery waiting lists, by surgical specialty, 2011–12 to 2015–16

(a) Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2. Percentage changes over time exclude data for the Australian Capital Territory.

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

(c) Includes admissions for which the Surgical specialty was not reported.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

Surgical specialty	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Cardio-thoracic surgery	3,701	3,574	3,082	767	832	277	n.a.	0	12,233
Ear, nose and throat surgery	16,916	15,896	12,931	5,615	5,825	1,446	n.a.	787	59,416
General surgery	54,197	36,654	34,711	15,769	12,748	4,484	n.a.	2,929	161,492
Gynaecology	28,488	19,164	19,455	7,891	8,958	2,461	n.a.	1,433	87,850
Neurosurgery	4,461	3,245	2,251	922	665	369	n.a.	0	11,913
Ophthalmology	29,773	21,685	11,738	14,124	8,312	2,812	n.a.	996	89,440
Orthopaedic surgery	34,535	21,965	27,315	12,071	8,563	2,421	n.a.	810	107,680
Plastic surgery	9,118	19,249	10,627	5,368	6,073	1,618	n.a.	457	52,510
Urology	28,488	29,791	13,416	11,930	6,384	2,741	n.a.	399	93,149
Vascular surgery	6,284	3,720	3,184	1,910	791	289	n.a.	103	16,281
Other <sup>(b)</sup>	1,856	3,989	2,540	10,758	587	55	n.a.	105	19,890
Total	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854

Table 3.2: Admissions from public hospital elective surgery waiting lists, by surgical specialty, states and territories, 2015-16

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

(b) Includes admissions for which the Surgical specialty was not reported.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

#### Where to go for more information

Information on waiting times by surgical specialty is available in 'Chapter 4 How long did people wait for elective surgery?' Information on data limitations and methods is available in appendixes A and B.

## 3.2 Surgical (indicator) procedures

Indicator procedures are procedures that are of high volume and are often associated with long waits (see METeOR id. 514033).

For this report, the more general term of 'surgical procedures' is generally used when referring to the procedures that are technically known as 'indicator procedures'.

For the NESWTDC, 15 categories of surgical procedures are specified and these are presented in this report. There is also an 'other' category which contains data for procedures not included in the 15 specific categories.

### Changes over time

Between 2011–12 and 2015–16 (excluding the Australian Capital Territory), *Cataract extraction* was the most commonly reported surgical procedure with almost 68,000 patients having this procedure in 2015–16; admissions for this procedure increased by an average of 3.6% each year (Table 3.3). *Cystoscopy* was the next most common surgical procedure; admissions for this procedure increased by an average of 2.4% each year between 2011–12 and 2015–16.

Between 2011–12 and 2015–16, the largest increases in the number of admissions from waiting lists were for *Total hip replacement* (increasing by an average of 5.6% each year), and *Total knee replacement* (4.8% per year). These procedures had relatively high increases in admissions between 2014–15 and 2015–16 (8.9% and 7.3%, respectively).

Between 2011–12 and 2015–16, admissions for *Myringotomy* (a procedure on the eardrum or tympanic membrane, to relieve pressure or drain fluid) decreased by 3.6% on average each year.

### Admissions by surgical procedure in 2015–16

Overall, about one-third of patients admitted for elective surgery had been waiting for 1 of the 15 specified surgical procedures and the remaining two-thirds of admissions were for other procedures (Table 3.4).

*Cataract extraction* accounted for about 9.5% of all admissions from public hospital elective surgery waiting lists. The proportion of admissions from public hospital elective surgery waiting lists that were for *Cataract extraction* ranged from 5.6% in Queensland to 12.7% in Western Australia.

*Cystoscopy* (a procedure using a scope to examine the bladder) was the next most common surgical procedure. It accounted for about 6.8% of admissions, and the proportion ranged from 3.8% in South Australia to 10.5% in Victoria.

The proportion of admissions from public hospital elective surgery waiting lists that were for 'other procedures' (rather than for 1 of the 15 specified surgical procedures) ranged from 62.9% in Victoria to 71.6% in Queensland. See Table A1 in Appendix A for information about the types of 'other procedures' performed in 2014–15.

						Change	<b>e (%)</b> <sup>(a)</sup>
Surgical procedure	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>	Average since 2011–12	Since 2014–15
Cataract extraction	59,847	62,933	64,481	65,182	67,755	3.6	6.0
Cholecystectomy	18,967	18,915	19,316	18,578	18,767	0.1	2.4
Coronary artery bypass graft	3,927	3,858	4,084	3,837	3,641	-1.2	-3.1
Cystoscopy	45,323	45,952	47,464	48,208	48,721	2.4	4.4
Haemorrhoidectomy	4,318	4,304	4,729	4,490	4,618	1.9	4.2
Hysterectomy	10,431	9,670	10,021	9,989	10,409	0.3	5.4
Inguinal herniorrhaphy	15,612	15,912	16,229	16,267	17,234	2.9	7.5
Myringoplasty	1,857	1,842	1,933	1,925	1,835	-0.1	-4.3
Myringotomy	5,821	5,712	5,725	4,991	4,864	-3.6	-0.5
Prostatectomy	7,937	7,535	7,790	7,311	7,629	-0.7	5.7
Septoplasty	4,551	4,539	4,926	5,065	5,229	4.1	4.9
Tonsillectomy	16,776	17,656	18,337	18,163	18,112	2.5	1.5
Total hip replacement	9,166	9,395	10,073	10,456	11,120	5.6	8.9
Total knee replacement	13,766	14,252	15,219	15,483	16,245	4.8	7.3
Varicose vein stripping and ligation	4,307	4,234	4,221	4,002	4,169	0.6	7.0
Other procedures	437,104	444,324	464,475	463,646	471,506	2.3	3.3
Total	659,710	671,033	699,023	697,593	711,854	2.4	3.8

## Table 3.3: Admissions from public hospital elective surgery waiting lists, by surgical procedure, 2011–12 to 2015–16

(a) Interpretation of changes over time should take into account changes in coverage as noted in Section 1.2. Percentage changes over time exclude data for the Australian Capital Territory.

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

### Where to go for more information

Information on waiting times by surgical procedure is available in:

- 'Chapter 4 How long did people wait for elective surgery?'
- 'Table S4.2: Waiting time statistics for admissions from public hospital waiting lists for elective surgery, by surgical procedure, and public hospital peer group, states and territories, 2015–16' (which accompanies this report online)
- 'Table S4.3: Waiting time statistics for admissions from public hospital waiting lists for elective surgery, by surgical procedure, and Indigenous status, states and territories, 2015–16' (which accompanies this report online).

Information on the 30 most common types of procedures (other than the 15 specified surgical procedures) for 2014–15 is included at Appendix A.

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

Surgical procedure	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Total <sup>(a)</sup>
Cataract extraction	23,587	15,843	7,971	11,059	6,446	2,119	n.a.	730	67,755
Cholecystectomy	6,570	4,078	4,317	1,805	1,216	558	n.a.	223	18,767
Coronary artery bypass graft	777	1,073	1,166	230	276	119	n.a.		3,641
Cystoscopy	12,580	18,745	5,866	7,760	2,262	1,130	n.a.	378	48,721
Haemorrhoidectomy	1,330	1,456	593	548	282	67	n.a.	342	4,618
Hysterectomy	2,473	2,731	2,666	1,098	1,015	356	n.a.	70	10,409
Inguinal herniorrhaphy	6,129	3,627	3,727	1,972	1,108	541	n.a.	130	17,234
Myringoplasty	387	443	431	304	59	42	n.a.	169	1,835
Myringotomy	291	1,668	1,214	810	558	177	n.a.	146	4,864
Prostatectomy	2,502	2,242	1,696	709	405	50	n.a.	25	7,629
Septoplasty	1,665	1,844	743	382	436	120	n.a.	39	5,229
Tonsillectomy	5,561	5,450	3,570	1,858	1,007	482	n.a.	184	18,112
Total hip replacement	3,706	2,684	2,151	1,244	906	381	n.a.	48	11,120
Total knee replacement	6,454	2,974	3,501	1,707	1,107	439	n.a.	63	16,245
Varicose vein stripping and ligation	1,424	1,540	530	292	326	43	n.a.	14	4,169
Other procedures	142,381	112,534	101,108	55,347	42,329	12,349	n.a.	5,458	471,506
Total	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854

Table 3.4: Admissions from public hospital elective surgery waiting lists, by surgical procedure, states and territories, 2015-16

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

# 4 How long did people wait for elective surgery?

This chapter presents information about the length of time waited by patients on public hospital elective surgery waiting lists before being admitted for surgery in 2015–16, as well as information for the 4 previous periods.

This chapter includes information on the number of days waited at the 50th percentile (median) and at the 90th percentile, and the proportion of patients who waited more than 365 days. It also includes the NHA performance indicator: *Waiting times for elective surgery – waiting time in days*.

The waiting times information for 2015–16 presented in this chapter does not include the Australian Capital Territory. National waiting times for the 4 previous periods include the data for the Australian Capital Territory.

## Key findings

In 2015–16, the median waiting time (the time within which 50% of all patients were admitted) was 37 days (excluding the Australian Capital Territory) – an increase of 2 days compared with the median waiting time in 2014–15.

Between 2011–12 and 2015–16, the 90th percentile waiting time increased from 250 days to 260 days. Between 2011–12 and 2014–15, the proportion of patients who waited more than 365 days to be admitted for their procedure decreased from 2.7% to 1.8%. Between 2014–15 and 2015–16, it increased to 2.0% (excludes the Australian Capital Territory).

### Hospital peer groups

In 2015–16, the median waiting time was shortest for *Principal referral and women's and children's hospitals* (32 days). The proportion of patients who waited more than 365 days was lowest in *Public acute group B hospitals* (1.0%).

### **Surgical specialties**

The surgical specialties with the longest median waiting times in 2015–16 were *Ophthalmology; Ear, nose and throat surgery,* and *Orthopaedic surgery* (78, 74, and 67 days, respectively). *Cardio-thoracic surgery* had the shortest median waiting time (17 days).

### Surgical procedures

*Coronary artery bypass graft* was the procedure with the shortest median waiting time (13 days) and *Septoplasty* (to fix a deviated septum) had the longest median waiting time (209 days).

### Indigenous status

In 2015–16, the median waiting time for Indigenous Australians (43 days) was higher than for other Australians (37 days) and a higher proportion of Indigenous Australians waited more than a year for their surgery, compared with other Australians (2.3% and 2.0%, respectively).

## 4.1 How did waiting times vary across states and territories and by type of hospital?

The number of days a patient waits for elective surgery is calculated by states and territories as the number of calendar days between the date the patient was placed on the waiting list and the date that the patient was removed from the waiting list (the removal date), minus any days when the patient was 'not ready for care', and any days the patient was waiting with a clinical urgency category that was less urgent than their clinical urgency category at removal (that is, if the patient's urgency category was reassigned as more urgent while they were waiting). See Box 4.1 for more information on clinical urgency categories.

The number of days waited also does not include the time waited for an initial appointment with the specialist – from the time of referral by the patient's general practitioner (GP) – because this information is not available. The AIHW is currently working with states and territories to develop a consistent and nationally agreed approach to measuring access time for elective surgery from the time of referral by the patient's GP. The aim is that nationally consistent data will become available on the time spent between GP referral and the initial specialist appointment.

In reports before 2011–12, waiting times information was presented for elective admissions only. In subsequent reports, this information has been presented for elective and emergency admissions (combined) from elective surgery waiting lists. Therefore, the information presented is not directly comparable with that presented in *Australian hospital statistics* reports before 2011–12.

### Changes over time

The waiting times information for 2015–16 does not include data for the Australian Capital Territory. National waiting times for the 4 previous periods include data for the Australian Capital Territory.

### Median (50th percentile) waiting time

The median waiting time indicates the time within which 50% of patients were admitted for the awaited procedure. Half of the patients had a shorter waiting time, and half had a longer waiting time.

In 2015–16, the overall median waiting time was 37 days (excluding the Australian Capital Territory), an increase compared with the median waiting times in 2011–12 and 2014–15 (36 and 35 days, respectively) (Table 4.1).

The median waiting time was relatively stable between 2011–12 and 2015–16 for most public hospital peer groups with rises and falls of the order of 3 to 4 days overall. Between 2014–15 and 2015–16, the median waiting time for *Principal referral and women's and children's hospitals* increased from 29 days to 32 days.

Between 2011–12 and 2015–16, the median waiting time to admission:

- was relatively stable for Queensland and Western Australia
- decreased for Victoria (from 36 to 30 days) and the Northern Territory (from 39 to 29 days)
- increased for New South Wales (from 49 to 55 days), South Australia (from 34 to 40 days) and Tasmania from 38 to 72 days) (Table 4.2).

The Tasmanian Department of Health and Human Services advised that, for Tasmania, the increase in median waiting time between 2014–15 and 2015–16 (and in the 90th percentile waiting time and proportion waited more than 365 days) was likely to be due to Tasmania prioritising admissions in 2015–16 for the patients who had been waiting longest.

### 90th percentile waiting time

The 90th percentile waiting time indicates the amount of time within which 90% of patients were admitted for the awaited procedure. For the remaining 10% of patients, the wait was longer.

Between 2011–12 and 2013–14, the amount of time within which 90% of patients were admitted for the awaited procedure increased from 250 days to 262 days (Table 4.1). It decreased to 253 days in 2014–15, and then increased to 260 days in 2015–16 (excluding the Australian Capital Territory).

For most states and territories, the 90th percentile waiting time increased between 2011–12 and 2015–16 (Table 4.2), with large increases in the 90th percentile waiting times for South Australia and Tasmania.

### Patients who waited more than 365 days

Between 2011–12 and 2014–15, the proportion of patients who waited more than 365 days to be admitted decreased from 2.7% to 1.8% (Table 4.1). Between 2014–15 and 2015–16, it increased to 2.0% (excluding the Australian Capital Territory) overall, and for *Principal referral and women's and children's hospitals*.

Between 2011–12 and 2015–16, the proportion of patients who waited more than 365 days generally decreased or remained relatively stable in most states and territories. For Tasmania, the proportion of admissions for patients who waited more than 365 days increased from 9.4% to 15.5% (Table 4.2).

## Waiting times in 2015-16

In 2015–16, the median waiting time (32 days) and the 90th percentile waiting time (215 days) were shortest for *Principal referral and women's and children's hospitals* (Table 4.1). The proportion of patients who waited more than 365 days was lowest in *Public acute group B hospitals* (1.0%).

In 2015–16:

- the median waiting time ranged from 29 days in Queensland and the Northern Territory to 72 days in Tasmania (Table 4.2)
- the 90th percentile waiting time ranged from 161 days in Western Australia to 452 days in Tasmania
- the proportion of patients who waited more than 365 days ranged from 0.4% in Queensland to 15.5% in Tasmania.

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(a)</sup>
Principal referral and women's and children's he	ospitals				
Days waited at 50th percentile	30	29	30	29	32
Days waited at 90th percentile	209	221	221	208	215
Percentage who waited more than 365 days	2.9	3.1	2.9	1.9	2.0
Public acute group A hospitals					
Days waited at 50th percentile	40	42	42	39	40
Days waited at 90th percentile	293	307	298	291	292
Percentage who waited more than 365 days	3.2	3.4	2.8	2.2	2.5
Public acute group B hospitals					
Days waited at 50th percentile	47	45	43	43	44
Days waited at 90th percentile	264	275	276	287	289
Percentage who waited more than 365 days	2.1	1.6	1.2	1.0	1.0
Total <sup>(b)</sup>					
Days waited at 50th percentile	36	36	36	35	37
Days waited at 90th percentile	250	265	262	253	260
Percentage who waited more than 365 days	2.7	2.7	2.4	1.8	2.0

Table 4.1: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by public hospital peer group, 2011–12 to 2015–16<sup>(a)</sup>

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

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(a)</sup>
New South Wales					
Days waited at 50th percentile	49	49	49	54	55
Days waited at 90th percentile	335	335	329	330	328
Percentage who waited more than 365 days	3.4	2.8	1.8	1.6	2.0
Victoria					
Days waited at 50th percentile	36	36	35	29	30
Days waited at 90th percentile	189	223	222	177	174
Percentage who waited more than 365 days	2.4	3.3	3.2	2.4	2.3
Queensland					
Days waited at 50th percentile	27	27	28	27	29
Days waited at 90th percentile	147	163	186	147	163
Percentage who waited more than 365 days	2.0	2.5	2.8	0.5	0.4
Western Australia					
Days waited at 50th percentile	30	30	29	29	30
Days waited at 90th percentile	159	159	142	148	161
Percentage who waited more than 365 days	1.7	1.5	0.7	0.7	0.8
South Australia					
Days waited at 50th percentile	34	34	35	37	40
Days waited at 90th percentile	191	182	180	210	233
Percentage who waited more than 365 days	1.5	1.0	0.8	1.1	1.8
Tasmania					
Days waited at 50th percentile	38	41	45	55	72
Days waited at 90th percentile	348	406	401	424	452
Percentage who waited more than 365 days	9.4	11.5	11.5	12.9	15.5
Australian Capital Territory					
Days waited at 50th percentile	63	51	48	45	n.a.
Days waited at 90th percentile	296	277	270	245	n.a.
Percentage who waited more than 365 days	6.2	4.1	4.7	5.3	n.a.
Northern Territory					
Days waited at 50th percentile	39	40	36	32	29
Days waited at 90th percentile	219	196	183	217	229
Percentage who waited more than 365 days	3.5	3.3	2.8	3.9	4.2
Total <sup>(b)</sup>					
Days waited at 50th percentile	36	36	36	35	37
Days waited at 90th percentile	250	265	262	253	260
Percentage who waited more than 365 days	2.7	2.7	2.4	1.8	2.0

# Table 4.2: Waiting time statistics for admissions from public hospital elective surgery waiting lists, states and territories, 2011–12 to 2015–16<sup>(a)</sup>

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

(b) For 2015–16, the total excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

# 4.2 How did waiting times vary by surgical specialty?

The surgical specialty describes the area of clinical expertise held by the doctor performing the elective surgery.

For the NESWTDC, 10 categories of surgical specialty are specified and these are presented in this report. There is also an 'other' category which contains data for surgeons whose specialty was not one of the 10 specific categories.

## Changes over time

Between 2011–12 and 2015–16, the surgical specialty with the lowest median waiting time was *Cardio-thoracic surgery*; the median waiting time fluctuated between 16 and 18 days (Table 4.3).

Median waiting times increased for several of the 10 surgical specialties. The largest increase in median waiting time was for *Ear, nose and throat surgery* – from 66 days in 2011–12 to 74 days in 2015–16.

Between 2011–12 and 2015–16, the 90th percentile waiting time for *Urology* decreased from 116 days to 100 days.

Since 2011–12, *Ear, nose and throat surgery* and *Orthopaedic surgery* have been the surgical specialties with the highest proportion of patients who waited more than 365 days to be admitted (4.5% and 3.8% in 2015–16, respectively).

## Waiting times in 2015-16

Nationally, the surgical specialty with the lowest median waiting time in 2015–16 was *Cardio-thoracic surgery* (17 days) (excluding the Australian Capital Territory, see Table 4.4). The median waiting time for *Cardio-thoracic surgery* ranged from 8 days in Western Australia to 31 days in Tasmania. The highest median waiting time was for *Ophthalmology* (78 days), and it ranged from 37 days in Western Australia to 256 days in Tasmania.

*Cardio-thoracic surgery* was also the surgical specialty with the lowest 90th percentile waiting time in 2015–16 (84 days). The 90th percentile waiting time for *Cardio-thoracic surgery* ranged from 39 days in Western Australia to 105 days in Tasmania.

*Ear, nose and throat surgery* had the highest proportion of patients who waited more than 365 days to be admitted (4.5%), ranging from 0.6% in Queensland to 16.3% in Tasmania.

### Where to go for more information

More information on waiting times for surgical specialties for patients with a cancer-related principal diagnosis is available in *Admitted patient care* 2014–15: *Australian hospital statistics* (AIHW 2016a).

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
Cardio-thoracic surgery					
Days waited at 50th percentile	16	17	18	18	17
Days waited at 90th percentile	81	80	86	82	84
Percentage who waited more than 365 days	0.1	0.3	0.2	0.2	0.2
Ear, nose and throat surgery					
Days waited at 50th percentile	66	68	70	73	74
Days waited at 90th percentile	344	349	348	347	345
Percentage who waited more than 365 days	5.6	5.9	5.0	4.8	4.5
General surgery					
Days waited at 50th percentile	31	30	30	29	30
Days waited at 90th percentile	164	178	163	151	162
Percentage who waited more than 365 days	1.8	1.9	1.4	1.0	1.1
Gynaecology					
Days waited at 50th percentile	31	31	32	32	30
Days waited at 90th percentile	133	157	150	150	140
Percentage who waited more than 365 days	0.9	1.2	0.9	0.7	0.9
Neurosurgery					
Days waited at 50th percentile	31	30	31	30	33
Days waited at 90th percentile	191	210	214	172	187
Percentage who waited more than 365 days	2.7	2.6	3.2	1.0	1.3
Ophthalmology					
Days waited at 50th percentile	71	75	69	70	78
Days waited at 90th percentile	336	335	328	325	328
Percentage who waited more than 365 days	3.7	3.3	2.6	1.9	2.4
Orthopaedic surgery					
Days waited at 50th percentile	63	65	66	64	67
Days waited at 90th percentile	338	342	337	329	333
Percentage who waited more than 365 days	5.4	5.5	4.8	3.3	3.8
Plastic surgery					
Days waited at 50th percentile	24	24	25	23	27
Days waited at 90th percentile	182	187	212	153	174
Percentage who waited more than 365 days	2.7	2.8	3.3	2.0	2.4

Table 4.3: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical specialty, 2011–12 to 2015– $16^{(a)}$ 

(continued)

	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
Urology					
Days waited at 50th percentile	27	25	25	24	25
Days waited at 90th percentile	116	113	110	98	100
Percentage who waited more than 365 days	1.2	1.1	0.9	0.6	0.8
Vascular surgery					
Days waited at 50th percentile	20	20	19	20	21
Days waited at 90th percentile	147	153	145	154	155
Percentage who waited more than 365 days	2.5	2.0	1.8	2.1	1.3
Other <sup>(c)</sup>					
Days waited at 50th percentile	25	25	23	22	21
Days waited at 90th percentile	100	110	110	102	101
Percentage who waited more than 365 days	0.6	0.5	0.5	0.3	0.2
Total <sup>(b)</sup>					
Days waited at 50th percentile	36	36	36	35	37
Days waited at 90th percentile	250	265	262	253	260
Percentage who waited more than 365 days	2.7	2.7	2.4	1.8	2.0

Table 4.3 (continued): Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical specialty, 2011–12 to 2015–16<sup>(a)</sup>

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

(b) For 2015–16, the total excludes data for the Australian Capital Territory, which were not available at the time of publication.

(c) Includes admissions for which the Surgical specialty was not reported.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

C									
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Cardio-thoracic surgery									
Days waited at 50th percentile	25	21	9	8	16	31	n.a.		17
Days waited at 90th percentile	86	101	65	39	70	105	n.a.		84
Percentage who waited more than 365 days	<0.1	0.6	<0.1	<0.1	0.2	<0.1	n.a.		0.2
Ear, nose and throat surgery									
Days waited at 50th percentile	169	68	43	76	63	122	n.a.	68	74
Days waited at 90th percentile	360	290	275	327	343	461	n.a.	509	345
Percentage who waited more than 365 days	5.8	4.9	0.6	2.5	5.6	16.3	n.a.	14.6	4.5
General surgery									
Days waited at 50th percentile	35	29	28	27	26	59	n.a.	27	30
Days waited at 90th percentile	237	136	112	115	98	404	n.a.	204	162
Percentage who waited more than 365 days	1.1	0.9	0.4	0.4	0.5	12.0	n.a.	2.8	1.1
Gynaecology									
Days waited at 50th percentile	37	26	33	27	28	42	n.a.	17	30
Days waited at 90th percentile	197	116	116	87	115	343	n.a.	114	140
Percentage who waited more than 365 days	0.8	1.0	0.1	<0.1	1.0	9.0	n.a.	0.8	0.9
Neurosurgery									
Days waited at 50th percentile	43	43	18	28	27	45	n.a.		33
Days waited at 90th percentile	260	189	87	131	121	248	n.a.		187
Percentage who waited more than 365 days	1.6	1.8	<0.1	1.0	1.4	3.0	n.a.		1.3
Ophthalmology									
Days waited at 50th percentile	209	50	55	37	96	256	n.a.	138	78
Days waited at 90th percentile	346	156	320	186	307	549	n.a.	331	328
Percentage who waited more than 365 days	2.3	1.4	0.9	0.1	0.9	32.5	n.a.	8.1	2.4

Table 4.4: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical specialty, states and territories, 2015–16

(continued)

Table 4.4 (continued): Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical specialty, states and territories 2015–16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Orthopaedic surgery									
Days waited at 50th percentile	119	69	39	56	75	162	n.a.	24	67
Days waited at 90th percentile	351	321	224	225	327	558	n.a.	205	333
Percentage who waited more than 365 days	3.8	6.6	0.6	2.4	3.1	25.3	n.a.	3.8	3.8
Plastic surgery									
Days waited at 50th percentile	39	20	27	31	36	38	n.a.	20	27
Days waited at 90th percentile	264	176	105	171	140	397	n.a.	144	174
Percentage who waited more than 365 days	2.0	3.3	0.3	1.8	2.5	10.6	n.a.	2.8	2.4
Urology									
Days waited at 50th percentile	30	21	25	23	31	36	n.a.	32	25
Days waited at 90th percentile	119	83	81	118	109	319	n.a.	194	100
Percentage who waited more than 365 days	0.5	0.7	0.1	0.7	0.9	8.0	n.a.	1.0	0.8
Vascular surgery									
Days waited at 50th percentile	21	28	16	22	19	28	n.a.	28	21
Days waited at 90th percentile	158	262	78	113	61	148	n.a.	97	155
Percentage who waited more than 365 days	0.6	4.0	0.0	0.5	0.6	4.5	n.a.	0.0	1.3
Other <sup>(b)</sup>									
Days waited at 50th percentile	16	28	23	19	19	29	n.a.	9	21
Days waited at 90th percentile	83	118	132	101	70	171	n.a.	55	101
Percentage who waited more than 365 days	0.2	0.1	0.1	0.2	0.3	3.6	n.a.	<0.1	0.2
Total									
Days waited at 50th percentile	55	30	29	30	40	72	n.a.	29	37
Days waited at 90th percentile	328	174	163	161	233	452	n.a.	229	260
Percentage who waited more than 365 days	2.0	2.3	0.4	0.8	1.8	15.5	n.a.	4.2	2.0

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

(b) Includes admissions for which the Surgical specialty was not reported.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

# 4.3 How did waiting times vary by surgical (indicator) procedure?

Waiting list statistics for surgical procedures can provide an indication of performance in particular areas of elective surgery provision.

For the NESWTDC, 15 categories of surgical procedure are specified and these are presented in this report. There is also an 'other' category which contains data for procedures not included in the 15 specific categories.

## Changes over time

Between 2011–12 and 2015–16, *Coronary artery bypass graft* was consistently the surgical procedure with the lowest median waiting time; it fluctuated between 13 and 18 days (in 2015–16, excluding the Australian Capital Territory) (Table 4.5).

Over this period, the median waiting time increased for several of the 15 surgical procedures, with the largest increase in median waiting time being for *Myringoplasty*, increasing from 105 days in 2011–12 to 173 days in 2015–16.

Between 2011–12 and 2015–16, the length of time within which 90% of patients were admitted for *Inguinal herniorrhaphy* decreased from 276 days to 233 days.

Between 2011–12 and 2015–16, there were marked decreases in the proportions of patients who waited more than 365 days to be admitted for *Varicose vein stripping and ligation* (from 10.0% in 2011–12 to 5.0% in 2015–16) and for *Total knee replacement* (from 11.6% in 2011–12 to 7.5% in 2015–16).

### Where to go for more information

Information on waiting times by surgical procedure for 2015–16 is available in:

- 'Section 4.5: Performance indicator Waiting times for elective surgery waiting time in days'
- 'Table S4.2: Waiting time statistics for admissions from public hospital waiting lists for elective surgery, by surgical procedure, and public hospital peer group, states and territories, 2015–16' (which accompanies this report online)
- 'Table S4.3: Waiting time statistics for admissions from public hospital waiting lists for elective surgery, by surgical procedure, and Indigenous status, states and territories, 2015–16' (which accompanies this report online).

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

Surgical procedure	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
Cataract extraction					
Days waited at 50th percentile	89	89	79	83	93
Days waited at 90th percentile	345	339	333	331	334
Percentage who waited more than 365 days	4.0	3.1	2.4	1.8	2.5
Cholecystectomy					
Days waited at 50th percentile	51	50	46	43	42
Days waited at 90th percentile	176	181	148	137	139
Percentage who waited more than 365 days	2.0	1.7	0.7	0.7	0.7
Coronary artery bypass graft					
Days waited at 50th percentile	16	16	18	14	13
Days waited at 90th percentile	76	77	82	73	70
Percentage who waited more than 365 days	<0.1	0.2	<0.1	<0.1	<0.1
Cystoscopy					
Days waited at 50th percentile	25	23	23	22	23
Days waited at 90th percentile	108	107	100	93	95
Percentage who waited more than 365 days	1.0	0.9	0.6	0.5	0.5
Haemorrhoidectomy					
Days waited at 50th percentile	57	59	59	56	54
Days waited at 90th percentile	245	257	222	208	225
Percentage who waited more than 365 days	3.2	3.5	2.3	1.0	2.2
Hysterectomy					
Days waited at 50th percentile	53	53	52	55	52
Days waited at 90th percentile	207	218	211	217	216
Percentage who waited more than 365 days	1.8	1.9	1.4	1.2	1.8
Inguinal herniorrhaphy					
Days waited at 50th percentile	57	60	56	51	52
Days waited at 90th percentile	276	284	246	242	233
Percentage who waited more than 365 days	3.0	3.1	1.8	1.5	1.8
Myringoplasty					
Days waited at 50th percentile	105	123	128	137	173
Days waited at 90th percentile	364	365	383	383	382
Percentage who waited more than 365 days	9.5	9.7	11.8	11.8	12.0
Myringotomy					
Days waited at 50th percentile	49	49	55	56	57
Days waited at 90th percentile	145	142	191	190	196
Percentage who waited more than 365 days	1.1	1.3	1.0	1.3	1.0

Table 4.5: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical procedure, 2011–12 to 2015–16<sup>(a)</sup>

(continued)

Surgical procedure	2011–12	2012–13	2013–14	2014–15	2015–16 <sup>(b)</sup>
Prostatectomy					
Days waited at 50th percentile	42	39	43	40	42
Days waited at 90th percentile	160	167	157	121	125
Percentage who waited more than 365 days	1.7	1.7	1.3	0.7	0.9
Septoplasty					
Days waited at 50th percentile	160	197	221	214	209
Days waited at 90th percentile	370	390	385	370	365
Percentage who waited more than 365 days	11.8	15.7	12.8	10.5	9.7
Tonsillectomy					
Days waited at 50th percentile	98	98	99	124	120
Days waited at 90th percentile	358	359	354	353	350
Percentage who waited more than 365 days	7.2	7.3	5.0	5.1	4.3
Total hip replacement					
Days waited at 50th percentile	116	116	106	109	114
Days waited at 90th percentile	357	357	354	344	348
Percentage who waited more than 365 days	7.2	7.5	6.5	4.4	4.8
Total knee replacement					
Days waited at 50th percentile	184	196	194	191	188
Days waited at 90th percentile	371	374	365	359	361
Percentage who waited more than 365 days	11.6	12.1	9.9	6.6	7.5
Varicose vein stripping and ligation					
Days waited at 50th percentile	103	96	97	105	104
Days waited at 90th percentile	365	356	353	357	348
Percentage who waited more than 365 days	10.0	7.7	7.2	8.3	5.0
Other procedures					
Days waited at 50th percentile	28	28	28	28	28
Days waited at 90th percentile	181	195	199	186	191
Percentage who waited more than 365 days	2.1	2.2	2.1	1.5	1.6
Total <sup>(b)</sup>					
Days waited at 50th percentile	36	36	36	35	37
Days waited at 90th percentile	250	265	262	253	260
Percentage who waited more than 365 days	2.7	2.7	2.4	1.8	2.0

Table 4.5 (continued): Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical procedure, 2011–12 to 2015–16<sup>(a)</sup>

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

(b) For 2015–16, the total excludes data for the Australian Capital Territory, which were not available at the time of publication.

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

# 4.4 How did waiting times vary by Indigenous status?

The quality of the data reported for Indigenous status in elective surgery waiting lists has not been formally assessed. Therefore, the information on Indigenous status presented in this report should be interpreted with caution (see Appendix A).

For 2015–16, there were about 25,000 admissions from elective surgery waiting lists for patients who identified as being of Aboriginal and/or Torres Strait Islander origin (excluding the Australian Capital Territory, see Table 2.9 and preceding text).

Overall, the median waiting time for Indigenous Australians was higher than that for other Australians (43 days compared with 37 days) (Table 4.6). For South Australia, the median waiting time for Indigenous Australians was lower than for other Australians.

Overall, the proportion of Indigenous Australians who waited more than 365 days for elective surgery was higher than for other Australians (2.3% and 2.0%, respectively).

## Surgical (indicator) procedures by Indigenous status

Indigenous Australians had higher median waiting times than other Australians for most of the 15 surgical (indicator) procedures (Table 4.7).

For surgical procedures for which there were at least 100 admissions for Indigenous persons, the most notable differences in median waiting times between Indigenous Australians and other Australians were for *Septoplasty* (283 days and 207 days, respectively) and *Total knee replacement* (259 days and 186 days, respectively).

Indigenous Australians had a notably lower median waiting time than other Australians for *Myringoplasty* (122 days and 185 days, respectively).

For Indigenous Australians, the highest proportion of patients who waited more than 365 days to be admitted was for *Myringoplasty* (13.7%).

Table 4.6: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by Indigenous status<sup>(a)</sup>, states and territories, 2015–16

	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Total <sup>(b)</sup>
Indigenous Australians									
Number of admissions	8,065	1,671	6,951	3,363	1,479	915	n.a.	2,373	24,817
Days waited at the 50th percentile	61	36	34	33	33	79	n.a.	46	43
Days waited at the 90th percentile	340	195	198	179	195	409	n.a.	310	294
Percentage who waited more than 365 days	2.1	2.2	0.5	0.6	1.8	13.2	n.a.	7.2	2.3
Other Australians <sup>(c)</sup>									
Number of admissions	209,752	177,261	134,299	83,762	58,259	18,058	n.a.	5,646	687,037
Days waited at the 50th percentile	55	30	29	30	40	71	n.a.	26	37
Days waited at the 90th percentile	328	174	162	160	234	455	n.a.	198	259
Percentage who waited more than 365 days	1.9	2.3	0.4	0.8	1.8	15.6	n.a.	3.0	2.0

(a) The quality of the data reported for Indigenous status in elective surgery waiting lists has not been formally assessed. Therefore, the information on Indigenous status presented in this report should be interpreted with caution.

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

(c) Other Australians includes patients for whom Indigenous status was Not reported.

Note: See Section 1.2, Box 2.1 and appendixes A and B for notes on data limitations and methods.

Table 4.7: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by Indigenous status<sup>(a)</sup> and surgical procedure, 2015–16<sup>(b)</sup>

		Indigenous Aust	ralians			Other Australia	ans <sup>(c)</sup>	
	Admissions	Days waited at the 50th percentile	Days waited at the 90th percentile	% waited more than 365 days	Admissions	Days waited at the 50th percentile	Days waited at the 90th percentile	% waited more than 365 days
Cataract extraction	1,782	140	350	4.4	65,973	92	333	2.4
Cholecystectomy	942	46	157	0.6	17,825	42	138	0.7
Coronary artery bypass graft	213	8	40	<0.1	3,428	13	71	<0.1
Cystoscopy	910	28	139	1.4	47,811	23	95	0.5
Haemorrhoidectomy	117	44	307	4.3	4,501	54	222	2.1
Hysterectomy	413	55	251	0.7	9,996	52	216	1.9
Inguinal herniorrhaphy	404	47	249	1.5	16,830	52	233	1.8
Myringoplasty	430	122	458	13.7	1,405	185	376	11.5
Myringotomy	562	55	236	2.0	4,302	57	191	0.9
Prostatectomy	99	n.p.	n.p.	n.p.	7,530	42	125	0.9
Septoplasty	129	283	365	9.3	5,100	207	365	9.7
Tonsillectomy	1,273	140	352	3.2	16,839	119	350	4.4
Total hip replacement	185	133	346	3.8	10,935	113	348	4.8
Total knee replacement	295	259	363	8.8	15,950	186	361	7.5
Varicose vein stripping and ligation	62	n.p.	n.p.	n.p.	4,107	104	348	5.0
Other procedures	17,001	32	234	1.8	454,505	28	189	1.6
Total	24,817	43	294	2.3	687,037	37	259	2.0

(a) The quality of the data reported for Indigenous status in elective surgery waiting lists has not been formally assessed. Therefore, the information on Indigenous status presented in this report should be interpreted with caution.

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

(c) Other Australians includes patients for whom Indigenous status was Not reported.

Note: See Section 1.2, Box 2.1 and appendixes A and B for notes on data limitations and methods.

# 4.5 Performance indicator: Waiting times for elective surgery—waiting time in days

Waiting times for elective surgery are an indicator of the provision of timely care and are included as an NHA performance indicator in the outcome area of *Australians receive appropriate high quality and affordable hospital and hospital related care* (COAG 2011).

This performance indicator can be related to the National Health Performance Framework dimension 'Accessibility' within the domain 'Health System Performance'.

The indicator reports on the median and 90th percentile waiting times for elective surgery in public hospitals, by surgical (indicator) procedure, and overall. It includes disaggregations for states and territories, by public hospital peer group and Indigenous status (see 'Section 4.4 How did waiting times vary by Indigenous status?').

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

## How did waiting times vary across public hospital peer groups?

Variations between hospital groups may reflect differences in the mix of patients and in the types of surgery performed.

Overall in 2015–16 (excluding the Australian Capital Territory), the median waiting time for patients admitted from waiting lists for *Principal referral and women's and children's hospitals* (32 days) was shorter than for *Public acute group A hospitals* and *Public acute group B hospitals* (40 days and 44 days, respectively) (Table 4.8).

For *Principal referral and women's and children's hospitals,* the median waiting time ranged from 27 days in the Northern Territory to 71 days in Tasmania. For *Public acute group A hospitals,* the median waiting time ranged from 26 days in the Northern Territory to 76 days in Tasmania.

## How did waiting times vary by surgical (indicator) procedure?

Nationally, *Coronary artery bypass graft* was the surgical procedure with the lowest median waiting time in 2015–16 (13 days) (excluding the Australian Capital Territory, see Table 4.9). The median waiting time for *Coronary artery bypass graft* ranged from 7 days in Queensland and Western Australia to 32 days in Tasmania.

*Coronary artery bypass graft* was also the surgical procedure with the lowest 90th percentile waiting time in 2015–16 (70 days). The 90th percentile waiting time for *Coronary artery bypass graft* ranged from 26 days in Western Australia to 105 days in Tasmania.

*Septoplasty* was the surgical procedure with the highest median waiting time in 2015–16 (209 days). The median waiting time for *Septoplasty* ranged from 97 days in Queensland to 383 days in Tasmania.

Table 4.8: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by public hospital peer group, states an	d
territories, 2015–16	

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Principal referral and women's and children's hospitals									
Days waited at the 50th percentile	35	32	28	28	40	71	n.a.	27	32
Days waited at the 90th percentile	283	172	161	150	212	399	n.a.	244	215
Percentage who waited more than 365 days	2.2	2.1	0.6	1.4	1.8	11.9	n.a.	4.7	2.0
Public acute group A hospitals									
Days waited at the 50th percentile	67	27	31	34	55	76	n.a.	26	40
Days waited at the 90th percentile	344	190	169	168	306	530	n.a.	146	292
Percentage who waited more than 365 days	2.5	2.9	0.1	0.5	3.5	19.4	n.a.	0.9	2.5
Public acute group B hospitals									
Days waited at the 50th percentile	78	29	38	26	27	63			44
Days waited at the 90th percentile	331	154	169	132	194	379			289
Percentage who waited more than 365 days	0.4	1.6	0.4	0.7	0.2	11.8			1.0
Other hospitals <sup>(b)</sup>									
Days waited at the 50th percentile	58	44	27	40	27			92	42
Days waited at the 90th percentile	313	160	105	193	215			422	234
Percentage who waited more than 365 days	2.0	2.0	0.2	0.3	0.0			12.8	1.3
Total									
Days waited at the 50th percentile	55	30	29	30	40	72	n.a.	29	37
Days waited at the 90th percentile	328	174	163	161	233	452	n.a.	229	260
Percentage who waited more than 365 days	2.0	2.3	0.4	0.8	1.8	15.5	n.a.	4.2	2.0

(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.

Note: See Section 1.2 and appendixes A, B and C for notes on data limitations and methods.

Table 4.9: Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical procedure, states and territories,2015-16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Cataract extraction									
Days waited at 50th percentile	240	56	64	37	119	301	n.a.	158	93
Days waited at 90th percentile	349	153	330	184	310	562	n.a.	342	334
Percentage who waited more than 365 days	2.5	1.0	0.7	0.1	0.5	36.4	n.a.	8.4	2.5
Cholecystectomy									
Days waited at 50th percentile	56	31	43	29	39	83	n.a.	43	42
Days waited at 90th percentile	232	103	100	87	90	414	n.a.	170	139
Percentage who waited more than 365 days	0.7	0.1	0.2	0.1	0.1	12.2	n.a.	2.2	0.7
Coronary artery bypass graft									
Days waited at 50th percentile	27	19	7	7	13	32	n.a.		13
Days waited at 90th percentile	89	80	48	26	39	105	n.a.		70
Percentage who waited more than 365 days	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.		<0.1
Cystoscopy									
Days waited at 50th percentile	30	20	24	24	29	32	n.a.	38	23
Days waited at 90th percentile	116	79	78	124	100	260	n.a.	232	95
Percentage who waited more than 365 days	0.3	0.3	0.1	0.7	0.8	5.0	n.a.	3.4	0.5
Haemorrhoidectomy									
Days waited at 50th percentile	63	55	59	37	31	141	n.a.	37	54
Days waited at 90th percentile	310	175	226	152	91	558	n.a.	317	225
Percentage who waited more than 365 days	2.9	1.1	0.8	0.2	0.4	26.9	n.a.	6.4	2.2
Hysterectomy									
Days waited at 50th percentile	62	48	54	36	45	110	n.a.	63	52
Days waited at 90th percentile	296	210	164	111	187	399	n.a.	176	216
Percentage who waited more than 365 days	1.9	2.3	0.2	<0.1	2.6	13.2	n.a.	2.9	1.8

(continued)

Table 4.9 (continued): Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical procedure, states and territories, 2015–16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Inguinal herniorrhaphy									
Days waited at 50th percentile	69	40	55	35	34	110	n.a.	55	52
Days waited at 90th percentile	327	132	163	105	111	477	n.a.	255	233
Percentage who waited more than 365 days	2.5	0.5	0.7	<0.1	0.3	18.3	n.a.	1.5	1.8
Myringoplasty									
Days waited at 50th percentile	317	154	109	90	252	259	n.a.	202	173
Days waited at 90th percentile	378	505	346	317	403	417	n.a.	865	382
Percentage who waited more than 365 days	14.7	18.1	1.9	2.3	15.3	19.0	n.a.	30.8	12.0
Myringotomy									
Days waited at 50th percentile	69	52	50	63	57	105	n.a.	117	57
Days waited at 90th percentile	312	142	226	202	117	257	n.a.	343	196
Percentage who waited more than 365 days	3.1	1.0	0.2	0.4	1.3	1.7	n.a.	7.5	1.0
Prostatectomy									
Days waited at 50th percentile	62	32	35	33	41	61	n.a.	29	42
Days waited at 90th percentile	201	110	87	115	139	137	n.a.	246	125
Percentage who waited more than 365 days	1.2	1.3	0.0	0.4	1.0	2.0	n.a.	4.0	0.9
Septoplasty									
Days waited at 50th percentile	317	123	97	173	273	383	n.a.	192	209
Days waited at 90th percentile	364	366	332	344	387	700	n.a.	957	365
Percentage who waited more than 365 days	8.3	10.2	1.6	5.5	15.8	54.2	n.a.	38.5	9.7
Tonsillectomy									
Days waited at 50th percentile	253	87	80	111	87	180	n.a.	58	120
Days waited at 90th percentile	361	280	310	342	368	447	n.a.	279	350
Percentage who waited more than 365 days	5.6	3.9	0.6	1.9	10.2	16.8	n.a.	6.5	4.3

Table 4.9 (continued): Waiting time statistics for admissions from public hospital elective surgery waiting lists, by surgical procedure, states and territories, 2015–16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
Total hip replacement									
Days waited at 50th percentile	212	115	63	78	144	178	n.a.	163	114
Days waited at 90th percentile	356	328	270	246	355	459	n.a.	420	348
Percentage who waited more than 365 days	4.4	6.5	0.7	2.4	6.3	22.6	n.a.	16.7	4.8
Total knee replacement									
Days waited at 50th percentile	290	148	88	94	222	299	n.a.	138	188
Days waited at 90th percentile	362	383	324	333	365	659	n.a.	372	361
Percentage who waited more than 365 days	6.6	11.7	1.3	6.0	9.8	43.3	n.a.	11.1	7.5
Varicose vein stripping and ligation									
Days waited at 50th percentile	135	121	58	61	80	231	n.a.	55	104
Days waited at 90th percentile	347	358	336	249	363	511	n.a.	210	348
Percentage who waited more than 365 days	2.6	8.8	<0.1	0.7	6.1	34.9	n.a.	<0.1	5.0
Other procedures									
Days waited at 50th percentile	36	26	26	27	31	46	n.a.	21	28
Days waited at 90th percentile	284	165	117	137	153	402	n.a.	149	191
Percentage who waited more than 365 days	1.5	2.4	0.3	0.8	1.4	11.6	n.a.	2.3	1.6
Total									
Days waited at 50th percentile	55	30	29	30	40	72	n.a.	29	37
Days waited at 90th percentile	328	174	163	161	233	452	n.a.	229	260
Percentage who waited more than 365 days	2.0	2.3	0.4	0.8	1.8	15.5	n.a.	4.2	2.0

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

Note: See Section 1.2 and appendixes A and B for notes on data limitations and methods.

# 4.6 How did waiting times differ by clinical urgency category?

At the time of being placed on the public hospital waiting list, a clinical assessment is made of the urgency (clinically recommended time) with which the patient requires elective surgery. For more information, see Box 4.1.

The information in this section includes the proportion of patients removed from waiting lists within the clinically recommended time, the median waiting time and the average overdue waiting time for patients remaining on waiting lists at the end of the year.

The proportion of patients seen within the recommended time is the percentage of patients removed from elective surgery waiting lists who were admitted for surgery within the clinically recommended time for each clinical urgency category.

The 'overdue wait' is the amount of time spent waiting while overdue – that is, after 30, 90 or 365 days for clinical urgency categories 1, 2 and 3, respectively. The average overdue wait time (in days) is calculated for patients who were still waiting for their elective surgery as at 30 June 2016, were ready for care, and had waited beyond the recommended time.

Due to the apparent lack of comparability of clinical urgency categories between states and territories, these data are presented for each state and territory separately. Comparisons between states and territories and between reporting years should be made with reference to Box 4.1, Table 4.10 and Appendix A.

For 2015–16, data were not available for the Australian Capital Territory.

### Box 4.1: Clinical urgency categorisation

In general, at the time of being placed on the public hospital waiting list, a clinical assessment is made of the urgency with which the patient requires elective surgery. The clinical urgency categories are:

- *Category 1* procedures that are clinically indicated within 30 days
- *Category* 2 procedures that are clinically indicated within 90 days
- *Category 3* procedures that are clinically indicated within 365 days.

Analyses of clinical urgency category data have shown notable variation in the assignment of these categories, both among and within jurisdictions, and for individual surgical specialties and surgical (indicator) procedures, as well as overall (AIHW 2013b). This apparent lack of comparability of clinical urgency categories among jurisdictions means that measures based on these categories are also not comparable between jurisdictions. The concepts of the proportion 'overdue' and the 'average overdue wait time' may also not be meaningful or comparable, because they depend on the urgency categorisation.

As for earlier years, there is apparent variation in the assignment of urgency categories among states and territories for 2015–16. For example, the proportion of patients admitted from waiting lists who were assigned to *Category 3* was 44% for New South Wales and less than 24% for Victoria and Queensland (Table 4.10).

Despite the differences in how clinicians assign clinical urgency categories, interpreting state and territory waiting times statistics could be assisted by having context information about the proportion of patients in each urgency category.

(continued)

### Box 4.1 (continued): Clinical urgency categorisation

For example, a state or territory could report relatively long median waiting times in association with a relatively high proportion of patients assessed by clinicians in the state (or territory) as being in *Category 3* (procedure clinically indicated within 365 days). Conversely, a state or territory in which a relatively high proportion of patients are assessed by clinicians as being in *Category 1* or 2 (procedure clinically indicated within 30 days and 90 days, respectively) could have relatively short overall median waiting times.

In 2012, the AIHW, in collaboration with the Royal Australasian College of Surgeons, developed a package of integrated reforms for national definitions for elective surgery urgency categories (AIHW 2013b), which were agreed by the Australian Health Ministers' Advisory Council.

The revised definitions for urgency categories were implemented from 1 July 2015, and further measures to improve comparability in urgency categorisations were implemented from 1 July 2016. With these changes, it is expected that the comparability of the urgency categorisation data will improve over coming years.

See appendixes A and B for more information.

Table 4.10: Admissions from public hospital elective surgery waiting lists, by clinical urgency
category, states and territories, 2015–16

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	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
			Admiss	ions					
Category 1	48,789	53,320	51,087	21,411	15,293	6,050	n.a.	3,008	198,958
Category 2	72,557	82,762	56,565	30,260	21,873	7,916	n.a.	3,527	275,460
Category 3	96,471	42,850	33,598	35,454	22,572	5,007	n.a.	1,484	237,436
Total admissions	217,817	178,932	141,250	87,125	59,738	18,973	n.a.	8,019	711,854
		Per	centage of	admissio	ns				
Category 1	22.4	29.8	36.2	24.6	25.6	31.9	n.a.	37.5	27.9
Category 2	33.3	46.3	40.0	34.7	36.6	41.7	n.a.	44.0	38.7
Category 3	44.3	23.9	23.8	40.7	37.8	26.4	n.a.	18.5	33.4

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

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on data limitations and methods.

### **New South Wales**

For New South Wales, 97% of patients were admitted within the clinically recommended time, overall (Table 4.11).

Almost all *Category 1* patients were admitted for surgery within 30 days, and the median waiting time was 10 days.

There were no overdue *Category 1* patients remaining on the waiting list as at 30 June 2016. For *Category 2* patients the average overdue waiting time was 22 days and it was 66 days for *Category 3* patients.

	(within	Category 2 (within	Category 3 (within	
	30 days)	90 days)	365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	48,789	72,557	96,471	217,817
Number admitted within clinically recommended time	48,709	70,466	92,217	211,392
Proportion admitted within clinically recommended time (%)	99.8	97.1	95.6	97.1
Days waited at 50th percentile	10	43	212	55
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	0.0	22.0	65.9	

Table 4.11: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, New South Wales, 2015–16

*Note:* See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

## Victoria

For Victoria, 88% of all patients were admitted within the clinically recommended time, overall (Table 4.12).

All *Category 1* patients were admitted for surgery within 30 days, and the median waiting time was 10 days. About 77% of *Category 2* patients and 94% of *Category 3* patients were admitted within the clinically recommended times.

There were no overdue *Category 1* patients remaining on the waiting list as at 30 June 2016. For *Category 2* patients the average overdue waiting time was 127 days and it was 137 days for *Category 3* patients.

Table 4.12: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, Victoria, 2015–16

	Category 1 (within	Category 2 (within	Category 3 (within	Total
Patients admitted from waiting lists during 2015–16	30 days)	90 days)	365 days)	Total
Number of admissions	53,320	82,762	42,850	178,932
Number admitted within clinically recommended time	53,320	63,835	40,162	157,317
Proportion admitted within clinically recommended time (%)	100.0	77.1	93.7	87.9
Days waited at 50th percentile	10	49	86	30
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	0.0	127.1	137.3	

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

## Queensland

For Queensland, almost 97% of all patients were admitted within the clinically recommended time, overall (Table 4.13).

About 40% of Queensland admissions were *Category* 2 patients – requiring admission within 90 days – and 95% of these were admitted within the clinically recommended time.

For *Category* 2 patients remaining on the waiting list as at 30 June 2016, the average overdue wait was 23.5 days (that is, they had been on the waiting list for an average of 113.5 days).

	Category 1 (within	Category 2 (within	Category 3 (within	
	30 days)	90 days)	365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	51,087	56,565	33,598	141,250
Number admitted within clinically recommended time	49,874	53,572	33,070	136,516
Proportion admitted within clinically recommended time (%)	97.6	94.7	98.4	96.6
Days waited at 50th percentile	12	48	130	29
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	6.8	23.5	32.8	

# Table 4.13: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, Queensland, 2015–16

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

### Western Australia

For Western Australia, over 93% of all patients were admitted within the clinically recommended time, overall (Table 4.14).

For patients remaining on the waiting list as at 30 June 2016, the average overdue waiting time for *Category 1* patients was 30.5 days, for *Category 2* patients it was 85 days and it was 95 days for *Category 3* patients.

Table 4.14: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, Western Australia, 2015–16

	Category 1 (within	Category 2 (within	Category 3 (within	
	30 days)	90 days)	365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	21,411	30,260	35,454	87,125
Number admitted within clinically recommended time	19,663	27,029	34,783	81,475
Proportion admitted within clinically recommended time (%)	91.8	89.3	98.1	93.5
Days waited at 50th percentile	11	41	58	30
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	30.5	85.0	94.9	

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

## **South Australia**

For South Australia, over 91% of all patients were admitted within the clinically recommended time, overall (Table 4.15).

The median wait for admission was 12 days for *Category 1* patients, 49 days for *Category 2* patients and 107 days for *Category 3* patients.

There were no overdue patients remaining on the waiting list as at 30 June 2016.

	Category 1 (within	Category 2 (within	Category 3 (within	
	30 days)	90 days)	365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	15,293	21,873	22,572	59,738
Number admitted within clinically recommended time	13,762	19,331	21,519	54,612
Proportion admitted within clinically recommended time (%)	90.0	88.4	95.3	91.4
Days waited at 50th percentile	12	49	107	40
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	0.0	0.0	0.0	

Table 4.15: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, South Australia, 2015–16

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

### Tasmania

For Tasmania, 59% of all patients were admitted within the clinically recommended time, overall (Table 4.16).

More than three-quarters of patients in *Category 1* were admitted within clinically recommended times, and more than 43% of *Category 2* patients were admitted within clinically recommended times.

For patients remaining on the waiting list as at 30 June 2016, the average overdue wait time for *Category 3* patients was 137 days (that is, they had been on the waiting list for an average of 502 days).

# Table 4.16: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, Tasmania, 2015-16

	Category 1 (within 30 days)	Category 2 (within 90 days)	Category 3 (within 365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	6,050	7,916	5,007	18,973
Number admitted within clinically recommended time	4,664	3,434	3,151	11,249
Proportion admitted within clinically recommended time (%)	77.1	43.4	62.9	59.3
Days waited at 50th percentile	18	108	289	72
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	26.1	159.8	136.6	

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

## **Northern Territory**

For the Northern Territory, over 79% of all patients were admitted within the clinically recommended time, overall (Table 4.17).

The average waiting time for admission for Category 1 patients was 11 days.

For *Category 1* patients remaining on the waiting list as at 30 June 2016, the average overdue wait was 30 days beyond the clinically recommended time.

	Category 1 (within	Category 2 (within	Category 3 (within	
	30 days)	90 days)	365 days)	Total
Patients admitted from waiting lists during 2015–16				
Number of admissions	3,008	3,527	1,484	8,019
Number admitted within clinically recommended time	2,803	2,359	1,193	6,355
Proportion admitted within clinically recommended time (%)	93.2	66.9	80.4	79.2
Days waited at 50th percentile	11	53	177	29
Patients remaining on waiting lists as at 30 June 2016				
Average overdue wait time (days)	30.4	121.7	196.7	

# Table 4.17: Selected statistics for public hospital elective surgery waiting lists, by clinical urgency, Northern Territory, 2015-16

Note: See Section 1.2, Box 4.1 and appendixes A and B for notes on definitions and data limitations.

### Where to go for more information

More information on waiting times by clinical urgency and by quarter for each state and territory for 2015–16 is available in tables S4.4 to S4.11: 'Selected statistics for admissions from public hospital waiting lists, by clinical urgency category and quarter, 2015–16' (which accompany this report online).

# 5 What was the safety and quality of the care?

This chapter presents information on some aspects of safety and quality of public hospital elective surgery. It includes information for:

- adverse events reported for elective surgery admissions
- unplanned readmissions following elective surgery.

Information on adverse events and unplanned readmissions was calculated and provided by the states and territories. The AIHW is therefore unable to assess the quality of the data.

For 2015-16, data were not available for the Australian Capital Territory.

# Key findings

### Adverse events

Queensland, Western Australia, South Australia, Tasmania and the Northern Territory provided adverse events data for the 4 years 1 April 2012 to 31 March 2016. The proportion of admissions from elective surgery waiting lists for which an adverse event was reported was relatively stable for these jurisdictions combined over the 4 year period.

Between 1 April 2015 and 31 March 2016, the rate of adverse events reported for public hospital elective surgery admissions (for jurisdictions that provided data) ranged from 4.8% in the Northern Territory to 7.8% in Victoria.

### **Readmission following surgery**

Queensland, Western Australia, South Australia and the Northern Territory provided data on readmissions following surgery for the 4 years 1 April 2012 to 31 March 2016. The rate of unplanned readmission to hospital following elective surgery was relatively stable for these jurisdictions combined over the 4 year period.

Between 1 April 2015 and 31 March 2016, the rate of unplanned readmission to hospital following elective surgery ranged from 1.0% in Victoria to 2.7% in the Northern Territory.

# 5.1 Adverse events reported for elective surgery admissions

Adverse events are generally defined as incidents in which harm resulted to a person receiving health care. They include infections, falls resulting in injuries, and problems with medication and medical devices – some of which may be preventable (see Box 5.1 for information about adverse events).

### Box 5.1: Adverse events reported for elective surgery-data limitations

Hospital separations data (which the states and territories use to report adverse events related to elective surgery) include information on diagnoses, places of occurrence and external causes of injury and poisoning that can indicate that an adverse event was treated and/or occurred during the hospitalisation. However, other diagnosis codes may also suggest that an adverse event has occurred, while some adverse events are not identifiable using these codes.

The data in Table 5.1 can be interpreted as representing selected adverse events in health care that resulted in, or affected, hospital admissions—rather than all adverse events that occurred in association with elective surgery. Some of the adverse events may represent events that occurred before admission. For information on the specification used to identify adverse events, see Appendix B.

The diagnosis information in the hospitals separations data that can indicate that adverse events occurred is available only at a time following the end of the episode of care. Therefore, information on adverse events may be incomplete at the end of the reporting period during which the surgery was undertaken. For that reason, data are presented here for the 12 months ending 31 March, rather than the 12 months ending 30 June.

For the period 1 April 2014 to 31 March 2015, data were not available for the 1 April 2014 to 30 June 2014 quarter for New South Wales, Victoria and the Australian Capital Territory. Therefore, the data presented for those jurisdictions in Table 5.1 are for the period 1 July 2014 to 31 March 2015.

For the period 1 June 2015 to 31 March 2016, data were not available for the Australian Capital Territory at the time of publication.

It should be noted that the use of the NESWTDC data for purposes such as reporting adverse events has not been validated for accuracy in Australia. The results should therefore be treated with caution.

Between 1 April 2012 and 31 March 2016, for Queensland, Western Australia, South Australia, Tasmania and the Northern Territory (for which data were provided for all 4 years) combined, the overall proportion of admissions from elective surgery waiting lists for which an adverse event was reported was relatively stable (Table 5.1).

The calculation of the rate is limited to records for which an adverse event flag was reported as either 1 (adverse event recorded) or 2 (no adverse event reported). It does not include records for which the adverse event flag was not assigned (about 4% of admissions).

Between 1 April 2015 and 31 March 2016, the rate of adverse events following elective surgery was 6.4% (excluding the Australian Capital Territory). It ranged from 4.8% in the Northern Territory to 7.8% in Victoria (Table 5.1).

Table 5.1: Adverse events reported for admissions<sup>(a)</sup> from public hospital elective surgery waiting lists, states and territories, April 2012 to March 2016

State or territory	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
	Warch 2013	Warch 2014	Warch 2015	Warch 2016
New South Wales <sup>(b)</sup>	10.001	10 <b>-</b> 01		
Admissions with adverse events	10,921	10,791	8,707	11,269
Admissions	205,613	211,495	159,127	209,980
Proportion with an adverse event (%)	5.3	5.1	5.5	5.4
Victoria <sup>(b)</sup>	44 707	40.000	10 5 10	40.057
Admissions with adverse events	11,737	13,306	10,549	13,057
Admissions	147,549	156,972	123,473	167,181
Proportion with an adverse event (%)	8.0	8.5	8.5	7.8
Queensland	7 000	0.000	0.000	0.000
Admissions with adverse events	7,902	8,020	8,283	9,338
Admissions	112,508	110,758	114,025	126,476
Proportion with an adverse event (%)	7.0	7.2	7.3	7.4
Western Australia	4 00 4	4 747	4 505	4 070
Admissions with adverse events	4,084	4,717	4,565	4,870
Admissions	80,945	84,832	81,955	84,444
Proportion with an adverse event (%) South Australia	5.0	5.6	5.6	5.8
Admissions with adverse events	3,776	4,083	3,761	3,655
Admissions	62,785		,	,
	6.0	63,542 6.4	61,839 6.1	59,672 6.1
Proportion with an adverse event (%) Tasmania	0.0	0.4	0.1	0.1
Admissions with adverse events	1,094	1,265	1 015	998
	,		1,015	
Admissions	14,980 7.3	16,021 7.9	14,503 7.0	16,645 6.0
Proportion with an adverse event (%) Australian Capital Territory <sup>(b)(c)</sup>	7.5	7.9	7.0	0.0
Admissions with adverse events	845	799	554	n.a.
	045 11,178			
Admissions	7.6	11,340 7.0	8,825 6.3	n.a.
Proportion with an adverse event (%)	7.0	7.0	0.5	n.a.
Northern Territory Admissions with adverse events	306	386	371	329
Admissions	7,016	7,100	6,856	6,784
Proportion with an adverse event (%)	4.4	7,100 5.4	0,000 5.4	6,764 4.8
Total	4.4	5.4	5.4	4.0
Admissions with adverse events	40,665	43,367	37,805	43,699
Admissions	40,665 642,574	43,367 662,060	570,603	43,699 680,382
Proportion with an adverse event (%) <sup>(d)</sup>	6.2	6.5	570,803 6.4	6.4

(a) Admissions represents the number of records for which an adverse event flag was reported as either 1 (adverse event recorded) or 2 (no adverse event reported). It does not include records for which the adverse event flag was not assigned.

(b) For the period 1 April 2014 to 31 March 2015, data were not available for the 1 April 2014 to 30 June 2014 quarter for New South Wales, Victoria and the Australian Capital Territory. Therefore, the data for those jurisdictions are for the period 1 July 2014 to 31 March 2015.

(c) Data for the 1 July 2015 to 31 March 2016 quarters were not available at the time of publication for the Australian Capital Territory.

(d) For April 2012 to March 2015, the national *Proportion with an adverse event* is calculated for Queensland, Western Australia, South Australia, Tasmania and the Northern Territory (for which data were provided for all 3 years). For April 2015 to March 2016, the national *Proportion with an adverse event* is calculated for New South Wales, Victoria, Queensland, Western Australia, South Australia, Tasmania and the Northern Territory (for which data were provided for the whole year).

Note: See Section 1.2, Box 5.1 and appendixes A and B for notes on definitions and data limitations.

# 5.2 Unplanned readmissions following admission from elective surgery waiting lists

Unplanned readmissions following admission from elective surgery waiting lists are defined as separations where the principal diagnosis indicated an unplanned or unexpected readmission and where admission to the same hospital occurred within 28 days of the episode in which the surgery occurred. The 28 day readmission period is calculated from the patient's date of separation (for the initial episode that included the surgery) to the patient's date of admission for subsequent hospital treatment (See Box 5.2 for information about unplanned readmissions following surgery).

The indicator is likely to underestimate all possible unplanned readmissions because:

- it is only calculated for readmissions to the same hospital, whereas readmissions can take place in other hospitals and even across state and territory borders
- the unplanned readmissions are limited to those having a principal diagnosis of a
  post-operative adverse event for which a specified *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification* (ICD-10-AM)
  diagnosis code has been assigned. This does not include all possible diagnoses that may
  relate to unplanned readmissions
- the indicator includes only unplanned readmissions where the urgency of admission was *Emergency*, whereas some readmissions can be on an elective (non-emergency) basis.

### Box 5.2: Unplanned readmissions following elective surgery-data limitations

Data on readmissions within 28 days following elective surgery are incomplete at the end of the reporting period during which the surgery occurred, as the readmission may occur during the following period. For that reason, data presented for readmissions are for the 12 months ending 31 March, rather than the 12 months ending 30 June. In addition, the numbers of readmissions following surgery may not be final for patients who were readmitted but not separated by 30 June.

For the period 1 April 2014 to 31 March 2015, data were not available for the 1 April 2014 to 30 June 2014 quarter for New South Wales, Victoria and the Australian Capital Territory. Therefore, the data presented for those jurisdictions in Table 5.2 are for the period 1 July 2014 to 31 March 2015.

For the period 1 June 2015 to 31 March 2016, the data for the Australian Capital Territory were not available at the time of publication.

For Tasmania, the numbers of readmissions identified were relatively low for all reporting periods.

It should be noted that the use of the NESWTDC data for purposes such as reporting readmissions has not been validated for accuracy in Australia. The results should therefore be treated with caution.

For information on the specification used for unplanned readmissions following elective surgery, see Appendix B.

Between 1 April 2012 and 31 March 2015, for Queensland, Western Australia, South Australia and the Northern Territory (for which data were provided for all 4 years) combined, the rate of unplanned readmission to hospital following elective surgery was relatively stable (Table 5.2). Queensland did not have full coverage of elective surgery data over this period, so the rate of unplanned admissions for Queensland may not be comparable with other jurisdictions that had full coverage. Over this period, the rate of unplanned readmission to hospital following elective surgery was consistently highest for the Northern Territory.

The calculation of the rate is limited to records for which a readmission flag was reported as either 1 (readmission reported) or 2 (no readmission reported). It does not include records for which the readmission flag was not assigned (about 4% of admissions).

Between 1 April 2015 and 31 March 2016, for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (for which data were provided for the entire year) combined, approximately 1.2% of patients who were admitted from a public hospital elective surgery waiting list had an unplanned readmission to hospital within 28 days following an admission from an elective surgery waiting list.

Between 1 April 2015 and 31 March 2016, for states and territories that reported readmission information for the entire period, the rate of unplanned readmission to hospital following elective surgery ranged from 1.0% in Victoria to 2.7% in the Northern Territory.

### Where to go for more information

More information on adverse events, and on readmissions following selected procedures for all admitted patients, will be available in *Admitted patient care 2015–16: Australian hospital statistics*, to be released in early 2017.

State or territory	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016
New South Wales <sup>(b)</sup>	Warch 2015		Warch 2015	
Readmissions within 28 days	2,219	2,281	1,765	2,282
Admissions	205,613	211,495	159,127	209,980
Proportion with readmission (%)	205,015	1.1	1.1	203,300
Victoria <sup>(b)</sup>	1.1	1.1	1.1	1.1
Readmissions within 28 days	1,701	1,697	1,357	1,663
Admissions	147,549	156,972	123,473	167,181
Proportion with readmission (%)	1.2	1.1	1.1	1.0
Queensland	1.2	1.1	1.1	1.0
Readmissions within 28 days	1,584	1,796	1,815	2,351
Admissions	112,508	110,757	114,025	126,476
Proportion with readmission (%)	1.4	1.6	1.6	1.9
Western Australia	1.4	1.0	1.0	1.5
Readmissions within 28 days	892	941	911	939
Admissions	80,945	84,832	81,955	84.444
Proportion with readmission (%)	1.1	1.1	1.1	1.1
South Australia		1.1		1.1
Readmissions within 28 days	714	753	780	827
Admissions	62,785	63,542	61,839	59,672
Proportion with readmission (%)	1.1	1.2	1.3	1.4
Tasmania <sup>(c)</sup>		1.2	1.0	1.4
Readmissions within 28 days	3	1	3	4
Admissions	14,980	16,021	14,503	16,645
Proportion with readmission (%)	<0.1	<0.1	<0.1	<0.1
Australian Capital Territory <sup>(b)(d)</sup>	-0.1	-0.1	-0.1	-0.1
Readmissions within 28 days	147	161	115	n.a.
Admissions	11,178	11,340	8,825	n.a.
Proportion with readmission (%)	1.3	1.4	1.3	n.a.
Northern Territory	1.0		1.0	1.4.
Readmissions within 28 days	177	147	186	180
Admissions	7,016	7,100	6,856	6,784
Proportion with readmission (%)	2.5	2.1	2.7	2.7
Total				
Readmissions within 28 days	7,437	7,777	6,932	8,275
Admissions	642,574	662,059	570,603	680,382
Proportion with readmission (%) <sup>(e)</sup>	1.3	1.4	1.4	1.2

Table 5.2: Unplanned readmissions reported as following admission<sup>(a)</sup> from an elective surgery waiting list, states and territories, April 2012 to March 2016

(a) Admissions represents the number of records for which a readmission flag was reported as either 1 (readmission reported) or 2 (no readmission reported). It does not include records for which the readmission flag was not assigned.

(b) Data were not available for the 1 April 2014 to 30 June 2014 quarter for New South Wales, Victoria and the Australian Capital Territory. Therefore, the data for those jurisdictions are for the period 1 July 2014 to 31 March 2015.

(c) For Tasmania, it was not possible to identify all readmissions for all periods.

(d) Data for the 1 July 2015 to 31 March 2016 quarters were not available at the time of publication for the Australian Capital Territory.

(e) For April 2012 to March 2015, the national Proportion with readmission is calculated for Queensland, Western Australia, South Australia and the Northern Territory (for which data were provided for all 3 years). For April 2015 to March 2016, the national Proportion with readmission is calculated for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (for which data were provided for the whole year).

Note: See Section 2.1, Box 5.2 and appendixes A and B for notes on definitions and data limitations.

# **Appendix A: Data quality information**

This appendix includes a Data Quality Statement summary relevant to interpreting the National Elective Surgery Waiting Times Data Collection (NESWTDC). It also contains additional information on variation in hospital reporting that may affect the interpretation of the data presented in this report.

The Data Quality Statement for the NESWTDC is also available online at <www.aihw.gov.au>.

# National Elective Surgery Waiting Times Data Collection 2015–16

The NESWTDC provides episode-level data on patients added to or removed from elective surgery waiting lists managed by public hospitals. This includes private patients treated in public hospitals, and may include public patients treated in private hospitals. 'Public hospitals' may include hospitals that are set up to provide services for public patients (as public hospitals do), but are managed privately. Removals are counted for patients who have been removed for admission, or for another reason.

The data supplied for 1 July 2015 to 30 June 2016 are based on the Elective surgery waiting times (removals and census data) National Minimum Data Set (ESWT NMDS) for 2015–16.

The NESWTDC includes data for each year from 1999-00 to 2015-16.

Also reported are data provided by states and territories for admissions from waiting lists that had an adverse event or unplanned readmission within 28 days of separation. These data are not defined under the ESWT NMDS.

## Summary of key data quality issues

- For 2015–16, Australian Capital Territory elective surgery waiting times information was not available at the time of publication. For all other states and territories in 2015–16, the NESWTDC covered most hospitals that undertook elective surgery. Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting list characteristics compared with other hospitals.
- Between 2011–12 and 2015–16, the coverage of the NESWTDC fluctuated between 92% and 94% (excluding data for the Australian Capital Territory from the numerator for 2015–16). These changes in coverage should be taken into account when interpreting changes over time:
  - For 2015–16, Australian Capital Territory data were not available at the time of publication. In 2014–15, the Australian Capital Territory reported about 12,000 admissions from elective surgery waiting lists.
  - For 2014–15, Queensland was not able to provide data for 2 hospitals (which reported about 7,000 admissions from elective surgery waiting lists in 2013–14) and 5 months of data for a third hospital (which reported about 3,700 admissions in 2013–14). In 2011–12, Queensland was not able to provide data for the same 3 hospitals and these hospitals reported data for only 3 of the 4 quarterly periods in 2012–13. In 2015–16, Queensland provided elective surgery waiting times data for an

additional 15 hospitals that accounted for about 3,000 records. Estimated coverage for Queensland was 89% in 2011–12, 91% in 2014–15, 98% in 2012–13 and 2013–14, and was 100% in 2015–16.

- For South Australia, 4 small hospitals (that accounted for a total of 141 admissions in 2011–12) ceased reporting between 2011–12 and 2015–16. This did not represent a significant decrease in coverage over this period.
- For Victoria, the Women's Hospital at Sandringham reported elective surgery data separately, whereas in previous years this data was reported with elective surgery data for the Royal Women's Hospital. This change in organisational arrangements did not represent an increase in coverage over this period.
- For Western Australia, the Fiona Stanley Hospital opened in October 2014, replacing the Royal Perth Hospital (Shenton Park campus) and Kaleeya Hospital. All 3 of these hospitals are included for 2014–15 in tables 2.1 and 2.2. In November 2015, the St John of God, Midland Public Hospital opened, replacing the Swan District Hospital, and both hospitals are included for 2015–16 in tables 2.1 and 2.2. All these changes in organisational arrangements did not represent an increase in coverage over this period.
- For 2015–16, the preliminary estimate of public hospital elective surgery covered by the NESWTDC was 93% (excluding the Australian Capital Territory from the numerator only, Table 1.2); if the Australian Capital Territory was excluded from both the numerator and denominator, it was 94%. The estimated coverage was 100% in New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory. For Victoria and South Australia, the majority of public hospital elective surgery was covered by the NESWTDC (81% and 96%, respectively). These estimates will be updated when the total number of elective surgery separations for public hospitals is available in the NHMD, early in 2017.
- Although there are national standards for data on elective surgery waiting times, methods to calculate waiting times have varied between states and territories and over time. For example, in Victoria, Queensland and Tasmania, for patients who were transferred from a waiting list managed by 1 hospital to that managed by another, the time waited on the first list is not included in the waiting time reported to the NESWTDC from the second hospital. Therefore, the number of days waited in those jurisdictions reflected the waiting time on the list managed by the reporting hospital only.
- For 2014–15 and 2015–16, New South Wales did not report the number of patients who were *Transferred to another hospital's waiting list*.
- There is an apparent lack of comparability of clinical urgency categories among jurisdictions, which may result in statistics that are not meaningful or comparable between jurisdictions (see Table 4.10).
- The quality of the data reported for Indigenous status for the NESWTDC has not been formally assessed; therefore, caution should be exercised when interpreting these data.
- The AIHW is unable to assess the quality of the data provided by states and territories to indicate whether admissions from waiting lists had an adverse event or were followed by an unplanned readmission.

### **Clinical urgency categorisation**

There is an apparent lack of comparability of clinical urgency categories among jurisdictions which may result in statistics that are not meaningful or comparable between jurisdictions.

As in previous years, analyses of clinical urgency category data for 2015–16 have shown notable variation in the assignment of clinical urgency categories, both among and within jurisdictions, and for individual surgical specialties and surgical procedures, as well as overall. See Box 4.1 for more information.

With the aim of promoting more nationally consistent and comparable elective surgery urgency categorisation, the AIHW worked with the Royal Australasian College of Surgeons (RACS) to develop national definitions for elective surgery urgency categories, including 'not ready for care'.

The AIHW and the RACS reviewed the existing practices across Australia and reported the findings of their review and recommendations for action in the report *National definitions for elective surgery urgency categories* (AIHW 2013b) which was presented to the Standing Council on Health in late 2012.

The Australian Health Ministers Advisory Council was asked to progress the implementation of the report's recommendations:

- 1. Adopt a statement of an overarching principle for urgency category assignment.
- 2. Adopt simplified, time-based definitions of urgency categories.
- 3. A listing of usual urgency categories for higher volume procedures, to be developed by surgical specialty groups.
- 4. Establish a national process to provide information on comparative urgency categorisation between states and territories.
- 5. Adopt 'treat in turn' as a principle for elective surgery management.
- 6. Clarified approaches for patients who are not ready for surgery because of clinical or personal reasons.

Also as a result of this work, revised definitions for clinical urgency categories and for the glossary items *elective surgery, emergency surgery* and *other surgery* were developed and were implemented in the ESWT NMDSs from 1 July 2015.

Revised definitions for the concept of *ready for surgery* and for *Intended procedure* (replacing the *Indicator procedure* data element) were implemented from 1 July 2016.

### Surgical (indicator) procedures

For this report the more general term of 'surgical procedures' is generally used when referring to the procedures that are technically known as 'indicator procedures'.

These surgical procedures usually account for about 30–35% of elective surgery reported to the NESWTDC. The remainder of records are assigned to a *Not applicable* category.

The 30 most common first procedures reported for elective surgery admissions, for which the reported surgical procedure was *Not applicable*, are presented in Table A1. The information presented in this table is based on 2014–15 data provided by the states and territories for the NHMD.

The 30 most common procedures accounted for 45% of all procedures reported in the *Not applicable* category, or about 28% of all records reported for the NESWTDC in 2014–15. High

volume procedures included, for example, *Excision of lesion of skin and subcutaneous tissue*, *Curettage and evacuation of uterus*, *Release of carpal and tarsal tunnel* and *Thyroidectomy*.

Some miscoding of surgical procedures apparently occurs. For example, in 2014–15, there were 3,204 records with a first procedure of *Tonsillectomy or adenoidectomy* and 2,759 with a first procedure for *Myringotomy*, both of which could be expected to be reported as the specific surgical procedures.

There were also 6,577 records with no procedure reported, which may represent uncoded/miscoded episodes, or episodes for which the patient was admitted but the procedure was not carried out (for example, due to contraindication).

### Quality of Indigenous status data

The quality of Indigenous status information in the data provided for the NESWTDC has not been formally assessed. Therefore, the information presented for Indigenous status for elective surgery waiting times in Chapter 4 should be used with caution.

The AIHW report *Indigenous identification in hospital separations data: quality report* (AIHW 2013a) found that, nationally, about 88% of Indigenous Australians were identified correctly in hospital admissions data in the 2011–12 study period, and the 'true' number of separations for Indigenous Australians was about 9% higher than reported. This underidentification could similarly affect the NESWTDC data.

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

#### New South Wales

The New South Wales Ministry of Health advised that Indigenous status has been collected for elective surgery waiting times data from 2010–11.

### Victoria

The Victorian Department of Health reports that Indigenous status data is of acceptable quality, with valid information recorded for more than 98% of patients admitted and/or removed from elective surgery waiting lists. However, the number of identified Aboriginal and Torres Strait Islander patients is likely to be more accurate within the admitted patient care data, compared with the waiting list data.

#### Queensland

Available evidence suggests that the number of Indigenous patients is understated in Queensland hospital data due to both non-reporting and misreporting of Indigenous status. Despite this, Queensland Health regards the Indigenous status data used in this report to be of an appropriate quality for publication.

#### Western Australia

The Western Australian Department of Health regards its Indigenous status data for elective surgery waiting times as being of good quality. Quality improvement activities, including cross-referencing across patient administration systems, continue to enhance the accuracy of this data element.

#### South Australia

The South Australian Department for Health and Ageing reports that the quality of Indigenous status data in its elective surgery waiting times collection has improved over recent years and is of sufficient quality to be appropriate for publication. However, the number of *Not stated* 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 elective surgery waiting list setting.

#### Tasmania

The Tasmanian Department of Health and Human Services reports that the quality and level of Indigenous status identification, across public hospital information collections, are of a high standard. However, as with all data collections, there is continued work on maintaining and improving the collection of this data element, where needed.

#### Northern Territory

The Northern Territory Department of Health considers the quality of its Indigenous status data for elective surgery waiting times patients to be good, with accuracy at over 90%. 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.

Proce	dure block	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
1620	Excision of lesion(s) of skin and subcutaneous tissue	12,897	10,677	10,917	5,085	4,914	1,225	483	398	46,596
1265	Curettage and evacuation of uterus	6,789	6,168	4,481	2,390	3,011	549	250	801	24,439
1554	Other application, insertion or removal procedures on other musculoskeletal sites	3,329	3,595	2,960	1,381	719	237	309	150	12,680
76	Release of carpal and tarsal tunnel	3,357	2,091	1,953	1,061	1,355	265	88	81	10,251
1744	Excision of lesion of breast	3,167	2,611	1,796	822	726	226	127	58	9,533
1275	Destruction procedures on cervix	2,151	1,694	1,600	703	430	174	103	136	6,991
992	Repair of umbilical, epigastric or linea alba hernia	1,928	1,384	1,409	615	398	154	88	59	6,035
1503	Arthroscopic excision of knee	1,681	1,406	1,208	581	569	103	21	85	5,654
1517	Arthroscopic meniscectomy of knee with repair	1,422	870	559	1,025	1,093	54	51	65	5,139
114	Thyroidectomy	1,744	1,504	863	440	259	78	55	46	4,989
1089	Examination procedures on bladder	3,777	320	182	74	262	283	32	5	4,935
1266	Excision of lesion of uterus	1,926	1,342	608	281	424	82	93	33	4,789
1259	Examination procedures on uterus	1,517	1,049	880	149	693	142	129	51	4,610
1196	Excision procedures on penis	1,186	944	697	831	328	102	49	116	4,253
1522	Reconstruction procedures on knee	1,182	896	1,130	504	350	44	52	43	4,201
1163	Closed biopsy of prostate or seminal vesicle	1,369	914	538	481	457	123	91	3	3,976
1748	Simple mastectomy	1,094	794	867	445	328	98	61	19	3,706
1566	Excision procedures on other musculoskeletal sites	1,147	808	854	442	245	65	54	31	3,646
913	Colectomy	1,180	792	748	240	329	80	71	14	3,454
1067	Endoscopic insertion, replacement or removal of ureteric stent	1,020	630	647	458	374	30	60	27	3,246
412	Tonsillectomy or adenoidectomy	1,245	346	311	292	895	83	23	9	3,204
1260	Insertion or removal of intrauterine device	866	639	647	310	510	133	35	41	3,181
984	Laparoscopy	857	780	750	332	255	78	54	42	3,148
1183	Vasectomy and epididymectomy	900	402	49	942	603	137	6	43	3,082
1404	Other repair procedures on shoulder	1,011	574	691	329	281	54	53	40	3,033
1283	Repair of prolapse of uterus, pelvic floor or enterocele	1,203	592	503	236	344	98	31	5	3,012
754	Transluminal balloon angioplasty	1,342	282	291	783	94	41	176	0	3,009
207	Vitrectomy	809	881	536	302	236	87	80	25	2,956
309	Myringotomy	1,481	213	194	158	635	17	57	4	2,759
	Other procedures	71,148	63,872	50,915	29,077	21,736	5,577	7,696	2,175	252,196
	Not reported	5,378	224	52	348	459	39	68	9	6,577
Total separations for which the indicator procedure was Not applicable		140,103	109,294	89,836	51,117	43,312	10,458	10,546	4,614	459,280

Table A1: The 30 most common first procedures for admissions from public hospital elective surgery waiting lists for which the indicator procedure was reported as Not applicable, states and territories, 2014–15

Note: These data were sourced from the 2014–15 NHMD as 2015–16 data were not available at the time this report was released.

# **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*, versions 16, 16.1 and 16.2 (AIHW 2012, 2015b, 2015c) (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. 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 symbols '<0.1' and '>-0.1' are used to denote numbers between zero and 0.05 and zero and negative 0.05, respectively.

Data on 50th and 90th percentile waiting times and the proportion of patients who waited more than 365 days for their surgery have been suppressed if there were fewer than 100 admissions 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 percentile waiting times

The waiting times data presented in this report are for patients who completed their wait and were admitted for their surgery as either an elective or emergency admission.

In reports before 2011–12, waiting times information was presented for elective admissions only. Therefore, the data presented are not directly comparable with those presented in *Australian hospital statistics* reports before 2011–12.

The 50th percentile (the median or middle value in a group of data arranged from lowest to highest value) represents the number of days within which 50% of patients were admitted for the awaited surgery; half the waiting times will have been shorter, and half the waiting times longer, than the median.

The 90th percentile data represent the number of days within which 90% of patients were admitted for the awaited surgery. The remaining 10% of patients waited longer.

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 50th and 90th percentiles have been rounded to the nearest whole number of days.

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*<sup>th</sup> and (*i*+1)<sup>th</sup> observations.

If  $n \times p$  is not an integer, the percentile value will correspond to the value for the (i+1)<sup>th</sup> 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 ascending waiting time). Similarly, the 90th percentile waiting time 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.

#### Elective surgical episodes with one or more adverse events

This analysis presents the number and proportion of admissions from elective surgery waiting lists where an adverse event was reported. In general, adverse events are defined as incidents in which harm resulted to a person receiving health care. They include infections, falls resulting in injuries, and problems with medication and medical devices. Some of these adverse events may be preventable.

The National Elective Surgery Waiting Times Data Collection (NESWTDC) included a flag indicating whether an adverse event had been reported for a patient after admission from the elective surgery waiting list. The flag was derived by the states and territories from the data reported for the admitted patient episode, not by the AIHW. States and territories were provided with the specification to assist calculation.

The flag was specified as one or more of the following *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification* (ICD-10-AM) (9th edition) diagnosis codes were reported, accompanied by a listed external cause code:

- For diagnoses:
  - T80-T88 code range for complications of surgical and medical care, not elsewhere classified
  - T98.3 Sequelae of complications of surgical and medical care, not elsewhere classified
  - ICD-10-AM chapter-specific diagnosis codes for post-procedural disorders (E89, G97, H59, H95, I97, J95, K91, M96 or N99)
- For external causes of injury and poisoning:
  - Y60-Y69 Misadventures to patients during surgical and medical care
  - Y70-Y82 Medical devices associated with misadventures in diagnostic and therapeutic use
  - Y83-Y84 Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure.

#### **Unplanned readmissions**

The NESWTDC included a flag indicating where a patient admitted from an elective surgery waiting list was readmitted to the same hospital within 28 days. The flag was derived from

the data reported for the admitted patient episode by the states and territories, not by the AIHW. States and territories were provided with the specification to assist calculation.

The specification was that the 28-day period was calculated from patient's date of separation from the admitted patient episode during which the surgery occurred to the patient's admission date for subsequent hospital treatment. Where a patient had more than 1 subsequent admission, only the first admission was flagged.

Records were flagged where the subsequent separation had an urgency of admission of *Emergency* and had one of the following ICD-10-AM (8th edition) principal diagnosis codes:

- T80–T88 code range for complications of surgical and medical care, not elsewhere classified
- T98.3 Sequelae of complications of surgical and medical care, not elsewhere classified
- ICD-10-AM chapter-specific diagnosis codes for post-procedural disorders (E89, G97, H59, H95, I97, J95, K91, M96 or N99).

#### Estimated coverage of the NESWTDC

The estimated proportion of elective surgical separations covered by the NESWTDC data is calculated as the number of admissions for elective surgery reported to the NESWTDC, divided by the number of elective surgical separations (separations with an *Elective* urgency of admission and a *Surgical* Australian Refined Diagnosis Related Group) reported to the National Hospital Morbidity Database (NHMD), as a percentage.

As 2015–16 elective surgery waiting times data for the Australian Capital Territory (the numerator) were not available at the time of publication, two estimates of national coverage for each year (2011–11 to 2015–16) were calculated; an estimate of coverage that included elective surgical separations for the Australian Capital Territory in the denominator (93% in 2015–16), and an estimate that excluded the Australian Capital Territory data from both the numerator and the denominator (94% in 2015–16).

For 2015–16, as the corresponding admitted patient care data were not available, this estimate was based on a comparison of the numbers of admissions and hospitals that were reported to the NESWTDC for 2014–15 and 2015–16, and the number of elective surgical separations reported to the NHMD for 2014–15.

For example:

- if the same hospitals were reported by a jurisdiction for the NESWTDC for both 2014–15 and 2015–16, the jurisdiction's coverage was assumed to be the same for both years
- if the hospitals reported by a jurisdiction changed between 2014–15 and 2015–16, the jurisdiction's coverage was adjusted by increasing (or decreasing) the numerator counts (NESWTDC admissions for 2014–15), based on the number of elective surgical separations reported for the individual hospital(s) to the NHMD for 2014–15
- If a hospital that was included in the NESWTDC for the first time in 2015–16 was not included in the NHMD for 2014–15, the number of elective surgical separations was assumed to be equal to the number of admissions from elective surgery waiting lists.

## **Appendix C: Public hospital peer groups**

This report uses the Australian hospital peer group classification (AIHW 2015a). A summary of the public hospital peer group classification is presented in Table C.1.

Group	Description
Acute public hospitals	Are identified according to the hospital's service profile:
Principal referral hospitals	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.
Public acute group A hospitals	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.
Public acute group B hospitals	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.
Public acute group C hospitals	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.
Public acute group D hospitals	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.
Very small hospitals	Generally have less than 200 admitted patient separations each year.
Specialist hospital groups	Perform a readily identified role within the health system
Women's and children's hospitals	
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.
Early parenting centres	Specialise in care and assistance for mothers and their very young children.
Drug and alcohol hospitals	Specialise in the treatment of disorders relating to drug or alcohol use.

Table C.1: Public hospital peer groups

(continued)

Group	Description
Psychiatric hospitals	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.
Same-day hospitals	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.
Other acute specialised hospitals	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.
Subacute and non-acute hospitals	
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.
Outpatient hospitals	Provide a range of non-admitted patient services. Generally do not admit patients.
Unpeered hospitals	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 Register (METeOR), 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 national minimum data sets (NMDSs). 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 for the 2015–16 Elective surgery waiting times (removals and census data) NMDSs in the *National health data dictionary* versions 16, 16.1 and 16.2 (AIHW 2012, 2015b, 2015c).

**admission:** The process whereby the hospital accepts responsibility for the patient's care and/or treatment. Admission follows a clinical decision based upon specified criteria that a patient requires same-day or overnight care or treatment. METeOR id: 327206

In this report, the term '**admissions from elective surgery waiting lists**' describes episodes for patients who were admitted for elective surgery as either an elective or emergency admission.

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

**clinical urgency:** A clinical assessment of the urgency with which a patient requires elective hospital care. METeOR id: 598034

**elective surgery:** Planned surgery that can be booked in advance as a result of a specialist clinical assessment resulting in placement on an elective surgery waiting list. METeOR id: 568780

**hospital:** A health-care facility established under Australian Government, 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: 268971

**indicator procedure:** The type of procedure for which an elective surgery patient is waiting. Also referred to in this report as **surgical procedure**. Waiting list statistics for indicator procedures give a specific indication of performance in particular areas of elective care provision. METeOR id: 514033

**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 2 of 3 components of the Australian Government definition:

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 person and is accepted as such by the community in which he or she lives. METeOR id: 291036

**overdue patient:** A patient is classified as overdue if ready for care and waiting time at admission or waiting time at a census date is longer than 30 days for patients in clinical urgency *Category 1*, 90 days for patients in clinical urgency *Category 2*, or 365 days for patients in clinical urgency *Category 3*. METeOR id: 599651

**peer group:** A classification of hospitals into broadly similar groups in terms of characteristics (see Appendix C).

**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.

**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.

**public patient:** A patient treated at no charge in a public hospital (or provided with care by a private hospital on behalf of a public hospital). METeOR id: 566080

**reason for removal from waiting list:** The reason a patient is removed from an elective surgery waiting list. METeOR id: 471735

**separation:** An episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). METeOR id: 327268

**surgery:** where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, excluding specific procedures frequently done by non-surgical clinicians. METeOR id: 604410

#### surgical procedure: See indicator procedure.

**surgical specialty:** The area of clinical expertise held by the doctor who will perform the elective surgery. METeOR id: 270146

**waiting time at admission/removal:** The time elapsed (in days) for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were removed from the waiting list. METeOR id: 471744

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# **Related publications**

This report, *Elective surgery waiting times 2015–16: Australian hospital statistics,* is part of an annual series. The earlier editions and any published later can be downloaded for free from the Australian Institute of Health and Welfare (AIHW) website

<www.aihw.gov.au/hospitals-publications/>. The website also includes information on ordering printed copies.

Recent related reports include:

- AIHW 2015. *Staphylococcus aureus* bacteraemia in Australian public hospitals 2014–15: Australian hospital statistics. Health services series no. 67. Cat. no. HSE 171. Canberra: AIHW.
- AIHW 2016. Admitted patient care 2014–15: Australian hospital statistics. Health services series no. 68. Cat. no. HSE 172. Canberra: AIHW.
- AIHW 2016. Australia's health 2016. Australia's health series no. 15. Cat. no. AUS 199. Canberra: AIHW.
- AIHW 2016. Australia's hospitals 2014–15: at a glance. Health services series no. 70. Cat. no. HSE 175. Canberra: AIHW.
- AIHW 2016. Emergency department care 2015–16: Australian hospital statistics. Health services series no. 72. Cat. no. HSE 182. Canberra: AIHW.
- AIHW 2016. Hospital resources 2014–15: Australian hospital statistics. Health services series no. 71. Cat. no. HSE 176. Canberra: AIHW.
- AIHW 2016. Non-admitted patient care 2014–15: Australian hospital statistics. Health services series no. 69. Cat. no. HSE 174. Canberra: AIHW.
- AIHW 2013. National definitions for elective surgery urgency categories: proposal for the Standing Council on Health. Cat. no. HSE 138. Canberra: AIHW.

Please see <www.aihw.gov.au/publications-catalogue/> to access a complete list of AIHW publications relating to Australia's health and welfare.

#### In 2015–16:

- about 712, 000 patients were admitted to Australian public hospitals from elective surgery waiting lists
- 50% of patients were admitted within 37 days, and 90% within 260 days
- about 2.0% of patients had waited more than a year for their surgery, an improvement compared with 2.7% in 2011–12.