# 6 Access to elective surgery

# Introduction

This chapter presents information related to access to elective surgery using different sources of data. The first two sources listed below relate to 'elective surgery' as defined in the *National health data dictionary* (HDSC 2006). The third data source relates to elective surgical separations for both public and private hospitals. They include all separations that were reported as elective and with a surgical procedure, as defined for the AR-DRG classification (see *Chapter 12*). In summary the three data sources are:

- Data for almost 565,000 patients admitted from public acute hospital elective surgery waiting lists (tables 6.1 to 6.6 and Figure 6.1). These data are sourced from the National Elective Surgery Waiting Times Data Collection (NESWTDC). The records include information on waiting times, surgical specialty of the scheduled doctor and Indicator procedures.
- Linked public hospital elective surgery waiting times and admitted patient data for over 550,000 records (Table 6.6 and figures 6.2 to 6.10). The linkage allowed demographic and diagnosis information to be analysed in conjunction with information on waiting times, surgical specialty and Indicator procedure. These data are presented as separation rates and median waiting times by remoteness areas, quintile of socioeconomic advantage/disadvantage and Indigenous status.
- Information on approximately 1.7 million elective surgical separations, sourced from the National Hospital Morbidity Database (NHMD) (Table 6.7 and figures 6.11 to 6.14).

Similar analyses of linked data and the data sourced from the NHMD for 2004–05 were presented in *Elective surgery in Australia: new measures of access* (AIHW 2008c).

# Variation in scope and analysis methods

The three data sources vary in scope and incorporate different data analysis methods.

#### Scope

The scope of the NESWTDC is patients on waiting lists for elective surgery which are managed by public acute hospitals, and may include private patients treated in public hospitals, and public patients treated in private hospitals.

The scope of the NHMD is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free standing day hospital facilities and alcohol and drug treatment centres in Australia.

For the linked public hospital admitted patient and elective surgery waiting times data, the scope is patients admitted from public acute hospital waiting lists for elective surgery. For 2007–08, all states and territories provided elective surgery waiting times data linkable to the NHMD. Overall, 97% of elective surgery records were linked to the NHMD. For most states and territories, the linked data includes patients treated at a hospital other than the hospital at which they were listed.

The 3% of records not linked included records for patients awaiting more than one procedure where:

- the second (and subsequent) elective surgery waiting list records may not have been identified where multiple awaited procedures were performed during the same admitted patient episode or
- the second (and subsequent) admitted patient episodes may not have been identified.

## **Analysis methods**

The definition of elective surgery care for the purposes of the NESWTDC and the linked data analyses, and the definition of elective surgical separations in the NHMD differ. In particular, the procedures defined as surgical differ between those used to define the scope of the NESWTDC and those used to define elective surgical separations in the NHMD.

For the NESWTDC, elective surgery comprises elective care where the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians (HDSC 2006).

For the NHMD, separations have been classified as elective surgical separations if they had an elective urgency of admission (see *Chapter 7*). The definition of 'surgical procedure' is based on the procedures used to define 'surgical' DRGs in *Australian Refined Diagnosis Related Groups, version 5.1* (DoHA 2004b). For more information see *Elective surgical separations*.

# **Elective surgery**

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

This section presents national statistics for elective surgery waiting times for the years 2003–04 to 2007–08, and a state and territory overview of elective surgery waiting times for 2007–08. Information on the number of days waited at the 50th and 90th percentiles by patients admitted from waiting lists for elective surgery, the proportion of patients waiting greater than 365 days, and the number of patients admitted is presented by public hospital peer group. Information is also included by the specialty of the surgeon who was to perform the elective surgery and by Indicator procedure.

The 50th percentile (the median or the middle value in a group of data arranged from lowest to highest value for days waited) represents the number of days within which 50% of patients were admitted; half the waiting times will have been shorter, and half the waiting times longer, than the median. The 90th percentile data represent the number of days within which 90% of patients were admitted. The 50th and 90th percentiles have been rounded to the nearest whole number of days.

The data cover public hospitals only, except as noted below in the description of the coverage of the data collection.

The waiting times data presented here for patients who complete their wait and are admitted for their surgery on an elective basis are generally used as the main summary measure of elective surgery waiting times. Most patients are admitted after waiting; however, some patients are removed from waiting lists for other reasons. Other reasons for removal are that the patient was admitted as an emergency patient for the awaited procedure; was transferred to another hospital's waiting list; had been treated elsewhere; was not contactable; had died, or had declined surgery. Information on time spent on waiting lists is therefore also presented for those reasons for removal.

The number of patients added to waiting lists and the number of patients removed from waiting lists for admission or other reasons are also presented in this chapter. This provides information about the movement of patients onto and off waiting lists.

*National health data dictionary* definitions (HDSC 2006) are the basis of the NESWTDC (see *Chapter 1*) and are summarised in the glossary. However, some of the definitions used varied slightly among the states and territories in 2007–08 and in comparison with previous reporting periods. Comparisons between jurisdictions and between 2007–08 and previous reporting periods should therefore be made with reference to the notes on the definitions used and to previous reports (AIHW 2004a, 2005a, 2006a, 2007a, 2008a).

#### Variation in methods to calculate waiting times

Waiting times were generally calculated by comparing the date on which a patient was added to a waiting list with the date that the patient was removed. Days on which a patient was 'not ready for care' were excluded.

For reporting periods before the 2004–05 collection period, South Australia used a different method from other states and territories to calculate waiting times for patients who changed clinical urgency category. However, from the 2004–05 reporting period, South Australia has been able to report waiting times as per the agreed national standard for calculating waiting times, that is:

Counting the time waited in the most recent urgency category plus any time waited in more urgent categories, e.g. time waiting in category 2, plus time spent previously in category 1.

This would have the effect of decreasing the apparent waiting time for South Australian admissions in 2004–05 and later years compared with previous reporting periods. In previous periods South Australia counted the waiting time in all urgency categories.

#### Transfers between waiting lists

In some states and territories, for patients who were transferred from a waiting list managed by one hospital to that managed by another, the time waited on the first list is not included in the waiting time reported to the NESWTDC. Therefore, the number of days waited in those jurisdictions reflects the waiting time on the list managed by the reporting hospital only. This has the effect of shortening the reported waiting time compared with the time actually waited by these patients.

New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory were able to report the total time waited on all waiting lists. This could have the effect of increasing the reported waiting time for admissions in these states and territories compared with other jurisdictions. Queensland has indicated that it is uncommon for patients to be transferred from a waiting list managed by one public hospital to that managed by another public hospital.

# Waiting times and other data elements reported for elective surgery

Figure 6.1 presents data on patients admitted to hospital from elective surgery waiting lists for surgery performed by a doctor whose surgical specialty was *Plastic surgery*. The information presented by Indicator procedure and public hospital peer groups is sourced from the NESWTDC. The other information provided in Figure 6.1 was available for records where the data for elective surgery waiting times could be linked to the NHMD (98% of records with a surgical specialty of *Plastic surgery*), thus allowing waiting times information for patients to be related to other information about their admission for elective surgery.

Australia-wide there were:

- 40,000 admissions for surgery performed by a doctor whose surgical specialty was *Plastic surgery*
- the median waiting time for these patients was 26 days
- 3.2% of these patients waited more than 365 days for admission
- more than 99% of admissions for *Plastic surgery* were not for one of the Indicator procedures.

For NESWTDC data linked to the NHMD data, there were:

- over 39,000 admissions for *Plastic surgery* and these accounted for over 79,000 patient days
- the average length of stay was 2.0 days
- the most common procedure (other than *Cerebral anaesthesia*) was *Excision of lesion of skin and subcutaneous tissue* (Block 1620)
- the most common principal diagnosis reported was *Other malignant neoplasms of skin* (C44), followed by *Fracture at wrist and hand level* (S62)
- the most common AR-DRG reported was *Other skin, subcutaneous tissue and breast procedures* (J11Z)
- the age group with the highest proportion of separations was 65–74 years and there were more separations for males than females
- 98.5% of these episodes had a separation mode of *Other*, suggesting that these patients went home after separation from hospital.

# State and territory overview

#### Coverage

The NESWTDC covers public acute hospitals only. However, some public patients treated under contract in private hospitals in Victoria and Tasmania were included. Data for the Mersey Community Hospital are included with the Tasmanian data. See *Appendix 2* for more information on the data for that hospital.

The data collection covered most public hospitals that undertake elective surgery. Tables 6.1 and 6.2 show that coverage of the collection was highest for the *Principal referral and Specialist women's and children's hospitals* peer group with 83 hospitals reported in this peer group. The collection covered 35 *Large hospitals*, and 51 *Medium hospitals*. Hospitals that were not included may not undertake elective surgery, may not have had waiting lists, or may have had different waiting list characteristics compared with reporting hospitals. Some smaller

remote hospitals may have different patterns of service delivery compared with other hospitals because specialists providing elective surgery services visit these hospitals only periodically.

Tables 6.1 and 6.2 also present estimates of the proportions of elective surgical separations that were covered by the NESWTDC. The AIHW derived these estimates from data provided by the states and territories for the NHMD as:

The number of separations with Urgency of admission reported as *Elective* and a surgical procedure for public hospitals reporting to the NESWTDC as a proportion of the number of separations with Urgency of admission reported as *Elective* and a surgical procedure for all public hospitals.

Separations for cosmetic surgery were excluded from the estimated coverage calculations. The definition of 'surgical procedure' used for these estimates is detailed in the *Glossary* and based on the procedures used to define 'surgical' in *Australian Refined Diagnosis Related Groups, version 5.1* (DoHA 2004b). Information about 'urgency of admission' is detailed in *Chapter 7*.

Based on this measure, coverage was 100% for the *Principal referral and Specialist women's and children's hospitals* peer group and was progressively lower for the *Large hospitals* and *Medium hospitals* groups (Table 6.1). Overall coverage of the NESWTDC was about 91% in 2007–08, and ranged from 100% in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory to 70% in South Australia (Table 6.2).

#### Admissions from waiting lists for elective surgery

Overall, there were 565,501 admissions from waiting lists (26.6 per 1,000 population) in 2007–08, compared with 556,770 (26.7 per 1,000 population) in 2006–07 (Table 6.1).

Hospitals in the *Principal referral and Specialist women's and children's hospitals* peer group accounted for 71.0% of admissions from elective surgery waiting lists in 2007–08, compared with 70.9% in 2006–07. Another 17.2% were reported for hospitals in the *Large hospitals* peer group in 2007–08, compared with 15.9% in 2006–07. In 2007–08 10.3% of admissions arose from the *Medium hospitals* peer group compared with 11.4% in 2006–07.

#### Distribution of waiting times

Overall, the median waiting time for patients who were admitted from waiting lists was 34 days in 2007–08, 32 days in 2006–07, 32 days in 2005-06, 29 days in 2004–05 and 28 days in 2003–04 (Table 6.1). In 2007–08, the median waiting time for patients admitted from waiting lists for hospitals in the *Principal referral and Specialist women's and children's hospitals* peer group (31 days) was shorter than for the *Large hospitals* and *Medium hospitals* peer groups (39 days and 42 days respectively) (Table 6.1). In 2007–08, the median waiting time ranged from 27 days in Queensland to 72 days in the Australian Capital Territory (Table 6.2).

In 2007–08, 90% of patients were admitted within 235 days, compared with 226 days in 2006-07, 237 days in 2005–06, 217 days in 2004–05 and 193 days in 2003–04. In 2007–08, the 90th percentile for waiting time ranged from 137 days in Queensland to 372 days in the Australian Capital Territory (Table 6.2).

#### Proportion waiting more than 365 days

Overall, the proportion of patients admitted after waiting more than 365 days was 3.0% in 2007–08, compared with 3.1% in 2006–07 and 3.9% in 2003–04 (Table 6.1). In 2007–08, this

proportion ranged from 1.8% in New South Wales to 10.3% in the Australian Capital Territory (Table 6.2).

In the *Principal referral and Specialist women's and children's hospitals* peer group in 2007–08, 3.4% of patients were admitted after waiting more than 365 days, as were 2.4% of patients in the *Large hospitals* peer group, and 1.4% of patients in the *Medium hospitals* peer group.

# Additions to and removals from waiting lists

Table 6.3 shows the movement of patients on and off waiting lists in 2007–08. This includes data on the total number of patients added to and removed from waiting lists, the distribution of days waited by patients removed from waiting lists and the proportion of patients waiting more than 365 days before being removed from waiting lists.

#### States and territories

In 2007–08 nearly 741,000 patients were added to elective surgery waiting lists and 661,000 patients were removed from elective surgery waiting lists, whether they were admitted for the procedure they were waiting for or were removed for other reasons. In 2007–08, New South Wales, Queensland, South Australia, Tasmania and the Northern Territory did not report removals from waiting lists for transfer to another hospital's waiting list. This could have an effect of increasing the waiting times reported for overall removals for those three jurisdictions relative to others.

*Elective admissions* accounted for the most removals from waiting lists in 2007–08 (85.5%), ranging from 82.5% in the Australian Capital Territory to 88.0% in South Australia. *Surgery not required or declined* accounted for 7.1% of removals. A further 3.4% of removals (23,000 patients) were *Treated elsewhere*, 1.4% (9,500) were *Not contactable/died*, and 0.9% (5,700) were *Emergency admissions*.

#### Distribution of waiting times

Overall, the reason for removal category with the shortest median waiting time in 2007–08 was *Emergency admission* (3 days), and the category with longest median waiting time was *Not contactable/died* (165 days) (Table 6.3).

As was the case with median waiting times, the reason for removal category with the shortest waiting time by which 90% of patients were removed was *Emergency admission* (84 days) and the category with the longest waiting time was *Not contactable/died* (456 days). The length of time by which 90% of patients were removed from waiting lists varied substantially between states and territories in most reason for removal categories. For example, waiting times at the 90th percentile in the *Emergency admission* category ranged from 15 days in Queensland to 277 days in Tasmania.

#### Proportion waiting more than 365 days

In 2007–08 the reason for removal category with the lowest proportion of patients waiting more than 365 days before removal was *Emergency admission* (0.9%) and the category with the highest proportion was *Not contactable/died* (16.8%) (Table 6.3).

The proportion of patients waiting more than 365 days differed substantially between states and territories in 2007–08. Overall, it ranged from 1.9% in New South Wales to 13.6% in

Tasmania. For the removal category *Not contactable or died* it ranged from 3.4% in New South Wales to 45.6% in the Northern Territory.

# Specialty of surgeon

The specialty of the surgeon describes the area of clinical expertise held by the doctor who was to perform the elective surgery.

#### States and territories

Table 6.4 shows the number of admissions from waiting lists, the distribution of days waited and the proportion of admissions where people waited more than 365 days in 2007–08. These data are presented by the specialty of the surgeon who was to perform the surgery and by state and territory.

#### Distribution of waiting times

*Ophthalmology, Ear, nose and throat surgery* and *Orthopaedic surgery* were the surgical specialties with the longest median waiting times in 2007–08 (68 days, 57 days and 54 days respectively). Almost all of the other surgical specialties (excluding *Gynaecology*) had median waiting times of less than 30 days; *Cardio-thoracic surgery* had the shortest median waiting time (12 days) (Table 6.4).

There was a marked variation between states and territories in the median waiting time for *Ear, nose and throat surgery,* with 50% of patients being admitted within 28 days in Queensland and within 135 days in the Australian Capital Territory. *Cardio-thoracic surgery* had the least variation between states and territories in the median waiting times, ranging from 6 days in Victoria to 21 days in Tasmania.

The length of time by which 90% of patients had been admitted also varied by surgical specialty in 2007–08, from 78 days for *Cardio-thoracic surgery* to 335 days for *Ear, nose and throat surgery*.

#### Proportion waiting more than 365 days

*Ear, nose and throat surgery* and *Orthopaedic surgery* were the specialties with the highest proportion of patients who waited more than 365 days to be admitted (6.2% and 5.8% respectively) (Table 6.5). *Cardio-thoracic surgery* had the lowest proportion of patients who waited more than 365 days (0.1%).

There was marked variation among the states and territories in the proportion of patients who waited more than 365 days to be admitted for some surgical specialties. For example, for *Ophthalmology*, 1.9% of patients waited more than 365 days in Victoria, compared with 30.7% of patients in Tasmania.

#### Admissions from waiting lists

Nationally, admissions from waiting lists were highest for the specialty of *General surgery* (138,100) and lowest for *Neurosurgery* (9,400) (Table 6.4). Admissions from waiting lists were also highest for *General surgery* across all jurisdictions. The surgical specialty with the lowest number of admissions (excluding *Other*) was *Neurosurgery* in New South Wales, Queensland, Western Australia, South Australia and Tasmania, *Cardio-thoracic surgery* in Victoria and the Australian Capital Territory and *Plastic surgery* in the Northern Territory.

## Indicator procedures

Indicator procedures are procedures which are of high volume and are often associated with long waits.

#### States and territories

Table 6.5 presents data on the distribution of days waited, the proportion of patients who waited more than 365 days, and the total number of patients admitted from waiting lists, by Indicator procedure and state and territory for 2007–08.

#### Distribution of waiting times

Nationally, the indicator procedure with the lowest median waiting time in 2007–08 was *Coronary artery bypass graft* (14 days) and the one with the highest median waiting time was *Total knee replacement* (160 days) (Table 6.5).

There was marked variation among the states and territories in the median waiting time for *Total knee replacement,* ranging from 77 days in Queensland to 381 days in Tasmania.

The length of time by which 90% of patients had been admitted also varied by indicator procedure, from 97 days for *Coronary artery bypass graft* to 430 days for *Varicose veins stripping and ligation*.

#### Admissions from waiting lists

Overall, 33.7% of patients admitted for elective surgery had been waiting for one of the 15 Indicator procedures. There was some variation among the states and territories: the Australian Capital Territory had the highest proportion of admissions for the Indicator procedures (39.2%) and Tasmania had the lowest proportion (25.0%).

*Cataract extraction* was the highest volume indicator procedure across all jurisdictions, other than Tasmania where *Cystoscopy* was the highest. *Myringoplasty* was the lowest volume Indicator procedure for New South Wales, Victoria, South Australia and Tasmania (451, 409, 90 and 20 admissions, respectively). For Western Australia, *Varicose vein stripping and ligation* was the lowest volume Indicator procedure with 147 admissions. *Haemorrhoidectomy* was the lowest volume Indicator procedure in Queensland and the Australian Capital Territory (443 and 22 admissions, respectively) and *Prostatectomy* was lowest for the Northern Territory with 10 admissions.

# Linked public hospital elective surgery waiting times and admitted patient data

While elective surgery waiting times data serve as a useful measure of access to elective surgery from public hospital waiting lists, these data do not provide information by population sub-groups.

As a guide to the coverage of the linked data by socioeconomic status and remoteness areas, a comparison was done with the NHMD data for public elective surgical separations. The linked data represented approximately 88% of the public elective surgical separations presented later in this chapter (including patients admitted from a public hospital waiting list as a private patient). However, the coverage varied by the remoteness of the patient's usual residence and by quintile of socioeconomic advantage/disadvantage.

Remoteness areas	Estimated coverage	Quintile of socioeconomic advantage/disadvantage	Estimated coverage
Major cities	100%	Most disadvantaged	86%
Inner regional	76%	Second most disadvantaged	86%
Outer regional	64%	Middle quintile	85%
Remote	60%	Second most advantaged	95%
Very remote	68%	Most advantaged	100%

Table 6.A: Estimated coverage of the linked elective surgery data and public elective surgical separations data, 2007–08

Note: Estimated coverage of the linked elective surgery and admitted patient data, compared with records for public elective surgical separations in the National Hospital Morbidity Database.

Coverage of the linked data by remoteness areas ranged from 60% in *Remote* areas to 100% in *Major cities*. Coverage by quintile of socioeconomic advantage/disadvantage ranged from 85% for the *Middle* quintile to 100% for the *Most advantaged* quintile (Table 6.A). These variations in coverage should be considered when interpreting the age-standardised rates presented in this section with the rates based on the elective surgical separations data presented later in this chapter.

For 2007–08, all states and territories provided the elective surgery waiting times either pre-linked or linkable to the admitted patient data, so that the information on waiting times are linked to the information on the surgery that occurred at the end of the wait. Where necessary, the AIHW linked the data with permission of the relevant state and territories and with permission of the AIHW Ethics Committee.

Using the linked elective surgery and admitted patient data for 2007–08, age-standardised rates of the provision of (or access to) public hospital elective surgery are presented below. Estimates of the separation rates are provided by remoteness area and quintile of socioeconomic advantage/disadvantage of area of usual residence, and Indigenous status of the patient. The data presented in this section include rate ratios by Indicator procedure (see *Appendix 1*). Rate ratios markedly different from 1.0 indicate that the rate of elective surgery for the group of interest is different from the overall rate (or from the Non-Indigenous rate for the analyses by Indigenous status).

Estimates of the median waiting times are also provided by remoteness area and quintile of socioeconomic advantage/disadvantage of area of usual residence, and Indigenous status of the patient.

Information is also presented on variation in waiting times by principal diagnosis within surgical specialties.

#### Coverage

The linkage resulted in approximately 550,000 linked records being available for analysis, representing over 97% of records of all records in the NESWTDC. The linkage resulted in 98.4% of New South Wales elective surgery records linked, 97.5% for Victoria, 100% for Queensland, 90.5% for Western Australia, 99.4% for South Australia, 83.5% for Tasmania, 99.5% for the Australian Capital Territory and 79.3% for the Northern Territory.

#### Overview

For 2007–08, the overall rate of admission from the linked data was 26.0 per 1,000 persons, and the median waiting time to admission from public hospital waiting lists was 34 days.

#### **Remoteness area**

Overall, approximately 69% of admissions from waiting lists for elective surgery were for patients residing in *Major cities*, 21% in *Inner regional* areas and 9% in *Outer regional* areas.

The median waiting time varied by remoteness ranging from 33 days for people living in *Remote* areas to 42 days for people living in *Very remote* areas (Figure 6.2).

Separation rate ratios (SRR) and median waiting times varied for all Indicator procedures across remoteness areas.

#### Indicator procedure separation rate ratios

Figure 6.3 presents standardised separation rate ratios by Indicator procedure and remoteness area. SRRs for *Tonsillectomy* varied markedly with people living in *Major cities* and *Inner regional* areas admitted at more than twice the rate of people living in *Very remote* areas. The SRR for *Coronary artery bypass graft* for people living in *Very remote* areas was about 1.8 times the national rate (Figure 6.3).

#### Indicator procedure waiting times

There was some variation in the median waiting time for remoteness areas by Indicator procedure. For Indicator procedures with at least 50 admissions for *Remote* and *Very remote* areas, *Total knee replacement* had the greatest variation in waiting times by remoteness area with people from *Outer regional* areas having the highest median waiting time of 233 days, and the lowest in *Major cities* (135 days), followed by *Very remote* areas (146 days). *Coronary artery bypass graft* had the least variation by remoteness area (Figure 6.4).

#### Socioeconomic status

Median waiting times and SRRs are presented by socioeconomic quintiles using the Australian Bureau of Statistics' (ABS) Index of Relative Socio-Economic Advantage/ Disadvantage (ABS 2008a) based on the statistical local area reported as the area of usual residence of the patient (see *Appendix 1*).

Overall, approximately 26% of admissions from waiting lists were for patients in the *Most disadvantaged* quintile, decreasing to about 13% in the *Most advantaged* quintile.

Median waiting times varied by quintile of socioeconomic advantage/disadvantage, ranging from 28 days for people in the *Most advantaged* quintile to 38 days for the *Second most disadvantaged* quintile (Figure 6.5).

Separation rate ratios (SRR) and median waiting times varied for all Indicator procedures by quintile of socioeconomic advantage/disadvantage.

#### Indicator procedure separation rate ratios

The greatest variation in SRRs by quintile of socioeconomic advantage/disadvantage was for *Coronary artery bypass graft*, with the SRRs ranging from 1.4 for the *Most disadvantaged* quintile (about 40% higher than the overall rate) to 0.5 for the *Most advantaged* quintile (about 50% lower than the overall rate). The SRRs for *Myringotomy* were more evenly distributed among

socioeconomic groups, with the *Middle* quintile about 5% higher than the overall rate, and the *Most advantaged* quintile about 25% lower than the overall rate (Figure 6.6).

#### Indicator procedure waiting times

*Septoplasty* was the Indicator procedure with the greatest variation in waiting times by quintile of socioeconomic advantage/disadvantage, ranging from 174 days for people in the *Second most disadvantaged* quintile to 114 days for people in the *Middle* quintile. *Cholecystectomy, Coronary artery bypass graft* and *Cystoscopy* had the least variation by quintile of socioeconomic advantage/disadvantage (Figure 6.7).

#### Indigenous status

For 2007–08, there were over 11,400 admissions from waiting lists for patients identified as Aboriginal and/or Torres Strait Islander persons in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. The quality of Indigenous status in the NHMD is variable, so the data in this section should be used with caution. For more information on the quality of Indigenous status data see *Appendix 1*.

Overall, the median waiting time for Indigenous persons was greater than the median waiting time for Other Australians (37 days and 33 days respectively, Figure 6.8).

#### Indicator procedure separation rate ratios

The SRRs presented in Figure 6.9 compare the standardised separation rates for Indigenous persons to the rates for Non-Indigenous persons, and include confidence intervals. For 11 of the 15 Indicator procedures, the confidence intervals indicate that the rates for Indigenous Australians were significantly different from the rates for Other Australians. The rates were not significantly different for *Haemorrhoidectomy*, *Prostatectomy*, *Tonsillectomy* and *Total knee replacement*.

The highest SRRs were reported for *Myringoplasty* (4.6) and *Coronary artery bypass graft* (3.8), with the rates of admission for Indigenous Australians higher than the rates for Other Australians. Indigenous Australians had lower SRRs of 0.6 for *Septoplasty, Total hip replacement* and *Varicose veins stripping and ligation* and 0.8 for *Inguinal herniorrhaphy* (Figure 6.9).

#### Indicator procedure waiting times

The number of separations for Indigenous persons was very small (less than 100) for six of the 15 Indicator procedures (*Haemorrhoidectomy*, *Prostatectomy*, *Septoplasty*, *Total hip replacement*, *Total knee replacement* and *Varicose veins stripping and ligation*). Indigenous Australians had higher median waiting times for eight of the nine Indicator procedures with at least 100 separations for Indigenous Australians. The greatest difference in median waiting times was for *Myringoplasty*, for which Indigenous Australians waited longer than Other Australians (196 and 92 days, respectively). *Hysterectomy*, *Coronary artery bypass graft* and *Inguinal herniorrhaphy* had the least variation by Indigenous status (Figure 6.10).

#### Specialty of surgeon

#### **Diagnosis information**

There is interest in how long patients for whom elective surgery is more urgent are waiting compared with other patients. The linked data allow diagnosis information to be considered

alongside waiting times information. In this way, the waiting times for patients awaiting surgery with malignancies, for example, can be compared to the waiting times for patients awaiting the same surgery for other conditions.

Table 6.6 shows that there is some variation in the waiting times by surgical specialty and principal diagnosis. Neoplasm-related principal diagnoses were defined by ICD-10-AM diagnosis codes included in Chapter II Neoplasms (C00–D48).

Overall, the median waiting times for patients with neoplasm-related principal diagnoses were 14 days shorter than the median waiting times for patients with other conditions. The largest variation in median waiting time by surgical specialty was for *Ophthalmology*, for which patients with a neoplasm waited 27 days compared with 86 days for patients with cataracts and 56 days for patients with other conditions. The only specialty with longer median waiting times for neoplasms than for other diagnoses was *Plastic surgery*.

There is also some variation in the waiting times for elective surgery for other principal diagnoses. For example, for *Orthopaedic surgery* waiting times were higher for patients with a principal diagnosis of *Gonarthrosis of the knee*, with a median waiting time of 135 days, compared with a median of 53 days overall.

# **Elective surgical separations**

While elective surgery waiting times data serve as a useful measure of access to elective surgery from public hospital waiting lists, these data do not provide information on access to elective surgery provided by the private sector.

This section presents information based on admitted patient data for both public and private hospitals. For this analysis:

- elective surgical separations were defined as a separation with an *Elective* Urgency of admission (admission could be delayed by at least 24 hours) and a 'surgical procedure' was reported, based on the procedures used to define 'surgical' DRGs in *Australian Refined Diagnosis Related Groups, version 5.1* (DoHA 2004b). Separations for cosmetic surgery or with childbirth-related AR-DRGs, were excluded.
- Private elective surgical separations refers to elective surgical separations for private patients in private hospitals.
- Public elective surgical separations refers to elective surgical separations in public hospitals and includes elective surgical separations for public patients in private hospitals.
- These episodes are not necessarily the same as elective surgery as defined in the National Minimum Data Set for Elective surgery waiting times (see below).

These data are presented as separation rates by remoteness areas, socioeconomic status and Indigenous status.

Over 84% of the elective surgery admissions (from the linked NHMD and NESWTDC data) were also classified as elective surgical separations in the NHMD. For the remaining 16% of elective surgery admissions, these records may have had an Urgency of admission reported as other than *Elective*, or may not have been categorised to a surgical DRG. These accounted for approximately 5% of the combined number of elective surgery admissions and elective surgical separations (Figure 6.A). Approximately 10% of patients admitted from a public

hospital waiting list were admitted as a private patient, and these accounted for 3% of the combined number of elective surgery admissions and elective surgical separations.

Of the NHMD records classified as public elective surgical separations, 26% were not elective surgery records. This includes admissions for public patients who were not on a hospital waiting list.



### Public and private elective surgical separations

In 2007–08, there were over 1.7 million elective surgical separations in public and private hospitals. Over 1.1 million of these were private elective surgical separations (64%), with the remaining 619,000 separations (36%) being public elective surgical separations. Approximately 13% of public hospital separations and 36% of private hospital separations were classified as elective surgical separations.

The linked data presented earlier in this chapter represented approximately 88% of the public elective surgical separations presented in this section (including patients admitted from a public hospital waiting list as a private patient). However, as noted earlier the coverage varied by the remoteness of the patient's usual residence and by quintile of socioeconomic advantage/disadvantage (see Table 6.A).

#### Elective surgical separation rates

Separation rates for elective surgical separations are one measure of access to surgery on an elective basis and can provide indications of whether access is equitable for different population sub-groups. In this section, the rates are presented by the remoteness area of

usual residence, by quintile of socioeconomic advantage/disadvantage (based on area of usual residence) and by Indigenous status.

Overall there were 52 private elective surgical separations per 1,000 persons and 29 public elective surgical separations per 1,000 persons.

#### Remoteness area of usual residence

The overall rate for elective surgical separations was highest for those living in *Inner regional* areas (83 per 1,000 persons) and decreased with increased remoteness to 51 per 1,000 persons in *Very remote* areas (Figure 6.11).

The rate of private elective surgical separations was highest for those living in *Major cities* (54 per 1,000 persons) and also decreased with increasing remoteness to 21 per 1,000 persons for *Very remote* areas. This may reflect variations in the availability of private hospital services in the more remote areas of Australia. The rate of public elective surgical separations was lowest for those living in *Major cities* (26 per 1,000) and highest for those living in *Outer regional* areas (37 per 1,000).

#### Socioeconomic status

Figure 6.12 presents separation rates per 1,000 population for elective surgical separations by quintile of socioeconomic advantage/disadvantage (see *Appendix 1*). There was some variation in both private and public elective surgical separation rates.

Overall elective surgical separations were highest for the *Most advantaged* quintile (86 per 1,000 persons) and tended to decrease with increasing disadvantage to 76 per 1,000 persons for the *Most disadvantaged* quintile.

The rate of private elective surgical separations was highest for the *Most advantaged* quintile (69 per 1,000 persons), and decreased to 38 per 1,000 persons for the *Most disadvantaged* quintile.

The rate of public elective surgical separations was lowest for the *Most advantaged* quintile (17 per 1,000) and highest for the *Most disadvantaged* quintile (38 per 1,000).

#### Indigenous status

Excluding data for Tasmania and the Australian Capital Territory, there were over 15,000 elective surgical separations in 2007–08 for patients reported as Aboriginal and/or Torres Strait Islanders. Over 85% of these (13,000) were for public elective surgical separations.

The overall rate of separations for elective surgical separations for Indigenous Australians was 48 per 1,000, about 61% of the rate for Other Australians (78 per 1,000).

The rate for public elective surgical separations for Indigenous Australians (38 per 1,000) was about 37% higher than for Other Australians (28 per 1,000). The rate for private elective surgical separations for Other Australians (50 per 1,000) was markedly higher than the rate for Indigenous Australians (10 per 1,000) (Figure 6.13).

Caution should be used in the interpretation of these data as there is considerable variation in the quality of Indigenous status reporting both among jurisdictions and by hospital sector (see *Appendix 1* for more information). In particular, the identification of Indigenous Australians for private hospitals is considered to be poor (AIHW 2005c, 2009).



Separations for which the care type was reported as Newborn with no qualified days, and records for Hospital boarders and Posthumous organ procurement have been excluded. q

Abbreviations: CC-complications and comorbidities; Cat-Catastrophic; Sev-severe; OR-operating room; W/O-without; ALOS-average length of stay.

Figure 6.1: Interrelationships of a specialty of surgeon (Plastic surgery) with other data elements, elective surgery, all hospitals, 2007–08

Table 6.1: Waiting time statistics for patients admitted from waiting lists for elective surgery, by
public hospital peer group, Australia, 2003-04 to 2007-08

	2003–04	2004–05	2005–06	2006–07	2007–08
Principal referral and Specialist women's & children's	hospitals				
Number of reporting hospitals <sup>(b)</sup>	68	75	78	82	83
Estimated coverage of surgical separations (%) <sup>(c)</sup>	99	99	99	98	100
Number of admissions <sup>(d)</sup>	343,430	372,085	386,203	394,831	401,518
Days waited at 50th percentile	27	28	30	30	31
Days waited at 90th percentile	182	203	228	225	233
% waited more than 365 days	3.9	4.6	4.7	3.4	3.4
Large hospitals					
Number of reporting hospitals <sup>(b)</sup>	42	36	34	30	35
Estimated coverage of surgical separations (%) <sup>(c)</sup>	85	82	81	77	80
Number of admissions <sup>(d)</sup>	110,284	100,916	97,816	88,433	97,475
Days waited at 50th percentile	30	29	35	33	39
Days waited at 90th percentile	206	227	251	224	237
% waited more than 365 days	4.2	4.8	4.6	2.7	2.4
Medium hospitals					
Number of reporting hospitals <sup>(b)</sup>	58	59	51	52	51
Estimated coverage of surgical separations (%) <sup>(c)</sup>	59	62	62	63	64
Number of admissions <sup>(d)</sup>	68,790	69,830	63,641	63,658	58,076
Days waited at 50th percentile	34	37	38	39	42
Days waited at 90th percentile	215	272	257	231	238
% waited more than 365 days	3.3	6.1	3.8	1.7	1.4
Total <sup>(e)</sup>					
Number of reporting hospitals <sup>(b)</sup>	196	195	191	192	192
Estimated coverage of surgical separations (%) <sup>(c)</sup>	87	87	87	88	91
Number of admissions <sup>(d)</sup>	528,949	549,746	556,951	556,770	565,501
Admissions per 1,000 population <sup>(f)</sup>	26.5	27.2	27.2	26.7	26.6
Days waited at 50th percentile	28	29	32	32	34
Days waited at 90th percentile	193	217	237	226	235
% waited more than 365 days	3.9	4.8	4.6	3.1	3.0

(a) For more information on the public hospital peer group classification, see Appendix 1.

(b) Number of hospitals reporting to the National Elective Surgery Waiting Times Data Collection. See Appendix 2 for further information.

(c) This is the number of separations with an Urgency of admission reported as Elective and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with an Urgency of admission reported as Elective and a surgical procedure for all public hospitals.

(d) Number of admissions for elective surgery reported to the National Elective Surgery Waiting Times Data Collection.

(e) Includes data for hospitals not included in the specified hospital peer groups and some private hospitals contracted to do elective surgery.

(f) Crude rate based on the Australian estimated resident population as at 31 December of the period in question.

Principal referral and Specialist women's & children's hospitals   29   20     Number of reporting hospitals <sup>(b)</sup> 100   100   100   100     Number of reporting hospitals <sup>(b)</sup> Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 133,191   90,392   92,9     Number of admissions <sup>(d)</sup> Number of admissions <sup>(d)</sup> 133,191   90,392   92,9     Days waited at 50th percentile   275   232   1   3   30     Days waited at 90th percentile   275   232   1   275   232   1     Waited more than 365 days   Large hospitals   275   2.2   4.3   3   30   3	20 90,392 30 30,392 4.3 8 8 232 68 211 2.3 2.3	18 100 92,935 27 2.6 2.6	6 100 30,354	ى س				
Number of reporting hospitals <sup>(b)</sup> Estimated coverage of elective surgical separations $(\%)^{(e)}$ 100 100 100 100 Number of admissions <sup>(d)</sup> 133,191 90,392 92.9 Days waited at 50th percentile 233 33 30 Days waited at 90th percentile 275 232 1 275 232 1 $\%$ waited more than 365 days Large hospitals $\%$ waited more than 365 days $Large hospitals$ Number of reporting hospitals <sup>(b)</sup> 15 2.2 4.3 2.2 4.3 $\%$ Number of admissions <sup>(d)</sup> 15 8 Estimated coverage of elective surgical separations $(\%)^{(e)}$ 100 68 10.5 Days waited at 50th percentile 22.2 4.0 $\%$ Number of admissions <sup>(d)</sup> 28,980 32,028 10.5 Days waited at 90th percentile 281 211 1 $\%$ waited more than 365 days $\%$ waited more than 365 days $\%$ Number of admissions <sup>(d)</sup> 28,980 32,028 10.5 Days waited at 90th percentile 281 211 1 $\%$ Waited more than 365 days $\%$ waited more than 365 days $\%$ Number of reporting hospitals <sup>(b)</sup> $\%$ Number of admissions <sup>(d)</sup> 28,980 32,028 10.5 Days waited at 90th percentile 281 211 1 $\%$ Waited more than 365 days $\%$ Number of reporting hospitals <sup>(b)</sup> $\%$ waited more than 365 days $\%$ waited more than 365 days $\%$ Number of reporting hospitals <sup>(b)</sup> $\%$ Number of reporting hospitals <sup>(b)</sup> $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$	20 100 30,392 30 30 30 32 4.3 4.3 8 8 8 211 2.3 2.3	18 100 27 143 2.6 2.6	6 100 30,354	5				
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Number of admissions <sup>(d)</sup> 133, 191     90, 392     92,9       Days waited at 50th percentile     33     30     33     30       Days waited at 50th percentile     275     232     1       Ve waited more than 365 days     2.2     4.3     2       Ve waited more than 365 days     2.2     4.3     2       Vumber of reporting hospitals <sup>(b)</sup> 15     8     1       Number of reporting hospitals <sup>(b)</sup> 15     8     1       Number of admissions <sup>(d)</sup> 15     8     1       Number of admissions <sup>(d)</sup> 28,980     32,028     10,5       Days waited at 50th percentile     281     211     1       Ve waited more than 365 days     0.9     2.3     3     0       Number of reporting hospitals <sup>(b)</sup> 28,00     32,028     10,5     3     3     0       Number of reporting bospitals <sup>(b)</sup> 28,00     32,028     10,5     3     0     3     0       Redium hospitals     0     28,00     32,028     10,5     3     0     3 <td>90,392 30 232 4.3 8 8 8 8 8 8 21 1 2.3 2.3</td> <td>92,935 27 143 2.6</td> <td>30,354</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td>	90,392 30 232 4.3 8 8 8 8 8 8 21 1 2.3 2.3	92,935 27 143 2.6	30,354	100	100	100	100	100
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Days waited at 90th percentile   275   232   1     % waited more than 365 days   2.2   4.3   2.2   4.3   2.2     % waited more than 365 days   Large hospitals   2.2   4.3   2.2   4.3   2.2     Number of reporting hospitals <sup>(b)</sup> Number of reporting hospitals <sup>(b)</sup> 15   8   1     Number of admissions <sup>(d)</sup> Number of admissions <sup>(d)</sup> 28,980   32,028   10,5     Days waited at 50th percentile   28,980   32,028   10,5   1   1     Days waited at 50th percentile   28,980   32,028   10,5   1	232 4.3 8 868 68 40 211 2.3	143 2.6	29	42	39	n.p.	96 9	31
% waited more than 365 days   2.2   4.3   2.2   4.3   2.2   4.3   2.3   2.3   2.3   2.3   2.3   2.3   2.3   2.3   2.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   2.5   4.3   7.5   8   10,5   5   5   8   10,5   5   8   10,5   5   8   10,5   5   10,5   28,1   21,1   1 <td>4.3 8 68 68 40 211 2.3</td> <td>7.0 7.0</td> <td>225</td> <td>203</td> <td>400</td> <td>n.p.</td> <td>329</td> <td>233</td>	4.3 8 68 68 40 211 2.3	7.0 7.0	225	203	400	n.p.	329	233
Large hospitals   15   8     Number of reporting hospitals <sup>(b)</sup> 15   8     Estimated coverage of elective surgical separations (%)   100   68   1     Number of admissions <sup>(d)</sup> 28,980   32,028   10,5     Days waited at 50th percentile   28,980   32,028   10,5     Days waited at 90th percentile   281   211   1     % waited more than 365 days   0.9   2.3   0     Mumber of reporting hospitals <sup>(b)</sup> Number of reporting hospitals <sup>(b)</sup> 36   3   3     Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100   32   3   0	8 68 32,028 40 211 2.3	ı	4.1	3.5	11.1	n.p.	8.0	3.4
Number of reporting hospitals(b)158Estimated coverage of elective surgical separations (%)(c)100681Number of admissions(d)28,98032,02810,5Days waited at 50th percentile42401Days waited at 90th percentile2812111% waited more than 365 days0.92.30Number of reporting hospitals(b)Number of reporting hospitals(b)363Setimated coverage of elective surgical separations (%)(c)10032	8 68 32,028 40 211 2.3	L						
Estimated coverage of elective surgical separations (%)(c)100681Number of admissions(d)Number of admissions(d)28,98032,02810,5Days waited at 50th percentile42404240Days waited at 90th percentile2812111% waited more than 365 days0.92.30Medium hospitalsNumber of reporting hospitals <sup>(b)</sup> 363Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 10032	68 32,028 211 2.3	a	ю	2	-	<del>.    </del>	:	35
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Days waited at 50th percentile4240Days waited at 90th percentile2812111% waited more than 365 days0.92.30% waited more than 365 days0.92.30% Medium hospitals36336Number of reporting hospitals (b)363Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 10032	40 211 2.3	10,515	11,778	6,286	3,633	4,255	:	97,475
Days waited at 90th percentile2812111% waited more than 365 days0.92.30% waited more than 365 days0.92.30Medium hospitals0.92.30Number of reporting hospitals <sup>(b)</sup> 363Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 10032	211 2.3	27	27	53	n.p.	n.p.	:	39
% waited more than 365 days 0.9 2.3 ( <b>Medium hospitals</b> Number of reporting hospitals <sup>(b)</sup> 36 3 Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100 32	2.3	112	189	276	n.p.	n.p.	:	237
<b>Medium hospitals</b> Number of reporting hospitals <sup>(b)</sup> 36 3 Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100 32		0.9	1.2	6.6	n.p.	n.p.	:	2.4
Number of reporting hospitals <sup>(b)</sup> 36 3 Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100 32								
Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100 32	С	7	4	~		:	:	51
	32	85	81	22	:	:	:	64
Number of admissions <sup>(4)</sup> 7,886 3,9	7,886	3,993	12,809	1,358		:	:	58,076
Days waited at 50th percentile 29	29	34	31	n.p.	:	:	:	42
Days waited at 90th percentile 290 124 1	124	117	177	n.p.	:	:	:	238
% waited more than 365 days 0.6 (	0.6	0.4	2.2	n.p.	:	:	:	1.4
Total <sup>(e)</sup>								
Number of reporting hospitals <sup>(b)</sup> 31	31	31	4	8	ę	7	£	192
Estimated coverage of elective surgical separations (%) <sup>(c)</sup> 100 80	80	98	79	20	100	100	100	91
Number of admissions <sup>(d)</sup> 107,6	130,306	107,623	57,122	41,046	14,149	9,577	6,100	565,501
Admissions per 1,000 population <sup>(f)</sup> 24.8 24	24.8	25.4	26.7	25.8	28.6	28.0	28.1	26.6
Days waited at 50th percentile 33	33	27	30	42	36	72	43	34
Days waited at 90th percentile 278 221 1	221	137	206	208	369	372	337	235
% waited more than 365 days 3.6 2	3.6	2.3	3.0	3.9	10.1	10.3	8.6	3.0

Table 6.2: Waiting time statistics for patients admitted from waiting lists for elective surgery, by public hospital peer group, states and territories,

The number of separations with an Urgency of admission reported as Elective and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with an Urgency of admission reported as of Elective and a surgical procedure for all public hospitals. Number of admissions for elective surgery reported to the National Elective Surgery Waiting Times Data Collection. (b) Number of hospitals reporting to the National Elective Surgery Waiting Times Data Collection. See Appendix 2 for further information.
(c) The number of separations with an Urgency of admission reported as Elective and a surgical procedure for public hospitals reporting to

Includes data for hospitals not included in the specified hospital peer groups. For more information on the public hospital peer group classification, see Appendix 1. Cude rate based on the Australian estimated resident population as at 31 December 2007. (j) (j) (j)

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	NSN	Vic	QId <sup>(a)</sup>	WA	SA	Tas	ACT	M	Total
Additions	228,515	152,505	212,700	65,846	45,693	17,362	11,337	6,994	740,952
Removals <sup>(b)</sup>									
Elective admission	199,578	130,306	107,623	57,122	41,046	14,149	9,577	6,100	565,501
Days waited at 50th percentile	39	33	27	30	42	36	72	43	8
Days waited at 90th percentile	278	221	137	206	208	369	372	337	235
% waited more than 365 days	1.8	3.6	2.3	3.0	3.9	10.1	10.3	8.6	3.0
Emergency admission	1,371	905	2,596	267	282	162	41	26	5,650
Days waited at 50th percentile	17	8	0	14	23	38	25	25	с
Days waited at 90th percentile	134	113	15	127	113	277	167	170	84
% waited more than 365 days	0.4	1.7	0.3	1.9	1.1	7.4	2.4	3.8	0.9
Not contactable/died	3,692	2,291	1,216	665	467	728	240	215	9,514
Days waited at 50th percentile	126	186	119	217	162	243	314	327	165
Days waited at 90th percentile	336	484	818	395	429	849	677	1,633	456
% waited more than 365 days	3.4	22.9	25.9	15.3	15.0	35.0	44.2	45.6	16.8
Treated elsewhere	10,581	3,624	4,853	1,427	828	623	454	130	22,520
Days waited at 50th percentile	91	06	106	131	83	207	190	109	66
Days waited at 90th percentile	299	349	575	398	344	757	451	465	355
% waited more than 365 days	2.1	8.8	18.6	15.2	8.2	31.9	19.6	15.4	9.0
Surgery not required or declined	15,892	14,134	7,238	4,427	2,612	1,134	1,020	718	47,175
Days waited at 50th percentile	122	105	66	177	66	219	201	204	113
Days waited at 90th percentile	332	422	567	427	407	840	645	1,454	393
% waited more than 365 days	3.2	14.1	16.2	18.5	12.7	33.2	29.3	34.4	12.2
Transferred to another hospital's waiting list	n.a.	2,297	n.a.	3,411	n.a.	n.a.	274	5	5,988
Days waited at 50th percentile	n.a.	75	n.a.	93	n.a.	n.a.	162	n.p.	89
Days waited at 90th percentile	n.a.	252	n.a.	360	n.a.	n.a.	646	n.p.	343
% waited more than 365 days	n.a.	4.1	n.a.	9.6	n.a.	n.a.	23.4	n.p.	8.1
Not reported	2	1,439	n.a.	1,853	1,403	229	0	~	4,927
Days waited at 50th percentile	n.p.	45	n.a.	84	06	98	:	n.p.	20
Days waited at 90th percentile	n.p.	318	n.a.	373	470	614	:	n.p.	387
% waited more than 365 days	n.p.	6.5	n.a.	10.9	17.2	22	:	n.p.	8.1
Total removals	231,116	154,996	123,526	69,172	46,638	17,026	11,606	7,195	661,275
Days waited at 50th percentile	43	38	28	37	45	49	85	52	38
Days waited at 90th percentile	291	263	177	271	242	461	431	430	273
% waited more than 365 days	1.9	50	4 U	49	4.9	13.6	13.3	12 4	4 2

expected that these admissions would be counterbalanced overall by the number of admissions occurring in a similar way in future reporting periods.

2007-08									
	NSN	Vic	QId <sup>(a)</sup>	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Cardio-thoracic surgery									
Admissions	3,924	2,489	2,877	697	867	409	229	0	11,494
Days waited at 50th percentile	14	9	10	19	4	21	18	:	12
Days waited at 90th percentile	74	85	69	55	101	131	103	:	78
% waited more than 365 days	0.1	0.1	0.3	0.0	0.0	0.5	0.4	:	0.1
Ear, nose & throat surgery									
Admissions	14,957	11,974	9,369	4,561	4,672	874	1,067	459	47,933
Days waited at 50th percentile	87	48	28	106	63	50	135	73	57
Days waited at 90th percentile	346	276	161	416	350	406	610	530	335
% waited more than 365 days	4.4	3.4	3.4	14.0	9.1	11.3	30.4	18.1	6.2
General surgery									
Admissions	55,468	29,998	25,882	10,930	8,659	3,485	1,591	2,073	138,086
Days waited at 50th percentile	29	34	26	27	37	25	35	44	29
Days waited at 90th percentile	165	204	109	152	180	344	218	244	170
% waited more than 365 days	0.6	2.8	1.1	1.7	2.6	9.0	1.3	5.5	1.7
Gynaecology									
Admissions	28,404	13,799	16,611	3,335	7,065	2,170	1,140	1,535	74,059
Days waited at 50th percentile	32	45	25	30	29	37	53	10	31
Days waited at 90th percentile	168	158	95	138	121	195	226	110	145
% waited more than 365 days	0.9	4. 4	0.9	1.1	0.4	3.3	2.3	2.3	1.1
Neurosurgery									
Admissions	3,572	2,606	1,456	659	637	212	302	0	9,444
Days waited at 50th percentile	25	24	21	35	21	35	39	:	25
Days waited at 90th percentile	148	185	134	187	95	343	276	:	166
% waited more than 365 days	0.7	1.5	4.3	1.8	0.2	9.9	7.6	:	1.9
Ophthalmology									
Admissions	24,121	16,878	9,184	7,810	4,380	786	1,174	1,006	65,339
Days waited at 50th percentile	134	36	42	55	61	104	169	149	68
Days waited at 90th percentile	335	217	296	267	230	670	484	524	315
% waited more than 365 days	2.6	1.9	5.5	3.5	2.5	30.7	18.4	18.9	3.8
Orthopaedic surgery									
Admissions	30,725	16,507	21,057	7,991	4,940	2,023	1,417	606	85,266
Days waited at 50th percentile	20	61	27	58	77	125	121	53	54
Days waited at 90th percentile	343	335	175	254	379	548	427	414	323
% waited more than 365 days	4.5	8.4	3.3	3.3	10.5	20.2	13.6	11.6	5.8

Table 6.4: Waiting time statistics for patients admitted from waiting lists for elective surgery, by specialty of surgeon, states and territories, 2007-08

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(continued)

Table 6.4 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by specialty of surgeon, states and territories, 2007–08

	NSN	Vic	QId <sup>(a)</sup>	MA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Plastic surgery									
Admissions	8,862	13,084	8,002	4,109	4,070	1,443	548	105	40,223
Days waited at 50th percentile	25	22	28	18	40	13	45	42	26
Days waited at 90th percentile	147	235	148	144	187	134	347	376	186
% waited more than 365 days	0.5	5.6	2.8	1.7	3.5	2.4	9.5	10.5	3.2
Urology									
Admissions	21,733	16,566	8,924	8,146	4,627	2,041	987	138	63,162
Days waited at 50th percentile	28	20	31	21	44	41	50	59	27
Days waited at 90th percentile	166	170	122	127	185	185	267	210	162
% waited more than 365 days	1.1	2.7	2.4	2.4	2.8	3.2	4.5	2.9	2.1
Vascular surgery									
Admissions	4,577	2,787	2,055	1,120	906	286	404	0	12,144
Days waited at 50th percentile	18	25	22	27	14	25	25	:	21
Days waited at 90th percentile	108	364	82	145	57	242	705	:	161
% waited more than 365 days	0.5	9.9	1.3	2.6	0.9	5.6	19.6	:	3.8
Other <sup>(c)</sup>									
Admissions	3,235	3,618	2,206	7,764	223	420	718	167	18,351
Days waited at 50th percentile	7	24	27	18	21	50	35	63	19
Days waited at 90th percentile	63	88	96	72	76	795	157	383	89
% waited more than 365 days	0.0	1.0	0.4	0.4	0.0	37.1	1.5	10.2	1.4
Total									
Admissions	199,578	130,306	107,623	57,122	41,046	14,149	9,577	6,100	565,501
Days waited at 50th percentile	39	33	27	30	42	36	72	43	34
Days waited at 90th percentile	278	221	137	206	208	369	372	337	235
% waited more than 365 days	1.8	3.6	2.3	3.0	3.9	10.1	10.3	8.6	3.0
(c) The total mumber of edmissions for Oursead	included EOT potionts	iomor orono oqui	ition the motiti	ad list for closting	odonicoloci hoforo	00 100 June 00	d occurrent of the for		

(a) The total number of admissions for Queensland includes 507 patients who were removed from the waiting list for elective admission before 30 June 2007 and separated before 30 June 2008. It is expected that these admissions would be counterbalanced overall by the number of admissions occurring in a similar way in future reporting periods.
(b) Includes data for the Mersey Community Hospital.
(b) Includes specialty of surgeon of *Not reported*.

2007-08									
	NSN	Vic	QId <sup>(a)</sup>	WA	SA	Tas <sup>(b)</sup>	ACT	ħ	Total
Cataract extraction									
Admissions	19,123	11,448	6,399	5,926	2,554	703	1,053	708	47,914
Days waited at 50th percentile	168	43	48	59	73	417	175	184	87
Days waited at 90th percentile	340	231	317	265	225	737	484	498	326
% waited more than 365 days	2.9	1.7	6.0	3.3	1.2	51.5	18.5	20.1	4.3
Cholecystectomy									
Admissions	6,907	3,748	3,345	1,237	907	464	220	152	16,980
Days waited at 50th percentile	53	50	37	33	50	78	83	76	47
Days waited at 90th percentile	202	194	117	194	154	420	227	384	188
% waited more than 365 days	0.7	4.1	0.7	1.8	0.6	13.8	1.8	10.5	1.4
Coronary artery bypass graft									
Admissions	1,107	842	1,229	230	369	238	135	0	4,150
Days waited at 50th percentile	14	11	6	24	20	31	13		14
Days waited at 90th percentile	102	151	67	56	113	140	84	:	97
% waited more than 365 days	0.1	0.2	0.2	0.0	0.0	0.8	0.0	:	0.2
Cystoscopy									
Admissions	14,661	10,108	4,611	4,428	1,846	755	626	254	37,289
Days waited at 50th percentile	26	21	33	20	35	49	51	52	26
Days waited at 90th percentile	156	163	137	146	119	174	279	181	157
% waited more than 365 days	0.0	2.0	3.0	3.1	1.1	2.4	4.0	3.5	1.8
Haemorrhoidectomy									
Admissions	1,679	985	443	306	232	32	22	33	3,732
Days waited at 50th percentile	50	65	37	39	48	68	72	79	50
Days waited at 90th percentile	249	260	167	245	168	440	168	307	245
% waited more than 365 days	1.9	4.2	2.5	2.9	1.7	12.5	0.0	6.1	2.8
Hysterectomy									
Admissions	4,091	2,139	2,155	721	611	256	148	87	10,208
Days waited at 50th percentile	52	52	36	42	54	66	85	78	49
Days waited at 90th percentile	239	161	121	161	167	221	308	158	192
% waited more than 365 days	1.8	1.2	0.7	1.1	0.8	3.5	4.1	3.4	1.4
Inguinal herniorrhaphy									
Admissions	5,939	3,157	1,676	1,352	847	375	226	104	13,676
Days waited at 50th percentile	56	52	40	35	51	98	06	74	50
Days waited at 90th percentile	231	232	145	196	201	424	237	461	225
% waited more than 365 days	0.8	4.1	0.9	1.5	2.4	15.5	1.8	11.5	2.2
									continued)

Table 6.5: Waiting time statistics for patients admitted from waiting lists for elective surgery, by Indicator procedure, states and territories,

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ICITIIOTICS, 2007-00									
	NSN	Vic	QId <sup>(a)</sup>	WA	SA	Tas <sup>(b)</sup>	ACT	NT	Total
Myringoplasty									
Admissions	451	409	454	190	06	20	25	06	1,729
Days waited at 50th percentile	177	63	62	166	200	441	417	406	104
Days waited at 90th percentile	365	322	358	408	551	1,432	860	1,043	411
% waited more than 365 days	9.8	5.9	9.9	15.8	32.2	60.0	64.0	55.6	14.5
Myringotomy									
Admissions	572	1,962	1,592	721	760	80	196	28	5,911
Days waited at 50th percentile	63	39	36	73	57	44	94	4	48
Days waited at 90th percentile	315	113	168	355	159	150	418	106	182
% waited more than 365 days	2.4	0.5	0.9	9.4	0.7	0.0	13.8	3.6	2.4
Prostatectomy									
Admissions	2,538	1,958	1,295	803	515	56	100	10	7,275
Days waited at 50th percentile	47	22	36	28	58	39	45	50	36
Days waited at 90th percentile	232	234	155	105	217	135	178	160	203
% waited more than 365 days	1.7	5.6	3.0	0.9	2.5	0.0	3.0	0.0	3.0
Septoplasty									
Admissions	1,453	1,360	605	382	290	48	148	19	4,305
Days waited at 50th percentile	224	105	68	156	148	507	196	153	141
Days waited at 90th percentile	369	364	625	382	459	1,557	645	1,913	389
% waited more than 365 days	11.3	9.7	14.5	12.3	18.6	60.4	32.4	21.1	13.1
Tonsillectomy									
Admissions	4,728	3,539	2,745	1,508	1,277	51	315	143	14,306
Days waited at 50th percentile	148	67	40	146	109	96	289	95	88
Days waited at 90th percentile	350	271	188	443	399	539	677	385	349
% waited more than 365 days	4.1	2.9	3.8	18.0	14.3	15.7	43.2	11.2	7.1
Total hip replacement									
Admissions	2,876	1,621	1,380	795	603	202	188	23	7,688
Days waited at 50th percentile	134	121	62	8	114	294	185	129	107
Days waited at 90th percentile	357	405	230	246	484	679	478	928	359
% waited more than 365 days	6.3	12.7	3.3	3.1	16.4	39.6	21.3	21.7	8.9
Total knee replacement									
Admissions	4,791	1,836	2,039	1,100	724	219	214	24	10,947
Days waited at 50th percentile	235	166	77	118	207	381	226	292	160
Days waited at 90th percentile	367	505	294	307	656	762	496	618	386
% waited more than 365 days	10.5	18.7	6.9	5.7	34.9	53.9	25.2	37.5	13.6

Table 6.5 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by Indicator procedure, states and territories, 2007–08

(continued)

			(a)		đ	Ę	101		ŀ
	NSN	VIC	QId	WA	AS	Tas	ACI	z	lotal
Varicose veins stripping & ligation									
Admissions	1,567	1,386	630	147	251	33	140	48	4,202
Days waited at 50th percentile	71	140	57	66	258	46	401	123	91
Days waited at 90th percentile	290	480	353	397	603	331	867	987	430
% waited more than 365 days	2.7	20.3	9.4	12.9	34.3	9.1	53.6	27.1	13.8
Not applicable/not stated									
Admissions	127,095	83,808	77,025	37,276	29,170	10,617	5,821	4,377	375,189
Days waited at 50th percentile	27	27	22	25	35	28	42	28	27
Days waited at 90th percentile	200	203	113	160	175	263	261	229	181
% waited more than 365 days	1.2	3.4	1.8	2.2	2.7	6.2	6.1	5.6	2.3
Total									
Admissions	199,578	130,306	107,623	57,122	41,046	14,149	9,577	6,100	565,501
Days waited at 50th percentile	39	33	27	30	42	36	72	43	8
Days waited at 90th percentile	278	221	137	206	208	369	372	337	235
% waited more than 365 days	1.8	3.6	2.3	3.0	3.9	10.1	10.3	8.6	3.0

Table 6.5 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by Indicator procedure, states and territories, 2007–08

(a) The total number of admissions for Queensland includes 507 patients who were removed from the waiting list for elective admission before 30 June 2007 and separated before 30 June 2008. It is expected that these admissions would be counterbalanced overall by the number of admissions occurring in a similar way in future reporting periods.
(b) Includes data for the Mersey Community Hospital.









Note: Rates are age-standardised to the Estimated Resident Population 30 June 2001.

Figure 6.5: Median waiting times for elective surgery by quintile of socioeconomic advantage/disadvantage, 2007-08





Note: Rates are age-standardised to the Estimated Resident Population 30 June 2001.

Figure 6.7: Median waiting times for elective surgery by selected Indicator procedures and quintile of socioeconomic advantage/disadvantage, 2007-08





Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

Notes:

- 1. Rates are age-standardised to the Estimated Resident Population 30 June 2001.
- 2. 95% confidence interval presented for the rate ratio.

3. Excludes data for Tasmania and the Australian Capital Territory. See Appendix 1 for more information.

Figure 6.9: Standardised separations rate ratios for elective surgery by Indicator procedure and Indigenous status, selected states and territories, 2007–08



Table 6.6: Waiting times for patients admitted from waiting lists for elective surgery by selected principal diagnoses and specialty of surgeon, 2007–08

Surgical specialty and principal diagnosis	Separations	Days waited at 50th percentile	Days waited at 90th percentile
Cardiothoracic surgery			
Angina pectoris	1,705	15	92
Neoplasm	1,560	8	28
Other principal diagnosis	7,886	13	84
Total	11,151	12	76
Ear, nose and throat surgery			
Chronic diseases of tonsils and adenoids	11,186	91	353
Neoplasm	4,134	13	73
Other principal diagnosis	31,577	57	334
Total	46,897	57	335
General surgery			
Cholelithiasis	14,087	48	185
Neoplasm	36,494	16	70
Other principal diagnosis	83,528	39	200
Total	134,109	29	168
Gynaecology			
Excessive, frequent and irregular menstruation	9,284	40	144
Neoplasm	12,766	26	103
Other principal diagnosis	50,785	31	157
Total	72,835	31	145
Neurosurgery			
Other spondylopathies	1,439	63	256
Neoplasm	1,853	11	61
Other principal diagnosis	5,953	26	160
Total	9,245	25	167
Ophthalmology			
Cataract	32,898	86	322
Neoplasm	1,393	27	104
Other principal diagnosis	29,003	56	308
Total	63,294	69	316
Orthopaedic surgery			
Gonarthrosis [arthrosis of knee]	13,390	135	372
Neoplasm	1,371	21	155
Other principal diagnosis	68,173	42	292
Total	82,934	53	321
Plastic surgery			
Fracture at wrist and hand level	2,362	2	7
Neoplasm	16,646	27	132
Other principal diagnosis	20,382	34	245
Total	39,390	26	183
Urology			
Follow-up examination after treatment for malignant neoplasms	7,530	22	174
Neoplasm	13,606	22	89
Other principal diagnosis	39,970	29	190
Total	61,106	27	164
Vascular surgery			
Varicose veins of lower extremities	2,516	90	437
Neoplasm	165	10	61
Other principal diagnosis	9,111	15	74
	11,792	21	154
Other			
Angina pectoris	795	40	91
Neoplasm	3,697	16	64
Other principal diagnosis	12,847	18	91
Total	17,339	18	84
Total			
Neoplasm	93.685	20	90
All principal diagnoses	550,092	34	233

Source : AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.





