

Elective surgery in Australia

New measures of access

later edition
available

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June 2008

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Foreword

The reporting of elective surgery waiting times is one way for policy-makers to assess how the demand for publicly funded elective surgery is being met. While elective surgery waiting times data serve as a useful measure of access to elective surgery, these data have some limitations, including lack of comparability of urgency categorisation across states and territories. In addition, elective surgery waiting times data do not provide information on different population sub-groups, or on access to elective surgery provided by the private sector.

This report presents new analyses of the provision of elective surgery services in Australia by combining admitted patient and elective surgery waiting times data to generate possible new measures of accessibility and equity.

Overall, the report indicates that access to private elective surgery decreases with remoteness and socioeconomic disadvantage, and that access to public elective surgery generally increases with remoteness and socioeconomic disadvantage. In addition, patients with cancers have lower waiting times for surgery than other patients.

While rates of public elective surgery are higher for Indigenous Australians than for other Australians, the overall rate of elective surgery (including private elective surgery) is lower for Indigenous Australians.

It is hoped that this report will stimulate and inform debate on appropriate methods to report access to elective surgery. Comments from readers are welcome.

Penny Allbon

Director

Australian Institute of Health and Welfare

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Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AR-DRG	Australian Refined Diagnosis Related Group
DoHA	Department of Health and Ageing
DRG	Diagnosis Related Group
ESWT	Elective surgery waiting times
HDSC	Health Data Standards Committee
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification
n.a.	Not available
NESWTDC	National Elective Surgery Waiting Times Data Collection
NCCH	National Centre for Classification in Health
NHDC	National Health Data Committee
NHDD	National health data dictionary
NHMD	National Hospital Morbidity Database
NHPC	National Health Performance Committee
NMDS	National Minimum Data Set
n.p.	Not published
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
SEIFA	Socio-Economic Indexes for Areas
SIMC	Statistical Information Management Committee
SLA	Statistical local area
SRR	Standardised separation rate ratio
Tas	Tasmania
Vic	Victoria
WA	Western Australia
..	Not applicable

Summary

Access to elective surgery has been the subject of community discussion for many years. In general terms, access to elective surgery can be measured by considering how much elective surgery is supplied, or by considering the demand for elective surgery and the extent to which the demand differs from the supply. In the absence of very good measures, use of both supply-related measures and demand-related measures may be useful.

Current measures of access to public elective surgery are demand-related and have a number of limitations. In the past, the size of public hospital waiting lists was often used to gauge whether access to elective surgery was improving or declining. In the mid-1990s, the focus shifted to waiting times based around clinical urgency categories. However, variation in urgency categorisation meant that these measures were not comparable between states and territories and possibly between other groups. For example, the proportion of patients on elective surgery waiting lists at 30 June 2006 who were Category 1 in New South Wales was 4 times higher than in Victoria (9.4% of all patients on waiting lists, compared to 1.9% respectively).

This report presents new demand-related and supply-related measures of access to elective surgery. The supply-related measures are population rates of elective surgery provision, age-standardised to facilitate comparisons between population sub-groups. The demand-related measures use diagnosis and other information, rather than urgency categorisation, to assess access to elective surgery for different types of patients.

These new measures could be developed and further refined for routine reporting on access to elective surgery in the future.

New supply-related measures

In Australia in 2004–05, there were over 1.6 million hospital separations for elective surgery. Almost 1 million of these separations were for private elective surgery, with the remaining 629,000 separations being for public elective surgery.

Remoteness of residence

The rate of private elective surgery was highest for those living in Major Cities (51.9 per 1,000 persons) and decreased to 16.1 per 1,000 persons for Very Remote areas. In contrast, the rate of public elective surgery was lowest for those living in Major Cities (27.8 per 1,000) and highest for those living in Outer Regional areas (39.3 per 1,000).

Rates of admission for *Plastic surgery* varied markedly by remoteness, with people living in Major Cities admitted at four times the rate of people living in remote areas. People living in Very Remote areas were admitted for *Cardiothoracic surgery* at about one and a half times the rate for people living in other areas.

Socio-economic status

The rate of private elective surgery was highest for people in the *Most advantaged* socio-economic group (62.4 per 1,000 persons) and decreased with socio-economic advantage to 35.6 per 1,000 persons for the *Most disadvantaged* group.

Rates of admission for *Gynaecology* and *Cardiothoracic surgery* varied markedly by socio-economic group with people in the *Most disadvantaged* group admitted at twice the rate of people in the *Most advantaged* group.

Indigenous status

The overall rate of elective surgery (including private elective surgery) for Indigenous Australians (48.9 per 1,000 persons) was markedly lower than for Other Australians (85.5 per 1,000 persons). However, Indigenous patients were admitted from public hospital waiting lists for *Cardiothoracic surgery*, *Vascular surgery* and *Ophthalmology* at about twice the corresponding rates for other patients.

New demand-related measures

Overall for 2004–05 the median waiting time to admission from public hospital waiting lists was 29 days.

Remoteness of residence

People living in Very Remote areas had longer median waiting times (31 days) than people living in other areas. People living in Very Remote areas had the longest median waiting time for *Ophthalmology* (89 days, compared with 61 days overall) and the shortest median waiting time for *Orthopaedic surgery* (29 days, compared with 43 days overall). People in Outer Regional areas had the longest waiting times for *Total hip replacement* (111 days, compared with 97 days overall).

Socioeconomic status

Overall, people in the *Most advantaged* socio-economic group had the shortest overall median waiting time (24 days) and the *Middle quintile* group had the longest (31 days). The *Middle quintile* group had the longest median waiting times for *Cardiothoracic surgery*, *Ophthalmology*, *Orthopaedic surgery*, *Neurosurgery* and *Ear, nose and throat surgery*.

Indigenous status

Overall, Indigenous Australians and other Australians had the same median waiting time (29 days). Indigenous Australians had a shorter median waiting time than other Australians for *Orthopaedic surgery* (27 days and 42 days, respectively), but had a longer median waiting time for *Total hip replacement* (116 days and 91 days, respectively).

Diagnosis

Overall, the median waiting times for patients with cancer-related principal diagnoses were 15 days shorter than the median waiting times for patients with other conditions. *Ophthalmology* patients with a neoplasm waited 21 days compared with 63 days for patients with other conditions. Patients with a principal diagnosis of *Acute myocardial infarction* had a median waiting time of 2 days for *Coronary artery bypass graft*, compared with a median waiting time of 16 days for those with *Chronic ischaemic heart disease*.

Adverse events

Overall for 2004–05, an adverse event was reported as being treated or occurring during 5.4% of elective surgery separations. The rate of *Adverse effects of drugs, medicaments and biological substances* was about 40% lower for elective surgery than for all hospital separations. However for elective surgery, the rate of *Misadventures to patients during surgical and medical care* was more than twice the rate reported for all separations.

1 Introduction

Background

Access to elective surgery is an issue that has been the subject of community discussion for many years. It is therefore important that statistics are available that provide useful information on access to and the equity of elective surgery provision.

Elective surgery activity in Australia includes both public elective surgery and private elective surgery. For public elective surgery (public and private patients in public hospitals and public patients receiving treatment in private hospitals), patients are usually placed on waiting lists prior to their surgery. Waiting lists are not maintained for private elective surgery (privately-funded elective surgery performed in private hospitals).

Methods to measure access to elective surgery

In general terms, access to elective surgery can be assessed by considering how much elective surgery occurs, or is supplied, or by considering the demand for elective surgery and the extent to which it differs from supply.

Measures of access to elective surgery that are based on waiting lists and waiting times depend on the level of demand for public elective surgery, and can be influenced by levels of supply of public and private elective surgery and other factors. They do not provide information on how much elective surgery is being provided, and they do not take into account the time that patients may need to wait before they are placed on a waiting list.

Measures of the supply of elective surgery include population rates of elective surgery provision. Such measures can be used to gauge whether the amount of public elective surgery is increasing or decreasing. However, these measures do not provide information on the amount of time waited for elective surgery.

For public elective surgery, information on the size of waiting lists was often used in the past to judge whether access to elective surgery was improving or declining. In the mid-1990s, the focus shifted to waiting times, with recognition that the length of waiting lists was not necessarily related to how long people waited for their elective surgery. This shift was accompanied by the establishment of nationally agreed urgency categorisation (NHDC 1997) based on clinical assessment with agreed target times by which patients in the most urgent two of the three categories should receive their surgery. Evidence that urgency categorisation varies (see below) means that the measures based on urgency categories are not comparable between states and territories and possibly between other groups (such as between surgical specialties or different specialists within the same jurisdiction or specialty).

In the absence of waiting lists, access to private elective surgery has not been assessed through demand-related measures such as length of waiting lists or time waited for surgery. However, the amount of elective surgery undertaken in private hospitals has been of interest in recent years, for example in the context of access to elective surgery more generally.

This report

In the context of the limitations of the currently-used demand-related measures, and the potential benefits of using supply-related measures as well as demand-related measures to assess access to elective surgery, this report presents preliminary information on new supply-related measures and demand-related measures of elective surgery provision in Australia. The supply-related measures are population rates of elective surgery provision, and the demand-related measures use diagnosis and other information, rather than urgency categorisation, to assess access to elective surgery for different types of patients.

A preliminary analysis of adverse events reported in association with public elective surgery is also presented.

These new measures can be used with the demand-related measures used to date (AIHW 2007) to provide a more complete picture of access to elective surgery in Australia.

Current reporting of information on access to elective surgery

National elective surgery waiting times information is published on an annual basis by the Australian Institute of Health and Welfare (AIHW), the Australian Government Department of Health and Ageing (DoHA), and by the Steering Committee for the Review of Government Services (SCRGSP). It is also included in the National Health Performance Committee's (NHPC) reporting of health sector performance indicators. In addition, most state and territory health authorities publish public elective surgery waiting list and/or waiting time information on an annual or quarterly basis.

For national reporting by AIHW and the NHPC, elective surgery waiting times are regarded as indicators of access within the National Health Performance Framework (NHPC 2001). In this framework, access is regarded as a dimension within 'Health system performance', along with effective, appropriate, efficient, responsive, accessible, safe, continuous, capable and sustainable. The questions asked for each dimension are: 'How well is the health system performing in delivering quality health actions to improve the health of all Australians?' and 'Is it the same for everyone?' (equity).

In the framework used for reporting by the SCRGSP, elective surgery waiting times are regarded as indicators of access, one group of indicators of effectiveness.

The median waiting time, the time waited at the 90th percentile, and the proportion of patients who wait longer than 365 days are used as indicators of accessibility in AIHW reporting, for example in *Australian hospital statistics 2005-06* (AIHW 2007), and on the AIHW website (http://www.aihw.gov.au/hospitals/waitingtime_data.cfm). Comparisons of waiting times for different surgical specialties, different procedures and by the state or territory of hospitalisation are presented for consideration of accessibility and equity. Separation rates for elective surgery (not age-standardised) are also presented for each state and territory.

The NHPC has combined a demand-related measure (median waiting times for public hospitals) and supply-related measures (rates of surgery in public and private hospitals) for three procedure types (NHPC 2004).

In addition to the waiting times measures used by AIHW and NHPC, the proportion of elective surgery admissions that were within the recommended time, by clinical urgency category, is reported by DoHA, most recently in the *State of our public hospitals June 2007 report* (DoHA 2007) and by the SCRGSP, most recently in the *Report on government services 2008* (SCRGSP 2008).

Limitations of the current measures of access to elective surgery

As summarised above, currently-used measures of access to public elective surgery have a number of limitations:

- There is evidence of considerable variation in the assignment of clinical urgency categories.
- The total time waited by the patient is not reflected in the data.
- The national data routinely available on elective surgery do not include comprehensive patient demographics or clinical information that would allow detailed consideration of equity of access.
- The collection of data on elective surgery waiting times is not complete.
- The measures are demand-related only, and do not include supply-related measures.
- The measures only relate to public elective surgery.

Clinical urgency categorisation is not comparable

Clinical urgency has been a data element in the Elective Surgery Waiting Times NMDS since its formation in 1995. The three clinical urgency categories used are defined as (NHDC 1997):

- Category 1: Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency
- Category 2: Admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency
- Category 3: Admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly and which does not have the potential to become an emergency.

The clinical urgency categories reflect the concept of speed of access being a way to assess access more generally, and the concept that speed of access should be determined by the clinically-assessed condition of the patient.

In 2005–06 the proportion of patients admitted from elective surgery waiting lists who were Category 1 varied from 48.9% in the Northern Territory to 22.4% in Victoria, with similar variations occurring in all urgency categories (Table 1.1). Variation between jurisdictions also existed in elective surgery waiting times census data; the proportion of patients on elective surgery waiting lists at 30 June 2006 who were Category 1 varied from 9.6% in the Northern Territory to 1.9% in Victoria (Table 1.2).

Table 1.1: Proportion of patients admitted from waiting lists for elective surgery, by clinical urgency category, by state and territory, 2005–06

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(Per cent)								
Category 1	40.1	22.4	35.5	35.3	33.9	44.5	29.9	48.9	34.2
Category 2	29.8	46.9	45.4	26.7	26.9	33.8	46.1	32.9	36.8
Category 3	30.2	30.7	19.1	38.0	39.2	21.6	24.0	18.2	29.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: AIHW National Elective Surgery Waiting Times data Collection.

Table 1.2: Proportion on elective surgery waiting lists, by clinical urgency category, by state and territory, 30 June 2006

Clinical urgency	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(Per cent)								
Category 1	9.4	1.9	6.3	6.6	8.1	8.8	2.4	9.6	6.5
Category 2	32.0	43.4	31.4	33.1	21.4	46.4	46.1	36.1	35.1
Category 3	58.6	54.7	62.3	60.3	70.6	44.7	51.4	54.3	58.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: AIHW National Elective Surgery Waiting Times Data Collection.

There are also variations between jurisdictions for individual surgical specialties and indicator procedures. For example, the proportion of Category 1 patients admitted with a surgical specialty of *Plastic surgery* was 79.2% in Tasmania compared with 31.0% in the Australian Capital Territory. For *Cataract extraction*, the proportion of Category 1 patients admitted was 0.8% in Victoria and the Australian Capital Territory and 15.0% in Tasmania. For *Hysterectomy*, 36.0% of patients admitted were Category 1 in New South Wales, as were 12.0% of patients in Western Australia (Appendix, tables A1.1 and A1.2).

Whilst the state variation overall and for individual surgical specialties could be attributed to differing mixes of patients between states and territories, the variation at the level of indicator procedure (for which patient mixes would be expected to be relatively uniform) provides evidence that other factors influence the variation. These other factors could include differing financial arrangements for the provision of elective surgery (such as financial incentives or disincentives for provision of elective surgery within the recommended maximum waiting times); and differing interpretation of the urgency category definitions by clinicians, clinician groups or hospitals.

This apparent lack of comparability of clinical urgency categories among jurisdictions means that measures based on clinical urgency categories (including the proportions of patients who are treated 'on time') are not meaningful or comparable between jurisdictions, and therefore have limited application for national elective surgery waiting times statistics. The measures may be more useful for comparisons within jurisdictions over time, or for use at the hospital or other local level.

Because of the apparent variation, the AIHW has not incorporated urgency categorisation in national reporting on elective surgery waiting times since the 1999–00 reference year. This follows a decision made by the Australian Health Ministers' Advisory Council in 2001 that AIHW should present the data without making invalid comparisons of differently-based jurisdictional figures.

Time waited is partial only

The amount of time waited by a patient for admission to elective surgery is currently reported as the number of days between the date of being added to the hospital's waiting list and the date of being removed from the waiting list for admission for the awaited surgery. However, this measure of time may not reflect the total time waited as perceived by patients, as it does not include the time that the patient waits between referral to the surgeon and the appointment with the surgeon, or the time between the appointment with the surgeon and being placed on the waiting list for surgery.

Demographic and clinical information is not used

The data currently reported to the National Elective Surgery Waiting Times Data Collection (NESWTDC) for the Elective Surgery Waiting Times NMDS do not include demographic information such as the age and sex of the patient, the Indigenous status of the patient or their area of usual residence. Therefore equity of access to public elective surgery between population sub-groups is not routinely assessed.

The data reported to the NESWTDC for the Elective Surgery Waiting Times NMDS also do not include clinical information on the patient's diagnoses. This means that there is no routine assessment of equity or appropriateness of access to public elective surgery for patient groups with similar needs, as indicated by diagnosis information. For example, the waiting times for patients awaiting surgery with a cancer diagnosis is not compared by jurisdiction or with the waiting times for patients awaiting the same surgery for other conditions.

Coverage is incomplete

As noted above, the coverage of the NESWTDC is not complete, with coverage estimated at about 87% nationally in 2005–06 (AIHW 2007). Coverage was estimated as complete for New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory. It was estimated at 96% for Queensland, 79% for Victoria, 76% for Western Australia and 63% for South Australia. Coverage also varied by type of hospital, with coverage estimated at 99% for principal referral hospitals, 81% for large hospitals and 62% for medium hospitals.

This varied coverage may contribute to data being non-comparable between jurisdictions and for populations serviced by the smaller hospitals.

Measures are demand-related only

As noted above, the measures usually used to assess access to elective surgery relate only to demand for elective surgery, not to how much elective surgery is supplied. It may be important to consider supply-related measures alongside demand-related measures, because demand for elective surgery could be influenced by a range of factors including clinically assessed need for surgery being influenced by perceived likelihood of service supply, and the accessibility of private elective surgery and non-surgical treatment alternatives.

The National Health Performance Committee included measures of supply of elective surgery in its *Report on health sector performance indicators* (NHPC 2004), noting that, for 2001–02, jurisdictions with comparatively higher surgery rates did not necessarily have lower median waiting times. Crude rates for public elective surgery are included in *Australian hospital statistics*, but have been of limited value, because data are not routinely

available to calculate age-standardised rates, and the coverage of the data collection is not complete for all jurisdictions.

Access to other types of health services have been assessed through consideration of levels of supply of the services. For example, in the *Report on government services 2008* (SCRGSP 2008), Pharmaceutical Benefits Scheme expenditure per person by geographical area is used as one measure of access to primary care and community health services.

Measures are for public hospitals only

Also as noted above, the measures used for most national reporting of access to elective surgery are only for public hospitals (or public hospitals, and patients treated in private hospitals on contract from the public sector). There is no routine provision of information on private elective surgery that is designed to contribute to the assessment of the accessibility of elective surgery overall. Given that private elective surgery comprises about 61% of elective surgery overall, it would be useful to incorporate measures of private elective surgery provision into routine reporting of access to elective surgery. This could be useful if, for example, levels of demand for or supply of public elective surgery is influenced by the level of supply of private elective surgery.

New measures

As noted above, the new measures presented in this report are the supply-related measures population rates of elective surgery provision, and the demand-related measures that use diagnosis and other information, rather than urgency categorisation, to assess access to surgery for different types of patients.

New supply-related measures

The supply-related measures use the approach that measurement of access to services can be measured as levels of provision of service at the population level. This approach incorporates an assumption that levels of 'need' are the same, on average, for different populations, or that variation in need can be accounted for using data analysis methods (such as age standardisation).

The measures presented are:

- Age-standardised separation rates for public and private elective surgery overall, by remoteness area, socioeconomic status, Indigenous status and sex of the patient
- Age-standardised separation rates and rate ratios for public elective surgery by surgical specialty and for indicator procedures, by remoteness area, socioeconomic status, Indigenous status and sex of the patient
- Indicative adverse event rates for public and private elective surgery.

Separation rates (or admission rates for elective surgery) may be a useful measure of accessibility as they do not rely on clinical urgency categorisation (so are not limited by non-comparability of the categorisation); the coverage of the data are essentially complete (AIHW 2007) (whereas the coverage of the National Elective Surgery Waiting Times Data Collection is not); data are available to assess access for different demographic groups; and data are available for both the public and private sectors.

As noted above, the use of age-standardised rates is based on the assumption that the level of need for services is affected only by the age structure of the population. However, the need for public hospital elective surgery can also be affected by differences in health status in the population, private health insurance coverage and access to and availability of private hospital services and non-surgical treatment. These measures may be difficult to interpret without standard benchmarks to report against.

The adverse event rates information is indicative of the safety of elective surgery provision, and is not a supply-related measure of access to elective surgery. It is included in this report because this type of information is to be incorporated into reporting requirements for the Australian Government's Elective Surgery Reduction Plan (Treasurers and Health Ministers 2008).

New demand-related measures

The new demand-related measures in this report incorporate demographic and diagnosis information on the patients that may assist in assessing access to elective surgery by different patient groups that is not dependent on the apparently non-comparable data on the clinically-assessed condition of the patient.

As with the clinical urgency categories, the diagnosis data are based on the clinically-assessed conditions of the patients, but are not regarded as non-comparable among the states and territories.

The measures presented are:

- Median waiting times and proportions of patients waiting longer than 365 days by surgical specialty and for indicator procedures, by remoteness area, socioeconomic status, Indigenous status, age and sex of the patient
- Median waiting times and proportions of patients waiting longer than 365 days for selected principal diagnoses, by surgical specialty and for indicator procedures.

For this report, diagnosis information has been used to present waiting times information for neoplasms (cancers) and some of the other more common diagnoses. If this type of analysis were to be incorporated into routine reporting of access to elective surgery, appropriate diagnosis categories for each surgical speciality, and each indicator procedure, could be further developed with clinical and stakeholder advice.

The diagnosis information is not necessarily known at the time that patients are added to waiting lists or admitted for their surgery. In addition, it does not necessarily reflect levels of pain, dysfunction or disability in the same way that urgency categories are designed to do. Diagnosis information may nevertheless have potential to be used as a 'proxy' for clinical urgency in national comparable reporting of elective surgery waiting times.

It is not anticipated that diagnosis information would replace urgency categorisation at the local level, where it is used to prioritise patients for their surgery, and may be suitable for assessing access to elective surgery over time.

2 Methods

Data for this report are sourced from two AIHW databases:

- The National Hospital Morbidity Database (NHMD), which is derived from hospital records on admitted patients, and includes a record for every separation from hospital for all public hospitals in Australia and essentially all private hospitals. The records include demographic and diagnosis information for the patient, and information on any procedures (including surgery) that they underwent during their hospitalisation.
- The National Elective Surgery Waiting Times Data Collection (NESWTDC), which is derived from public hospital elective surgery waiting lists, and includes a record for each patient removed from a waiting list for their elective surgery for about 87% of public elective surgery. Information is included on how long each patient waited for their surgery and the surgical specialty and indicator procedure for which they were waiting.

More information on these data collections is available in *Australian hospital statistics 2005–06* (AIHW 2007). They are based on the National Minimum Data Sets for Admitted Patient Care and Elective Surgery Waiting Times, respectively. Definitions are summarised in the Glossary.

Admitted patient care data

For data from the National Hospital Morbidity Database:

- Elective surgery was defined as a separation for which the Urgency of admission was reported as *Elective* (admission could be delayed by at least 24 hours) and where the assigned Diagnosis Related Group was *Surgical* (at least one operating room procedure was performed during the episode), and the principal diagnosis was not Z41 (cosmetic surgery).
- Private elective surgery refers to elective surgery for private patients in private hospitals.
- Public elective surgery refers to elective surgery in public hospitals and elective surgery for public patients in private hospitals. The latter group can be managed through elective surgery waiting lists maintained by public hospitals.
- Neoplasm-related principal diagnoses were defined by ICD-10-AM diagnosis codes included in Chapter II Neoplasms (C00–D48)
- Separations with adverse events were defined as those for which one or more diagnosis and/or external cause codes that indicate an adverse event was treated during the episode of care was recorded, as reported routinely in *Australian hospital statistics* (AIHW 2007). This is one way of identifying adverse events, and other methods could be used. In particular, information on whether a condition had onset during the episode of care could be used to exclude records where the condition existed before admission. A condition onset flag will be included in the NHMD from the 2008–09 reference year. This information could also be used in the future to include conditions not identifiable with the codes currently used to indicate adverse events.
- Separations for which the care type was reported as *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

Linked public hospital admitted patient and elective surgery waiting times data

For 2004–05, some states and territories (South Australia, Queensland, the Australian Capital Territory and the Northern Territory) provided the elective surgery waiting times linked 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. For other states (New South Wales, Victoria and Tasmania), the AIHW linked the data, with permission of the relevant state and with permission of the AIHW Ethics Committee. Western Australia did not give permission for the linkage to be undertaken for their data. The linkage was undertaken with the advice of New South Wales, Victoria and Tasmania and was on the basis of matching identifiers for the hospitals and patients from the two data sets.

This linkage allowed demographic and diagnosis information to be analysed in conjunction with information on waiting times, surgical specialty and indicator procedure, for public elective surgery.

The linkage resulted in approximately 478,000 linked records being available for analysis, representing over 95% of records provided for the NESWTDC by the participating jurisdictions, and 87% of all records in the NESWTDC.

The linked data also represented approximately 84% of public elective surgery in the participating jurisdictions and 75% of public elective surgery overall in the NHMD. Coverage varied by remoteness of the patient's usual residence and by socioeconomic status (Table 2.1). Coverage for separations for Indigenous Australians was estimated at 90% and for other Australians it was estimated at 84%. Coverage for separations for males was estimated at 93% and for females at 79%. This variation should be considered when interpreting the age-standardised rates based on the linked data presented in this report.

Table 2.1: Estimated coverage of the linked elective surgery and admitted patient data

Remoteness areas	Estimated coverage	Socioeconomic status	Estimated coverage
Major Cities	93%	Most disadvantaged	80%
Inner Regional	77%	Second most disadvantaged	78%
Outer Regional	66%	Middle quintile	90%
Remote	66%	Second most advantaged	88%
Very Remote	73%	Most advantaged	95%

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

For analyses using the data from the NHMD and/or the NESWTDC:

- Waiting times data have been suppressed if there were fewer than 10 elective surgery admissions in the category being presented.
- Population rates were age-standardised using the direct standardisation method and 5-year age groups. The Australian population for 30 June 2001 was used as the standard population and population estimates for 30 June 2004 were used for the observed rates.

3 Measures of supply of elective surgery

Public and private elective surgery

In Australia in 2004–05 there were over 1.6 million separations for elective surgery. Almost 1 million of these separations were for private elective surgery (61%), with the remaining 629,000 separations (39%) being for public elective surgery. Approximately 15% of public hospital separations and 36% of private hospital separations were for elective surgery.

Elective surgery separation rates

Elective surgery separation rates provide a measure of access to elective surgery and can provide indications of whether access is equitable for different population sub-groups. In this section, the rates are presented by the remoteness of the place of usual residence of the patient, by the socioeconomic status of the patient (based on their place of usual residence) and by the Indigenous status and sex of the patient.

The overall separation rate for private elective surgery was 48.3 per 1,000 persons and the separation rate for public elective surgery was 31.0 per 1,000 persons.

Remoteness area of usual residence

The rate of private elective surgery was highest for those living in Major Cities (51.9 per 1,000 persons) and decreased with increasing remoteness to 16.1 per 1,000 persons for Very Remote areas (Figure 3.1, Table A1.3). The rate of public elective surgery was lowest for those living in Major Cities (27.8 per 1,000) and highest for those living in Outer Regional areas (39.3 per 1,000).

This may indicate that access to private elective surgery is not even: access for people living in Remote and Very Remote areas may be markedly lower than that for people living in Major Cities and regional areas. Access to public elective surgery appears to be more even, although residents of Major Cities seem to access public elective surgery at lower rates than other Australians.

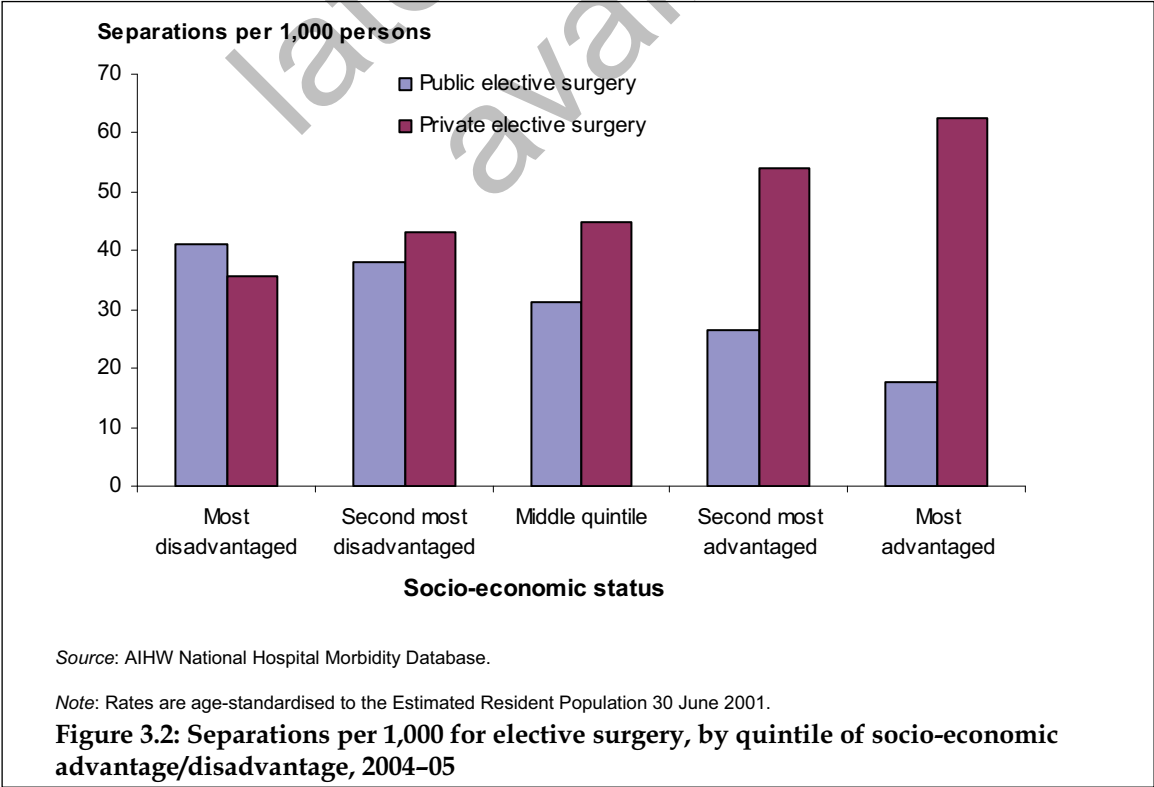
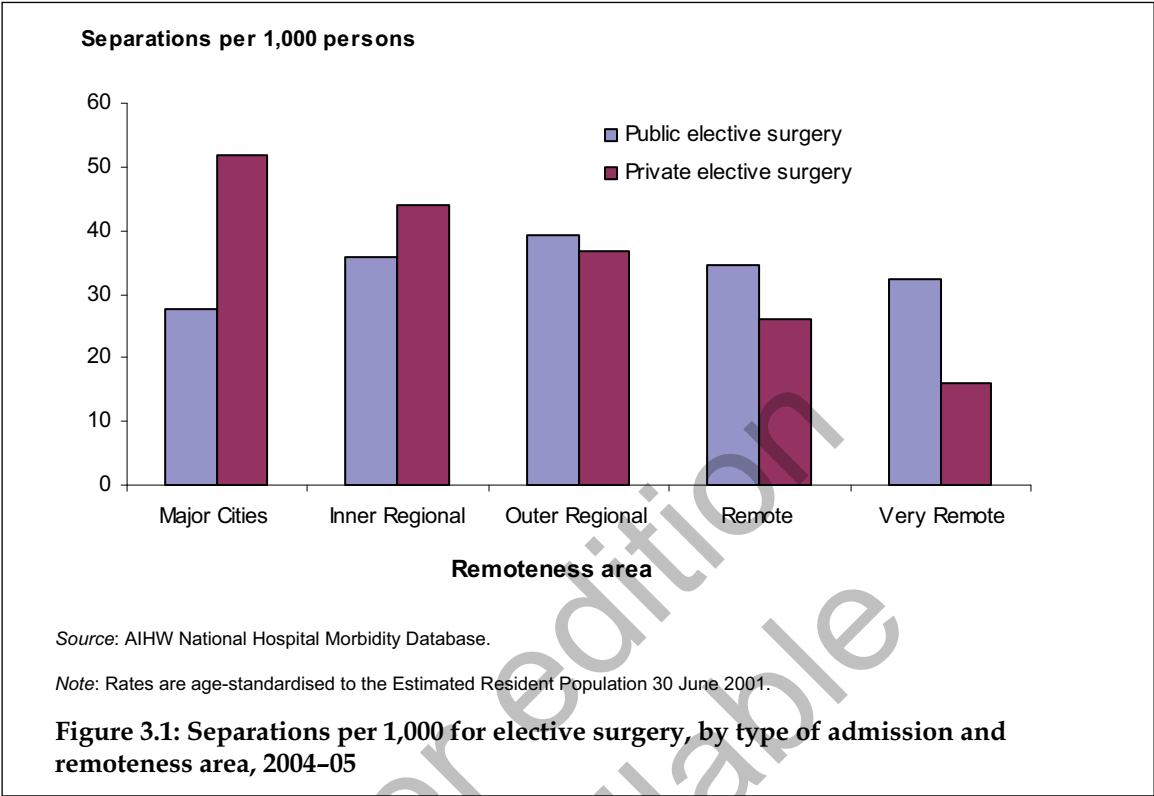
Socio-economic status

Figure 3.2 presents rates per 1,000 population for elective surgery separations by quintile of socioeconomic advantage/disadvantage using the Australian Bureau of Statistics' (ABS) Index of Socio-Economic Advantage/Disadvantage (ABS 2004) of the statistical local area of the patient's usual residence.

The rate of private elective surgery was highest for those in the *Most advantaged* quintile (62.4 per 1,000 persons). The rate for private elective surgery decreased with socio-economic advantage to 35.6 per 1,000 persons for the *Most disadvantaged* quintile. The rate of public elective surgery was lowest for those in the *Most advantaged* quintile (17.7 per 1,000) and

highest for those *Most disadvantaged* quintile (41.1 per 1,000) (see Table A1.4 for more information).

This may indicate that access to both private and public elective surgery varies markedly by socio-economic status.

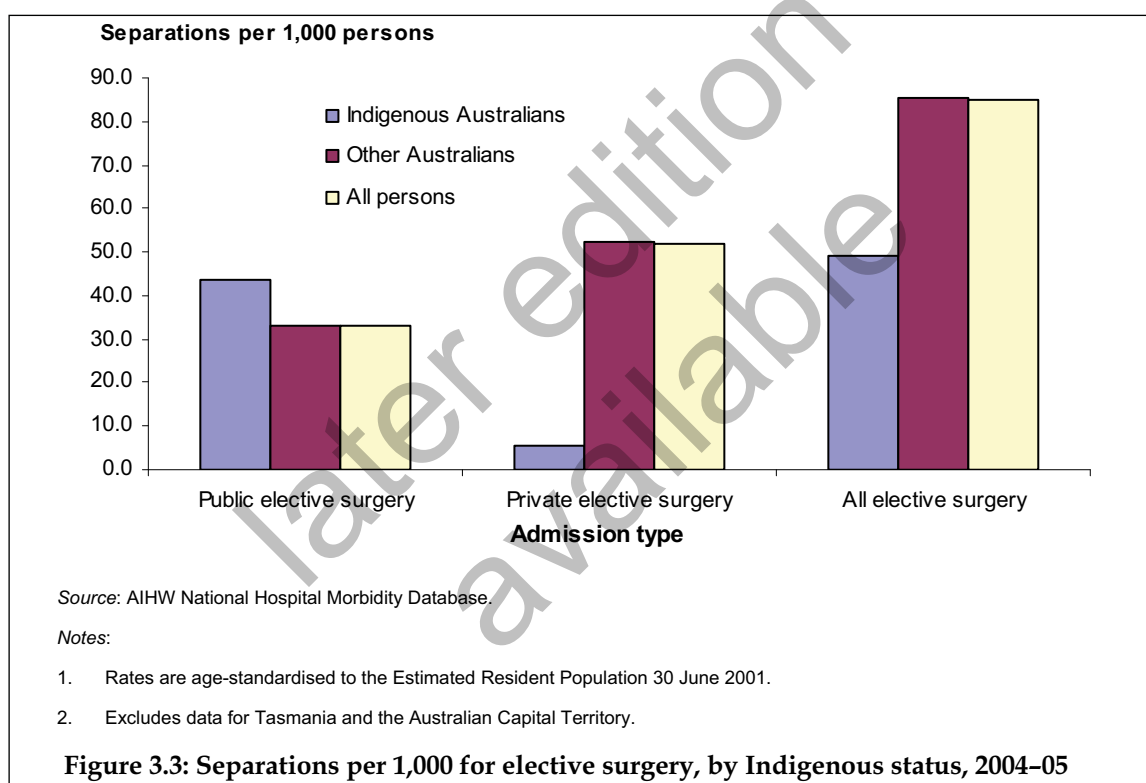


Indigenous status

There were almost 15,000 elective surgery separations in 2004–05 for patients reported as Aboriginal and/or Torres Strait Islanders. Over 90% of these were for public elective surgery.

The rate of elective surgery for Indigenous Australians was 48.9 per 1,000, just over half the rate for Other Australians (85.5 per 1,000). The rates of public and private elective surgery for Indigenous Australians were 43.5 per 1,000 and 5.5 per 1,000, respectively. The rate for public elective surgery was about 32% higher for Indigenous Australians than for Other Australians (33.0 per 1,000). The rate for private elective surgery for Other Australians (52.6 per 1,000) was markedly higher than the rate for Indigenous Australians (Figure 3.3 and Table A1.5).

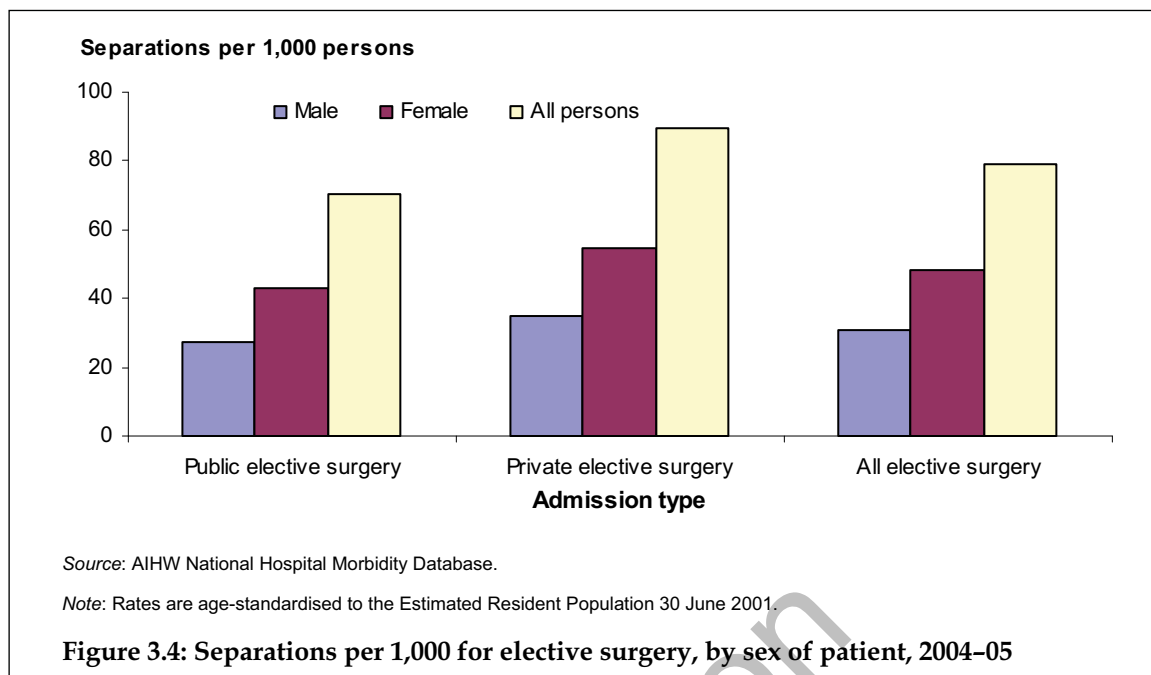
Caution should be used in the interpretation of these data as there is considerable variation in the quality of Indigenous status reporting both among jurisdictions and by hospital sector. In particular, the identification of Indigenous Australians for private hospitals is considered to be poor (AIHW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



Sex of patient

Overall, females had higher rates of elective surgery than males, accounting for 58% of separations categorised as elective surgery.

The rate of elective surgery was 78% higher for females than for males, and this difference was the same for both public and private elective surgery (Figure 3.4, Table A1.6). The differing rates for elective surgery probably reflect differing needs for elective surgery between males and females.



Public elective surgery

As noted above, an analysis of linked elective surgery and admitted patient data could be used to generate age-standardised, or population group-specific rates for surgical specialties and indicator procedures.

Using the linked elective surgery and admitted patient data for 2004–05, age-standardised rates of the provision of (or access to) public hospital elective surgery are presented below.

The overall rate of admission from the linked data was 26.0 per 1,000 persons (Table A1.8) and the overall rate of public elective surgery was 31.0 per 1,000 persons (Table A1.3). The difference in these rates probably reflects limitations in the linkage process and the incomplete coverage of the NESWTDC. The analyses below include estimates of the gaps in coverage of the linked data, compared with the public elective surgery identified in the NHMD for this report. Estimates are provided by remoteness area, socio-economic status, Indigenous status and the sex of the patient.

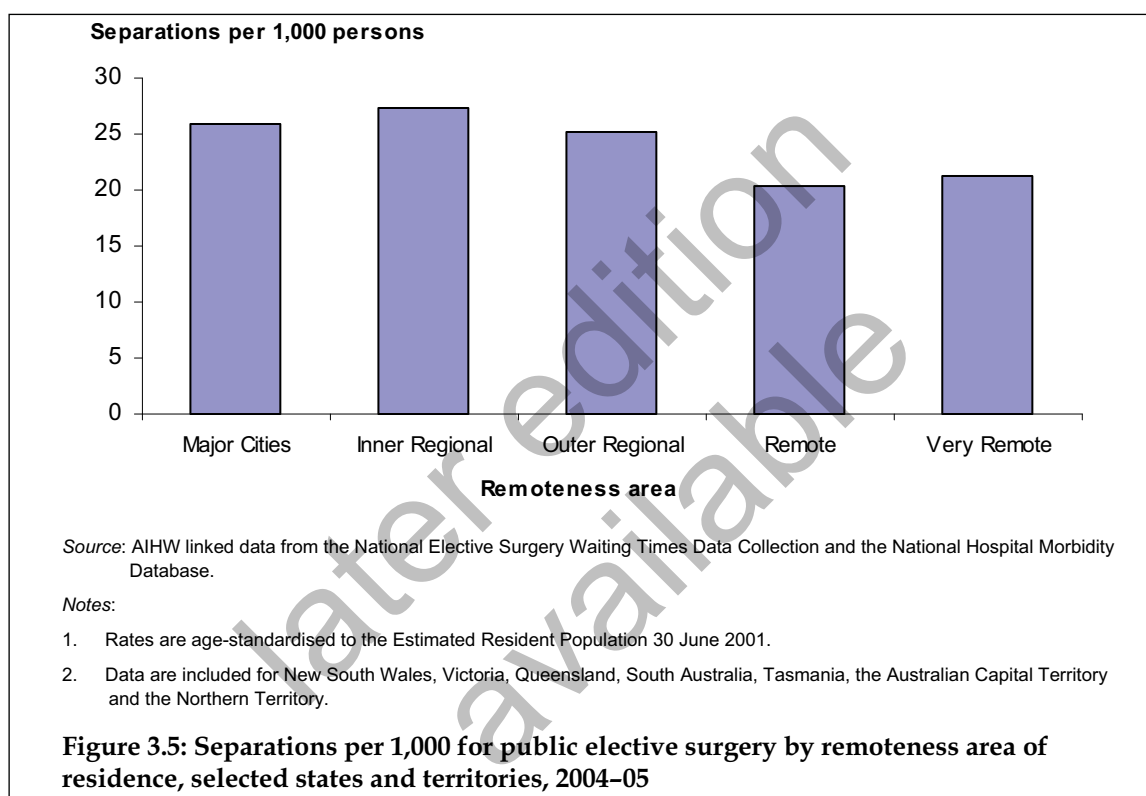
The data presented in this section include rate ratios by surgical specialty and by indicator procedure. The rate ratios (RR) compare the age-standardised rate for each remoteness area/SEIFA category/sex of patient against the total for Australia and, for Indigenous Australians, against the rate for other persons. If the RR is greater than 1, then the age-standardised rate for the remoteness area/SEIFA category was higher than the age-standardised rate for the population overall. Included in the supporting appendix tables are the 95% confidence intervals of the RR which show the range of values which the RR could be expected to fall within due to chance. If the confidence interval includes 1, then a difference between the categories presented in the table is not considered to be statistically significant.

These data should be considered with regard to differing needs to access public hospital elective surgery, including as influenced by private health insurance coverage and access to private hospital services.

Remoteness of usual residence

Using the linked elective surgery and admitted patient data for 2004–05, approximately 65% of admissions from waiting lists for public elective surgery were for patients residing in Major Cities, 23% in Inner Regional areas and 10% in Outer Regional areas.

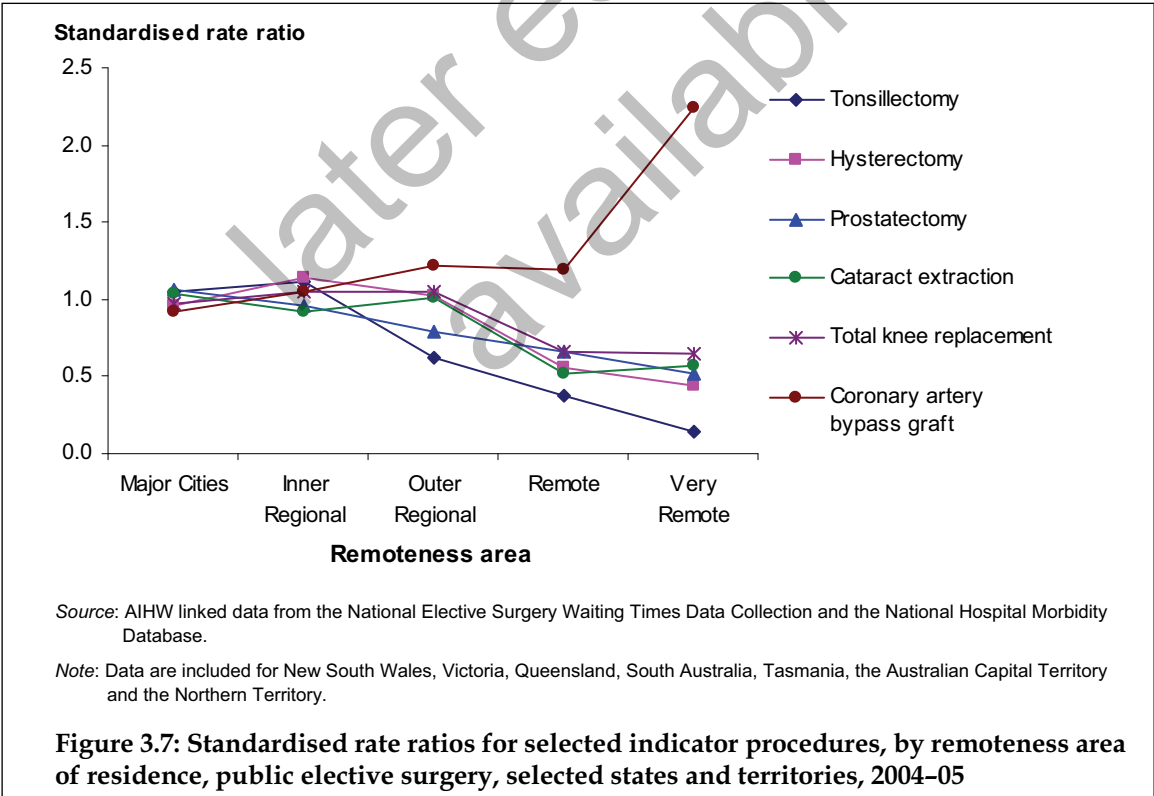
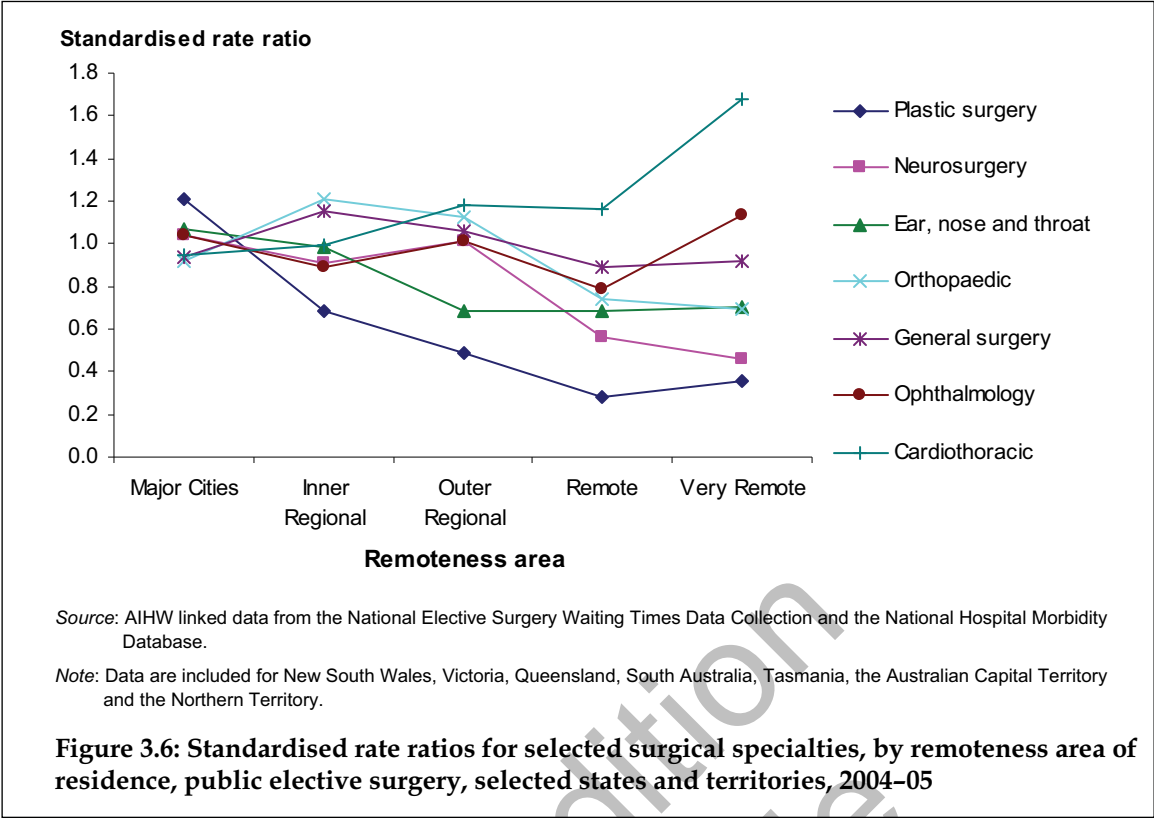
For 2004–05, people living in Remote and Very Remote areas had lower rates of admission for public elective surgery than people living in Major Cities, Inner Regional and Outer Regional areas (Figure 3.5 and Tables A1.7 and A1.8). Taking into consideration the variation in coverage of the linked data by remoteness (see Table 2.1), the rates of admission for public elective surgery for people in Outer Regional and Remote areas may be understated by approximately 50%, rates in Inner Regional and Very Remote areas understated by about 30%–35% and rates for Major Cities understated by about 7%.



Surgical specialty

Access to elective surgery is increasingly variable with remoteness across different surgical specialties. In general terms access to a number of surgical specialties was lower for residents of Remote and Very remote areas than for other residents.

Rates of admission for *Plastic surgery* varied markedly by remoteness, with people living in Major Cities admitted at more than four times the rate of people living in Remote areas. The rate of admissions for *Cardiothoracic surgery* for people living in Very Remote areas was about 50% higher than for people living in other areas (Figure 3.6 and Table A1.7).



Indicator procedure

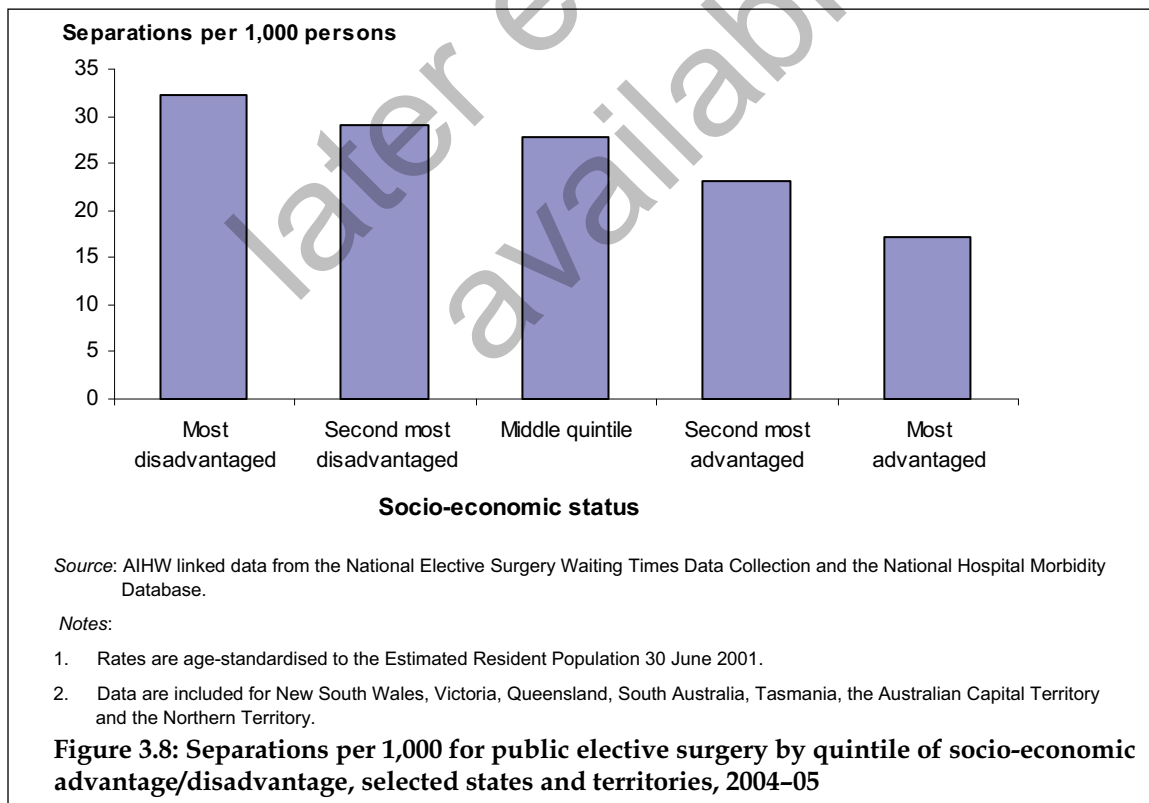
Rates of admission for *Hysterectomy* varied markedly with people living in Outer Regional areas admitted at more than 2.6 times the rate of people living in Very Remote areas. The rate of admissions for *Tonsillectomy* for people living in Outer Regional areas was about 7.5 times the rate for people living in Very Remote areas and almost 3 times the rate for people living in Remote areas (Figure 3.7, Table A1.8).

Socio-economic status

Using the linked elective surgery and admitted patient data for 2004–05, approximately 27% of admissions from waiting lists were for patients in the *Most disadvantaged* quintile, decreasing to about 14% in the *Most advantaged* quintile.

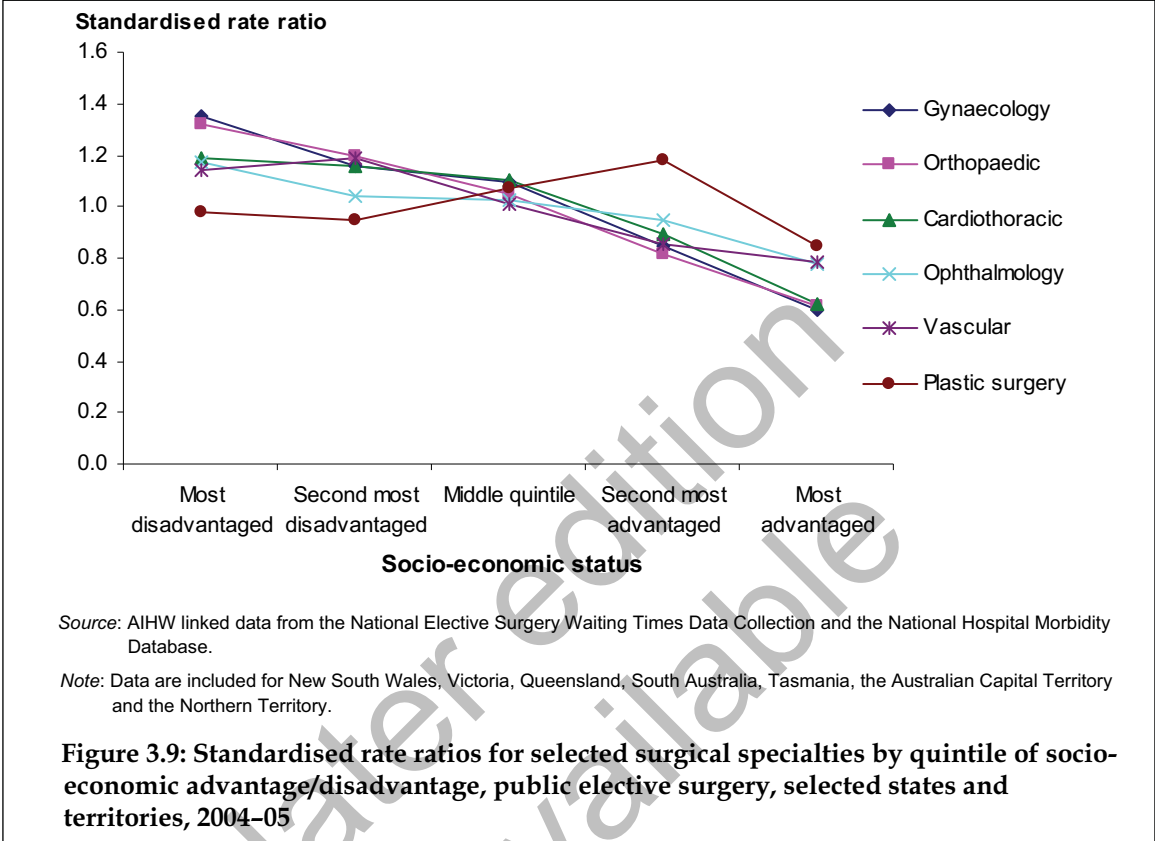
Taking into consideration the variation in coverage of the linked data by socio-economic status (see Table 2.1), the rates of admission for public elective surgery for people in the *Most disadvantaged* and *Second most disadvantaged* quintiles may be understated by approximately 25%, rates for people in the *Middle* and *Second most advantaged* quintiles may be understated by about 11%–14% and rates for the *Most advantaged* quintile understated by about 5%.

The *Most disadvantaged* quintile (32.3 per 1,000) had the highest rate of admission for elective surgery and the *Most advantaged* quintile had the lowest overall rate (17.2 per 1,000) (Figure 3.8 and Table A1.9). When variation in the coverage is considered, these differences may be greater.



Surgical specialty

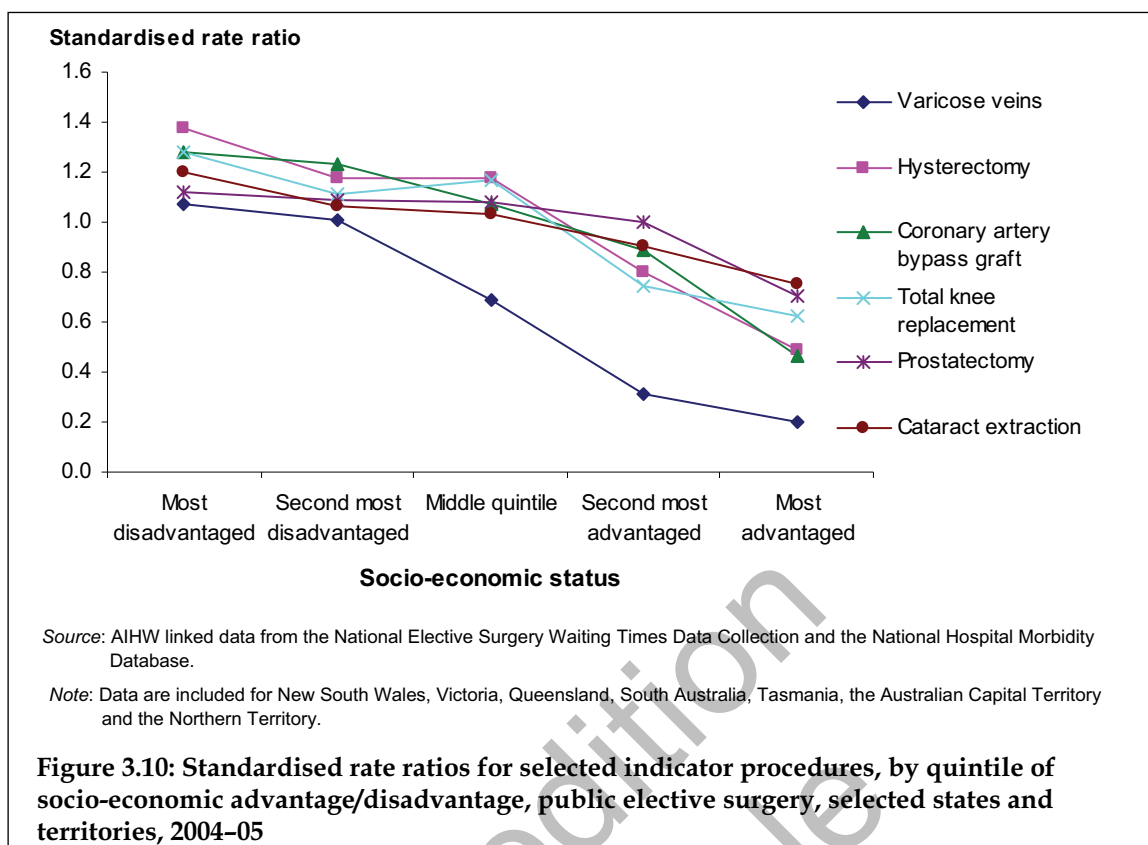
Rates of admission for *Gynaecology* and *Cardiothoracic surgery* varied markedly by socio-economic status with persons in the *Most disadvantaged* quintile admitted at around twice the rate of persons in the *Most advantaged* quintile. The rate of admissions for *Plastic surgery* (excludes cosmetic surgery) was fairly even among socio-economic groups, with slightly higher rates in the *Second most disadvantaged* quintile (Figure 3.9, Table A1.9).



Indicator procedure

Rates of admission varied markedly by socio-economic status and indicator procedure. For the *Most disadvantaged* quintile, admission rates for 14 of the 15 indicator procedures were at least 50% higher than the rates for the *Most advantaged* quintile. The *Most advantaged* quintile had the lowest rates of admission for all indicator procedures. As noted above, when variations in coverage, are taken into account, the variations in admission rates may be more marked.

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. The highest rate ratios were reported for *Hysterectomy* and *Cholecystectomy* (1.4), with the rates of admission for the *Most disadvantaged* quintile about 40% higher than the overall rates. The *Most advantaged* quintile had the lowest rates for these two procedures, at about 50% lower than the overall rates. The rates of admission for *Cystoscopy* were more evenly distributed among socio-economic groups, with the *Middle* quintile about 20% higher than the overall rate, and the *Most advantaged* quintile about 24% lower than the overall rate (Figure 3.10, Table A1.10).



Indigenous status

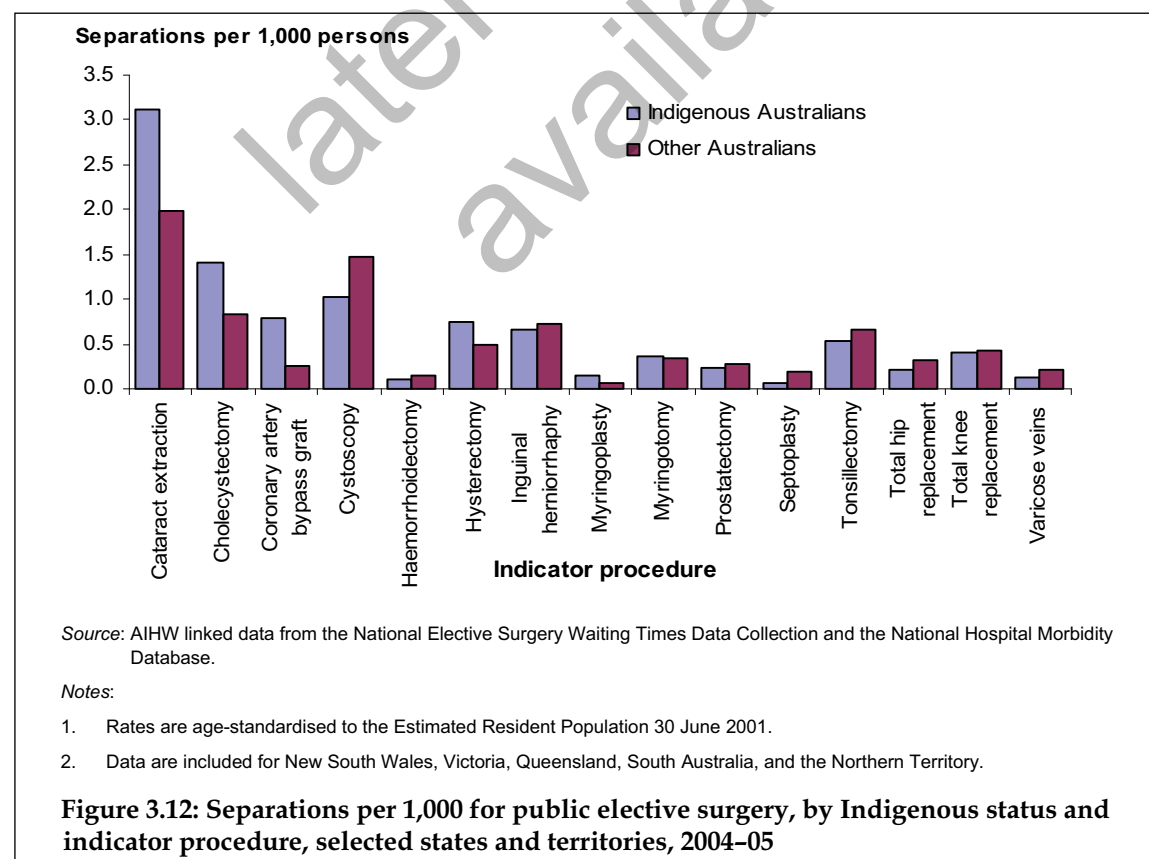
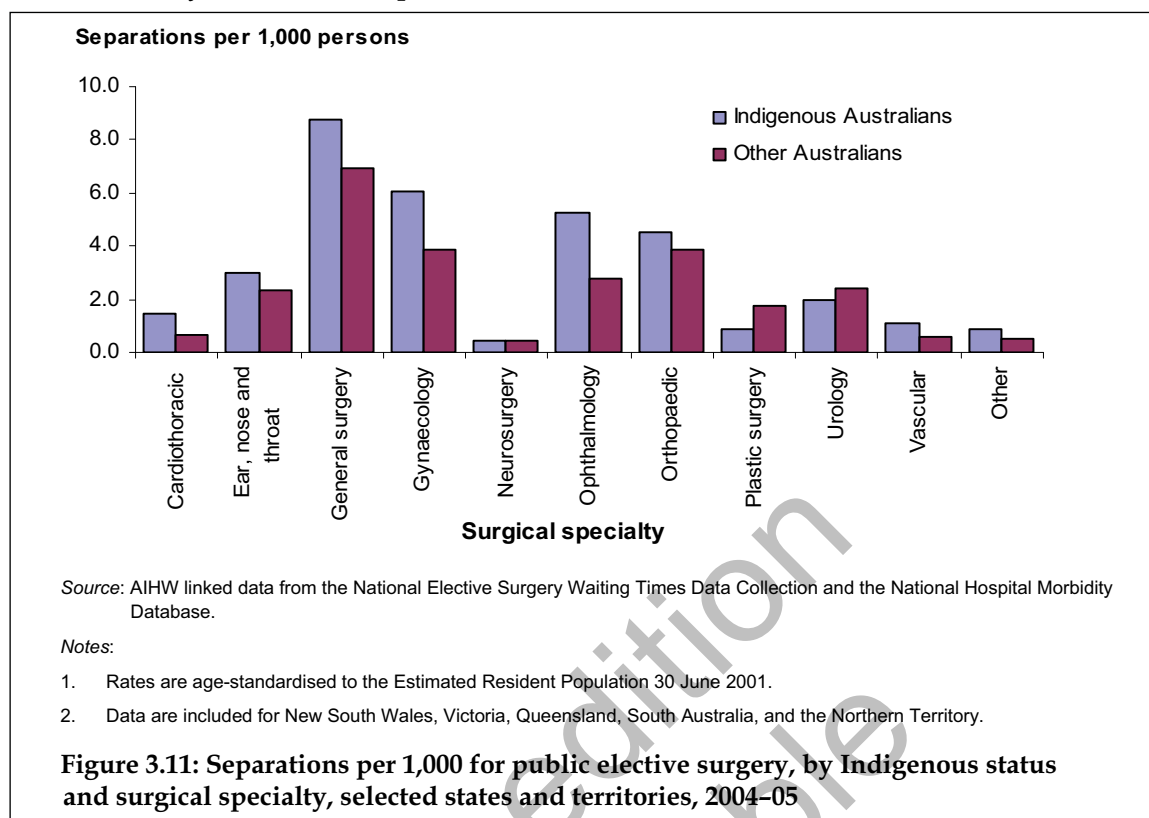
Using the linked elective surgery and admitted patient data for New South Wales, Victoria, Queensland, South Australia and the Northern Territory for 2004-05, there were almost 10,000 admissions from waiting lists for patients identified as Aboriginal and/or Torres Strait Islander persons. An estimate of coverage by Indigenous status indicates that about 10% of separations for Indigenous Australians and about 16% for Other Australians are not included in the linked data. Therefore admission rates by surgical specialty and indicator procedure for Indigenous Australians are underestimated to a lesser degree than the rates for Other Australians. The quality of Indigenous status in the National Hospital Morbidity Database is variable, so the data in this section should be used with caution.

Overall, for 2004-05, Indigenous Australians had higher rates of admission (34.1 per 1,000) for public elective surgery than other persons (26.1 per 1,000) (Table A1.11). The rate of admission for public elective surgery for Indigenous Australians was almost 1.3 times the rate for Other Australians. To put it into perspective, the rate for all hospitalisations for Indigenous Australians was about 2.1 times the rate for Other Australians (AIHW 2007).

Surgical specialty

The highest rate ratios were for *Cardiothoracic surgery* (2.3), and *Vascular surgery* and *Ophthalmology* (both 1.9) with the rates of admission for Indigenous Australians higher than the rates for Other Australians. In contrast, Indigenous Australians were admitted for *Plastic surgery* at about half the rate for Other Australians (0.5) (Figure 3.11, Table A1.11). As the

coverage for Indigenous Australians is more complete than that for Other Australians, the rate ratios may be lower than presented here.



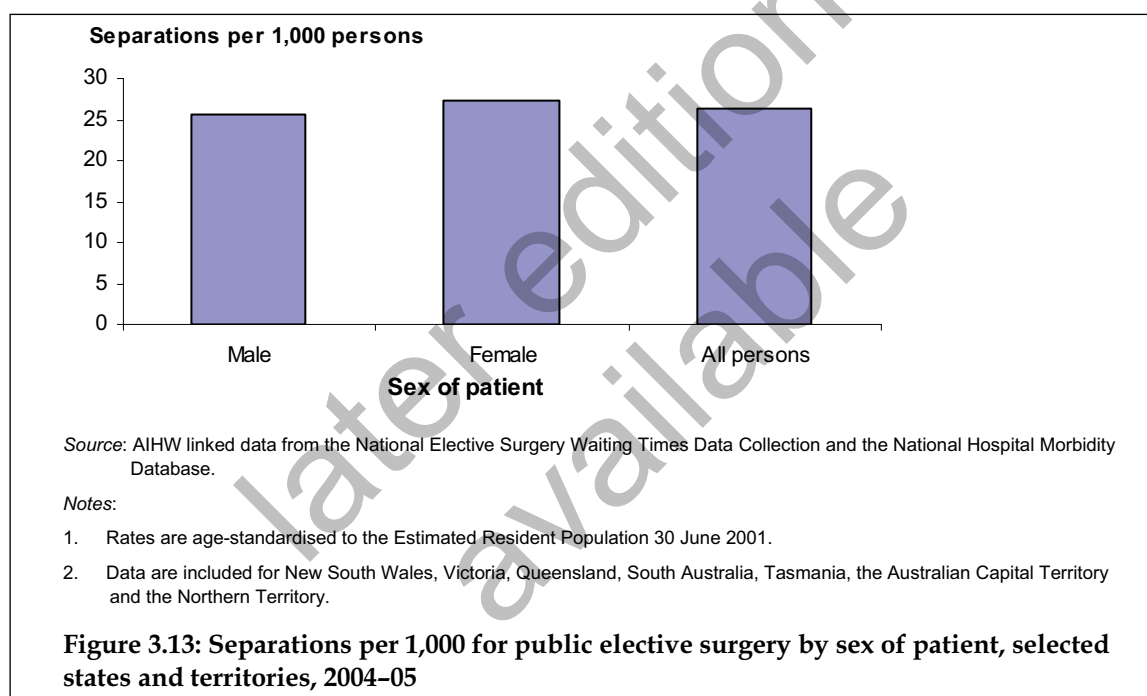
Indicator procedure

The highest rate ratios were reported for *Coronary artery bypass graft* (3.2) and *Myringoplasty* (2.3) with the rates of admission for Indigenous Australians higher than the rates for Other Australians. Indigenous Australians had lower rates of admission for *Cystoscopy* and *Total hip replacement* (0.7) (Figure 3.12, Table A1.12).

Sex of patient

Using the linked elective surgery and admitted patient data for 2004–05, females accounted for about 53% of admissions for public elective surgery. Females also accounted for about 53% of all hospitalisations (AIHW 2007). Variation in the coverage of the linked data by sex may mean that the rates for females are underestimated to a greater extent than for males.

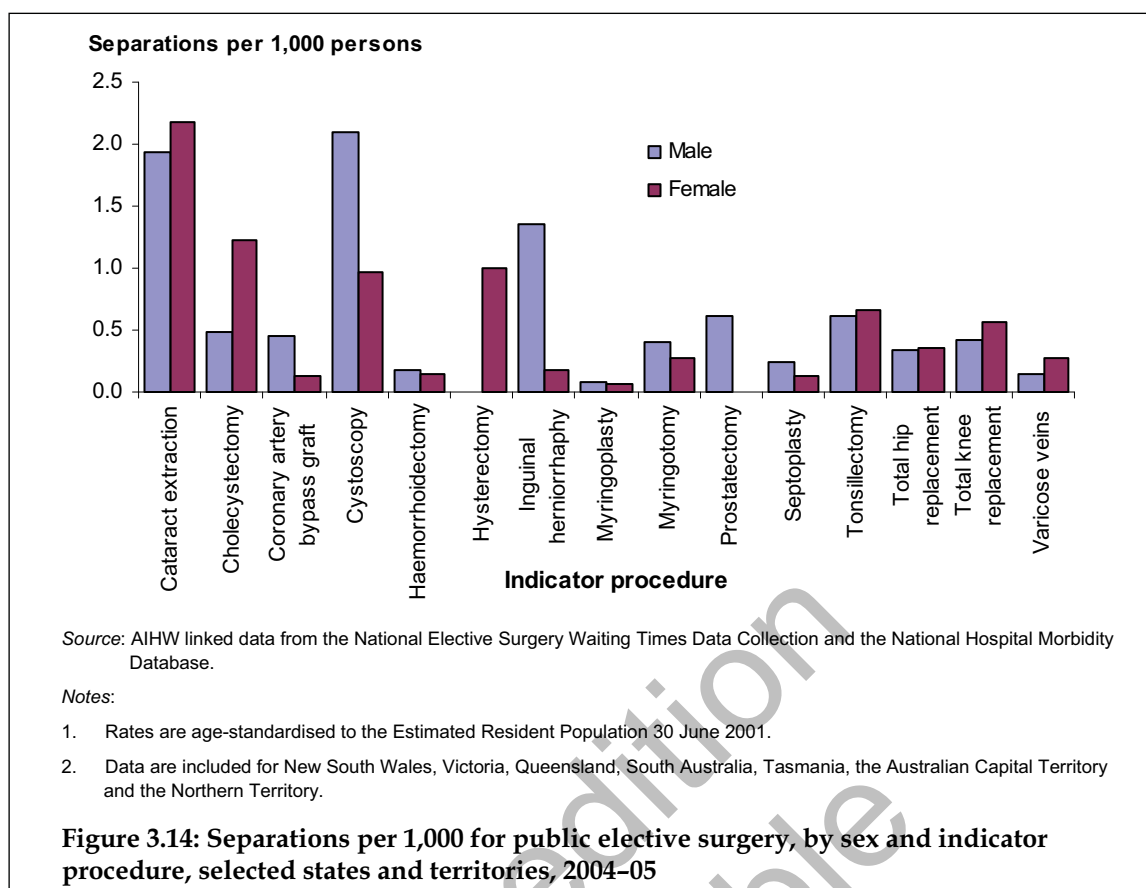
Overall, for 2004–05, females (27.4 per 1,000) had higher rates of admissions for elective surgery than males (25.6 per 1,000) (Figure 3.13, Table A1.13). This may reflect differing needs for elective surgery between males and females.



Information on indicator procedures is presented here only, as it is expected that the variation in need between males and females for these procedures could be expected to be smaller than variation in need by surgical specialty.

Indicator procedure

Apart from the sex-specific indicator procedures (*Hysterectomy* and *Prostatectomy*), the highest rate ratios were reported for *Inguinal herniorrhaphy* (8.0) and *Coronary artery bypass graft* (3.4) with the rates of admission for males higher than the rates for females. Males had lower rates of admission for *Varicose vein stripping and ligation* (0.5) and *Cholecystectomy* (0.4) (Figure 3.14, Table A1.13).

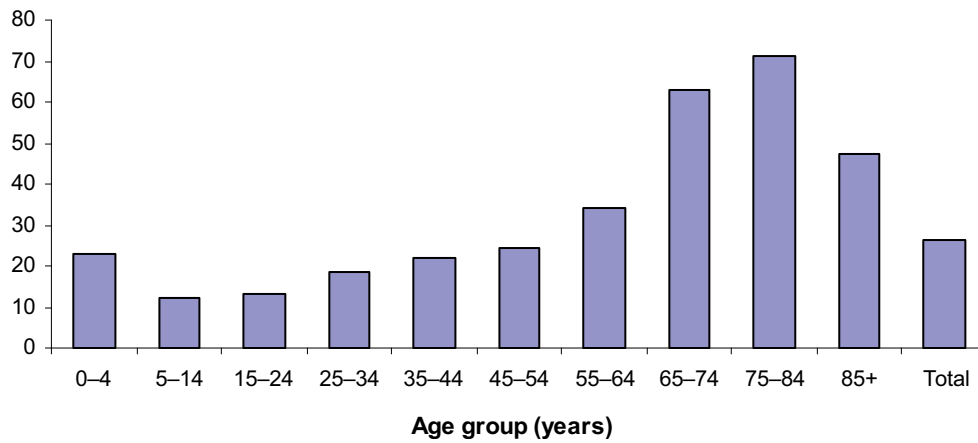


Age of patient

Using the linked elective surgery and admitted patient data for 2004-05, patients aged 55 years and over accounted for over 45% of admissions for public elective surgery and the age-specific rates were higher for this group than the overall rate. The distribution by age group for public elective surgery is similar to all hospital separations (51% aged 55 years and over). Patients aged 65 to 74 years accounted for over 16% of all public elective surgery, and those aged 75 to 84 years had the highest separation rate (Figure 3.15).

This may reflect differing needs for elective surgery between different age groups, and for different procedures.

Separations per 1,000 persons



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

Notes:

1. Rates are age-specific based on the Estimated Resident Population at 31 December 2004.
2. Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Figure 3.15: Separations per 1,000 for public elective surgery, by age group, selected states and territories, 2004-05

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4 Measures of demand for public elective surgery

Current reporting of elective surgery waiting times

As noted above, indicators of access to elective surgery have, to date, focussed on measures of demand derived from information on elective surgery waiting lists maintained by public hospitals in the states and territories. Indicators reported have included median waiting times, waiting times at the 90th percentile, and proportions of patients waiting longer than 365 days for their surgery. This information has also been available for each state and territory, for hospital peer groups, and for each surgical speciality and indicator procedure (AIHW 2007). The coverage of public elective surgery data provided for the NESWTDC is estimated to be about 87%.

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. Similarly, 10% of patients will have longer waiting times than patients at the 90th percentile, and 90% will have had shorter waiting times.

The NESWTDC data presented in Table 4.1 indicate that, between 2001–02 and 2005–06, the median waiting time rose from 27 days to 32 days. Over this period, median waiting times tended to be lower for *Principal referral and Specialist women's and children's hospitals* than in other hospitals. The number of days waited at the 90th percentile ranged between 193 days and 237 days, and the proportion of patients waiting longer than 365 days ranged between 3.9% and 4.8%.

New measures of demand

This section presents new measures of demand for elective surgery, based on data derived from elective surgery waiting lists, linked to data on the hospital admissions during which the surgery occurred, for the 2004–05 reporting period.

These linked data (described in more detail in the Methods section above) have not been routinely available, but now allow waiting times information to be presented by the remoteness area of the patient, the socioeconomic status of the patient (based on their area of residence) and the age, sex and Indigenous status of the patient, facilitating consideration of differences in waiting times for different demographic groups of patients. They also allow presentation of waiting times for patients with differing diagnoses, similarly facilitating consideration of differing waiting times experiences. The estimated coverage for the linked data is 84% of public elective surgery for participating jurisdictions.

Overall for 2004–05 the median waiting time to admission from public hospital waiting lists was 29 days.

Table 4.1: Waiting time statistics for patients admitted from waiting lists for elective surgery, by public hospital peer group, Australia, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	2005–06
Principal referral and Specialist women's & children's hospitals					
Number of reporting hospitals ^(a)	66	69	68	75	78
Estimated coverage of surgical separations (%) ^(b)	100	99	99	99	99
Number of admissions ^(c)	317,275	339,370	343,430	372,085	386,203
Days waited at 50th percentile	24	26	27	28	30
Days waited at 90th percentile	184	182	182	203	228
% waited more than 365 days	4.2	3.9	3.9	4.6	4.7
Large hospitals					
Number of reporting hospitals ^(a)	40	41	42	36	34
Estimated coverage of surgical separations (%) ^(b)	84	82	85	82	81
Number of admissions ^(c)	116,882	108,742	110,284	100,916	97,816
Days waited at 50th percentile	33	31	30	29	35
Days waited at 90th percentile	229	213	206	227	251
% waited more than 365 days	5.0	4.2	4.2	4.8	4.6
Medium hospitals					
Number of reporting hospitals ^(a)	56	56	58	59	51
Estimated coverage of surgical separations (%) ^(b)	53	52	59	62	62
Number of admissions ^(c)	62,430	59,109	68,790	69,830	63,641
Days waited at 50th percentile	32	34	34	37	38
Days waited at 90th percentile	231	234	215	272	257
% waited more than 365 days	4.7	3.6	3.3	6.1	3.8
Total^(d)					
Number of reporting hospitals ^(a)	193	199	196	195	191
Estimated coverage of surgical separations (%) ^(b)	84	85	87	87	87
Number of admissions ^(c)	508,371	517,503	528,949	549,746	556,951
Days waited at 50th percentile	27	28	28	29	32
Days waited at 90th percentile	203	197	193	217	237
% waited more than 365 days	4.5	4.0	3.9	4.8	4.6

Source: AIHW 2007.

Notes:

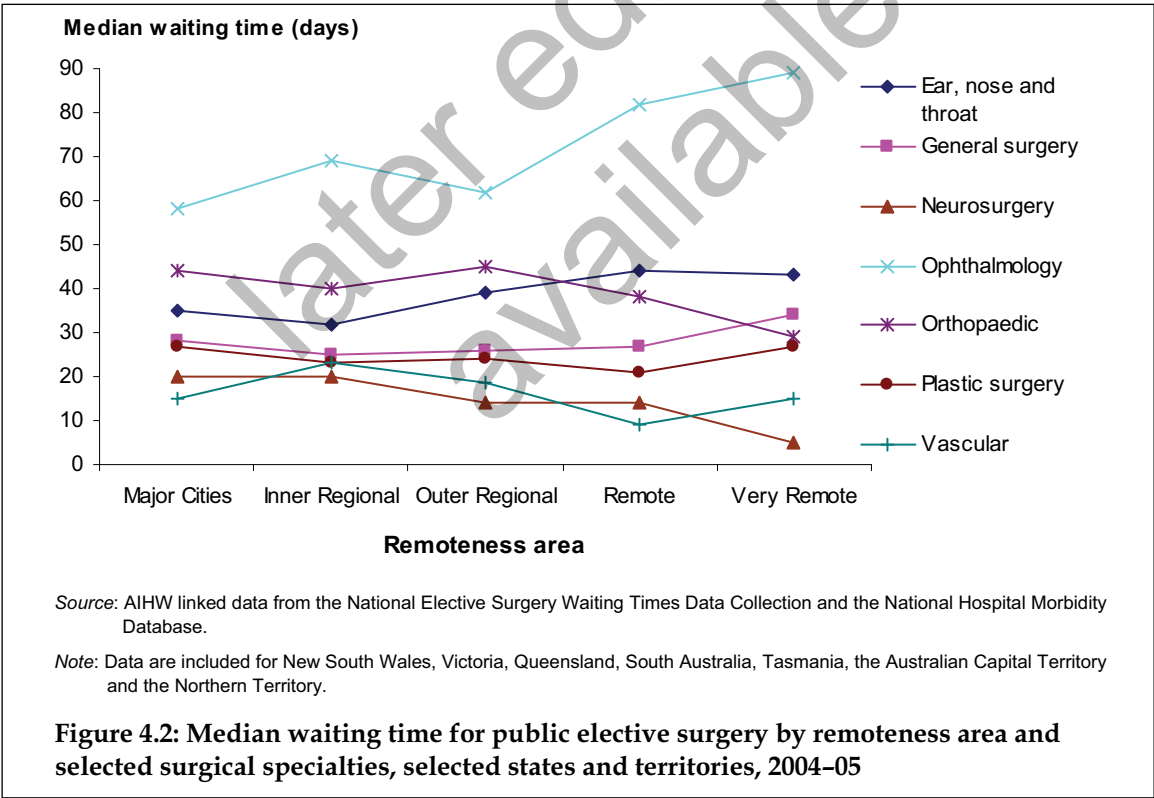
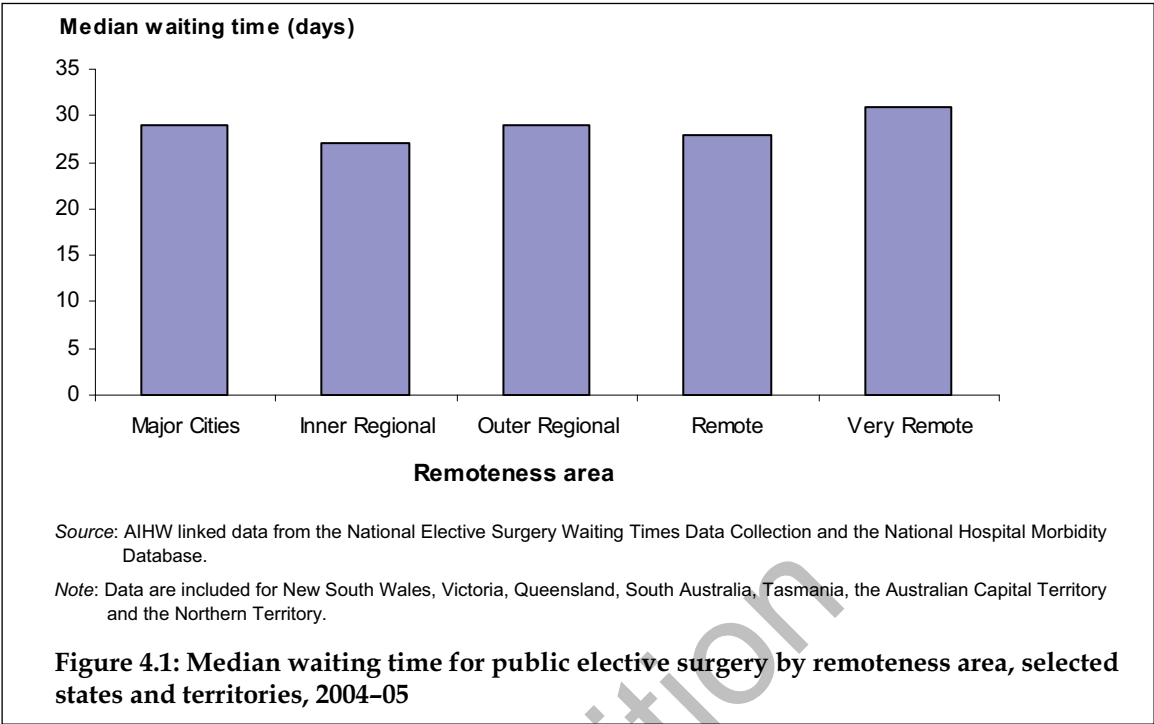
1. Estimate coverage is calculated as the number of separations with urgency of admission reported as 'elective' and a surgical procedure for public hospitals reporting to the National Elective Surgery Waiting Times Data Collection as a proportion of the number of separations with urgency of admission reported as 'elective' and a surgical procedure for all public hospitals.
2. The total includes data for hospitals not included in the specified hospital peer groups and some private hospitals contracted to do elective surgery. See Australian hospital statistics for further information on peer groups.

Remoteness of residence

Overall for 2004–05, residents of Very Remote areas had the longest median waiting time (31 days) and residents of Inner Regional areas had the shortest median waiting time (27 days) (Figure 4.1, Table A1.14).

Surgical specialty

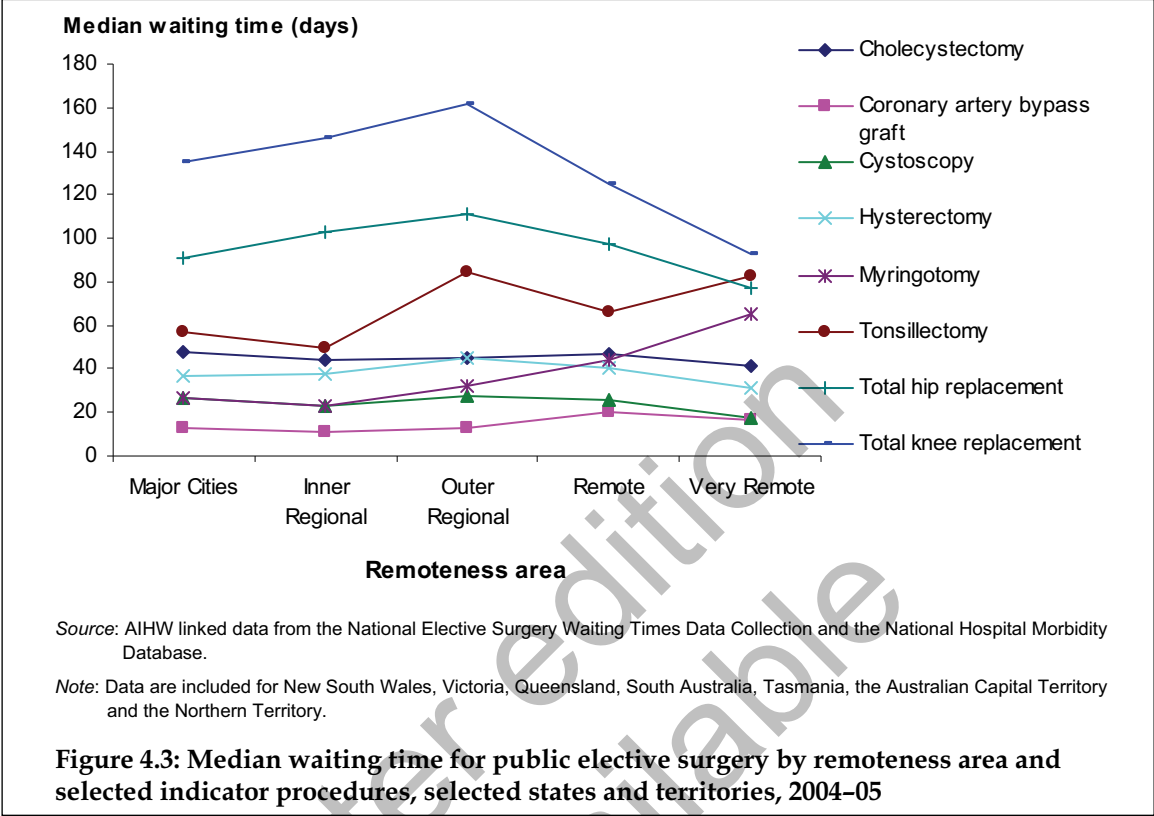
Ophthalmology was the specialty with the greatest variation in waiting times by remoteness area with people from Very Remote areas having the highest median waiting time of 89 days (compared to an overall median of 61 days). There was also a lot of variation for *Orthopaedic surgery*, with the lowest median waiting time in Very Remote area (29 days) and the highest in Outer Regional areas (45 days). *Cardio-thoracic surgery*, *Urology* and *Plastic surgery* had the least variation by remoteness area (Figure 4.2 and Table A1.14).



Indicator procedure

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/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 162 days, and the lowest in Very Remote areas (93 days). *Myringotomy* also showed a lot of variation, with the lowest median waiting time in Inner Regional areas (23 days) and the highest in Very Remote areas (65 days). *Cholecystectomy*, *Coronary artery bypass graft* and *Cystoscopy* had the least variation by remoteness area (Figure 4.3 and Table A1.15).

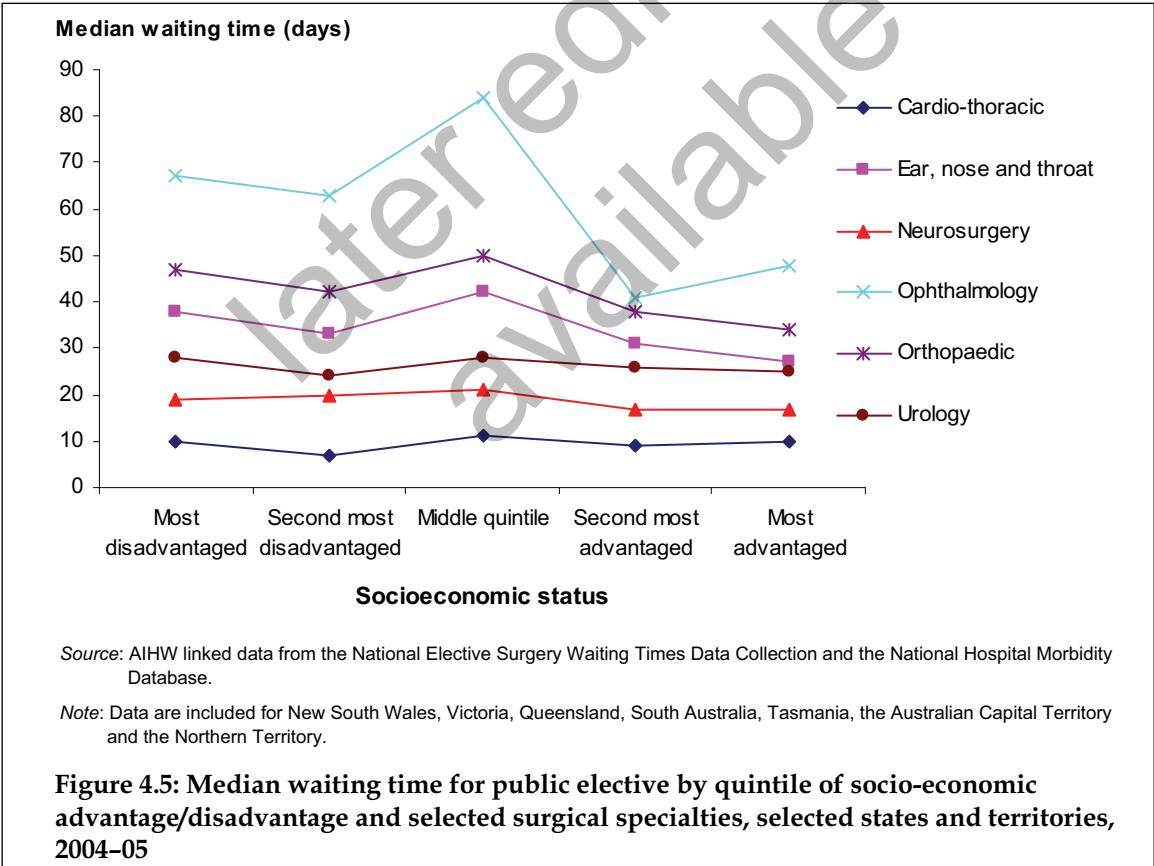
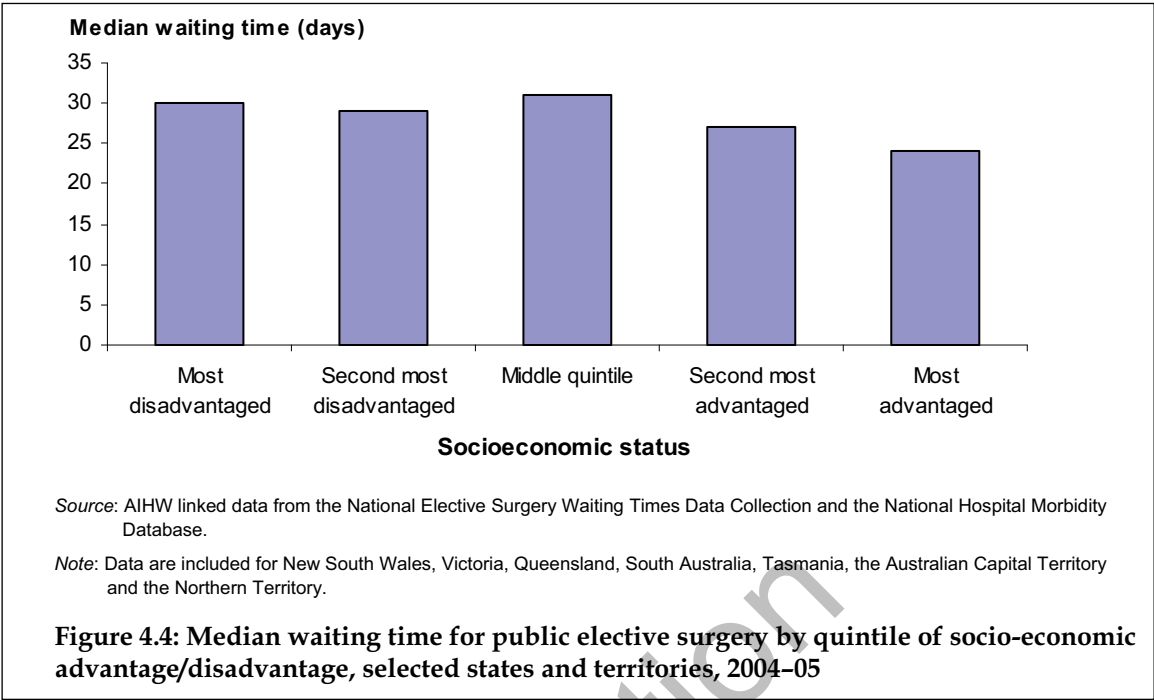


Socio-economic status

The *Most advantaged* quintile had the lowest median waiting time for public elective surgery (24 days) and the *Middle* quintile had the highest overall median waiting time (31 days) (Figure 4.4).

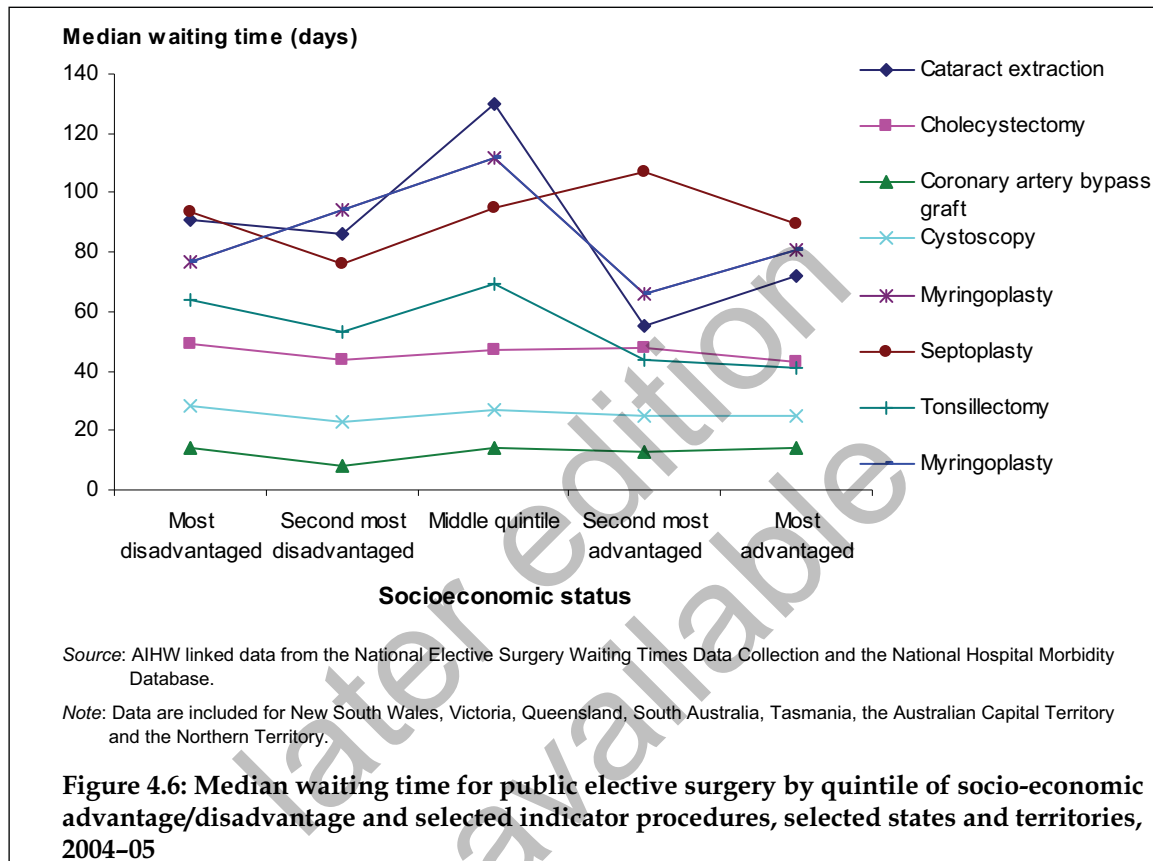
Surgical specialty

Ophthalmology was the specialty with the greatest variation in waiting times by socio-economic status, ranging from 84 days for people in the *Middle* quintile to 41 days for people in the *Second most advantaged* quintile. For *Orthopaedic surgery* and *Ear, nose and throat surgery* the highest median waiting times were for people in the *Middle* quintile (50 and 42 days, respectively) and the lowest in the *Most advantaged* quintile (34 and 27 days, respectively). *Cardio-thoracic surgery*, *Urology* and *Neurosurgery* had the least variation by socio-economic status (Figure 4.5, Table A1.16).



Indicator procedure

Cataract extraction was the indicator procedure with the greatest variation in waiting times by socio-economic status ranging from 130 days for people in the *Middle quintile* to 55 days for people in the *Second most advantaged* quintile. For *Total knee replacement* and *Myringoplasty* the highest median waiting times were for people in the *Middle quintile* (156 and 112 days, respectively) and the lowest in the *Second most advantaged* quintile (112 and 66 days, respectively). *Cholecystectomy*, *Coronary artery bypass graft* and *Cystoscopy* had the least variation by socio-economic status (Figure 4.6, Table A1.17).



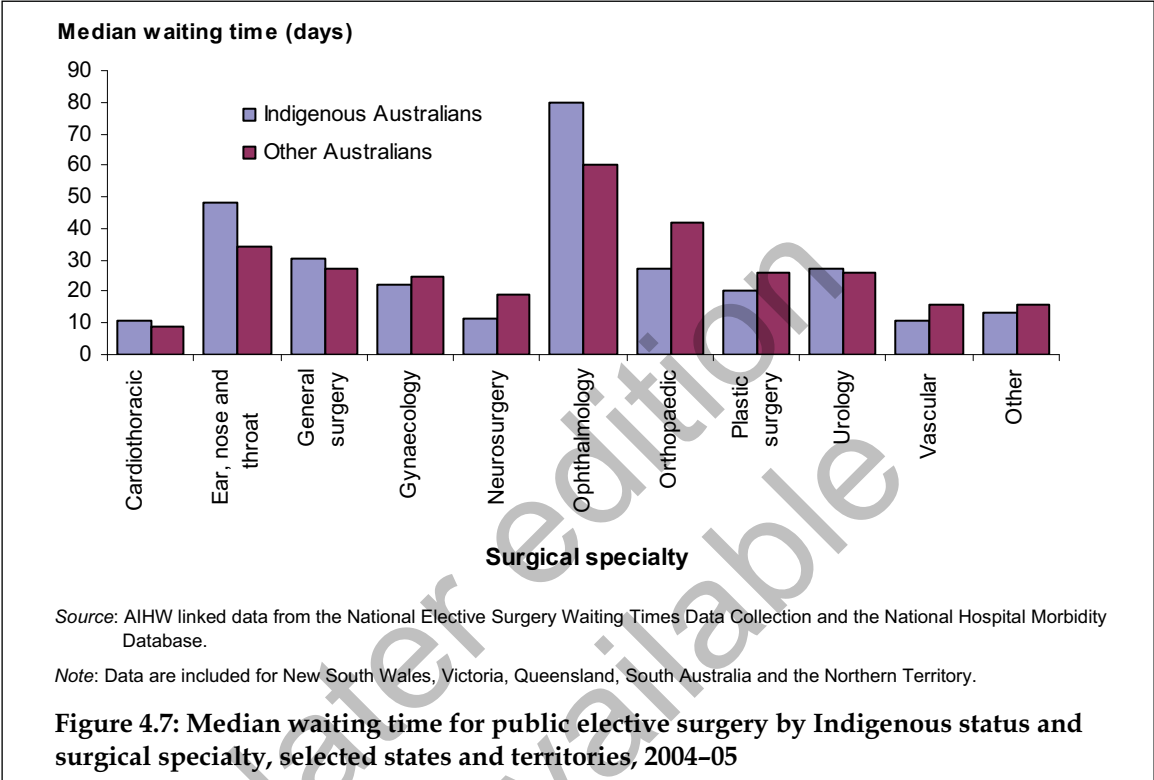
Indigenous status

Overall, for 2004-05, Indigenous Australians and Other Australians had the same median waiting times for elective surgery (29 days). However, the relationship between Indigenous status and median waiting time for elective surgery varied both by surgical specialty and by indicator procedure. As there are very small numbers of separations for Indigenous Australians for some of the surgical specialties and indicator procedures, these data should be treated with caution.

Data on Indigenous status are included only for New South Wales, Victoria, Queensland, South Australia and the Northern Territory, for which the quality of the Indigenous identification is considered acceptable for the purpose of analysis. The quality of Indigenous status in the NHMD is variable, so the data in this section should be used with caution.

Surgical specialty

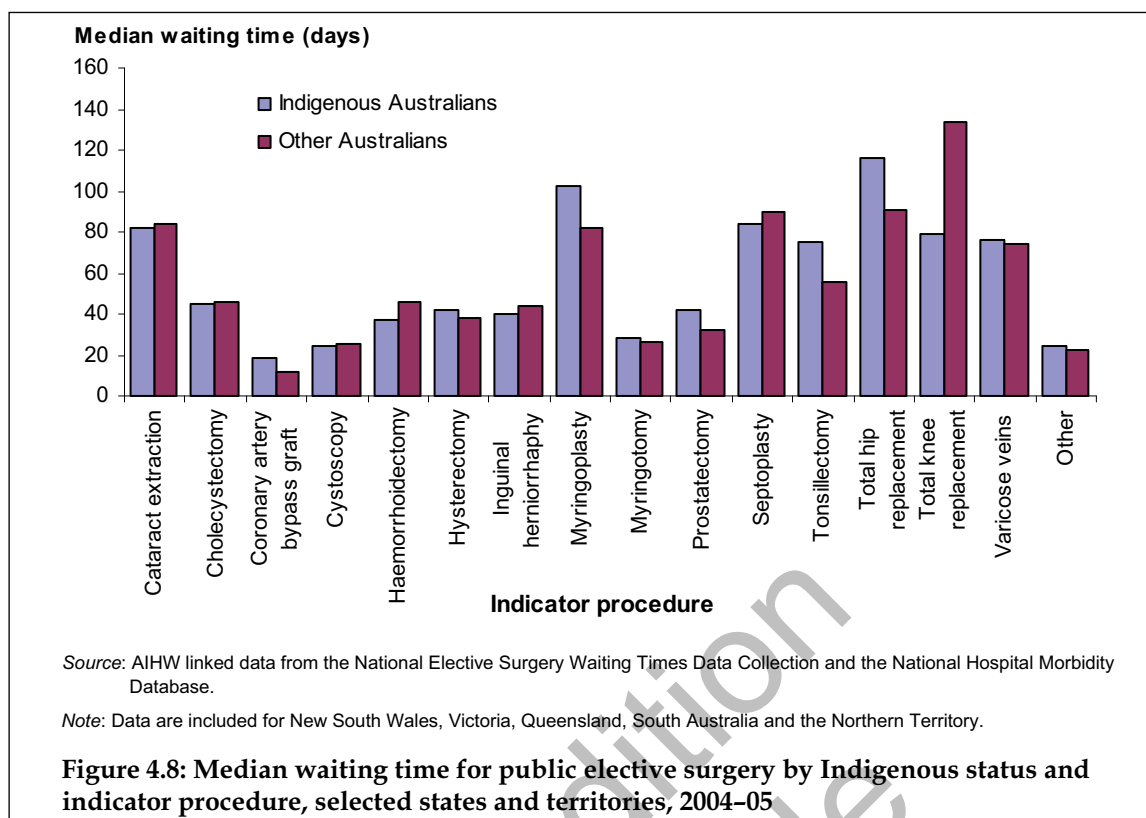
Ophthalmology was the specialty with the greatest variation in waiting times by Indigenous status. Indigenous Australians had a median waiting time for *Ophthalmology* of 80 days, and Other Australians had a median waiting time of 60 days. Indigenous Australians also waited longer for *Ear, nose and throat surgery* than *Other Australians* (48 and 34 days, respectively). For *Orthopaedic surgery*, Indigenous Australians had shorter median waiting times than *Other Australians* (27 and 42 days, respectively). *Cardio-thoracic surgery*, *Urology* and *Gynaecology* had the least variation by Indigenous status (Figure 4.7 and Table A1.18).



Indicator procedure

Using the linked data, the number of Indigenous separations was very small (less than 100) for seven of the fifteen indicator procedures (*Haemorrhoidectomy*, *Myringoplasty*, *Prostatectomy*, *Septoplasty*, *Total hip replacement*, *Total knee replacement* and *Varicose veins stripping and ligation*). Indigenous Australians had higher median waiting times for five of the eight indicator procedures with at least 100 separations for Indigenous Australians.

For *Tonsillectomy*, Indigenous Australians waited longer than Other Australians (75 and 56 days, respectively). *Cataract extraction*, *Cystoscopy* and *Myringotomy* had the least variation by Indigenous status (Figure 4.8 and Table A1.19).



Sex of patient

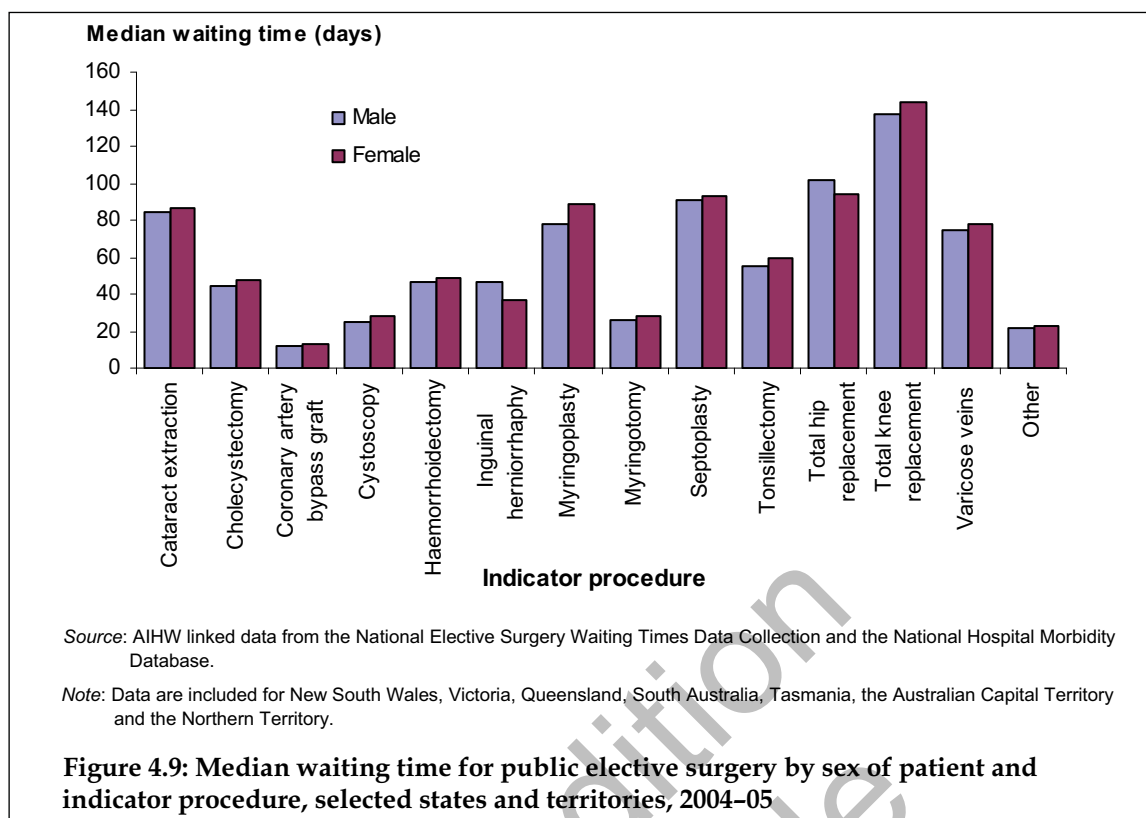
Overall, for 2004-05, males and females had similar median waiting times for elective surgery (28 and 29 days, respectively). Different waiting time experiences overall, and for individual surgical specialties, may be expected given that males and females would have differing needs for surgery.

The relationship between the sex of the patient and median waiting time varied by indicator procedure, for which variation in need for surgery could be expected to be smaller. Males had shorter median waiting times than females for 11 of the 13 non-sex-specific indicator procedures (that is, excluding *Hysterectomy* and *Prostatectomy*).

Indicator procedure

Myringoplasty was the indicator procedure with the greatest variation in waiting times by sex of the patient. Males had shorter median waiting times for this procedure than females (78 days and 89 days, respectively).

Inguinal herniorrhaphy and *Total hip replacement* were the only two indicator procedures for which females (37 and 94 days, respectively) had shorter median waiting times than males (46 and 102 days, respectively). *Coronary artery bypass graft*, *Myringotomy* and *Septoplasty* were the procedures with the least variation by sex of patient (Figure 4.9 and Table A1.20).



Age of patient

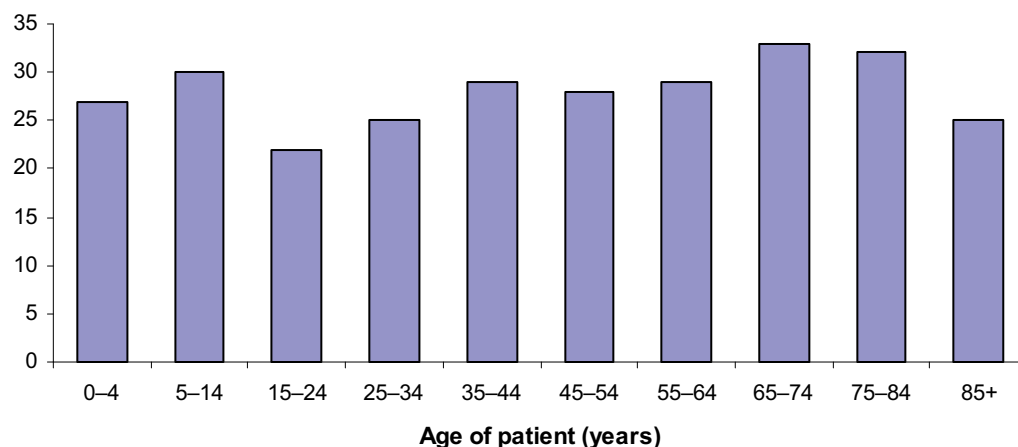
Overall, for 2004-05, most age groups had median waiting times for elective surgery similar to the overall figure (29 days). However, persons aged 15-34 years and those aged 85 years and older had shorter waiting times than the overall figure, and those aged 65-84 years had slightly longer waiting times (Figure 4.10). Different waiting time experiences overall, and for individual surgical specialties, may be expected given that different age groups would have differing needs for surgery.

Indicator procedure

The relationship between age and median waiting time for elective surgery varied by indicator procedure.

The indicator procedures with the least variation in median waiting times by age of patient were *Cholecystectomy*, *Coronary artery bypass graft*, *Cystoscopy*, *Myringoplasty*, *Myringotomy*, *Prostatectomy*, *Septoplasty* and *Varicose vein stripping and ligation*. For other indicator procedures median waiting times were generally lower for both the younger age groups and for the very old, with the longest waiting times for those aged 65-84 years. (Figure 4.11, Table A1.21). As the types of conditions or diseases for which the surgery was performed may also vary with age, these data should be interpreted with caution.

Median waiting time (days)

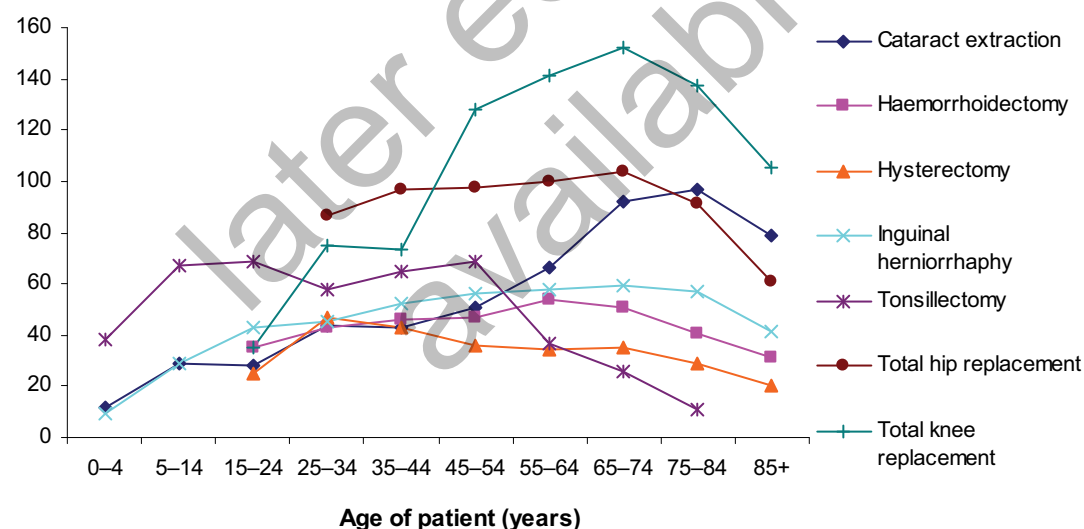


Source: AIHW linked data from the National Elective Surgery Waiting Times Data Collection and the National Hospital Morbidity Database.

Note: Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Figure 4.10: Median waiting time for public elective surgery by age of patient, selected states and territories, 2004-05

Median waiting time (days)



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

Note: Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Figure 4.11: Median waiting time for public elective surgery by age of patient and selected indicator procedures, selected states and territories, 2004-05

Diagnosis information

As noted earlier, clinical urgency data do not appear to be comparable between states and territories. However, 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 such a way that diagnosis information provides a possible 'proxy' for clinical urgency. 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.

Surgical speciality

There is some variation in the waiting times by surgical speciality and principal diagnosis. Overall, the median waiting times for patients with cancer-related principal diagnoses were 15 days shorter than the median waiting times for patients with other conditions. The largest variation in median waiting time by surgical speciality was for *Ophthalmology*, for which patients with a neoplasm waited 21 days compared with 63 days for patients with other conditions. The only speciality 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. Notable differences include:

- For *Cardio-thoracic surgery* the median waiting times were longer for patients with a principal diagnosis of *Angina pectoris* than *Acute myocardial infarction*, with median waiting times of 13 and 2 days respectively.
- For *Gynaecology*, waiting times were shorter for patients with a principal diagnosis of *Malignant neoplasm of female genital organ*. These patients had a median waiting time of 13 days and about 1 in 1,000 of these patients waited longer than 365 days for their procedure. In contrast, patients with a principal diagnosis of *Female genital prolapse* had a median waiting time of 62 days and nearly 1 in 20 patients waited longer than 365 days for their procedure.
- For *Ophthalmology* waiting times were higher for patients with a principal diagnosis of *Senile and Other cataracts*, with a median waiting time of 83 days, and about 1 in 9 patients waiting longer than 365 days. For patients with other conditions the median was 40 days and 1 in 18 patients waited longer than 365 days.
- For *Orthopaedic surgery* waiting times were higher for patients with a principal diagnosis of *Gonarthrosis of the knee*, with a median waiting time of 119 days and about 1 in 5 patients waiting longer than 365 days. For patients with other conditions the median was 34 days and 1 in 15 patients waited longer than 365 days.

Table 4.2: Waiting times statistics for selected principal diagnoses by surgical specialty, selected states and territories, 2004–05

Surgical specialty and principal diagnosis	Separations	Days waited at 50th percentile	Waited more than 365 days (per cent)
Cardiothoracic surgery			
Neoplasm	1,528	6	0.0
Angina pectoris	2,279	13	0.1
Acute myocardial infarction	658	2	0.0
<i>Total</i>	<i>11,947</i>	<i>9</i>	<i>0.2</i>
Ear, nose and throat surgery			
Neoplasm	3,319	10	0.7
Nonsuppurative otitis media	5,848	34	1.8
<i>Total</i>	<i>41,830</i>	<i>35</i>	<i>9.3</i>
General surgery			
Neoplasm	32,733	15	0.6
Other principal diagnosis	93,436	34	3.6
<i>Total</i>	<i>126,169</i>	<i>27</i>	<i>2.8</i>
Gynaecology			
Neoplasm	11,292	22	0.7
Female genital prolapse	4,673	62	4.7
<i>Total</i>	<i>69,676</i>	<i>25</i>	<i>1.5</i>
Neurosurgery			
Neoplasm	1,773	8	0.3
Other principal diagnosis	6,282	24	2.1
<i>Total</i>	<i>8,055</i>	<i>19</i>	<i>1.7</i>
Ophthalmology			
Neoplasm	1,218	21	0.7
Cataract	30,600	83	11.0
<i>Total</i>	<i>51,557</i>	<i>61</i>	<i>8.9</i>
Orthopaedic surgery			
Neoplasm	1,255	20	3.1
Gonarthrosis [arthrosis of knee]	10,917	119	19.7
<i>Total</i>	<i>70,953</i>	<i>43</i>	<i>8.8</i>
Plastic surgery			
Neoplasm	12,873	27	1.1
Mononeuropathies of upper limb	1,377	62	2.9
<i>Total</i>	<i>31,286</i>	<i>26</i>	<i>3.3</i>
Urology			
Neoplasm	9,355	21	0.6
Other principal diagnosis	35,903	28	3.8
<i>Total</i>	<i>45,258</i>	<i>26</i>	<i>3.1</i>
Vascular surgery			
Neoplasm	237	11	0.0
Other principal diagnosis	10,404	17	4.1
<i>Total</i>	<i>10,641</i>	<i>17</i>	<i>4.0</i>
Other			
Neoplasm	2,175	16	0.4
Other principal diagnosis	8,162	20	2.0
<i>Total</i>	<i>10,337</i>	<i>18</i>	<i>1.6</i>
Total			
Neoplasm	77,758	18	0.7
Other principal diagnosis	399,951	33	5.4
Total	477,709	29	4.6

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

Note: Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Indicator procedure

There is also some variation in the waiting times for elective surgery by principal diagnosis for indicator procedures (Table 4.3).

Table 4.3: Waiting times statistics for indicator procedures by selected principal diagnoses, selected states and territories, 2004–05

Indicator procedure and principal diagnosis	Separations	Days waited at 50th percentile	Waited more than 365 days (per cent)
Cataract extraction			
Type 2 diabetes mellitus	5,869	98	10.5
Senile cataract	2,435	139	14.7
Other cataract	27,526	81	10.8
<i>Total</i>	36,855	85	11.0
Cholecystectomy			
Neoplasm	117	20	1.7
<i>Total</i>	15,377	47	4.0
Coronary artery bypass graft			
Angina pectoris	2,111	14	0.1
Acute myocardial infarction	547	2	0.0
Chronic ischaemic heart disease	1,709	16	0.1
<i>Total</i>	4,831	13	0.0
Cystoscopy			
Malignant neoplasm of bladder	2,650	22	0.5
Unspecified haematuria	2,898	31	2.8
Follow-up examination after treatment for malignant neoplasms	5,237	19	2.6
<i>Total</i>	27,320	26	2.5
Haemorrhoidectomy			
Haemorrhoids	2,458	48	7.4
<i>Total</i>	2,872	47	7.6
Hysterectomy			
Neoplasm of female genital organ	3,494	26	1.3
Female genital prolapse	1,604	60	4.7
Excessive, frequent and irregular menstruation	1,816	47	2.3
<i>Total</i>	9,103	38	2.2
Inguinal herniorrhaphy			
<i>Total</i>	13,423	44	3.9
Myringotomy			
Nonsuppurative otitis media	3,658	28	0.7
Suppurative and unspecified otitis media	1,148	21	0.6
<i>Total</i>	5,834	27	0.9
Prostatectomy			
Malignant neoplasm of prostate	1,504	28	1.6
Hyperplasia of prostate	2,927	36	7.4
<i>Total</i>	5,164	32	5.3
Varicose vein stripping and ligation			
Varicose veins of lower extremities	3,629	78	20.9
<i>Total</i>	3,831	77	20.6
Total			
Neoplasm	77,758	18	0.7
Other principal diagnosis	399,951	33	5.4
Total	477,709	29	4.6

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

Note: Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Notable differences include:

- For *Cataract extraction*, waiting times were generally higher for patients with a principal diagnosis of *Senile cataract*, with a median waiting time of 139 days and 1 in 7 patients waiting longer than 365 days. For patients with other conditions the median was 83 days and about 1 in 9 patients waited longer than 365 days.
- For *Coronary artery bypass graft*, waiting times were lower for patients with a principal diagnosis of *Acute myocardial infarction*, with a median waiting time of 2 days. For patients with other conditions the median was 15 days.
- For *Myringotomy*, waiting times were lower for patients with a principal diagnosis of *Suppurative and unspecified otitis media* (21 days) than for patients with a principal diagnosis of *Nonsuppurative otitis media* (28 days).
- For *Cystoscopy*, *Hysterectomy* and *Prostatectomy* waiting times were lower for patients with a principal diagnoses indicating a malignancy or tumour. For *Hysterectomy*, patients with a principal diagnosis of *Neoplasm of the female genital organs* had a median waiting time of 26 days compared to 48 days for patients with other conditions.

Some indicator procedures are fairly homogenous in the types of conditions treated and therefore the disaggregation by diagnosis-based indicators of differing 'need' (for those indicator procedures) may not be as meaningful as for other indicator procedures. For example *Haemorrhoidectomy*, *Inguinal herniorrhaphy* and *Varicose vein stripping and ligation* had 86%, 93% and 95% of separations respectively, reporting the same principal diagnosis.

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5 Adverse events

Adverse events are defined as incidents in which harm resulted to a person receiving health care. They include infections, falls and other injuries, and medication and medical device problems, some of which may be preventable.

Hospital separations data can be used to signify the occurrence of adverse events because they include clinical information which can indicate that an adverse event was treated and/or occurred during the hospitalisation. For the purpose of this report, adverse events have been defined as detailed in the Methods section. The data presented in Figures 5.1 and 5.2 can be interpreted as representing selected adverse events that have affected elective surgery separations, rather than adverse events that occurred during elective surgery episodes.

It should be noted that, as a condition onset flag was not available for the 2004–05 reference year, some of the adverse events presented in Figures 5.1 and 5.2 (and in Tables A1.22 and A1.23) may represent events that occurred before the admission for surgery. A condition onset flag will be available in the NHMD from the 2008–09 reference year. This information could be used in the future to exclude conditions that arose before the admission and to include conditions not identifiable with the codes currently used to indicate adverse events.

Overview

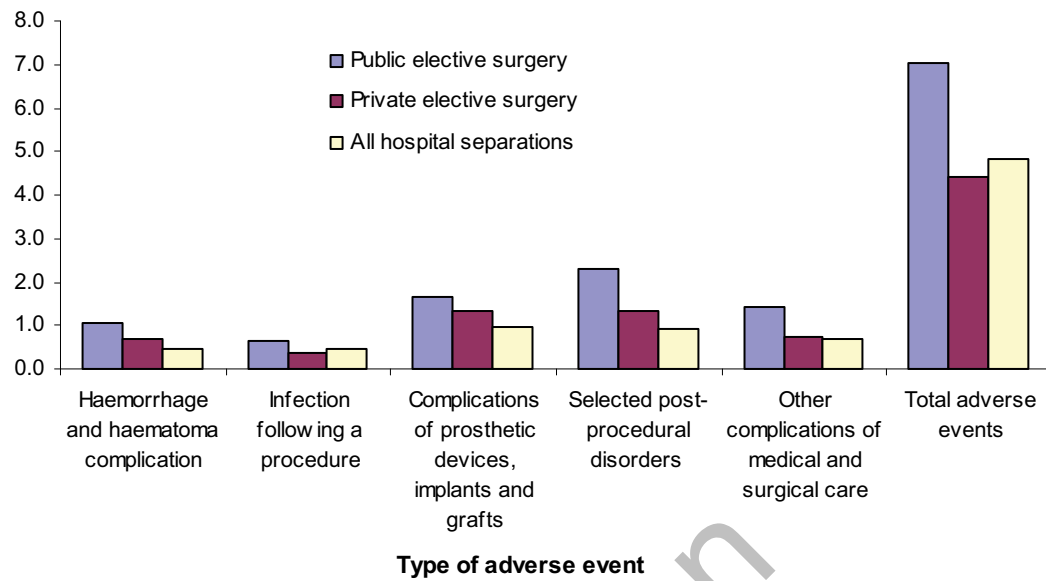
The *National health data dictionary* (NHDC 2006) defines a procedure as a clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training, and/or requires special facilities or equipment available only in an acute care setting. Patients having surgical procedures are more likely to experience some of the adverse events presented below than patients receiving non-surgical (medical) care.

Overall for 2004–05, approximately 5.4% of elective surgery separations reported an adverse event. This is higher than the rate for all hospital separations (4.8%) which include separations with emergency care (including surgery) and separations for non-surgical care.

About 7.0% of public elective surgery separations and 4.4% of private elective surgery separations reported an adverse event (Figure 5.1). However, the data for public hospitals are not comparable with the data for private hospitals because their casemixes differ and recording practices may be different.

There was no difference between elective surgery separations and all hospital separations in the rates of *Infection following a procedure*. The rate of *Adverse effects of drugs, medicaments and biological substances* for elective surgery was about 40% lower than for all hospital separations. *Complications of internal prosthetic devices, implants and grafts* were reported for almost 24,000 elective surgery separations and the rate per 100 separations was over 50% higher than reported for all hospital separations. The rate of *Misadventures to patients during surgical and medical care* for elective surgery was over twice the rate reported for all hospital separations (Table A1.22).

Separations with adverse events per 100 separations



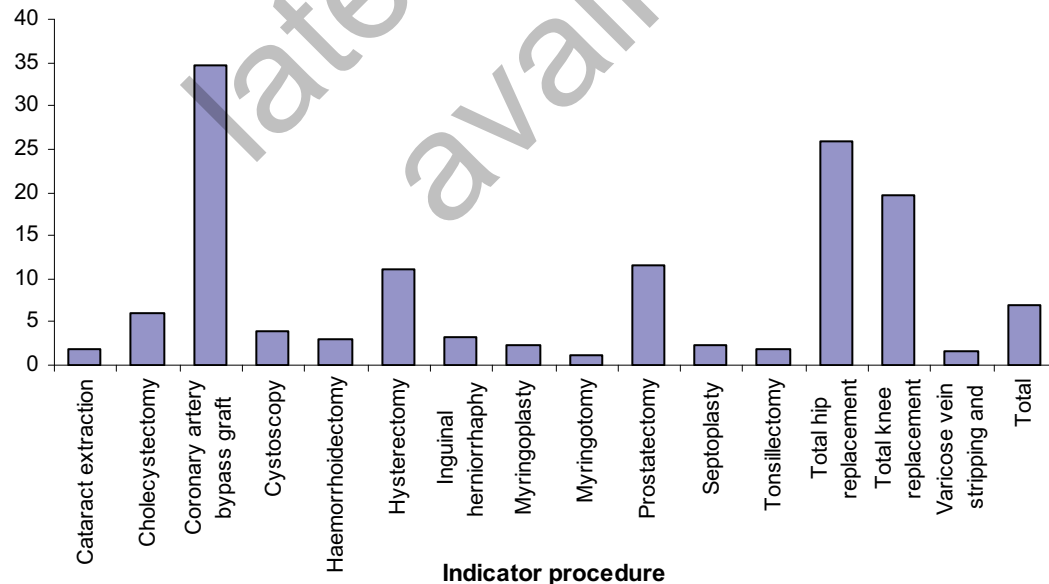
Source: AIHW National Hospital Morbidity Database.

Notes

- 1 Rates are age-standardised to the Estimated Resident Population 30 June 2001.
- 2 The data for public elective surgery are not comparable to the data for private elective surgery because casemixes and recording practices may differ between public and private hospitals.

Figure 5.1: Selected adverse events per 100 separations, by type of admission, 2004-05

Separations with adverse events per 100 separations



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

Note: Data are included for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory.

Figure 5.2: Separations with adverse events per 100 separations, public elective surgery, by indicator procedure, selected states and territories, 2004-05

Public elective surgery

Using the linked data for 2004–05, approximately 6.9% of public elective surgery separations reported an adverse event. Figure 5.2 includes all types of adverse events as presented in Table A1.23. There was a great deal of variation in the rate of adverse events by indicator procedure. It should be noted that the procedures varied and would carry differing risks for adverse events.

Cataract extraction, Myringotomy, Tonsillectomy and Varicose vein stripping and ligation had the lowest rates of separations with adverse events per 100 separations (all less than 2%). Rates of separations with adverse events were very high for *Coronary artery bypass graft* (35% of separations), *Total hip replacement* (26%), *Total knee replacement* (20%), *Prostatectomy* (12%) and *Hysterectomy* (11%). The principal type of adverse event reported varied by indicator procedure. The highest rates of *Complications of internal prosthetic devices, implants and grafts* were reported for *Total hip replacement* and *Total knee replacement*. *Coronary artery bypass graft* reported the highest rates for *Procedures causing abnormal reactions/complications* and *Selected post-procedural complications* (Table A1.23).

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6 Future directions

As outlined in the introduction for this report, there are a number of inadequacies in currently available national data on access to elective surgery. The new measures proposed in this report could be used to minimise the limitations of the currently available data. However, there are a range of data improvements that could also be investigated. Some of these were also highlighted in the evaluation of the National Minimum Data Sets (NMDSs) for Elective Surgery Waiting Times, recently conducted by the Australian Institute of Health and Welfare (AIHW) (AIHW 2008, in press). The evaluation report also includes information on other data quality issues for the NMDSs for ESWT, and further discussion on approaches to standardisation of clinical urgency categorisation.

The various improvements that could be considered would address different inadequacies in the data. Some would be relevant to the routine adoption of the new measures in this report and/or refinement of currently reported measures of access to elective surgery. They include:

- Standardisation of clinical urgency categorisation. Some work has been undertaken at jurisdiction level to attempt to standardise categorisation, and also in some other countries. Further detail is included in the evaluation report. Standardisation could be attempted by incorporating more detail into the urgency category definitions, and creating detailed guidelines for them. However, most attempts to standardise categorisation have focussed on specific procedures, rather than on elective surgery as a whole. It could be reasonable to aim to standardise urgency categorisation for the indicator procedures only. Urgency category-based measures of access to elective surgery could then be regarded as comparable for each of the indicator procedures, but probably not between indicator procedures, and not for other elective surgery.
- Further development of the use of diagnosis-based disaggregation of separations for assessment of relative waiting times experiences, including the development of suitable benchmarks, with clinical and stakeholder input. Such development would allow the use of diagnosis information to undertake comparable analysis of access to elective surgery. It would not replace clinical urgency categorisation at the local level – that would retain a role for local prioritising of patients for surgery as appropriate to local hospital and state management arrangements for elective surgery.
- Further development of the adverse events analysis, particularly with the use of the Condition onset flag that will be part of the NMDS for Admitted Patient Care from the 2008-09 reference year.
- Development of a linkage strategy within patient records to allow identification of which procedure an adverse event was related to.
- Routine provision of linked data to allow the types of analyses presented in this report to be undertaken routinely. Alternatively, demographic and diagnosis information could be added to the ESWT NMDSs, or information indicating admission from an elective surgery waiting list could be added to the NMDS for Admitted Patient Care.
- Addition of information on time waited between referral and time placed on the waiting list, to the NMDSs for ESWT and/or the NMDS for Admitted Patient Care.
- Coverage of the NMDSs for Elective Surgery Waiting Times could be improved.

Appendix – statistical tables

Table A1.1: Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by surgical specialty, states and territories, 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(Per cent)								
Cardiothoracic surgery									
Category 1	76.4	66.6	71.6	68.2	51.1	100.0	47.4	n.a.	70.6
Category 2	18.9	31.2	25.5	7.3	42.9	0.0	51.3	n.a.	21.3
Category 3	4.7	2.2	2.9	24.4	6.0	0.0	1.3	n.a.	8.0
Ear, nose and throat surgery									
Category 1	31.6	11.2	21.6	23.6	24.4	45.7	16.3	28.7	22.5
Category 2	30.8	47.0	48.2	36.2	25.9	32.1	54.5	39.4	39.4
Category 3	37.6	41.7	30.2	40.3	49.7	22.2	29.3	31.8	38.1
General surgery									
Category 1	47.8	25.6	39.0	34.9	37.2	49.2	45.2	39.9	39.5
Category 2	34.9	47.5	46.9	30.3	27.0	37.4	48.8	39.0	39.4
Category 3	17.2	26.9	14.1	34.8	35.7	13.4	6.1	21.1	21.1
Gynaecology									
Category 1	44.9	20.5	34.4	23.4	31.7	43.3	38.3	64.7	35.8
Category 2	36.7	53.6	51.8	21.6	34.6	39.0	39.3	27.6	42.3
Category 3	18.4	25.9	13.8	55.0	33.7	17.6	22.4	7.7	21.9
Neurosurgery									
Category 1	56.8	31.7	53.0	23.1	49.3	51.2	38.8	n.a.	41.6
Category 2	27.8	57.8	42.5	26.1	43.5	48.2	55.4	n.a.	38.7
Category 3	15.3	10.4	4.5	50.8	7.2	0.6	5.8	n.a.	19.7
Ophthalmology									
Category 1	11.3	5.6	10.9	11.8	7.4	20.3	3.4	13.6	9.5
Category 2	16.3	36.4	41.1	24.0	10.6	11.6	10.3	44.5	25.5
Category 3	72.4	58.0	48.0	64.2	82.0	68.1	86.3	41.9	65.0
Orthopaedic surgery									
Category 1	29.5	12.7	34.3	25.5	15.2	22.6	15.1	53.2	25.8
Category 2	28.2	55.0	44.2	40.6	27.5	50.3	74.6	30.8	39.9
Category 3	42.3	32.3	21.5	33.9	57.2	27.1	10.3	16.0	34.3
Plastic surgery									
Category 1	49.5	34.0	40.2	53.4	54.5	79.2	31.0	47.8	44.3
Category 2	28.6	43.6	49.2	25.9	29.6	18.4	64.7	34.4	37.7
Category 3	21.9	22.4	10.7	20.7	15.9	2.4	4.3	17.8	18.0
Urology									
Category 1	45.0	36.5	44.8	49.0	51.6	44.4	32.5	44.9	43.3
Category 2	30.5	48.1	41.1	22.9	26.5	33.2	42.2	29.0	35.9
Category 3	24.5	15.4	14.1	28.1	22.0	22.4	25.3	26.1	20.8
Vascular surgery									
Category 1	67.5	37.0	55.9	64.7	70.4	28.6	69.7	n.a.	57.3
Category 2	19.6	32.5	37.5	30.9	21.4	49.1	11.7	n.a.	27.4
Category 3	12.9	30.4	6.5	4.4	8.1	22.3	18.6	n.a.	15.3
Other									
Category 1	64.4	20.3	33.0	55.4	20.8	35.8	38.9	87.1	41.4
Category 2	17.9	44.8	37.0	5.0	22.6	11.2	57.0	8.7	30.1
Category 3	17.7	35.0	30.1	39.6	56.5	53.0	4.1	4.1	28.4
Total									
Category 1	40.1	22.4	35.5	35.3	33.9	44.5	29.9	48.9	34.2
Category 2	29.8	46.9	45.4	26.7	26.9	33.8	46.1	32.9	36.8
Category 3	30.2	30.7	19.1	38.0	39.2	21.6	24.0	18.2	29.0

Source: National Elective Surgery Waiting Times Data Collection.

Table A1.2: Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by indicator procedure, states and territories, 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(Per cent)								
Cataract extraction									
Category 1	5.2	0.8	2.2	5.1	1.7	15.0	0.8	6.5	3.6
Category 2	14.0	33.4	42.5	22.3	7.2	15.5	8.0	44.3	23.0
Category 3	80.8	65.9	55.3	72.6	91.0	69.5	91.2	49.2	73.4
Cholecystectomy									
Category 1	34.8	15.1	21.5	21.9	25.3	31.4	19.2	39.8	26.0
Category 2	46.2	69.4	67.3	43.8	47.2	51.9	74.4	50.4	56.3
Category 3	19.0	15.5	11.2	34.3	27.5	16.6	6.4	9.7	17.7
Coronary artery bypass graft									
Category 1	76.4	58.0	71.9	82.6	38.5	100.0	54.4	n.a.	69.3
Category 2	19.6	41.8	27.4	12.2	54.9	0.0	45.6	n.a.	28.5
Category 3	4.0	0.2	0.7	5.2	6.7	0.0	0.0	n.a.	2.2
Cystoscopy									
Category 1	40.5	31.1	36.0	40.6	53.8	50.1	29.6	46.4	38.0
Category 2	30.1	49.7	39.9	23.4	26.9	36.9	36.3	42.9	36.3
Category 3	29.4	19.2	24.1	36.0	19.3	13.0	34.1	10.7	25.7
Haemorrhoidectomy									
Category 1	30.8	7.2	13.6	16.3	10.3	20.3	4.2	22.2	18.0
Category 2	46.1	55.5	61.6	32.6	20.9	52.5	75.0	33.3	47.9
Category 3	23.1	37.2	24.8	51.1	68.8	27.1	20.8	44.4	34.1
Hysterectomy									
Category 1	36.0	19.4	20.2	12.0	22.2	34.6	26.3	18.6	26.2
Category 2	39.4	57.7	62.8	21.5	38.5	45.1	39.8	48.8	46.3
Category 3	24.6	22.9	17.0	66.6	39.3	20.3	33.9	32.6	27.5
Inguinal herniorrhaphy									
Category 1	30.0	10.3	16.0	22.0	14.4	32.3	19.8	32.1	21.5
Category 2	45.0	60.1	67.6	37.7	33.8	46.1	68.7	52.4	50.9
Category 3	25.0	29.6	16.4	40.4	51.8	21.6	11.5	15.5	27.6
Miringoplasty									
Category 1	8.6	1.4	8.4	5.5	3.0	33.3	0.0	0.0	5.9
Category 2	32.5	37.9	56.7	41.1	33.0	33.3	22.2	8.6	39.3
Category 3	58.9	60.6	35.0	53.4	63.9	33.3	77.8	91.4	54.9
Miringotomy									
Category 1	34.4	5.3	11.4	13.9	12.0	74.3	7.5	37.0	11.9
Category 2	45.6	62.4	58.3	45.2	35.3	17.1	79.6	59.3	54.5
Category 3	20.0	32.3	30.3	40.9	52.7	8.6	12.9	3.7	33.6
Prostatectomy									
Category 1	51.2	43.6	42.1	51.8	56.5	71.1	33.0	40.9	48.0
Category 2	37.5	51.2	49.9	27.8	30.5	28.9	49.5	54.5	42.2
Category 3	11.3	5.3	8.0	20.4	13.0	0.0	17.5	4.5	9.8
Septoplasty									
Category 1	7.5	1.2	2.9	1.5	3.2	6.3	5.5	13.9	3.9
Category 2	24.5	31.6	52.3	28.4	16.9	68.8	23.6	44.4	30.8
Category 3	68.0	67.3	44.8	70.1	79.9	25.0	70.9	41.7	65.3
Tonsillectomy									
Category 1	16.4	3.5	7.3	11.0	5.6	50.0	2.9	12.0	9.4
Category 2	34.7	48.5	56.6	38.7	28.2	29.4	65.9	59.0	43.7
Category 3	48.9	48.0	36.1	50.3	66.2	20.6	31.3	28.9	46.9

(continued)

Table A1.2 (continued): Proportion of patients admitted from waiting lists for elective surgery in each clinical urgency category, by indicator procedure, states and territories, 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(Per cent)								
Total hip replacement									
Category 1	18.7	3.4	9.7	18.0	5.7	12.5	4.2	45.8	12.0
Category 2	37.4	67.7	56.3	64.0	42.4	60.9	90.6	41.7	52.4
Category 3	43.9	28.9	34.0	18.0	51.8	26.6	5.2	12.5	35.5
Total knee replacement									
Category 1	8.4	1.3	2.9	12.6	2.1	2.6	1.7	22.2	5.8
Category 2	30.3	62.3	58.3	60.4	35.3	56.7	89.5	61.1	45.1
Category 3	61.3	36.4	38.8	27.0	62.6	40.7	8.8	16.7	49.1
Varicose vein stripping and ligation									
Category 1	17.1	0.7	6.3	19.2	11.7	23.5	9.5	0.0	9.5
Category 2	39.5	21.1	41.6	26.9	11.7	35.3	20.0	38.1	31.4
Category 3	43.4	78.1	52.1	53.8	76.7	41.2	70.5	61.9	59.2
Not applicable									
Category 1	49.3	27.9	41.7	41.5	40.1	47.8	40.2	54.9	41.2
Category 2	29.6	46.0	43.1	24.8	26.4	32.8	48.2	30.0	36.0
Category 3	21.1	26.2	15.2	33.7	33.5	19.4	11.6	15.2	22.8
Total									
Category 1	40.1	22.4	35.5	35.3	33.9	44.5	29.9	48.9	34.2
Category 2	29.8	46.9	45.4	26.7	26.9	33.8	46.1	32.9	36.8
Category 3	30.2	30.7	19.1	38.0	39.2	21.6	24.0	18.2	29.0

Source: National Elective Surgery Waiting Times Data Collection.

Table A1.3: Separation statistics for elective surgery, by type of patient and remoteness area, 2004–05

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia
Public elective surgery						
Separations	371,791	155,782	81,889	10,495	5,081	629,432
Separations per 1,000 persons	27.8	35.8	39.3	34.5	32.3	31.0
Private elective surgery						
Separations	700,649	195,098	77,245	7,948	2,443	988,795
Separations per 1,000 persons	51.9	43.8	36.7	25.9	16.1	48.3
Total elective surgery						
Separations	1,072,440	350,880	159,134	18,443	7,524	1,618,227
Separations per 1,000 persons	79.7	79.6	76.0	60.4	48.4	79.2

Source: National Hospital Morbidity Database.

Notes:

1. Elective surgery separations are defined as separations with a reported Urgency of admission of *Elective* and a *Surgical Diagnosis Related Group* (excludes records with a principal diagnosis for cosmetic surgery Z41).
2. Private elective surgery includes privately funded elective surgery admission in private hospitals.
3. Public elective surgery includes publicly funded elective surgery admission in private hospitals and all elective surgery admissions in public hospitals.

Table A1.4: Separation statistics for elective surgery, by type of patient and socio-economic status, 2004–05

	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Public elective surgery						
Separations	169,632	150,629	127,596	105,636	73,329	629,432
Separations per 1,000 persons	41.1	37.9	31.1	26.7	17.7	31.0
Private elective surgery						
Separations	149,571	172,507	184,617	215,995	261,358	988,795
Separations per 1,000 persons	35.6	43.1	44.9	54.1	62.4	48.3
Total elective surgery						
Separations	319,203	323,136	312,213	321,631	334,687	1,618,227
Separations per 1,000 persons	76.7	81.0	76.1	80.7	80.1	79.2

Source: National Hospital Morbidity Database.

Notes:

1. Elective surgery separations are defined as separations with a reported Urgency of admission of *Elective* and a *Surgical* Diagnosis Related Group (excludes records with a principal diagnosis for cosmetic surgery Z41).
2. Private elective surgery includes privately funded elective surgery admission in private hospitals.
3. Public elective surgery includes publicly funded elective surgery admission in private hospitals and all elective surgery admissions in public hospitals.

Table A1.5: Separation statistics for elective surgery, by type of patient and Indigenous status, 2004–05

	Indigenous Australians	Other Australians	Total persons
Public elective surgery			
Separations	12,941	596,063	609,004
Separations per 1,000 persons	43.5	33.0	33.1
Private elective surgery			
Separations	1,216	957,172	958,388
Separations per 1,000 persons	5.5	52.6	51.8
Total elective surgery			
Separations	14,157	1,553,235	1,567,392
Separations per 1,000 persons	48.9	85.5	85.0

Source: National Hospital Morbidity Database. Excludes data for Tasmania and the Australian Capital Territory.

Notes:

1. Elective surgery separations are defined as separations with a reported Urgency of admission of *Elective* and a *Surgical* Diagnosis Related Group (excludes records with a principal diagnosis of Z41).
2. Private elective surgery includes privately funded elective surgery admission in private hospitals.
3. Public elective surgery includes publicly funded elective surgery admission in private hospitals and all elective surgery admissions in public hospitals.
4. Identification of Indigenous patients is not considered to be complete and completeness varies among the jurisdictions.

Table A1.6: Separation statistics for elective surgery, by type of patient and sex, 2004–05

	Male	Female	All persons
Public elective surgery			
Separations	267,965	361,461	629,432
Separations per 1,000 persons	27.3	34.9	31.0
Private elective surgery			
Separations	418,415	570,380	988,795
Separations per 1,000 persons	42.8	54.6	48.3
Total elective surgery			
Separations	686,380	931,841	1,618,227
Separations per 1,000 persons	70.1	89.4	79.3

Source: National Hospital Morbidity Database.

Notes:

1. Elective surgery separations are defined as separations with a reported Urgency of admission of *Elective* and a *Surgical* Diagnosis Related Group (excludes records with a principal diagnosis of Z41).
2. Private elective surgery includes privately funded elective surgery admission in private hospitals.
3. Public elective surgery includes publicly funded elective surgery admission in private hospitals and all elective surgery admissions in public hospitals.

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Table A1.7: Separations for public elective surgery, by surgical specialty and remoteness area of usual residence, selected states and territories, 2004–05

Surgical specialty	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Cardiothoracic surgery						
Admissions for elective surgery	7,268	2,807	1,526	165	118	11,947
Rate per 1,000 population	0.6	0.6	0.8	0.7	1.1	0.6
Standardised rate ratio (RR)	0.95	1.00	1.18	1.16	1.68	
95% confidence interval of RR	0.93–0.97	0.96–1.03	1.12–1.24	0.98–1.34	1.37–1.98	
Ear, nose and throat surgery						
Admissions for elective surgery	28,941	9,133	3,057	390	213	41,830
Rate per 1,000 population	2.5	2.3	1.6	1.6	1.7	2.3
Standardised rate ratio (RR)	1.07	0.98	0.68	0.68	0.71	
95% confidence interval of RR	1.05–1.08	0.96–1.00	0.66–0.71	0.61–0.75	0.61–0.80	
General surgery						
Admissions for elective surgery	76,696	32,802	14,047	1,407	732	126,169
Rate per 1,000 population	6.4	7.9	7.3	6.1	6.3	6.9
Standardised rate ratio (RR)	0.93	1.16	1.06	0.89	0.91	
95% confidence interval of RR	0.93–0.94	1.14–1.17	1.05–1.08	0.84–0.94	0.85–0.98	
Gynaecology						
Admissions for elective surgery	44,721	16,724	6,808	856	356	69,676
Rate per 1,000 population	3.7	4.5	3.8	3.8	2.9	3.8
Standardised rate ratio (RR)	0.96	1.16	0.99	0.98	0.75	
95% confidence interval of RR	0.95–0.97	1.14–1.18	0.96–1.01	0.91–1.04	0.67–0.82	
Neurosurgery						
Admissions for elective surgery	5,433	1,648	850	57	23	8,055
Rate per 1,000 population	0.5	0.4	0.4	0.2	0.2	0.4
Standardised rate ratio (RR)	1.04	0.91	1.01	0.57	0.46	
95% confidence interval of RR	1.01–1.07	0.86–0.95	0.94–1.08	0.42–0.71	0.27–0.65	
Ophthalmology						
Admissions for elective surgery	34,243	10,903	5,541	455	274	51,557
Rate per 1,000 population	2.8	2.4	2.8	2.2	3.1	2.7
Standardised rate ratio (RR)	1.04	0.89	1.01	0.79	1.13	
95% confidence interval of RR	1.03–1.05	0.87–0.90	0.99–1.04	0.71–0.86	1.00–1.27	
Orthopaedic surgery						
Admissions for elective surgery	42,253	19,160	8,309	642	304	70,953
Rate per 1,000 population	3.5	4.7	4.4	2.8	2.7	3.9
Standardised rate ratio (RR)	0.91	1.21	1.13	0.74	0.69	
95% confidence interval of RR	0.91–0.92	1.19–1.23	1.11–1.15	0.68–0.79	0.61–0.77	
Plastic surgery						
Admissions for elective surgery	24,738	4,735	1,584	110	70	31,286
Rate per 1,000 population	2.1	1.2	0.8	0.5	0.6	1.7
Standardised rate ratio (RR)	1.21	0.69	0.49	0.28	0.36	
95% confidence interval of RR	1.20–1.23	0.67–0.71	0.46–0.51	0.23–0.33	0.27–0.44	

(continued)

Table A1.7 (continued): Separations for public elective surgery, by surgical specialty and remoteness area of usual residence, selected states and territories, 2004–05

Surgical specialty	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Urology						
Admissions for elective surgery	31,344	9,878	3,463	325	141	45,258
Rate per 1,000 population	2.6	2.3	1.7	1.5	1.6	2.4
Standardised rate ratio (RR)	1.08	0.94	0.72	0.62	0.65	
95% confidence interval of RR	1.06–1.09	0.92–0.96	0.69–0.74	0.55–0.69	0.54–0.76	
Vascular surgery						
Admissions for elective surgery	7,094	2,190	1,209	75	51	10,641
Rate per 1,000 population	0.6	0.5	0.6	0.4	0.5	0.6
Standardised rate ratio (RR)	1.04	0.88	1.08	0.64	0.88	
95% confidence interval of RR	1.01–1.06	0.84–0.91	1.02–1.14	0.49–0.78	0.64–1.12	
Other						
Admissions for elective surgery	6,115	2,225	1,732	117	105	10,337
Rate per 1,000 population	0.5	0.5	0.9	0.5	0.8	0.6
Standardised rate ratio (RR)	0.90	0.96	1.60	0.86	1.33	
95% confidence interval of RR	0.88–0.93	0.92–1.00	1.53–1.68	0.71–1.02	1.08–1.59	
Total						
Admissions for elective surgery	308,846	112,205	48,126	4,599	2,387	477,709
Rate per 1,000 population	25.8	27.3	25.1	20.3	21.3	26.0
Standardised rate ratio (RR)	0.99	1.05	0.97	0.78	0.82	
95% confidence interval of RR	0.99–1.00	1.04–1.06	0.96–0.98	0.76–0.80	0.79–0.85	

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. The total includes unknown remoteness area of residence.
3. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.

Table A1.8: Separations for public elective surgery, by indicator procedure and remoteness area of usual residence, selected states and territories, 2004–05

Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Cataract extraction						
Admissions for elective surgery	24,322	8,215	3,938	200	83	36,855
Rate per 1,000 population	2.0	1.8	2.0	1.0	1.1	1.9
Standardised rate ratio (RR)	1.03	0.92	1.01	0.52	0.57	
95% confidence interval of RR	1.02–1.05	0.90–0.94	0.97–1.04	0.45–0.59	0.45–0.70	
Cholecystectomy						
Admissions for elective surgery	10,037	3,696	1,460	103	35	15,377
Rate per 1,000 population	0.8	0.9	0.8	0.5	0.3	0.8
Standardised rate ratio (RR)	0.99	1.11	0.93	0.55	0.36	
95% confidence interval of RR	0.97–1.01	1.07–1.14	0.88–0.97	0.44–0.65	0.24–0.49	
Coronary artery bypass graft						
Admissions for elective surgery	2,822	1,225	645	66	56	4,831
Rate per 1,000 population	0.2	0.3	0.3	0.3	0.6	0.3
Standardised rate ratio (RR)	0.92	1.05	1.22	1.20	2.24	
95% confidence interval of RR	0.89–0.95	0.99–1.11	1.13–1.32	0.91–1.49	1.65–2.83	
Cystoscopy						
Admissions for elective surgery	19,457	5,620	1,972	149	68	27,320
Rate per 1,000 population	1.6	1.3	1.0	0.7	0.8	1.5
Standardised rate ratio (RR)	1.11	0.88	0.68	0.48	0.52	
95% confidence interval of RR	1.09–1.12	0.86–0.91	0.65–0.71	0.40–0.55	0.40–0.64	
Haemorrhoidectomy						
Admissions for elective surgery	2,065	522	252	18	7	2,872
Rate per 1,000 population	0.2	0.1	0.1	0.1	0.1	0.2
Standardised rate ratio (RR)	1.10	0.82	0.85	0.50	0.39	
95% confidence interval of RR	1.05–1.15	0.75–0.89	0.74–0.95	0.27–0.73	0.10–0.67	
Hysterectomy						
Admissions for elective surgery	5,733	2,264	970	65	25	9,103
Rate per 1,000 population	0.5	0.6	0.5	0.3	0.2	0.5
Standardised rate ratio (RR)	0.96	1.14	1.03	0.55	0.43	
95% confidence interval of RR	0.94–0.99	1.10–1.19	0.96–1.09	0.42–0.69	0.26–0.61	
Inguinal herniorrhaphy						
Admissions for elective surgery	8,762	3,133	1,387	79	20	13,423
Rate per 1,000 population	0.7	0.8	0.7	0.3	0.2	0.7
Standardised rate ratio (RR)	1.01	1.03	0.97	0.47	0.27	
95% confidence interval of RR	0.99–1.03	0.99–1.07	0.92–1.03	0.36–0.57	0.15–0.39	
Myringoplasty						
Admissions for elective surgery	919	235	94	8	6	1,264
Rate per 1,000 population	0.1	0.1	0.0	0.0	0.0	0.1
Standardised rate ratio (RR)	1.12	0.83	0.70	0.47	0.60	
95% confidence interval of RR	1.04–1.19	0.73–0.94	0.56–0.84	0.14–0.79	0.12–1.08	
Myringotomy						
Admissions for elective surgery	4,122	1,285	351	51	14	5,834
Rate per 1,000 population	0.4	0.3	0.2	0.2	0.1	0.3
Standardised rate ratio (RR)	1.10	0.98	0.55	0.57	0.26	
95% confidence interval of RR	1.07–1.13	0.93–1.03	0.49–0.61	0.42–0.73	0.13–0.40	

(continued)

Table A1.8 (continued): Separations for public elective surgery, by indicator procedure and remoteness area of usual residence, selected states and territories, 2004–05

Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Prostatectomy						
Admissions for elective surgery	3,452	1,210	444	37	11	5,164
Rate per 1,000 population	0.3	0.3	0.2	0.2	0.1	0.3
Standardised rate ratio (RR)	1.06	0.96	0.79	0.66	0.51	
95% confidence interval of RR	1.02–1.09	0.91–1.02	0.72–0.86	0.45–0.87	0.21–0.82	
Septoplasty						
Admissions for elective surgery	2,410	667	196	18	0	3,299
Rate per 1,000 population	0.2	0.2	0.1	0.1	0.0	0.2
Standardised rate ratio (RR)	1.09	0.95	0.57	0.43	0.00	
95% confidence interval of RR	1.05–1.14	0.88–1.03	0.49–0.65	0.23–0.63	..	
Tonsillectomy						
Admissions for elective surgery	7,566	2,758	734	60	15	11,160
Rate per 1,000 population	0.7	0.7	0.4	0.2	0.1	0.6
Standardised rate ratio (RR)	1.05	1.11	0.62	0.37	0.15	
95% confidence interval of RR	1.02–1.07	1.07–1.16	0.58–0.66	0.28–0.47	0.07–0.22	
Total hip replacement						
Admissions for elective surgery	3,668	1,702	685	42	19	6,146
Rate per 1,000 population	0.3	0.4	0.3	0.2	0.2	0.3
Standardised rate ratio (RR)	0.94	1.15	1.03	0.59	0.71	
95% confidence interval of RR	0.91–0.97	1.10–1.21	0.95–1.10	0.41–0.77	0.39–1.03	
Total knee replacement						
Admissions for elective surgery	5,071	2,102	947	62	25	8,244
Rate per 1,000 population	0.4	0.5	0.5	0.3	0.3	0.4
Standardised rate ratio (RR)	0.97	1.05	1.06	0.66	0.65	
95% confidence interval of RR	0.94–1.00	1.01–1.10	0.99–1.12	0.50–0.83	0.40–0.91	
Varicose vein stripping and ligation						
Admissions for elective surgery	2,682	846	274	15	5	3,831
Rate per 1,000 population	0.2	0.2	0.1	0.1	0.0	0.2
Standardised rate ratio (RR)	1.07	1.00	0.69	0.31	0.20	
95% confidence interval of RR	1.03–1.11	0.94–1.07	0.60–0.77	0.15–0.47	0.02–0.38	
Not applicable						
Admissions for elective surgery	205,758	76,725	33,777	3,626	1,998	322,986
Rate per 1,000 population	17.2	19.0	17.9	15.9	17.1	17.7
Standardised rate ratio (RR)	0.97	1.08	1.01	0.90	0.97	
95% confidence interval of RR	0.97–0.98	1.07–1.09	1.00–1.02	0.87–0.93	0.93–1.01	
Total						
Admissions for elective surgery	308,846	112,205	48,126	4,599	2,387	477,709
Rate per 1,000 population	25.8	27.3	25.1	20.3	21.3	26.0
Standardised rate ratio (RR)	0.99	1.05	0.97	0.78	0.82	
95% confidence interval of RR	0.99–1.00	1.04–1.06	0.96–0.98	0.76–0.80	0.79–0.85	

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. The total includes unknown remoteness area of residence.
3. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.

Table A1.9: Separations for public elective surgery, by surgical specialty and quintile of socio-economic advantage/disadvantage, selected state and territories, 2004–05

Surgical specialty	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Cardiothoracic surgery						
Admissions for elective surgery	3,214	2,650	2,581	1,983	1,480	11,947
Rate per 1,000 population	0.8	0.7	0.7	0.6	0.4	0.6
Standardised rate ratio (RR)	1.19	1.15	1.10	0.90	0.62	
95% confidence interval of RR	1.14–1.23	1.11–1.20	1.06–1.15	0.86–0.94	0.59–0.66	
Ear, nose and throat surgery						
Admissions for elective surgery	10,742	8,855	9,367	7,526	5,282	41,830
Rate per 1,000 population	2.8	2.6	2.5	2.2	1.5	2.3
Standardised rate ratio (RR)	1.20	1.11	1.08	0.93	0.64	
95% confidence interval of RR	1.17–1.22	1.09–1.13	1.06–1.10	0.91–0.96	0.62–0.66	
General surgery						
Admissions for elective surgery	36,230	27,187	27,521	20,196	14,647	126,169
Rate per 1,000 population	9.2	7.9	7.5	5.8	3.9	6.9
Standardised rate ratio (RR)	1.34	1.15	1.09	0.84	0.57	
95% confidence interval of RR	1.32–1.35	1.13–1.16	1.08–1.10	0.83–0.85	0.56–0.58	
Gynaecology						
Admissions for elective surgery	18,704	14,616	15,408	11,673	9,116	69,676
Rate per 1,000 population	5.2	4.4	4.2	3.3	2.3	3.8
Standardised rate ratio (RR)	1.35	1.16	1.10	0.85	0.60	
95% confidence interval of RR	1.33–1.37	1.14–1.17	1.08–1.11	0.83–0.86	0.59–0.61	
Neurosurgery						
Admissions for elective surgery	1,968	1,609	1,853	1,475	1,119	8,055
Rate per 1,000 population	0.5	0.5	0.5	0.4	0.3	0.4
Standardised rate ratio (RR)	1.13	1.06	1.16	0.97	0.68	
95% confidence interval of RR	1.08–1.18	1.01–1.11	1.11–1.21	0.92–1.01	0.64–0.72	
Ophthalmology						
Admissions for elective surgery	13,844	10,374	10,229	8,992	8,010	51,557
Rate per 1,000 population	3.2	2.9	2.8	2.6	2.1	2.7
Standardised rate ratio (RR)	1.17	1.04	1.02	0.95	0.78	
95% confidence interval of RR	1.15–1.19	1.02–1.06	1.00–1.04	0.93–0.97	0.76–0.79	
Orthopaedic surgery						
Admissions for elective surgery	20,177	15,877	14,822	11,055	8,863	70,953
Rate per 1,000 population	5.1	4.6	4.0	3.2	2.4	3.9
Standardised rate ratio (RR)	1.32	1.19	1.05	0.82	0.61	
95% confidence interval of RR	1.30–1.34	1.17–1.21	1.03–1.06	0.80–0.83	0.60–0.62	
Plastic surgery						
Admissions for elective surgery	6,525	5,563	6,678	7,039	5,454	31,286
Rate per 1,000 population	1.7	1.6	1.8	2.0	1.4	1.7
Standardised rate ratio (RR)	0.98	0.94	1.07	1.18	0.85	
95% confidence interval of RR	0.96–1.00	0.92–0.97	1.04–1.10	1.16–1.21	0.82–0.87	

(continued)

Table A1.9 (continued): Separations for public elective surgery, by surgical specialty and quintile of socio-economic advantage/disadvantage, selected state and territories, 2004–05

Surgical specialty	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Urology						
Admissions for elective surgery	11,284	9,623	9,948	7,649	6,677	45,258
Rate per 1,000 population	2.7	2.7	2.7	2.2	1.8	2.4
Standardised rate ratio (RR)	1.11	1.11	1.13	0.91	0.73	
95% confidence interval of RR	1.09–1.13	1.09–1.14	1.11–1.15	0.89–0.93	0.71–0.74	
Vascular surgery						
Admissions for elective surgery	2,731	2,429	2,085	1,687	1,693	10,641
Rate per 1,000 population	0.6	0.7	0.6	0.5	0.4	0.6
Standardised rate ratio (RR)	1.14	1.19	1.01	0.85	0.78	
95% confidence interval of RR	1.10–1.19	1.14–1.24	0.97–1.05	0.81–0.89	0.74–0.82	
Other						
Admissions for elective surgery	2,518	2,128	1,641	1,784	2,250	10,337
Rate per 1,000 population	0.6	0.6	0.4	0.5	0.6	0.6
Standardised rate ratio (RR)	1.13	1.10	0.78	0.90	1.07	
95% confidence interval of RR	1.09–1.18	1.05–1.14	0.74–0.82	0.85–0.94	1.02–1.11	
Total						
Admissions for elective surgery	127,937	100,911	102,133	81,059	64,591	477,709
Rate per 1,000 population	32.4	29.2	27.9	23.2	17.2	26.0
Standardised rate ratio (RR)	1.25	1.12	1.07	0.89	0.66	
95% confidence interval of RR	1.24–1.25	1.12–1.13	1.07–1.08	0.89–0.90	0.66–0.67	

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. The total includes unknown remoteness area of residence.
3. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.

Table A1.10: Separations for public elective surgery, by indicator procedure and quintile of socio-economic advantage/disadvantage, selected states and territories 2004–05

Indicator procedure	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Cataract extraction						
Admissions for elective surgery	10,249	7,611	7,262	6,058	5,591	36,855
Rate per 1,000 population	2.3	2.1	2.0	1.8	1.5	1.9
Standardised rate ratio (RR)	1.20	1.06	1.03	0.90	0.76	
95% confidence interval of RR	1.17–1.22	1.04–1.08	1.01–1.06	0.88–0.92	0.74–0.77	
Cholecystectomy						
Admissions for elective surgery	4,363	3,304	3,656	2,409	1,602	15,377
Rate per 1,000 population	1.1	1.0	1.0	0.7	0.4	0.8
Standardised rate ratio (RR)	1.37	1.16	1.20	0.81	0.49	
95% confidence interval of RR	1.33–1.41	1.12–1.20	1.16–1.23	0.78–0.85	0.47–0.52	
Coronary artery bypass graft						
Admissions for elective surgery	1,438	1,151	1,001	779	449	4,831
Rate per 1,000 population	0.3	0.3	0.3	0.2	0.1	0.3
Standardised rate ratio (RR)	1.28	1.23	1.07	0.88	0.47	
95% confidence interval of RR	1.21–1.35	1.16–1.30	1.01–1.14	0.82–0.95	0.42–0.51	
Cystoscopy						
Admissions for elective surgery	6,368	5,766	6,361	4,561	4,225	27,320
Rate per 1,000 population	1.5	1.6	1.7	1.3	1.1	1.5
Standardised rate ratio (RR)	1.04	1.10	1.20	0.90	0.76	
95% confidence interval of RR	1.02–1.07	1.07–1.13	1.17–1.23	0.87–0.92	0.74–0.78	
Haemorrhoidectomy						
Admissions for elective surgery	808	625	559	481	393	2,872
Rate per 1,000 population	0.2	0.2	0.2	0.1	0.1	0.2
Standardised rate ratio (RR)	1.34	1.17	0.97	0.87	0.65	
95% confidence interval of RR	1.25–1.44	1.08–1.26	0.89–1.05	0.79–0.94	0.59–0.72	
Hysterectomy						
Admissions for elective surgery	2,577	1,988	2,157	1,416	930	9,103
Rate per 1,000 population	0.7	0.6	0.6	0.4	0.2	0.5
Standardised rate ratio (RR)	1.38	1.18	1.18	0.80	0.49	
95% confidence interval of RR	1.32–1.43	1.13–1.23	1.13–1.23	0.76–0.85	0.46–0.52	
Inguinal herniorrhaphy						
Admissions for elective surgery	3,506	2,816	2,937	2,276	1,851	13,423
Rate per 1,000 population	0.9	0.8	0.8	0.7	0.5	0.7
Standardised rate ratio (RR)	1.20	1.11	1.09	0.90	0.69	
95% confidence interval of RR	1.16–1.24	1.07–1.15	1.06–1.13	0.86–0.93	0.66–0.72	
Myringoplasty						
Admissions for elective surgery	337	264	250	259	153	1,264
Rate per 1,000 population	0.1	0.1	0.1	0.1	0.0	0.1
Standardised rate ratio (RR)	1.26	1.10	0.97	1.06	0.60	
95% confidence interval of RR	1.12–1.39	0.97–1.24	0.85–1.08	0.93–1.19	0.51–0.70	
Myringotomy						
Admissions for elective surgery	1,483	1,333	1,172	1,262	579	5,834
Rate per 1,000 population	0.3	0.3	0.3	0.3	0.2	0.3
Standardised rate ratio (RR)	1.12	1.08	1.08	1.00	0.70	
95% confidence interval of RR	1.06–1.17	1.03–1.14	1.02–1.14	0.95–1.06	0.64–0.76	

(continued)

Table A1.10 (continued): Separations for public elective surgery, by indicator procedure and quintile of socio-economic advantage/disadvantage, selected states and territories 2004–05

Indicator procedure	Second					Total
	Most dis- advantaged	most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	
Prostatectomy						
Admissions for elective surgery	1,356	1,090	1,065	936	711	5,164
Rate per 1,000 population	0.3	0.3	0.3	0.3	0.2	0.3
Standardised rate ratio (RR)	1.12	1.08	1.08	1.00	0.70	
95% confidence interval of RR	1.06–1.18	1.02–1.15	1.01–1.14	0.94–1.07	0.65–0.75	
Septoplasty						
Admissions for elective surgery	746	739	732	643	436	3,299
Rate per 1,000 population	0.2	0.2	0.2	0.2	0.1	0.2
Standardised rate ratio (RR)	1.12	1.22	1.10	0.99	0.61	
95% confidence interval of RR	1.04–1.20	1.13–1.31	1.02–1.18	0.91–1.07	0.55–0.67	
Tonsillectomy						
Admissions for elective surgery	2,986	2,393	2,709	1,875	1,181	11,160
Rate per 1,000 population	0.8	0.7	0.7	0.6	0.4	0.6
Standardised rate ratio (RR)	1.25	1.12	1.14	0.87	0.56	
95% confidence interval of RR	1.20–1.29	1.07–1.16	1.10–1.18	0.83–0.91	0.53–0.59	
Total hip replacement						
Admissions for elective surgery	1,779	1,314	1,321	959	766	6,146
Rate per 1,000 population	0.4	0.4	0.4	0.3	0.2	0.3
Standardised rate ratio (RR)	1.25	1.10	1.12	0.85	0.62	
95% confidence interval of RR	1.19–1.31	1.04–1.16	1.06–1.18	0.80–0.91	0.58–0.67	
Total knee replacement						
Admissions for elective surgery	2,478	1,784	1,847	1,111	1,007	8,244
Rate per 1,000 population	0.6	0.5	0.5	0.3	0.3	0.4
Standardised rate ratio (RR)	1.28	1.11	1.17	0.74	0.62	
95% confidence interval of RR	1.23–1.33	1.06–1.16	1.11–1.22	0.70–0.79	0.58–0.66	
Varicose vein stripping and ligation						
Admissions for elective surgery	953	877	761	689	544	3,831
Rate per 1,000 population	0.2	0.3	0.2	0.2	0.1	0.2
Standardised rate ratio (RR)	1.18	1.23	1.00	0.94	0.68	
95% confidence interval of RR	1.11–1.26	1.15–1.31	0.93–1.07	0.87–1.01	0.63–0.74	
Not applicable						
Admissions for elective surgery	86,510	67,856	68,343	55,345	44,173	322,986
Rate per 1,000 population	22.3	19.8	18.6	15.8	11.7	17.6
Standardised rate ratio (RR)	1.27	1.12	1.06	0.89	0.66	
95% confidence interval of RR	1.26–1.27	1.12–1.13	1.05–1.06	0.89–0.90	0.66–0.67	
Total						
Admissions for elective surgery	127,937	100,911	102,133	81,059	64,591	477,709
Rate per 1,000 population	32.3	29.1	27.8	23.1	17.2	25.9
Standardised rate ratio (RR)	1.25	1.12	1.07	0.89	0.66	
95% confidence interval of RR	1.24–1.25	1.11–1.13	1.07–1.08	0.88–0.90	0.66–0.67	

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. The total includes unknown remoteness area of residence.
3. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.
4. The standardised rate ratio is equal to the rate for Indigenous Australians divided by the rate for other Australians (which includes *Not reported*).

Table A1.11: Patients admitted from public waiting lists for elective surgery, by surgical specialty and Indigenous status, selected states and territories, 2004–05

Surgical specialty	Separations		Separations per 1,000 population		Rate ratio	95% confidence interval of SRR
	Indigenous Australians	Other Australians	Indigenous Australians	Other Australians		
Cardio-thoracic surgery	331	11,211	1.4	0.6	2.3	2.02–2.51
Ear nose & throat surgery	1,410	39,363	3.0	2.4	1.2	1.18–1.31
General surgery	2,522	119,520	8.8	6.9	1.3	1.22–1.31
Gynaecology	1,895	65,330	6.0	3.8	1.6	1.50–1.65
Neurosurgery	106	7,641	0.4	0.4	0.9	0.75–1.11
Ophthalmology	752	49,656	5.2	2.8	1.9	1.74–2.00
Orthopaedic surgery	1,400	66,810	4.5	3.9	1.2	1.10–1.22
Plastic surgery	320	29,825	0.8	1.7	0.5	0.44–0.55
Urology	347	42,705	2.0	2.4	0.8	0.73–0.90
Vascular surgery	193	9,848	1.1	0.6	1.9	1.65–2.19
Other	366	8,158	0.9	0.5	1.8	1.61–1.98
Total	9,642	450,067	34.1	26.1	1.3	1.28–1.33

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia and the Northern Territory only.
2. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.
3. The standardised rate ratio is equal to the rate for Indigenous Australians divided by the rate for other Australians (which includes *Not reported*).

Table A1.12: Patients admitted from public waiting lists for elective surgery, by indicator procedure and Indigenous status, selected states and territories, 2004–05

Indicator procedure	Separations		Separations per 1,000 population		Rate ratio	95% confidence interval of SRR
	Indigenous Australians	Other Australians	Indigenous Australians	Other Australians		
Cataract extraction	348	35,653	3.1	2.0	1.6	1.41–1.74
Cholecystectomy	386	14,353	1.4	0.8	1.7	1.53–1.87
Coronary artery bypass graft	138	4,434	0.8	0.2	3.2	2.63–3.68
Cystoscopy	179	26,202	1.0	1.5	0.7	0.59–0.80
Haemorrhoidectomy	28	2,770	0.1	0.2	0.7	0.45–0.98
Hysterectomy	182	8,557	0.7	0.5	1.5	1.28–1.71
Inguinal herniorrhaphy	189	12,684	0.7	0.7	0.9	0.78–1.04
Myringoplasty	73	1,163	0.2	0.1	2.3	1.77–2.82
Myringotomy	261	5,473	0.4	0.3	1.1	0.96–1.23
Prostatectomy	28	5,064	0.2	0.3	0.8	0.53–1.16
Septoplasty	26	3,228	0.1	0.2	0.4	0.23–0.52
Tonsillectomy	349	10,632	0.5	0.7	0.8	0.74–0.91
Total hip replacement	39	5,760	0.2	0.3	0.6	0.45–0.85
Total knee replacement	54	7,775	0.4	0.4	0.9	0.67–1.16
Varicose vein stripping and ligation	33	3,705	0.1	0.2	0.6	0.42–0.85
Other	7,329	302,614	24.1	17.6	1.4	1.34–1.40
Total	9,642	450,067	34.1	26.1	1.3	1.28–1.33

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia and the Northern Territory only.
2. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.
3. The standardised rate ratio is equal to the rate for Indigenous Australians divided by the rate for other Australians (which includes *Not reported*).

Table A1.13: Patients admitted from public waiting lists for elective surgery, by indicator procedure and sex of patient, selected states and territories, 2004–05

Indicator procedure	Separations		Separations per 1,000 population		Rate ratio	95% confidence interval of SRR
	Male	Female	Male	Female		
Cataract extraction	15,493	21,361	1.9	2.2	0.9	0.87–0.90
Cholecystectomy	4,155	11,222	0.5	1.2	0.4	0.38–0.41
Coronary artery bypass graft	3,665	1,166	0.5	0.1	3.4	3.30–3.52
Cystoscopy	18,032	9,288	2.1	1.0	2.2	2.15–2.21
Haemorrhoidectomy	1,535	1,337	0.2	0.1	1.2	1.14–1.26
Inguinal herniorrhaphy	11,873	1,549	1.4	0.2	8.0	7.81–8.10
Myringoplasty	662	602	0.1	0.1	1.1	1.04–1.21
Myringotomy	3,532	2,302	0.4	0.3	1.5	1.43–1.52
Septoplasty	2,191	1,108	0.2	0.1	2.0	1.92–2.08
Tonsillectomy	5,446	5,714	0.6	0.7	0.9	0.89–0.94
Total hip replacement	2,791	3,355	0.3	0.4	1.0	0.94–1.02
Total knee replacement	3,197	5,047	0.4	0.6	0.7	0.71–0.76
Varicose vein stripping and ligation	1,319	2,512	0.1	0.3	0.5	0.51–0.57
Other	143,843	179,143	16.3	19.3	0.8	0.84–0.85
Total	222,881	254,826	25.6	27.4	0.9	0.93–0.94

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. Rates per 1,000 population are directly age standardised to the at 30 June 2001 Estimated resident population.
3. The standardised rate ratio is equal to the rate for male persons divided by the rate for female persons.

Table A1.14: Waiting time statistics for patients admitted from waiting lists for elective surgery, by surgical specialty and remoteness area of usual residence, 2004–05

Surgical specialty	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Cardio-thoracic surgery						
Admissions	7,268	2,807	1,526	165	118	11,947
Days waited at 50th percentile	10	8	8	10	8	9
Days waited at 90th percentile	71	64	58	56	60	68
% waited more than 365 days	0.2	0.2	0.0	0.0	0.0	0.2
Ear, nose & throat surgery						
Admissions	28,941	9,133	3,057	390	213	41,830
Days waited at 50th percentile	35	32	39	44	43	35
Days waited at 90th percentile	340	237	330	320	385	317
% waited more than 365 days	9.1	5.2	8.8	8.5	11.7	8.2
General surgery						
Admissions	76,696	32,802	14,047	1,407	732	126,169
Days waited at 50th percentile	28	25	26	27	34	27
Days waited at 90th percentile	169	138	124	136	236	155
% waited more than 365 days	3.2	2.4	1.8	2.6	4.5	2.8
Gynaecology						
Admissions	44,721	16,724	6,808	856	356	69,676
Days waited at 50th percentile	25	23	28	20	27	25
Days waited at 90th percentile	121	105	118	93	116	117
% waited more than 365 days	1.6	1.2	1.4	1.6	3.9	1.5
Neurosurgery						
Admissions	5,433	1,648	850	57	23	8,055
Days waited at 50th percentile	20	20	14	14	5	19
Days waited at 90th percentile	138	140	140	216	46	139
% waited more than 365 days	1.5	1.5	3.8	3.5	0.0	1.7
Ophthalmology						
Admissions	34,243	10,903	5,541	455	274	51,557
Days waited at 50th percentile	58	69	62	82	89	61
Days waited at 90th percentile	343	372	330	360	399	353
% waited more than 365 days	8.6	10.7	6.9	9.2	16.1	8.9
Orthopaedic surgery						
Admissions	42,253	19,160	8,309	642	304	70,953
Days waited at 50th percentile	44	40	45	38	29	43
Days waited at 90th percentile	346	313	359	335	244	339
% waited more than 365 days	9.1	7.8	9.7	9.2	6.9	8.8
Plastic surgery						
Admissions	24,738	4,735	1,584	110	70	31,286
Days waited at 50th percentile	27	23	24	21	27	26
Days waited at 90th percentile	151	152	191	264	167	154
% waited more than 365 days	3.3	3.0	4.1	4.5	5.7	3.3

(continued)

Table A1.14 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by surgical specialty and remoteness area of usual residence, 2004–05

Surgical specialty	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Urology						
Admissions	31,344	9,878	3,463	325	141	45,258
Days waited at 50th percentile	27	24	28	29	27	26
Days waited at 90th percentile	165	133	156	125	108	156
% waited more than 365 days	3.5	2.4	2.1	1.2	1.4	3.1
Vascular surgery						
Admissions	7,094	2,190	1,209	75	51	10,641
Days waited at 50th percentile	15	23	19	9	15	17
Days waited at 90th percentile	131	128	99	49	59	125
% waited more than 365 days	4.8	2.8	2.0	0.0	0.0	4.0
Other						
Admissions	6,115	2,225	1,732	117	105	10,337
Days waited at 50th percentile	22	13	14	12	14	18
Days waited at 90th percentile	128	93	106	91	133	118
% waited more than 365 days	1.3	1.3	3.3	0.9	1.9	1.6
Total						
Admissions	308,846	112,205	48,126	4,599	2,387	477,709
Days waited at 50th percentile	29	27	29	28	31	29
Days waited at 90th percentile	216	203	203	194	244	211
% waited more than 365 days	4.9	4.1	4.3	4.3	6.1	4.6

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

Table A1.15: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and remoteness area of usual residence, 2004–05

Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Cataract extraction						
Admissions	24,322	8,215	3,938	200	83	36,855
Days waited at 50th percentile	82	100	83	105	81	85
Days waited at 90th percentile	375	386	346	398	398	376
% waited more than 365 days	10.8	13.0	7.7	13.0	18.1	11.0
Cholecystectomy						
Admissions	10,037	3,696	1,460	103	35	15,377
Days waited at 50th percentile	48	44	45	47	41	47
Days waited at 90th percentile	228	201	145	113	97	213
% waited more than 365 days	4.5	3.8	2.1	0.0	0.0	4.0
Coronary artery bypass graft						
Admissions	2,822	1,225	645	66	56	4,831
Days waited at 50th percentile	13	11	13	20	17	13
Days waited at 90th percentile	101	82	68	76	53	89
% waited more than 365 days	0.3	0.2	0.0	0.0	0.0	0.2
Cystoscopy						
Admissions	19,457	5,620	1,972	149	68	27,320
Days waited at 50th percentile	27	23	28	26	17	26
Days waited at 90th percentile	162	120	140	112	108	152
% waited more than 365 days	2.9	1.7	1.0	1.3	2.9	2.5
Haemorrhoidectomy						
Admissions	2,065	522	252	18	7	2,872
Days waited at 50th percentile	48	48	43	59	27	47
Days waited at 90th percentile	322	250	202	254	114	299
% waited more than 365 days	8.1	6.5	5.6	5.6	0.0	7.6
Hysterectomy						
Admissions	5,733	2,264	970	65	25	9,103
Days waited at 50th percentile	37	38	45	40	31	38
Days waited at 90th percentile	171	144	146	97	84	158
% waited more than 365 days	2.6	1.8	1.4	0.0	0.0	2.2
Inguinal herniorrhaphy						
Admissions	8,762	3,133	1,387	79	20	13,423
Days waited at 50th percentile	45	43	44	46	30	44
Days waited at 90th percentile	229	203	183	148	94	215
% waited more than 365 days	4.3	3.6	2.8	1.3	0.0	3.9
Myringoplasty						
Admissions	919	235	94	8	6	1,264
Days waited at 50th percentile	89	69	78	257	282	83
Days waited at 90th percentile	567	428	792	852	1,514	563
% waited more than 365 days	22.1	14.5	25.5	37.5	33.3	21.0
Myringotomy						
Admissions	4,122	1,285	351	51	14	5,834
Days waited at 50th percentile	27	23	32	44	65	27
Days waited at 90th percentile	104	90	162	147	693	104
% waited more than 365 days	0.8	0.6	2.3	7.8	14.3	0.9

(continued)

Table A1.15 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and remoteness area of usual residence, 2004–05

Indicator procedure	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Total
Prostatectomy						
Admissions	3,452	1,210	444	37	11	5,164
Days waited at 50th percentile	34	29	34	49	54	32
Days waited at 90th percentile	246	138	176	134	172	215
% waited more than 365 days	5.9	3.8	4.5	2.7	0.0	5.3
Septoplasty						
Admissions	2,410	667	196	18	0	3,299
Days waited at 50th percentile	99	64	153	52	0	92
Days waited at 90th percentile	660	393	1,568	717	0	637
% waited more than 365 days	25.6	13.6	33.7	22.2	..	23.6
Tonsillectomy						
Admissions	7,566	2,758	734	60	15	11,160
Days waited at 50th percentile	57	50	85	66	83	57
Days waited at 90th percentile	386	265	363	247	367	348
% waited more than 365 days	10.9	4.9	9.5	1.7	13.3	9.3
Total hip replacement						
Admissions	3,668	1,702	685	42	19	6,146
Days waited at 50th percentile	91	103	111	98	77	97
Days waited at 90th percentile	411	448	468	441	490	429
% waited more than 365 days	13.2	15.2	17.1	23.8	10.5	14.2
Total knee replacement						
Admissions	5,071	2,102	947	62	25	8,244
Days waited at 50th percentile	135	146	162	125	93	141
Days waited at 90th percentile	518	580	573	424	407	538
% waited more than 365 days	21.2	24.2	26.1	22.6	12.0	22.5
Varicose veins stripping & ligation						
Admissions	2,682	846	274	15	5	3,831
Days waited at 50th percentile	75	80	74	54	49	77
Days waited at 90th percentile	877	482	464	366	709	760
% waited more than 365 days	23.0	15.2	14.2	13.3	20.0	20.6
Not applicable/not stated						
Admissions	205,758	76,725	33,777	3,626	1,998	322,986
Days waited at 50th percentile	23	22	23	23	29	23
Days waited at 90th percentile	157	137	153	171	244	153
% waited more than 365 days	3.2	2.5	3.1	3.5	5.8	3.0
Total						
Admissions	308,846	112,205	48,126	4,599	2,387	477,709
Days waited at 50th percentile	29	27	29	28	31	29
Days waited at 90th percentile	216	203	203	194	244	211
% waited more than 365 days	4.9	4.1	4.3	4.3	6.1	4.6

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

Table A1.16: Waiting time statistics for patients admitted from waiting lists for elective surgery, by surgical specialty and quintile of socio-economic advantage/disadvantage, 2004–05

Surgical specialty	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Cardio-thoracic surgery						
Admissions	3,214	2,650	2,581	1,983	1,480	11,947
Days waited at 50th percentile	10	7	11	9	10	9
Days waited at 90th percentile	77	54	74	67	61	68
% waited more than 365 days	0.3	0.2	0.2	0.2	0.1	0.2
Ear, nose & throat surgery						
Admissions	10,742	8,855	9,367	7,526	5,282	41,830
Days waited at 50th percentile	38	33	42	31	27	35
Days waited at 90th percentile	321	302	349	257	312	317
% waited more than 365 days	8.4	7.4	9.3	7.3	8.5	8.2
General surgery						
Admissions	36,230	27,187	27,521	20,196	14,647	126,169
Days waited at 50th percentile	27	27	27	27	23	27
Days waited at 90th percentile	154	154	163	164	137	155
% waited more than 365 days	2.9	2.8	3.1	2.9	2.1	2.8
Gynaecology						
Admissions	18,704	14,616	15,408	11,673	9,116	69,676
Days waited at 50th percentile	26	28	26	23	19	25
Days waited at 90th percentile	118	124	128	115	92	117
% waited more than 365 days	1.6	1.5	1.7	1.8	0.6	1.5
Neurosurgery						
Admissions	1,968	1,609	1,853	1,475	1,119	8,055
Days waited at 50th percentile	19	20	21	17	17	19
Days waited at 90th percentile	152	139	132	126	139	139
% waited more than 365 days	0.3	0.1	0.2	0.2	0.2	0.2
Ophthalmology						
Admissions	13,844	10,374	10,229	8,992	8,010	51,557
Days waited at 50th percentile	67	63	84	41	48	61
Days waited at 90th percentile	369	342	397	273	331	353
% waited more than 365 days	10.2	7.8	12.4	5.2	7.6	8.9
Orthopaedic surgery						
Admissions	20,177	15,877	14,822	11,055	8,863	70,953
Days waited at 50th percentile	47	42	50	38	34	43
Days waited at 90th percentile	355	301	390	320	280	339
% waited more than 365 days	9.5	7.3	11.3	8.3	6.1	8.8
Plastic surgery						
Admissions	6,525	5,563	6,678	7,039	5,454	31,286
Days waited at 50th percentile	28	27	27	24	21	26
Days waited at 90th percentile	187	158	146	150	126	154
% waited more than 365 days	4.3	3.6	2.9	3.3	2.5	3.3

(continued)

Table A1.16 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by specialty of surgeon and quintile of socio-economic advantage/disadvantage, 2004–05

Surgical specialty	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Urology						
Admissions	11,284	9,623	9,948	7,649	6,677	45,258
Days waited at 50th percentile	28	24	28	26	25	26
Days waited at 90th percentile	158	135	166	174	149	156
% waited more than 365 days	3.1	2.8	3.6	3.6	2.4	3.1
Vascular surgery						
Admissions	2,731	2,429	2,085	1,687	1,693	10,641
Days waited at 50th percentile	17	17	17	20	15	17
Days waited at 90th percentile	114	106	133	160	134	125
% waited more than 365 days	3.3	3.0	3.7	5.6	5.3	4.0
Other						
Admissions	2,518	2,128	1,641	1,784	2,250	10,337
Days waited at 50th percentile	13	18	16	23	25	18
Days waited at 90th percentile	90	113	116	120	145	118
% waited more than 365 days	1.4	2.4	1.6	1.1	1.6	1.6
Total						
Admissions	127,937	100,911	102,133	81,059	64,591	477,709
Days waited at 50th percentile	30	29	31	27	24	29
Days waited at 90th percentile	224	207	237	191	186	211
% waited more than 365 days	5.0	4.2	5.5	4.2	3.7	4.6

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

Table A1.17: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and quintile of socio-economic advantage/disadvantage, 2004–05

	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Cataract extraction						
Admissions	10,249	7,611	7,262	6,058	5,591	36,855
Days waited at 50th percentile	91	86	130	55	72	85
Days waited at 90th percentile	385	363	431	300	363	376
% waited more than 365 days	12.1	9.6	15.8	6.2	9.7	11.0
Cholecystectomy						
Admissions	4,363	3,304	3,656	2,409	1,602	15,377
Days waited at 50th percentile	49	44	47	48	43	47
Days waited at 90th percentile	217	195	233	209	204	213
% waited more than 365 days	4.1	3.5	4.8	3.8	3.9	4.0
Coronary artery bypass graft						
Admissions	1,438	1,151	1,001	779	449	4,831
Days waited at 50th percentile	14	8	14	13	14	13
Days waited at 90th percentile	97	66	98	97	101	89
% waited more than 365 days	0.3	0.3	0.1	0.1	0.0	0.2
Cystoscopy						
Admissions	6,368	5,766	6,361	4,561	4,225	27,320
Days waited at 50th percentile	28	23	27	25	25	26
Days waited at 90th percentile	159	131	158	165	145	152
% waited more than 365 days	2.7	2.2	2.9	2.7	1.7	2.5
Haemorrhoidectomy						
Admissions	808	625	559	481	393	2,872
Days waited at 50th percentile	43	48	54	52	43	47
Days waited at 90th percentile	257	251	345	327	319	299
% waited more than 365 days	6.4	6.9	8.8	8.1	8.7	7.6
Hysterectomy						
Admissions	2,577	1,988	2,157	1,416	930	9,103
Days waited at 50th percentile	38	43	40	35	28	38
Days waited at 90th percentile	148	164	188	153	130	158
% waited more than 365 days	2.1	2.2	2.8	2.3	1.4	2.2
Inguinal herniorrhaphy						
Admissions	3,506	2,816	2,937	2,276	1,851	13,423
Days waited at 50th percentile	45	48	45	44	39	44
Days waited at 90th percentile	225	205	239	207	190	215
% waited more than 365 days	4.6	3.8	4.5	3.3	2.8	3.9
Myringoplasty						
Admissions	337	264	250	259	153	1,264
Days waited at 50th percentile	77	95	112	66	81	83
Days waited at 90th percentile	563	573	641	469	550	563
% waited more than 365 days	20.2	24.6	28.8	14.3	15.7	21.0
Myringotomy						
Admissions	1,483	1,333	1,172	1,262	579	5,834
Days waited at 50th percentile	32	27	27	25	18	27
Days waited at 90th percentile	112	100	115	93	82	104
% waited more than 365 days	1.1	0.7	1.5	0.5	0.7	0.9

(continued)

Table A1.17 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and quintile of socio-economic advantage/disadvantage, 2004–05

	Most dis- advantaged	Second most dis- advantaged	Middle quintile	Second most advantaged	Most advantaged	Total
Prostatectomy						
Admissions	1,356	1,090	1,065	936	711	5,164
Days waited at 50th percentile	33	29	38	29	30	32
Days waited at 90th percentile	190	197	250	256	179	215
% waited more than 365 days	5.0	5.5	5.4	6.8	3.1	5.3
Septoplasty						
Admissions	746	739	732	643	436	3,299
Days waited at 50th percentile	94	76	95	107	90	92
Days waited at 90th percentile	636	563	618	714	748	637
% waited more than 365 days	23.6	21.1	21.4	28.0	25.0	23.6
Tonsillectomy						
Admissions	2,986	2,393	2,709	1,875	1,181	11,160
Days waited at 50th percentile	64	53	69	44	41	57
Days waited at 90th percentile	365	312	405	258	371	348
% waited more than 365 days	10.0	7.1	11.8	6.9	10.2	9.3
Total hip replacement						
Admissions	1,779	1,314	1,321	959	766	6,146
Days waited at 50th percentile	104	96	104	87	83	97
Days waited at 90th percentile	449	411	465	396	368	429
% waited more than 365 days	15.6	13.2	17.6	11.7	10.1	14.2
Total knee replacement						
Admissions	2,478	1,784	1,847	1,111	1,007	8,244
Days waited at 50th percentile	146	141	156	112	131	141
Days waited at 90th percentile	585	509	563	472	466	538
% waited more than 365 days	24.0	21.3	27.8	18.0	16.1	22.5
Varicose veins stripping & ligation						
Admissions	953	877	761	689	544	3,831
Days waited at 50th percentile	85	77	67	79	74	77
Days waited at 90th percentile	706	774	642	952	813	760
% waited more than 365 days	21.0	19.4	20.9	21.2	20.8	20.6
Not applicable/not stated						
Admissions	86,510	67,856	68,343	55,345	44,173	322,986
Days waited at 50th percentile	23	24	24	22	20	23
Days waited at 90th percentile	156	150	163	155	129	153
% waited more than 365 days	3.3	2.8	3.4	3.2	2.3	3.0
Total						
Admissions	127,937	100,911	102,133	81,059	64,591	477,709
Days waited at 50th percentile	30	29	31	27	24	29
Days waited at 90th percentile	224	207	237	191	186	211
% waited more than 365 days	5.0	4.2	5.5	4.2	3.7	4.6

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

Table A1.18: Waiting time statistics for patients admitted from waiting lists for elective surgery, by surgical specialty and Indigenous status, 2004–05

Surgical specialty	Separations		Median waiting time (days)	
	Indigenous Australians	Other Australians	Indigenous Australians	Other Australians
Cardio-thoracic surgery	331	11,211	11	9
Ear nose & throat surgery	1,410	39,363	48	34
General surgery	2,522	119,520	30.5	27
Gynaecology	1,895	65,330	22	25
Neurosurgery	106	7,641	11.5	19
Ophthalmology	752	49,656	80	60
Orthopaedic surgery	1,400	66,810	27	42
Plastic surgery	320	29,825	20.5	26
Urology	347	42,705	27	26
Vascular surgery	193	9,848	11	16
Other	366	8,158	13.5	16
Total	9,642	450,067	28	28

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia and the Northern Territory only.

Table A1.19: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and Indigenous status, 2004–05

Indicator procedure	Separations		Median waiting time (days)	
	Indigenous Australians	Other Australians	Indigenous Australians	Other Australians
Cataract extraction	348	35,653	82	84
Cholecystectomy	386	14,353	44.5	46
Coronary artery bypass graft	138	4,434	19	12
Cystoscopy	179	26,202	24	25
Haemorrhoidectomy	28	2,770	37	46
Hysterectomy	182	8,557	41.5	38
Inguinal herniorrhaphy	189	12,684	40	44
Myringoplasty	73	1,163	102	82
Myringotomy	261	5,473	28	26
Prostatectomy	28	5,064	42	32
Septoplasty	26	3,228	83.5	90
Tonsillectomy	349	10,632	75	56
Total hip replacement	39	5,760	116	91
Total knee replacement	54	7,775	79	134
Varicose vein stripping and ligation	33	3,705	76	74
Other	7,329	302,614	24	22
Total	9,642	450,067	28	28

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia and the Northern Territory only.

Table A1.20: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and sex of patient, 2004–05

Indicator procedure	Separations		Median waiting time (days)	
	Male	Female	Male	Female
Cataract extraction	15,493	21,361	84	87
Cholecystectomy	4,155	11,222	44	48
Coronary artery bypass graft	3,665	1,166	12	13
Cystoscopy	18,032	9,288	25	28
Haemorrhoidectomy	1,535	1,337	46	49
Inguinal herniorrhaphy	11,873	1,549	46	37
Myringoplasty	662	602	78	89
Myringotomy	3,532	2,302	26	28
Septoplasty	2,191	1,108	91	93
Tonsillectomy	5,446	5,714	55	59
Total hip replacement	2,791	3,355	102	94
Total knee replacement	3,197	5,047	137	144
Varicose vein stripping and ligation	1,319	2,512	75	78
Other	143,843	179,143	22	23
Total	222,881	254,826	28	28

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

Note: Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

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Table AI.21: Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and age group of patient, 2004-05

	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Cataract extraction											
Admissions	48	42	67	108	351	1,328	3,885	12,377	15,453	3,196	36,855
Days waited at 50th percentile	12	29	28	44	43	51	66	92	97	79	85
Days waited at 90th percentile	56	104	158	339	274	301	338	378	390	377	376
% waited more than 365 days	0.0	0.0	1.5	5.6	5.1	6.1	7.5	11.1	12.4	10.9	11.0
Cholecystectomy											
Admissions	n.p.	n.p.	1,087	2,552	2,816	2,818	2,647	2,144	1,112	148	15,377
Days waited at 50th percentile	n.p.	n.p.	36	40	50	50	51	53	39	29	47
Days waited at 90th percentile	n.p.	n.p.	158	176	223	217	236	259	199	114	213
% waited more than 365 days	0.0	0.0	2.1	3.1	4.4	4.2	4.6	5.3	3.6	0.7	4.0
Coronary artery bypass graft											
Admissions	n.p.	0	n.p.	11	130	588	1,291	1,835	931	42	4,831
Days waited at 50th percentile	n.p.	0	n.p.	5	10	11	13	14	10	7	13
Days waited at 90th percentile	n.p.	0	n.p.	93	85	75	86	96	86	84	89
% waited more than 365 days	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.1	0.0	0.2
Cystoscopy											
Admissions	432	412	618	1,134	2,065	3,064	4,747	7,128	6,320	1,400	27,320
Days waited at 50th percentile	23	24	27	27	28	28	27	26	24	21	26
Days waited at 90th percentile	77	110	179	163	171	168	160	152	143	108	152
% waited more than 365 days	1.2	2.4	2.4	3.4	3.5	3.4	2.7	2.3	2.0	1.4	2.5
Haemorrhoidectomy											
Admissions	n.p.	n.p.	72	349	726	661	510	364	160	25	2,872
Days waited at 50th percentile	n.p.	n.p.	36	43	46	47	54	51	41	31	47
Days waited at 90th percentile	n.p.	n.p.	138	233	280	335	335	354	330	180	299
% waited more than 365 days	0.0	0.0	2.8	5.7	6.2	8.5	8.8	9.3	8.8	4.0	7.6
Hysterectomy											
Admissions	0	0	17	703	3,004	3,030	1,089	771	452	37	9,103
Days waited at 50th percentile	0	0	25	47	43	36	34	35	29	20	38
Days waited at 90th percentile	0	0	55	172	168	148	155	168	138	68	158
% waited more than 365 days	..	..	0.0	1.8	2.3	2.1	2.5	2.6	2.4	0.0	2.2
Inguinal herniorrhaphy											
Admissions	1,526	743	542	975	1,361	1,780	2,225	2,420	1,573	278	13,423
Days waited at 50th percentile	9	29	43	45	52	56	58	59	57	41	44
Days waited at 90th percentile	55	97	176	207	224	236	257	264	262	185	215
% waited more than 365 days	0.3	0.3	3.3	2.6	4.3	4.4	5.4	5.9	4.6	2.5	3.9

(continued)

Table A1.21 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and age group of patient, 2004-05

	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Myringoplasty											
Admissions	n.p.	339	137	142	203	186	123	85	25	n.p.	1264
Days waited at 50th percentile	n.p.	73	102	76	92	93	97	121	69	n.p.	83
Days waited at 90th percentile	n.p.	537	527	574	546	667	570	570	406	n.p.	563
% waited more than 365 days	0.0	18.3	24.1	19.7	22.2	27.4	19.5	23.5	12.0	0.0	21.0
Myringotomy											
Admissions	3,006	2,278	128	57	78	80	83	83	35	6	5,834
Days waited at 50th percentile	25	30	36	20	24	18	18	20	23	42	27
Days waited at 90th percentile	92	117	132	83	268	134	92	103	103	126	104
% waited more than 365 days	0.3	1.2	3.9	1.8	6.4	3.8	2.4	2.4	0.0	0.0	0.9
Prostatectomy											
Admissions	0	0	0	6	17	218	1,212	2,109	1,356	246	5,164
Days waited at 50th percentile	0	0	0	16	28	32	29	35	32	26	32
Days waited at 90th percentile	0	0	0	86	66	109	179	260	212	111	215
% waited more than 365 days	..	..	..	0.0	0.0	1.4	4.7	6.6	4.9	2.8	5.3
Septoplasty											
Admissions	0	85	543	746	754	537	382	201	n.p.	n.p.	3,299
Days waited at 50th percentile	0	84	78	99	97	99	84	95	n.p.	n.p.	92
Days waited at 90th percentile	0	427	559	610	670	803	733	582	n.p.	n.p.	637
% waited more than 365 days	..	17.6	19.5	24.0	24.4	27.6	25.4	20.4	0.0	0.0	23.6
Tonsillectomy											
Admissions	3,058	5,075	1,796	761	271	113	46	28	n.p.	n.p.	11,160
Days waited at 50th percentile	38	67	69	58	65	69	37	26	n.p.	n.p.	57
Days waited at 90th percentile	186	409	391	376	453	462	359	833	n.p.	n.p.	348
% waited more than 365 days	2.3	11.9	11.9	10.9	14.4	16.8	8.7	14.3	0.0	0.0	9.3
Total hip replacement											
Admissions	0	n.p.	n.p.	55	227	562	1,249	2,201	1,584	251	6,146
Days waited at 50th percentile	0	n.p.	n.p.	87	97	98	100	104	91	61	97
Days waited at 90th percentile	0	n.p.	n.p.	380	424	459	456	424	411	273	429
% waited more than 365 days	..	0.0	0.0	14.5	15.9	16.2	15.6	14.6	12.9	6.8	14.2
Total knee replacement											
Admissions	0	0	20	21	60	443	1,699	3,365	2,384	252	8,244
Days waited at 50th percentile	0	0	35	75	74	128	141	152	137	106	141
Days waited at 90th percentile	0	0	531	528	774	860	801	859	521	93	760
% waited more than 365 days	..	..	60.0	342.9	298.3	45.8	10.2	3.6	1.1	0.0	9.6

(continued)

Table A1.21 (continued): Waiting time statistics for patients admitted from waiting lists for elective surgery, by indicator procedure and age group of patient, 2004-05

	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Varicose veins stripping & ligation											
Admissions	0	0	67	431	867	879	860	544	174	9	3,831
Days waited at 50th percentile	0	0	94	67	85	81	65	86	68	56	77
Days waited at 90th percentile	0	0	531	528	774	860	801	859	521	93	760
% waited more than 365 days	..	..	17.9	16.7	20.6	23.1	20.2	22.4	14.9	0.0	20.6
Not applicable/not stated											
Admissions	18,115	20,988	28,287	40,757	46,597	44,887	44,331	43,203	28,998	6,823	322,986
Days waited at 50th percentile	28	25	20	22	26	24	23	22	20	18	23
Days waited at 90th percentile	151	174	140	153	171	160	162	153	114	85	153
% waited more than 365 days	1.5	3.1	3.1	3.2	3.6	3.4	3.5	3.1	1.9	0.9	3.0
Total											
Admissions	26,209	30,019	33,399	48,808	59,527	61,174	66,379	78,858	60,618	12,718	477,709
Days waited at 50th percentile	27	30	22	25	29	28	29	33	32	25	29
Days waited at 90th percentile	140	213	167	171	194	189	215	265	271	204	211
% waited more than 365 days	1.4	4.6	3.9	3.8	4.3	4.3	4.9	5.9	5.8	3.9	4.6

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. Total includes separations for which the age of the patient was not reported.

Table A1.22: Separations with an adverse event by type of admission, Australia, 2004–05

Adverse event	Public elective surgery		Private elective surgery		Total elective surgery		All hospital separations	
	Separations	Rate per 100 separations	Separations	Rate per 100 separations	Separations	Rate per 100 separations	Separations	Rate per 100 separations
External cause codes								
Adverse effects of drugs, medicaments and biological substances	4,558	0.7	3,250	0.3	7,808	0.5	90,371	1.3
Misadventures to patients during surgical and medical care	4,200	0.7	2,003	0.2	6,203	0.4	11,034	0.2
Procedures causing abnormal reactions/complications	36,140	5.7	38,102	3.8	74,242	4.5	218,232	3.1
Other external causes of adverse events	941	0.1	345	0.0	1,286	0.1	5,744	0.1
Place of occurrence codes								
Health service area	43,360	6.8	42,465	4.2	85,825	5.2	309,119	4.4
Diagnosis codes								
Haemorrhage and haematoma complicating a procedure, n.e.c.	6,735	1.1	6,874	0.7	13,609	0.8	32,804	0.5
Infection following a procedure, n.e.c.	3,995	0.6	3,601	0.4	7,596	0.5	31,406	0.4
Complications of internal prosthetic devices, implants and grafts	10,552	1.7	13,333	1.3	23,885	1.5	66,503	0.9
Selected post-procedural disorders	14,404	2.3	13,059	1.3	27,463	1.7	65,076	0.9
Other diagnoses of complications of medical and surgical care, not included above	8,842	1.4	7,267	0.7	16,109	1.0	48,438	0.7
Total for selected diagnoses	38,787	6.1	39,035	3.9	77,822	4.8	219,058	3.1
Total	44,171	7.0	43,739	4.4	87,910	5.4	339,899	4.8

Source: National Hospital Morbidity Database.

Notes:

1. Separations for which the care type was reported as *Newborn* with no qualified days, and records for *Hospital boarders* and *Postinimum organ procurement* have been excluded.
2. Separations that included ICD-10-AM diagnosis and/or external cause codes that indicated an adverse event was treated and/or occurred during the hospitalisation. Other diagnosis and/or external cause codes may also indicate that an adverse event has occurred, and some adverse events are not identifiable using ICD-10-AM codes. Hence these data will underestimate the total number of adverse events. See *Australian hospital statistics* for more information on the ICD-10-AM codes used.
3. The data for public elective surgery is not comparable with the data for private elective surgery because the casemixes and recording practices may differ between public and private hospitals.
4. Categories do not sum to the totals because multiple diagnoses can be recorded for each separation, and diagnosis codes can be used together to describe an adverse event.
5. n.e.c. Not elsewhere classified.

Table A1.23: Separations with adverse events per 100 separations for public elective surgery, by indicator procedure, selected states and territories, 2004–05

Adverse event	Cataract extraction	Cholecystectomy	Coronary artery bypass graft		Cystoscopy	Haemorrhoidectomy	Hysterectomy	Inguinal herniorrhaphy	Meningioplasty
External cause codes									
Adverse effects of drugs, medicaments and biological substances	0.1	0.6	2.2	0.3	0.4	1.4	0.3	n.p.	
Misadventures to patients during surgical and medical care	1.1	1.5	1.6	0.2	n.p.	1.8	0.4	n.p.	
Procedures causing abnormal reactions/complications	0.7	4.3	32.2	3.3	2.2	8.3	2.4	1.6	
Other external causes of adverse events	n.p.	0.1	0.3	0.1	n.p.	0.3	n.p.	n.p.	
Place of occurrence codes									
Health service area	1.8	6.0	34.3	3.7	2.9	11.0	3.2	2.3	
Diagnosis codes									
Haemorrhage and haematoma complicating a procedure, n.e.c.	0.0	1.0	6.5	0.3	0.6	2.9	0.9	n.p.	
Infection following a procedure, n.e.c.	n.p.	0.5	3.3	0.1	n.p.	1.1	0.2	n.p.	
Complications of internal prosthetic devices, implants and grafts	0.2	0.3	3.5	1.1	n.p.	0.6	0.1	n.p.	
Selected post-procedural disorders	0.3	2.2	22.4	1.4	1.0	3.4	1.2	1.2	
Other diagnoses of complications of medical and surgical care, not included above	1.1	2.1	4.5	0.4	n.p.	2.7	0.6	n.p.	
Total	1.8	6.0	34.7	3.8	3.0	11.2	3.2	2.4	

(continued)

Table A1.23 (continued): Separations with adverse events per 100 separations for public elective surgery, by indicator procedure, selected states and territories, 2004-05

Adverse event	Myringotomy	Prostatectomy	Septoplasty	Tonsillectomy	Total hip replacement	Total knee replacement	Varicose vein stripping and ligation	Total
External cause codes								
Adverse effects of drugs, medicaments and biological substances	n.p.	0.8	n.p.	0.2	3.1	2.5	n.p.	0.6
Misadventures to patients during surgical and medical care	n.p.	0.9	0.4	0.1	0.7	0.4	n.p.	0.6
Procedures causing abnormal reactions/complications	1.0	9.9	1.6	1.5	22.7	16.6	1.4	5.7
Other external causes of adverse events	n.p.	0.3	n.p.	n.p.	0.5	0.4	n.p.	0.2
Place of occurrence codes								
Health service area	1.1	11.4	2.4	1.9	25.4	19.3	1.6	6.8
Diagnosis codes								
Haemorrhage and haematoma complicating a procedure, n.e.c.	n.p.	2.9	1.1	0.9	2.8	1.6	0.8	1.0
Infection following a procedure, n.e.c.	n.p.	0.5	n.p.	n.p.	1.4	1.2	n.p.	0.6
Complications of internal prosthetic devices, implants and grafts	0.6	2.0	n.p.	n.p.	12.3	6.5	n.p.	1.6
Selected post-procedural disorders	0.3	4.9	0.4	0.3	7.8	7.1	0.4	2.4
Other diagnoses of complications of medical and surgical care, not included above	n.p.	1.2	0.6	0.3	1.9	1.6	n.p.	1.3
Total	1.1	11.6	2.4	1.9	25.8	19.6	1.7	6.9

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

Notes:

1. Data included are for New South Wales, Victoria, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.
2. Separations that included ICD-10-AM diagnosis and/or external cause codes that indicated an adverse event was treated and/or occurred during the hospitalisation. Other diagnosis and/or external cause codes may also indicate that an adverse event has occurred, and some adverse events are not identifiable using ICD-10-AM codes. Hence these data will underestimate the total number of adverse events. See *Australian hospital statistics 2005-06* for more information on the ICD-10-AM codes used.
3. Categories do not sum to the totals because multiple diagnoses can be recorded for each separation, and diagnosis codes can be used together to describe an adverse event.
4. n.e.c. Not elsewhere classified.
5. n.p. Not published. Rates per 100 separations have not been published if the number of separations with the specified adverse event was less than 10.

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Glossary

For further information on the terms used in this report, refer to the Glossary of *Australian hospital statistics 2005–06* (AIHW 2007), and the definitions in use in the *National health data dictionary* version 12 and version 13 (NHDC 2003, HDSC 2006). Each definition contains an identification number from the METeOR Metadata Online Registry. METeOR is Australia's central repository for health, community services and housing assistance metadata. It provides definitions for data for health and community services-related topics, and specifications for related national minimum data sets (NMDSs), such as the NMDSs which form the basis of this report. METeOR can be viewed on the AIHW website at www.aihw.gov.au.

<i>Age-standardisation</i>	A set of techniques used to remove as far as possible the effects of differences in age when comparing two or more populations.
<i>Clinical urgency</i>	A clinical assessment of the urgency with which a patient requires elective hospital care.
METeOR identifier: 270008	
<i>Elective care</i>	Care that, in the opinion of the treating clinician, is necessary and for which admission can be delayed for at least 24 hours.
METeOR identifier: 270589	
<i>Elective surgery</i>	Elective care in which the procedures required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinicians and some procedures for which the associated waiting time is strongly influenced by factors other than the supply of services.
METeOR identifier: 270589	
<i>Elective surgery separation</i>	A separation for which the Urgency of admission was reported as Elective (admission could be delayed by at least 24 hours) and where the assigned Diagnosis Related Group was Surgical (at least one operating room procedure was performed during the episode)
<i>Indicator procedure</i>	A procedure which is of high volume, and is often associated with long waiting periods. Elective surgery waiting time statistics for indicator procedures give a specific indication of waiting time for these in particular areas of elective care provision.
METeOR identifier: 269991	
<i>Indigenous status</i>	A measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin. This is in accord with the first two of three components of the Commonwealth definition below: An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives.
METeOR identifier: 270157	
<i>Median waiting time</i>	50th percentile waiting time. The median or 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
<i>90th percentile</i>	90th percentile waiting time. Represents the number of days within which 90% of patients were admitted; 10% of the waiting times were longer than the 90th percentile waiting time
<i>Non-Indigenous</i>	Person who does not identify as being of Aboriginal or Torres Strait Islander origin. For the purpose of this report, Non-Indigenous includes those records where the Indigenous status was Not reported.
<i>Percentile</i>	Any one of 99 values that divide the range of probability distribution or sample into 100 intervals of equal probability or frequency.
<i>Performance indicator</i>	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.

<i>Principal diagnosis</i> METeOR identifier: 270187	The diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care.
<i>Private hospital</i>	A privately owned and operated institution, catering for patients who are treated by a doctor of their own choice. Patients are charged fees for accommodation and other services provided by the hospital and relevant medical and paramedical practitioners. Acute care and psychiatric hospitals are included, as are private free-standing day hospital facilities. See also <i>Establishment type</i> .
<i>Privately-funded</i>	The reported funding source was not public (that is, including Private Health Insurance, Self-funded, Compensation and others where the patient election status was private)
<i>Procedure</i> METeOR identifier: 269932	A clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in the acute care setting.
<i>Public hospital</i>	A hospital controlled by a state or territory health authority. Public hospitals offer free diagnostic services, treatment, care and accommodation to all eligible patients.
<i>Publicly-funded</i>	The reported funding source was public (that is, Australian Health Care Agreements, Reciprocal Health Care Agreements, Other hospital or public authority (and patient election status was public))
<i>Remoteness Area</i>	A classification of the remoteness of a location using the Australian Standard Geographical Classification remoteness Structure, based on the Accessibility / remoteness Index of Australia (ARIA) which measures the remoteness of a point based on the physical road distance to the nearest urban centre. The categories are: Major cities, Inner regional, Outer regional, Remote, Very remote and Migratory.
<i>Removal from waiting list</i> METeOR identifier: 269959	The reason a patient is removed from an elective surgery waiting list. The reason-for-removal categories are: 1 Admitted as an elective patient for awaited procedure in this hospital or another hospital 2 Admitted as an emergency patient for awaited procedure in this hospital or another hospital 3 Could not be contacted (includes patients who have died while waiting whether or not the cause of death was related to the condition requiring treatment) 4 Treated elsewhere for awaited procedure, but not as a patient of this hospital's waiting list 5 Surgery not required or declined 6 Transferred to another hospital's waiting list 9 Not known
<i>SEIFA category/quintile</i>	Socio-Economic Indexes For Areas - generated by the ABS. The most disadvantaged quintile represents the areas containing the 20% of the population with the least advantage/most disadvantage and the most advantaged quintile represents the areas containing the 20% of the population with the least disadvantage/most advantage.
<i>Separation rate ratio</i>	The separation rate for one population divided by the separation rate of another.
<i>Separations</i> METeOR identifier: 270407	The total number of episodes of care for admitted patients, which can be total hospital stays (from admission to discharge, transfer or death), or portions of hospital stays beginning or ending in a change of type of care (for example, from acute to rehabilitation) that cease during a reference period.
<i>Surgical procedure</i>	A procedure used to define surgical Australian Refined Diagnosis Related Groups version 5.0 (DoHA 2002).
<i>Surgical specialty</i> METeOR identifier: 270146	The area of clinical expertise held by the doctor who will perform the surgery of interest.
<i>Urgency of admission</i> METeOR identifier: 269986	Whether the admission has an urgency status assigned and, if so, whether admission occurred on an emergency basis.
<i>Waiting time at admission</i>	The time elapsed for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to the date they were admitted to hospital for the procedure. METeOR identifier: 269477

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