

**Waiting times for
elective surgery
1995–96 and 1996–97**

HEALTH DIVISION
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Waiting times for elective surgery 1995–96 and 1996–97

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Foreword

This working paper describes the available data on elective surgery waiting times and waiting lists for 1995–96 and 1996–97. The Institute aims to collate and disseminate nationally consistent information about the lengths of time patients wait for elective surgery in Australian public hospitals, however, data available for these two years are not of high quality. This paper therefore includes considerable discussion of how the data collection practices varied from State to State and thus restrict the compilation of accurate comparative statistics.

Notes are included in the introductory chapters and throughout the working paper on the limitations of the data and how the data should be interpreted. The definitions used and the hospitals included vary in some cases among the States and Territories and with time. Hence comparisons between the jurisdictions and between reporting periods should be made with reference to the notes on the variations in scope and use of definitions.

Although the data on elective surgery waiting times require further standardisation, they are based on nationally agreed definitions, and there has been some progress made with data quality over recent years. For example, national data were collected for the first time for the full 12 months for 1995–96 and 1996–97, and most jurisdictions were able to report using three categories of patient clinical urgency, rather than the two used in the past.

Data quality is set to improve. In late 1998, States and Territories agreed, through the National Health Information Management Group, to standardise some important collection methods relating to counting waiting times, for implementation from July 1999. More recently, with the advice of the National Health Information Management Group, the Institute is using funding, provided by the Australian Health Ministers' Advisory Council for data development work, to further revise and improve national elective surgery waiting times data elements.

Waiting times continue to be of interest to health care consumers and providers and there will be an ongoing need for useful performance indicators and other information on waiting times. The Institute will therefore continue to work with the States and Territories and other stakeholders to remedy the data inconsistencies and to improve data reporting on national elective surgery waiting times.

Richard Madden
Director
March 2000

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Summary

This working paper presents 1995–96 and 1996–97 elective surgery waiting times data collected by State and Territory health authorities and provided to the Institute’s National Elective Surgery Waiting Times Data Collection. The focus is waiting times, rather than waiting lists because, without knowledge of the rate of turnover of patients on a waiting list, its size is not a reliable indicator of access to the hospital system or of the amount of time that a patient would be likely to have to wait, or to have waited, prior to surgery. Two types of data are the basis of this paper:

- data on patients who were added to or removed from waiting lists during 1995–96 and 1996–97 (throughput data), and
- data on patients who were on waiting lists at a particular time (census data).

The patients waiting for elective surgery are classified according to their clinical urgency into three categories, as detailed in Chapter 2. ‘Extended waits’ have been defined as waits longer than 30 days for clinical urgency category 1, waits longer than 90 days for clinical urgency category 2 and waits longer than 12 months for clinical urgency category 3.

Four measures relating to waiting times are presented. They are the proportion of patients admitted from waiting lists after extended waits, median waiting time for patients admitted from waiting lists, the proportion of patients on waiting lists (on a census date) with extended waits, and waiting list clearance times (the theoretical lengths of time it would take to clear all patients from the waiting lists, given several assumptions).

Nationally agreed definitions are the basis of the paper, however the definitions used and the hospitals included varied among the States and Territories and with time. Comparisons between the jurisdictions and between reporting periods should therefore be made with reference to the notes on data interpretation and limitations.

Extended waits and waiting times for patients admitted from waiting lists

- About 12% of clinical urgency category 1 patients were admitted after extended waits in 1995–96 and 14% in 1996–97. About 19% of clinical urgency category 2 patients were admitted after extended waits in 1995–96 and 17% in 1996–97 (Tables 3.1 and 3.2).
- The largest proportions of clinical urgency category 1 admissions with extended waits in both 1995–96 and 1996–97 were for urology and plastic surgery (Tables 3.6 and 3.7).
- For category 1 patients in 1996–97 the indicator procedures with the highest proportions of admissions with extended waits were total hip replacement (52%) and total knee replacement (54%) (Table 3.8).
- The median waiting time for clinical urgency category 1 patients admitted (in New South Wales, South Australia and the Northern Territory combined) was eight days in 1995–96 and nine days in 1996–97. For clinical urgency category 2 and 3 patients combined, it was 36 days in 1995–96 and 38 days in 1996–97 (Tables 3.9 and 3.10).
- In both years, the shortest median waiting times for clinical urgency category 1 patients were for neurosurgery, cardio-thoracic and vascular surgery (six or seven days), while the longest median waiting times were for urology (Tables 3.9 and 3.10).

Patients with extended waits on waiting lists on census dates

- About 38% of clinical urgency category 1 patients on waiting lists on 30 June 1996 had extended waits and 33% on 30 June 1997. For clinical urgency category 2 patients, about 43% had extended waits on 30 June 1996 and 42% on 30 June 1997 (Tables 3.17 and 3.18).
- The largest proportions of clinical urgency category 1 patients with extended waits were for ophthalmology and orthopaedic surgery waits on 30 June 1996, and for ear, nose and throat, and orthopaedic surgery on 30 June 1997 (Tables 3.19 and 3.20).
- The indicator procedures with the highest proportions of extended waits for clinical urgency category 1 patients on 30 June 1997 were total hip replacement (64%) and total knee replacement (69%) (Table 3.21).

Waiting lists

- Most patients admitted from waiting lists were in clinical urgency categories 2 or 3 (65% in 1995–96 and 68% in 1996–97). The largest proportions of patients on waiting lists on 30 June were also in these groups (93% in both 1995–96 and 1996–97) (Table 4.1).
- There was marked variation among the States and Territories in the proportions of patients who were categorised as clinical urgency category 1 for each surgical specialty (Tables 4.3 and 4.4).
- General surgery accounted for the largest proportion of admissions in both 1995–96 and 1996–97 (28% and 27% respectively) and orthopaedic surgery accounted for the greatest number of patients on waiting lists on 30 June (22% and 24%, respectively) (Table 4.5).
- The most commonly awaited indicator procedure was cataract extraction. This procedure was reported for over 5% of admissions from waiting lists in 1996–97 and nearly 8% of patients on waiting lists on 30 June 1997 (Table 4.8).
- For all States and Territories the number of admissions and other removals from waiting lists represented about 100% of the additions for 1995–96 and 1996–97, indicating that the size of the waiting lists remained relatively stable over this period (Figures 4.4 and 4.5).

Clearance times

- The clearance time for clinical urgency category 1 patients was less than one month for all surgical specialties in 1995–96. For 1996–97 the longest clearance time was 1.1 months, for ear, nose and throat, and orthopaedic surgery (Tables B.1 and B.2). For the different surgical specialties, clinical urgency category 2 clearance times ranged from 1.8 to 7.6 months in 1995–96, and from 2.0 to 6.3 months in 1996–97.
- Orthopaedic surgery recorded the longest clearance times for clinical urgency category 1 patients in 1996–97 (1.1 month) and for clinical urgency category 2 patients in both 1995–96 (7.6 months) and 1996–97 (6.3 months) (Tables B.1 and B.2).
- Total knee replacement had the longest clearance time in both clinical urgency category 1 (2.6 months) and clinical urgency category 2 (8.8 months) in 1996–97 (Table B.3).

Patient numbers

- There were about 138,000 patients reported on waiting lists throughout Australia on 30 June 1996 and about 149,000 on 30 June 1997 (Table C.1).
- There were about 384,000 patients admitted from waiting lists during 1995–96 and about 441,000 in 1996–97 (Table C.1).

1. Introduction

Background

Waiting lists for elective surgery, and the associated waiting times, continue to attract a great deal of public attention. They are often used to evaluate the status of health services within a community, particularly the ability of public hospitals to provide access to their services, that is, to provide appropriate, affordable and timely care according to need.

Hospitals maintain waiting lists for patients for elective surgery because admission dates for elective surgery cannot usually be allocated when the surgery is first requested. This is because elective surgery is undertaken as emergency workloads allow, and patients with more urgent clinical needs are generally given priority over patients whose need for elective surgery is not so urgent.

Data on waiting times and waiting lists play an important role in policy debate and are used by health planners, administrators and researchers. Under the 1993–98 Medicare Agreements, States and Territories undertook to collect nationally consistent and comparable data on elective surgery waiting lists and waiting times and to provide these for publication at the national level. The States and Territories have similarly agreed to collect and provide data for reporting against elective surgery waiting times performance indicators, in association with the 1998–2003 Australian Health Care Agreements. The National Health Ministers' Benchmarking Working Group and the Productivity Commission's Steering Committee for the Review of Commonwealth/State Service Provision have also adopted elective surgery waiting times as indicators of access to public hospital services.

This working paper

Waiting Times for Elective Surgery, 1995–96 and 1996–97 is based on data collected by the State and Territory health authorities and provided to the Australian Institute of Health and Welfare under the National Health Information Agreement. The data provided are part of the Elective Surgery Waiting Times National Minimum Data Set and the data elements are as defined in the *National Health Data Dictionary Version 5.0* (National Health Data Committee 1996) and summarised in the glossary.

The quality of the national data is not high, as there was much variation in the actual definitions used and the scope of the collections among the States and Territories. However, this publication contains the most comprehensive collection of national data to date. Unlike the previous reports, it includes data relating to the full 12 months of both 1995–96 and 1996–97, data relating to three clinical urgency categories (rather than two) and data derived from patient-level records in addition to aggregate data reported at the hospital level.

Chapter 2 of this paper describes the data sources and methods used. It also provides detailed information on the data quality issues that hamper use of the data. Chapter 3 presents a number of performance measures focusing on waiting times for elective surgery and patients who experienced extended waits. Included are data on waiting times for admitted patients and waiting times for patients on waiting lists on particular 'census' dates (for example, 30 June 1996), and on the distribution of waiting times. Then follows

information on the characteristics of waiting lists, for example, the distribution of patients by specialty of surgeon, clinical urgency category, hospital size, and State and Territory (Chapter 4). Chapter 5 summarises State and Territory plans for future elective surgery waiting times data collection and issues for national data development.

In relation to the patient-level data provided by several jurisdictions, this paper represents a transition between previous reports and performance indicators based on jurisdiction- and hospital-level data aggregations, and future reports which could encompass more precise access measurement and the more detailed analyses of the determinants of waiting times that will be made possible by the collection and collation of patient-level waiting times data. In addition to including statistics in line with those published in the previous reports, this paper includes, for example, waiting times distribution data by clinical urgency of the patient, surgical specialty and hospital size.

South Australia was able to supply waiting times data at the patient level linked to patient separation records in the National Hospital Morbidity Database. This data format will allow future analyses of patient-level data on waiting times and subsequent hospital admissions to provide more detailed information on the effects of factors such as patient diagnosis, diagnosis related group, age group, sex, public/private status and area of residence. Some of these have recently been shown to have been significantly associated with waiting time in a limited study in New South Wales (Clover et al 1998). Other States and Territories are expected to be able to link data between waiting list and hospital morbidity data collections in future years.

Data interpretation and limitations

The focus of this paper is waiting times, rather than waiting lists. This is because, without knowledge of the rate of turnover of patients waiting on a waiting list, the list's size is not a reliable indicator of access to the hospital system or of the amount of time that a patient would be likely to have to wait, or to have waited, prior to surgery. Waiting list size is influenced by many factors, including hospital size, the population of the associated community, and the particular health needs of the community.

This paper is concerned only with waiting times for elective surgery in public hospitals. It does not examine waiting times for hospital admission for reasons other than elective surgery, nor does it examine waiting times for hospital emergency departments or outpatient clinics. Private hospitals are not included (except for two in New South Wales that are funded by the New South Wales Health Department to provide services for public patients). The paper deals only with the timeliness of the provision of care, not the quality of care provided.

Interpretation of waiting times data is not straightforward, so notes are included in Chapter 2 and throughout the paper on the limitations of the data and how the data should be interpreted. Nationally agreed definitions are the basis of the paper, however, these definitions, and the associated data collection practices in some States and Territories, are still developing. The definitions used and the hospitals included varied in some cases among the States and Territories and with time. Hence comparisons between the jurisdictions and between reporting periods should be made with reference to these notes.

2. Data sources, methods and quality

Introduction

Data were provided by the State and Territory health authorities and collated as the National Elective Surgery Waiting Times Data Collection by the Australian Institute of Health and Welfare. The States and Territories collect the data on a routine basis as part of their elective surgery management. The data are provided annually to the Institute with data provided for the National Hospital Morbidity Database and the National Public Hospital Establishments Database (see Australian Institute of Health and Welfare 1999).

Census and throughput data

Two types of data are the basis of this paper:

- information about patients waiting to be admitted for elective surgery on a census date (census data). The census date may be any chosen day; most of the census data presented in this paper relate to patients on waiting lists on 30 June 1996 and on 30 June 1997, but some data are also presented for census dates at the end of the first three quarters of 1996–97; and
- information about additions to and removals from waiting lists during the data collection period (throughput data). This includes patients added to waiting lists, patients removed from waiting lists after admission for the awaited procedure, and patients removed from waiting lists for other reasons.

Throughput data are generally used as the main measure of elective surgery waiting times, although they provide accurate measures of waiting times only for patients who complete their wait and are admitted. Most patients are admitted after waiting, however, 10% to 20% of patients are removed from waiting lists for other reasons (for example, admission as an emergency patient for the awaited procedure; the patient could not be contacted, had died or was treated elsewhere; or the surgery was no longer required or was declined).

Because throughput data on the amount of time waited are collected nationally and in most jurisdictions only for patients who end their wait by being admitted, census data are collected on all patients on waiting lists, not just those who actually receive elective surgery at the end of their wait. These data enable assessment of waiting times for patients who do not go on to be admitted for the procedure for which they were waiting.

Census data should be interpreted with care because patients who wait for long periods are more likely to be counted at census points (Nicholl 1988). Data for a particular census point therefore generally show a higher proportion of patients with long waits, compared with throughput data for a period until that census point. In addition, census data provide no information on how long patients actually do wait before admission.

Data requested and provided

Throughput data relating to patients admitted from waiting lists for the awaited procedure were requested to be supplied at the individual patient level (and, where possible, linked to the data provided to the National Hospital Morbidity Database for the patient's subsequent hospital admission). Included in the request were the time waited before admission, the clinical urgency of the patient, the specialty of the surgeon who was to undertake the surgery and, for 1996–97, whether the patient was waiting for a particular indicator procedure (see Glossary).

If these throughput data could not be supplied at the patient level, States and Territories were requested to provide the data aggregated to the establishment or hospital level, with counts of patients with extended waits (see below) replacing the patient-level data on individual waiting times. The remainder of the throughput data (counts of additions to the waiting lists and removals from the waiting lists for elective surgery admission and other reasons) and the census data were requested and supplied at the hospital level. These data were also requested by clinical urgency, surgical specialty and, for 1996–97, by indicator procedure.

The 1995–96 data collection was the first for which data were requested at lower levels of aggregation than the State or Territory. All States and Territories were able to supply data at the hospital level. Patient-level data including waiting times were supplied by New South Wales, South Australia and the Northern Territory for both 1995–96 and 1996–97 and Western Australia provided patient-level data for 1996–97 (but was not able to include data on the time waited by each patient).

This data supply has enabled some data to be presented nationally, some by State and Territory, some based on hospital characteristics and some (such as median waiting times in Chapter 3) based on the patient-level data. Appendix A provides a summary of the type of data provided by each State and Territory for the National Elective Surgery Waiting Times Data Collection for 1995–96 and 1996–97.

State and Territory variation

Most of the States and Territories provided data for the periods 1 July 1995 to 30 June 1996 and 1 July 1996 to 30 June 1997. For 1995–96, Queensland was only able to provide throughput data for June 1996.

For 1995–96, Victoria and the Australian Capital Territory were unable to provide extended wait data (see below) for patients admitted from waiting lists and Western Australia was unable to provide these data by surgical specialty. Victoria was also unable to provide extended wait data for 'booked' patients (see below) on waiting lists at the end of the year. The Northern Territory's Territory Health Services advise that the 1995–96 data contain some discrepancies, including inaccuracies affecting the calculation of waiting times.

For 1996–97, Victoria was unable to provide extended wait data (except for 'unbooked' patients on waiting lists on census dates) and the Australian Capital Territory was not able to supply extended wait data for patients admitted from waiting lists. Only New South Wales, Queensland, Western Australia, South Australia and the Northern Territory were able to supply data by indicator procedure.

For both 1995–96 and 1996–97, Victorian waiting list information on admissions, additions and removals was based on a monthly census count and did not include patients registered for elective surgery and admitted or cancelled within a single calendar month.

For South Australia, the patient-level admissions data (used for Tables 3.3 to 3.15) included 1,144 records (3.2%) additional to the establishment data in 1996–97, and the 1995–96 establishment level data included 869 records (2.7%) that were additional to the patient level data. The extra records in 1996–97 were for patients who were recorded on the database as

not 'ready for care' (see Glossary) at the time of admission. They were excluded from the summary establishment level data but not from the patient level data. In 1995-96 the difference was due to imperfect linking of hospital morbidity and waiting list records. All records were included at the establishment level (where no linking was required), while those not able to be matched exactly were excluded from the patient level data.

Definitions

The guidelines and definitions used for collecting the waiting times data are included in the *National Health Data Dictionary* (National Health Data Committee 1996). Definitions for data elements and concepts relevant to this working paper are contained in the Glossary and discussed further below.

Clinical urgency and extended wait

Patients waiting for elective surgery are categorised according to their clinical urgency. Although during 1995-96 and 1996-97, a two-tiered clinical urgency categorisation was defined for national use, most States and Territories were able to provide data using the three-tiered categorisation which was approved for national implementation from 1 July 1997 (National Health Data Committee 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.

Many of the statistics in this paper use the concept of 'extended wait'. Patients are classed as having an extended wait depending on their clinical urgency category. Clinical urgency category 1 patients with extended waits are those patients who waited over 30 days for admission; clinical urgency category 2 patients have extended waits if they waited over 90 days for admission. Although there is no upper limit on the time clinical urgency category 3 patients should wait for admission, in this paper those patients who waited over 12 months for admission are classified as having an extended wait.

Clinical urgency category 1 and 2 patients who had extended waits are also referred to as being 'overdue'. That is, the patient's wait has exceeded the time that has been determined as clinically desirable in relation to their urgency category.

In the report of 1995 waiting times (Moon 1996), patients in the least urgent category (for which there was also no waiting time used to define 'overdue' patients) were similarly reported as having an extended wait.

State and Territory variation

New South Wales was not able to report data using the three-level clinical urgency categorisation described above. Data from New South Wales were reported using a clinical urgency categorisation that was mappable to clinical urgency category 1 and a combined category of clinical urgency categories 2 and 3. While New South Wales patients were able to be assigned to category 1 (the most urgent category) (and a combined category 2 and 3), it is possible that classification practices may have been affected by the number of clinical

urgency classifications available. Thus, the New South Wales equivalent of category 1 could also include patients that would have been classified as category 2 patients if that category had been available. In addition, in New South Wales, there were two subgroups that were mapped to category 1: patients categorised as requiring admission either within seven days or within eight to 30 days. For these reasons, it is important that comparisons between New South Wales and other States and Territories be made with care.

Where possible, data are reported in this paper using the three clinical urgency categories, but to allow inclusion of New South Wales data, sometimes data for clinical urgency categories 2 and 3 have been aggregated into one group. However, patients with extended waits in the combined clinical urgency categories 2 and 3 in New South Wales who had waited between three and 12 months would have been counted as not having an extended wait if reported by New South Wales, but as having had an extended wait if reported by the other jurisdictions (and reported as being in clinical urgency category 2). This means that the extended wait data for the combined clinical urgency category in New South Wales would not be comparable with the data for other jurisdictions and so are excluded from the tables.

During 1995–96 and continuing until October 1996, some Western Australian public hospitals did not use the national definitions for clinical urgency category 2, resulting in an incomplete data collection for that category.

There is some evidence that there is variation in use of the clinical urgency categories among the jurisdictions; some of this is presented in Chapter 4 in relation to clinical urgency category 1.

Other definitions with varied use

‘Booked’ patients

Victoria’s Department of Human Services partitions the register of patients waiting for elective surgery into two, the ‘booked’ and ‘unbooked’ patient registers. ‘Booked’ patients have been given a definite admission date (within six weeks) and ‘unbooked’ patients are still waiting for an admission date. The *National Health Data Dictionary* and all other State and Territory waiting lists and waiting list data do not distinguish between patients with and without an admission date.

In some sections of this paper, data on Victoria’s ‘booked’ patients are included with the Victorian admissions data, thus the Victorian admissions data will be overstated by the number of patients who were ‘booked’ during this reporting period, but had not yet been admitted. This has been done on the basis that the majority of booked patients will be admitted, but will not be counted as admitted from a waiting list (as they are regarded as having been admitted from a ‘booked’ list).

In some other sections of the paper, the data on ‘booked’ patients on waiting lists on census dates have been added to data on ‘unbooked’ patients on the waiting lists, to make the data on patients on the waiting lists more comparable with data from other jurisdictions.

This means, however, that Victorian patients who were ‘booked’, but had not been admitted by the end of each reporting period are counted both as an admission (throughput data) and as on a waiting list (census data) in this paper.

Extended wait and clinical urgency category information on patients on waiting lists was not available for ‘booked’ patients, so Victorian data on the proportion of patients with extended waits was not able to be included in Chapter 3.

Waiting time calculation

There is some variation in the method by which waiting times were calculated by the States and Territories (Table 2.1) and this would have affected the proportions of patients who have been reported as having extended waits. For patients who change clinical urgency category while they are on the waiting list, some States and Territories counted only the time waited in the most recent urgency category. Others have counted the time waited in the most recent urgency category and time waited in previous urgency categories, if the previous urgency categories were of higher urgency. There has been recent national agreement to use the latter method from 1 July 1999.

This variation may have had the effect, for example, of increasing the reported waiting times for some patients in Victoria and Tasmania, relative to Queensland, and reducing it for some patients in Western Australia and the Northern Territory.

Table 2.1: Methods used to calculate waiting times, by State and Territory

State or Territory	Method of calculating waiting times
New South Wales	Total time waited in most recent clinical urgency category plus total time waited from any previous higher clinical urgency categories
Victoria	Total time waited in all clinical urgency categories
Queensland	Total time waited in most recent clinical urgency category plus total time waited from any previous higher clinical urgency categories
Western Australia	Total time waited in most recent clinical urgency category only (calculated only approximately if a change in clinical urgency category occurs)
South Australia	Total time waited in the most recent clinical urgency category, for extended wait calculations; total time waited in all clinical urgency categories for median and average waiting times
Tasmania	Total time waited in all clinical urgency categories
Australian Capital Territory	Total time waited in all clinical urgency categories in one hospital and total time waited in the most recent category only in the other
Northern Territory	Total time waited in most recent clinical urgency category only

Emergency admissions

There was also some variation in patients included in the data on admissions from the waiting lists. Most States and Territories provided data separately for patients admitted for the awaited procedure as an elective admission and for patients admitted as an emergency patient for the awaited procedure. In that case, the Institute has presented only the data on elective admissions as 'admissions', because patients who were admitted as emergency patients for the awaited procedure can no longer be regarded as having 'elective surgery' and has having waited as long as patients who have elective surgery.

However, records for emergency admissions were not able to be identified in the patient level admissions data supplied to the Institute by some States and Territories. Thus in 1995–96, emergency admissions accounted for 0.7% of admissions reported for the Northern Territory. In 1996–97, 0.4% of admissions reported by the Northern Territory and 0.6% of reported admissions for New South Wales were emergency admissions.

South Australia included a small number of emergency admissions (0.2%) with the 1996–97 admissions data supplied at the establishment level and used for Tables 3.17 to 3.22, Chapter 4 and Appendix C.

Other

Queensland used 1 June 1997 rather than 30 June 1997 as the census date at the end of 1996–97.

Coverage

The data collected for this paper are for public acute hospitals. Private hospitals are not included, except for two in New South Wales that are funded by the New South Wales Health Department to provide services for public patients.

The numbers of patients included in the current and previous data collections are shown in Table 2.2 (and in more detail in Appendix C). In each collection, data were included on over 110,000 patients on waiting lists at the census date (30 June). This figure cannot, however, be regarded as the total number of people awaiting treatment for elective surgery in Australia. This is because not all hospitals undertaking elective surgery were included in the data collection (see Table 2.3) and no attempt has been made to adjust for the hospitals that were not included. Hospitals that were not included may have different waiting list characteristics compared with reporting hospitals and in some cases may not have waiting lists at all. Further, it is possible for a patient to be on more than one waiting list for an awaited procedure, making it likely that there was some double counting of patients.

Over 215,000 patients were admitted from waiting lists during the six months January to June 1995, in the next 12 months 384,000 patients were admitted, and in the 12 months July 1996 to June 1997, over 441,000 patients were admitted (Table 2.2). This translates to almost 36,000 patients admitted per month during the first data collection, about 32,000 per month in the second data collection, and over 36,000 in the third data collection. The differences are likely to be largely due to changes in the number of States and Territories included in each data collection. Queensland data were only included in full in 1996–97 (see also Appendix C). Other possible reasons for change are seasonal influences in the patterns of admission or changes in the hospitals included in the data collections.

The admissions from waiting lists reported to the Institute represented about 11% of the 3.57 million separations from public acute hospitals in Australia in 1995–96 and about 12% of the 3.62 million separations in 1996–97. With an adjustment for the proportion of elective surgery admissions estimated to have been omitted from the data collections (see below) (but not for the total separations from the two private hospitals in New South Wales for which data on elective surgery admissions, but not total separations, were available), this indicates that about 15% of all separations in both 1995–96 and 1996–97 were for elective surgery.

Table 2.2: Patients included in the 1995, 1995–96 and 1996–97 National Elective Surgery Waiting Times Data Collections

	Jan – Jun 1995 ^(a)	Jul 1995 – Jun 1996 ^(b)	Jul 1996 – Jun 1997 ^(b)
Patients on waiting lists at census date (30 June)	113,332	137,694	149,157
Patients admitted from waiting lists during the data collection period			
<i>Total number</i>	215,734	383,927 ^(a)	441,076
<i>Number per month</i>	35,956	31,994 ^(a)	36,756

(a) Source: Moon 1996. Excludes Queensland.

(b) Includes Victorian 'booked' patients in counts of both patients on waiting lists and patients admitted from waiting lists. See Appendix C for more detail.

State and Territory variation

In some States and Territories, all public hospitals were included in the data collection and, as noted above, two private hospitals were also included in New South Wales. In other States and Territories, all public hospitals that perform elective surgery were generally included, although in some States and Territories, data were not collected for some smaller

public hospitals. In Western Australia, for example, for both 1995–96 and 1996–97, only the metropolitan teaching hospitals were included.

The proportion of elective surgery admissions that is covered is a useful measure of coverage. Table 2.3 shows the coverage based on this measure. Coverage varied by State and Territory and complicates the comparison of waiting times between the States and Territories and between time periods. Although coverage was low for some jurisdictions, it is expected that it will improve in the future (see Chapter 5). In Queensland, for example, coverage for 1997–98 was expected to be 95%.

Table 2.3: Proportion of elective surgery admissions included in the National Elective Surgery Waiting Times Data Collections, 1995–96 and 1996–97, by State and Territory^(a)

State or Territory	1995–96	1996–97
	(per cent)	
New South Wales	100	100
Victoria	72	76
Queensland	49	56
Western Australia	51	71
South Australia	61	71
Tasmania	92	93
Australian Capital Territory	Census: 100 Throughput: 70	Census: 100 Throughput: 67
Northern Territory	100	100
Australia	73	79

(a) Estimates provided by State and Territory health authorities. The exceptions were for Western Australia and South Australia for 1995–96 (and the totals for Australia). Those estimates were calculated as total separations from hospitals included in the waiting times data collection as a percentage of all public hospital separations. The source of the data for these calculations was the National Hospital Morbidity Database at the Institute. The different estimation methods used for 1995–96 and 1996–97 for Western Australia and South Australia may have affected the comparisons of coverage between the two years for those two jurisdictions.

Comparison with previous reports

Two previous national elective surgery waiting times reports have been published by the Australian Institute of Health and Welfare, based on data provided by the States and Territories relating to a period in 1994 (Mays 1995) and to the period January to June 1995 (Moon 1996). Some national data for 1995–96 were also published by the Institute in *Australia's Health 1998* (Australian Institute of Health and Welfare 1998).

Only limited comparisons are possible between performance measure data included in this and the 1995 national elective surgery waiting times report (Moon 1996), for several reasons. First, the 1995–96 and 1996–97 data collection periods were 12 months, whereas the 1995 data collection period was January to June 1995. Any seasonal effects on the 1995 data will therefore have been less evident in the annual data of the later two data collections. For 1996–97, however, most of the States and Territories were able to supply data relating to each quarter, affording the opportunity to assess seasonal fluctuations for the first time.

Second, the coverage of hospitals has improved with time. This means that comparison of the size of waiting lists is particularly problematic. Coverage of patients is also not the same as in 1995. The Victorian Department of Human Services provided data for the 1995 report on 'booked' patients on the waiting lists (patients who have been given a definite admission date within six weeks), and 'unbooked' patients (those still waiting for an admission date). For 1995–96 and 1996–97, only limited data on 'booked' patients were available. This restricts the ability to compare Victorian data with data for previous periods.

Third, although two levels for clinical urgency categorisation were used in the 1995 report and were defined in the *National Health Data Dictionary* for 1995–96 and 1996–97, as noted above, a three-level clinical urgency classification has been able to be used for this paper by all jurisdictions except New South Wales. The change in categories available may have influenced categorisation practice (as discussed above) such that the 1995 data from jurisdictions other than New South Wales are less comparable with data for 1995–96 and 1996–97.

Other comparability issues

In addition to the different amounts of data provided, different use of definitions, and the different coverage of elective surgery hospitals and admissions, other factors potentially affect comparability of waiting times data among the States and Territories.

First, there are geographical differences between the States and Territories. Comparatively isolated hospitals may admit patients from waiting lists in a less regular pattern, when a specialist surgeon attends periodically to perform surgery. As States and Territories have different proportions of isolated hospitals, periodic treatment of patients could have varying impacts on waiting lists.

Second, the States and Territories differ in demographic factors such as population age, sex and proportion of Indigenous people. These differences can influence the health status of the population and priorities and strategies to manage elective surgery waiting lists.

Third, there are cross-border flows in the provision of elective surgery in Australia, which may affect waiting lists. Patients may be on waiting lists or undergo elective surgery in a different State or Territory from their place of residence. Population rate information should therefore be interpreted with care.

Fourth, there may be differences in the health system infrastructure of different States and Territories. These may include differences in the balance between public and private hospital use, the proportions of public and other patients in public hospitals, the size of hospitals, and the range of procedures performed.

Measures of waiting times

The length of time that patients wait for elective surgery, rather than the number of patients on the waiting lists, is the preferred focus when assessing performance in the provision of timely elective surgery. Waiting times can still be relatively short even if there are a large number of patients on the waiting list (Moon 1996).

There is a range of possible performance indicators for elective surgery waiting times. In this paper, the three main indicators used are:

- the proportion of patients admitted from waiting lists after extended waits (throughput patient-level and establishment-level data)
- the proportion of patients on waiting lists (on a census date) with extended waits (census patient-level and establishment-level data)
- the median waiting time for patients admitted from waiting lists (throughput patient-level data).

The median waiting time is the middle value in a group of data arranged from lowest to highest; half the waiting times will be shorter and half will be longer than the median. Unlike the mean, or average, this measure is not distorted by extreme observations such as very long waiting times for a very small proportion of patients.

Also included are data on the proportion of patients with different waiting times prior to admission (for example the proportion of patients who waited less than seven days, and between seven and 14 days).

The statistics on the proportion of patients with different waiting times and median waiting times are derived from the patient-level waiting times data provided by New South Wales, South Australia and the Northern Territory. These patient-level data allows this type of analysis and would also allow the presentation of data on mean (average) waiting times, for example.

Data on clearance times are presented in Appendix B. Clearance times are derived by dividing the number of patients on a waiting list at a particular time (the census date) by the number of patients cleared (admitted and removed) from the waiting list over a period leading up to the census date. They are the theoretical times it would take to clear all patients from the waiting lists assuming the clearance rate remained constant, no patients were added to the list, and patients were removed from the waiting lists in the same order as they were added. They can be viewed as the theoretical maximum waiting times.

Clearance times are a theoretical measure and not directly related to actual waiting times. However, clearance times data were included in the 1995 national waiting times report (Moon 1996) so summary clearance times are included in this paper for comparison with the 1995 data.

Notes on the tables

Data presented by State or Territory refer to the State or Territory of the hospital, not to the State or Territory of residence of the patient.

Where totals are provided in the tables, they include data only for those States and Territories for which data were available, as indicated in the tables.

Information on average available beds (see Glossary) was used to categorise hospitals by size (Chapters 2 and 3). These data were obtained from the National Public Hospital Establishments Database at the Institute. The exception was the data on the average number of available beds for the two private hospitals included in the data collection; these data were provided by the New South Wales Health Department.

Symbols used in the tables are:

n.a. not available

. . not applicable

n.p. not published (the Tasmanian Department of Health and Human Services did not authorise separate publication of some data it provided to the Institute).

3. Waiting times and extended waits

Introduction

This chapter focuses on the length of time that patients waited for elective surgery, and the proportions of patients who had experienced extended waits prior to admission or on census dates. The three main indicators used are:

- the proportion of patients admitted from waiting lists after extended waits;
- the median waiting time for patients admitted from waiting lists; and
- the proportion of patients on waiting lists (on a census date) with extended waits.

Depending on the availability of data, these indicators have been reported by clinical urgency, specialty of surgeon, indicator procedure and hospital size. Some information is also reported by State and Territory.

Median waiting times are a performance measure that indicates the value (waiting time) by which half the patients had been admitted. However, it is possible to have relatively short median waiting times but still have a large number of patients with extended waits. For this reason it is also useful to examine the proportion of patients with extended waits, both for those admitted and for those still waiting. Better performance would be indicated by performance measures with smaller values for all three measures.

This chapter is divided into three sections:

- The overview section provides a summary of waiting times measures by State and Territory for the 1995, 1995–1996 and 1996–97 data collection periods.
- The next section presents waiting times measures for patients admitted from waiting lists during 1995–96 and 1996–97. Some of the data in this section are based on a subset of States and Territories only.
- Finally, the time already waited by patients on waiting lists on 30 June 1996 and 30 June 1997 is summarised. Some data are also included for census dates at the end of the first three quarters of 1996–97.

The data presented in this Chapter should be interpreted using the comments provided in the text and the information included in Chapter 2 on the coverage of the data collections, the definitions used, and the data supplied by each State and Territory.

State and Territory overview

Tables 3.1 and 3.2 summarise waiting time measures for 1995–96 and 1996–97, by State and Territory. The median waiting times were calculated using patient-level waiting times data supplied by New South Wales, South Australia and the Northern Territory. The proportion of patients admitted with extended waits was reported for these jurisdictions and for

Table 3.1: Summary of waiting times measures, by State and Territory, 1995–96^(a)

State or Territory	Proportion of patients admitted after extended waits (%)			Proportion of patients on the list with extended waits on 30 June (%)			Median waiting time (days)		
	Clinical urgency category						1	2	3
	1	2	3	1	2	3			
New South Wales	11.9	n.a.	n.a.	35.2	n.a.	n.a.	8	34 ^(b)	
Victoria	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Queensland ^(c)	19.0	16.7	11.7	49.1	42.6	27.7	n.a.	n.a.	n.a.
Western Australia	10.4	12.8	6.7	35.7	45.8	20.9	n.a.	n.a.	n.a.
South Australia	10.9	14.9	4.7	26.9	16.1	n.a.	9	41	50
Tasmania	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory	n.a.	n.a.	n.a.	27.0	47.4	n.a.	n.a.	n.a.	n.a.
Northern Territory	18.6	22.4	11.5	80.2	60.6	47.6	2	30	50
Total^(c)	11.5^(d)	18.9^(d)	6.9^(d)	38.2	43.2	26.4	8	36^(b)	

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Categories 2 and 3 combined.

(c) Extended wait admissions data are for June 1996 only.

(d) Excludes Queensland.

Queensland, Western Australia and, for 1996–97, for Tasmania. The proportion of patients on waiting lists with extended waits was available for both years for most jurisdictions. Victorian data were not included, as extended wait information was only available for ‘unbooked’ patients (patients without an allocated admission date within six weeks; see Chapter 2).

These tables illustrate the difficulty in comparing waiting times between States and Territories, for reasons including the different numbers of clinical urgency categories used, the non-availability of extended wait data for Victorian ‘booked’ patients and the non-availability of other data for some States and Territories.

Table 3.2: Summary of waiting times measures, by State and Territory, 1996–97^(a)

State or Territory	Proportion of patients admitted with extended waits (%)			Proportion of patients on the list with extended waits on 30 June (%)			Median waiting time (days)		
	Clinical urgency category						1	2	3
	1	2	3	1	2	3			
New South Wales	14.9	n.a.	n.a.	38.6	n.a.	n.a.	9	38 ^(b)	
Victoria	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Queensland	8.3	16.1	10.5	2.3	44.1	30.8	n.a.	n.a.	n.a.
Western Australia	21.9	16.2	0.0	18.1	26.0	22.9	n.a.	n.a.	n.a.
South Australia	11.6	12.3	3.8	26.7	19.6	10.7	8	38	48
Tasmania	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory	n.a.	n.a.	n.a.	4.8	42.5	27.5	n.a.	n.a.	n.a.
Northern Territory	12.8	20.1	5.2	50.0	39.4	17.4	5	36	35
Total	14.2	17.2	5.7	33.4	41.7	25.1	9	38^(b)	

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Categories 2 and 3 combined.

For New South Wales, clinical urgency category 1 patients were probably not fully comparable with clinical urgency category 1 patients from other jurisdictions, for the reasons outlined on page 5 in Chapter 2.

In addition, the coverage of the data collections varied from jurisdiction to jurisdiction and the fine details of the ways in which waiting times were calculated (see Chapter 2) also varied. Given these deficiencies in the data, no conclusions can be drawn on whether the proportions of patients who had extended waits differed markedly between the States and Territories that were able to report these data.

The data for 1995–96 and 1996–97 are also not easily compared, because of the increased coverage of the data collection between the two years in Western Australia, in particular, but also in Queensland and possibly South Australia (see page 9 in Chapter 2).

Table 3.3 presents indicative summary data on elective surgery waiting times for the current and previous data collection periods for clinical urgency category 1 patients with extended waits. As noted above, data limitations make comparisons between years problematic, especially for those jurisdictions which had increased coverage of elective surgery data collections over this period. It is also possible that comparisons between the 1995 period and the later periods may be due to seasonal factors. This is because the first period covered the six months between January and June, while the second and third periods covered the 12 months between July and June.

In addition, the data for January to June 1995 were collected using a two-tiered clinical urgency categorisation, which means that the data are less comparable between that 1995 period and the later periods for those jurisdictions (all except New South Wales) which changed to a three tier categorisation in 1995–96. Given these deficiencies in the data, no conclusions can be drawn on whether the proportions of patients who had extended waits have changed over these data collection periods.

Table 3.3: Proportion of category 1 patients with extended waits, January to June 1995, 1995–96 and 1996–97^(a)

State or Territory	Patients admitted from waiting lists			Patients on waiting lists at		
	Jan – Jun 1995 ^(b)	1995–96 ^(c)	1996–97	30 June 1995	30 June 1996	30 June 1997
	(per cent)					
New South Wales	11.9	11.9	14.9	26.2	35.2	38.6
Victoria	3.0	n.a.	n.a.	3.4	n.a.	n.a.
Queensland ^(c)	n.a.	19.0	8.3	n.a.	49.1	2.3
Western Australia	6.5	10.4	21.9	25.6	35.7	18.1
South Australia	11.3	10.9	11.6	32.7	26.9	26.7
Tasmania	17.4	n.p.	n.p.	40.6	n.p.	n.p.
Australian Capital Territory	n.a.	n.a.	n.a.	50.1	27.0	4.8
Northern Territory	21.2	18.6	12.8	83.1	80.2	50.0
Total	10.5	11.5^(d)	14.2	26.7	38.2	33.4

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Source: Moon 1996.

(c) Queensland admissions data are for June 1996 only.

(d) Excludes Queensland.

Extended waits and waiting times for patients admitted from waiting lists

This section includes data on the proportions of patients admitted after having waited on a waiting list for an extended period of time. Also included are data on median waiting times and the distribution of waiting times of patients who were admitted in jurisdictions for which patient-level data on waiting times was available (New South Wales, South Australia and the Northern Territory). These latter data are presented to illustrate the type of analyses that are possible with the patient-level data on waiting times.

Patients admitted after extended waits

Tables 3.4 to 3.8 show the proportion of patients admitted after extended waits. Available State and Territory data are presented in Tables 3.4 and 3.5. As noted previously, New South Wales was unable to supply data separately for clinical urgency category 2 and category 3 patients but did provide data for the combined category 2 and category 3. These tables are based on the patient-level data provided by New South Wales, South Australia and the Northern Territory, and establishment-level summary data provided for patients admitted in Tasmania, Western Australia and Queensland. With the inclusion of data from these States, data in these tables account for 79% of admissions in the data collection in 1995–96 (excluding Queensland) and 81% in 1996–97.

Table 3.4: Proportion of patients admitted with extended waits, by State and Territory and clinical urgency, 1995–96^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(per cent)				
New South Wales	11.9	n.a.	n.a.	1.4	n.a.
Victoria	n.a.	n.a.	n.a.	..	n.a.
Queensland ^(b)	19.0	16.7	11.7	..	14.9
Western Australia	10.4	12.8	6.7	..	8.2
South Australia	10.9	14.9	4.7	..	7.8
Tasmania	n.p.	n.p.	n.p.	..	n.p.
Australian Capital Territory	n.a.	n.a.	n.a.	..	n.a.
Northern Territory	18.6	22.4	11.5	..	16.2
Total^(c)	11.5	18.9	6.9	1.4	10.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Queensland data are for June 1996 only.

(c) Excludes Queensland.

As explained earlier in this Chapter, because of the variations in the use of definitions and the coverage of the data collections between the two reporting periods and among the jurisdictions, it is not possible to draw conclusions about any apparent differences in the proportions of patients admitted with extended waits.

Table 3.5: Proportion of patients admitted with extended waits, by State and Territory and clinical urgency, 1996–97^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(per cent)				
New South Wales	14.9	n.a.	n.a.	1.3	n.a.
Victoria	n.a.	n.a.	n.a.	..	n.a.
Queensland	8.3	16.1	10.5	..	12.3
Western Australia	21.9	16.2	0.0	..	8.2
South Australia	11.6	12.3	3.8	..	7.2
Tasmania	n.p.	n.p.	n.p.	..	n.p.
Australian Capital Territory	n.a.	n.a.	n.a.	..	n.a.
Northern Territory	12.8	20.1	5.2	..	10.8
Total	14.2	17.2	5.7	1.3	10.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Tables 3.6 and 3.7 show the proportion of patients admitted with extended waits by clinical urgency and specialty of surgeon for 1995–96 and 1996–97. The proportions presented would have been affected by the varied definition use and coverage of the data collections. There may not have been large differences in the effects on the different surgical specialties (except that some specialties are more common in some jurisdictions than others), so comparisons between surgical specialties (but not between years) could be made cautiously. During both 1995–96 and 1996–97, the data indicate that the largest proportion of admissions with extended waits for clinical urgency category 1 patients were in the specialties of urology and plastic surgery.

Table 3.6: Proportion of patients admitted with extended waits, by specialty of surgeon and clinical urgency, 1995–96^{(a)(b)}

Specialty of surgeon	Clinical urgency			All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	
	(per cent)			
Cardio-thoracic	12.4	24.7	0.9	9.0
Ear, nose and throat	15.5	19.2	11.6	13.5
General	10.1	17.9	4.6	9.3
Gynaecology	10.2	16.4	6.1	9.4
Neurosurgery	6.4	4.0	4.2	5.5
Ophthalmology	15.7	6.7	1.8	3.5
Orthopaedic	16.9	43.7	10.4	17.4
Plastic	18.2	22.3	6.0	11.0
Urology	17.9	13.2	8.7	13.5
Vascular	9.1	11.9	2.6	6.2
Other	2.6	0.0	19.0	6.0
Total	12.0	20.3	6.9	10.9

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia, Tasmania and the Northern Territory.

(c) For patients admitted in South Australia, Tasmania and the Northern Territory only.

Table 3.7: Proportion of patients admitted with extended waits, by specialty of surgeon and clinical urgency, 1996–97^{(a)(b)}

Specialty of surgeon	Clinical urgency			All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	
	(per cent)			
Cardio-thoracic	10.1	24.9	3.8	11.9
Ear, nose and throat	18.3	16.4	9.8	12.2
General	12.8	16.0	5.1	10.6
Gynaecology	13.8	12.1	3.1	6.9
Neurosurgery	8.2	6.5	1.4	5.0
Ophthalmology	12.9	9.8	6.4	8.1
Orthopaedic	16.8	26.7	9.5	15.0
Plastic	19.6	21.5	4.6	13.9
Urology	19.8	15.5	3.5	9.3
Vascular	11.2	8.7	3.3	7.1
Other	6.3	8.9	2.6	6.1
Total	14.2	17.1	5.7	10.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, Queensland, Western Australia, South Australia, Tasmania and the Northern Territory.

(c) For patients admitted in Queensland, Western Australia, South Australia, Tasmania and the Northern Territory.

Table 3.8: Proportion of patients admitted with extended waits, by indicator procedure and clinical urgency, 1996–97^{(a)(b)}

Indicator procedure	Clinical urgency			All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	
	(per cent)			
Cataract extraction	19.4	7.5	7.8	8.0
Cholecystectomy	27.0	16.7	7.1	13.1
Coronary artery bypass graft	13.6	32.9	7.1	19.0
Cystoscopy	20.8	14.7	4.1	9.7
Haemorrhoidectomy	20.0	20.2	11.4	15.6
Hysterectomy	22.1	10.4	2.9	7.4
Inguinal herniorrhaphy	19.2	16.6	4.6	9.8
Myringoplasty	27.5	17.7	13.2	14.5
Myringotomy	27.8	14.8	3.6	11.4
Prostatectomy	23.7	18.9	5.6	12.9
Septoplasty	24.7	26.4	12.2	18.4
Tonsillectomy	27.8	19.1	10.3	14.3
Total hip replacement	51.6	38.7	9.9	21.5
Total knee replacement	54.4	39.3	13.1	22.7
Varicose veins stripping and ligation	20.2	20.9	17.1	18.7
Other procedures	12.0	14.1	3.7	8.4
All patients	14.1	15.6	5.0	9.7

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, Queensland, South Australia, Western Australia and the Northern Territory.

(c) For patients admitted in Queensland, Western Australia, South Australia and the Northern Territory.

Table 3.8 presents the proportion of patients with extended waits by clinical urgency and indicator procedure. As for the data in Tables 3.6 and 3.7, the proportions presented would have been affected by the varied definition use and coverage of the data collections. There may not have been large differences in the effects for the different indicator procedures (except that some would be more common in some jurisdictions than others), so comparisons between them could be made cautiously.

The data indicate that for clinical urgency category 1 patients in 1996–97 the indicator procedures with the highest proportions of admissions with extended waits were for total hip replacement and total knee replacement. More than half of clinical urgency category 1 patients admitted for these procedures waited more than 30 days for admission. Total hip replacement and total knee replacement were also the indicator procedures with the highest proportions of clinical urgency category 2 patients with extended waits. For clinical urgency category 3 patients, varicose veins stripping and ligation had the highest proportion of admissions with extended waits.

Median waiting times

In the previous national waiting times report, data were only available to allow calculation of clearance times and the proportions of patients with extended waits (Moon 1996). Little information was available on the waiting times for patients who did not have extended waits, and it was not possible to calculate other summary measures of waiting time.

As outlined in Chapter 2, data for individual patients were supplied by New South Wales, South Australia and the Northern Territory for both 1995–96 and 1996–97. This section includes detailed information on the waiting time for patients admitted for the awaited procedure in these three jurisdictions (Tables 3.4 to 3.11). These data may be a reasonable indicator of national elective surgery waiting times, as information was supplied by one large, one medium and one small jurisdiction, and these admissions accounted for 68% of all admissions from waiting lists included in the data collection in 1995–96 (excluding Queensland) and 57% in 1996–97. Nevertheless, these data should be interpreted with caution, noting the change in coverage, and considered to be only indicative of national waiting times in these two data collection periods. The two-tier clinical urgency categorisation in New South Wales would also have affected the data, as this may have led more patients to be categorised as clinical urgency category 1 in that jurisdiction than elsewhere. Comparisons between surgical specialties and between indicator procedures could be made with caution, noting that some of each will be more common in some jurisdictions than others.

Tables 3.9 and 3.10 show the median waiting time for 1995–96 and 1996–97 by the specialty of the surgeon and clinical urgency category, based on data supplied by the two States and the Northern Territory. Table 3.11 shows the equivalent data for 1996–97 by indicator procedure.

The median waiting time for clinical urgency category 1 patients admitted in the three jurisdictions was eight days in 1995–96 and nine days in 1996–97. For clinical urgency category 2 and 3 patients combined, the median waiting time was 36 days in 1995–96 and 38 days in 1996–97. In 1995–96, all specialties except ophthalmology and urology had median waiting times of less than 10 days for clinical urgency category 1 patients. For 1996–97 the only specialties with a median waiting time greater than 10 days were urology and ear, nose and throat surgery. For clinical urgency category 2 and 3 patients in both 1995–96 and 1996–97, the shortest median waiting times were in neurosurgery, cardio-thoracic and vascular surgery, while the longest median waiting times were for ophthalmology, ear, nose and throat, and orthopaedic surgery.

Table 3.9: Median waiting time for elective surgery admission, 1995–96^{(a)(b)}

Specialty of surgeon	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(days)				
Cardio-thoracic	7	40	19	27	13
Ear, nose and throat	8	44	70	57	36
General	8	34	46	29	17
Gynaecology	8	33	36	31	19
Neurosurgery	6	34	21	18	11
Ophthalmology	10	47	58	60	46
Orthopaedic	7	63	75	55	34
Plastic	9	46	57	37	24
Urology	12	32	41	32	22
Vascular	6	23	14	25	11
Other	1	19	40	8	3
All patients	8	39	50	36	21

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

(c) For patients admitted in South Australia and the Northern Territory only.

Table 3.10: Median waiting time for elective surgery admission, 1996–97^{(a)(b)}

Specialty of surgeon	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(days)				
Cardio-thoracic	6	28	14	30	12
Ear, nose and throat	11	57	63	60	41
General	9	36	48	32	20
Gynaecology	9	37	41	33	21
Neurosurgery	7	40	19	19	12
Ophthalmology	9	48	67	69	49
Orthopaedic	8	62	70	65	42
Plastic	9	54	41	33	25
Urology	13	27	35	33	23
Vascular	7	13	21	29	13
Other	3	21	24	11	7
All patients	9	39	49	38	24

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

(c) For patients admitted in South Australia and the Northern Territory only.

Table 3.11: Median waiting time for elective surgery admission, by indicator procedure, 1996–97^{(a)(b)}

Indicator procedure	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(days)				
Cataract extraction	16	55	83	83	71
Cholecystectomy	20	40	65	49	36
Coronary artery bypass graft	6	30	13	35	14
Cystoscopy	14	28	41	32	24
Haemorrhoidectomy	13	60	84	39	34
Hysterectomy	16	52	77	47	36
Inguinal herniorrhaphy	14	34	46	44	33
Myringoplasty	14	80	175	102	105
Myringotomy	14	48	57	57	41
Prostatectomy	14	28	43	34	25
Septoplasty	12	55	46	93	42
Tonsillectomy	18	73	90	78	62
Total hip replacement	36	70	116	90	78
Total knee replacement	40	79	111	100	88
Varicose vein stripping and ligation	14	59	163	57	54
Other procedures	7	36	41	32	18
All patients	9	39	49	38	24

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

(c) For patients admitted in South Australia and the Northern Territory only.

For clinical urgency category 1 patients in 1996–97 the only indicator procedures that had median waiting times reported of more than 30 days were total hip replacement and total knee replacement. For clinical urgency category 2 and 3 patients, the shortest median waiting times reported were for cystoscopy, prostatectomy and coronary artery bypass graft.

The median waiting time for patients admitted for elective surgery varied by hospital size, as measured by the average number of available beds. In general, the smallest and largest hospitals had the lowest median waiting times (Figures 3.1 and 3.2.). For clinical urgency category 1 patients, there was very little variation in median waiting times by hospital size, with median waiting times ranging from seven to nine days. For clinical urgency category 2 and 3 patients, the smallest hospitals (up to 50 beds) had a median waiting time of 18 days in both 1995–96 and 1996–97. Both the largest hospitals (>500 beds) and the second group of hospitals (51–100 beds) had the second lowest medians (30 days in 1995–96 and 33 days in 1996–97). These patterns may reflect the different proportions of clinical urgency category 1 patients treated in hospitals of different sizes.

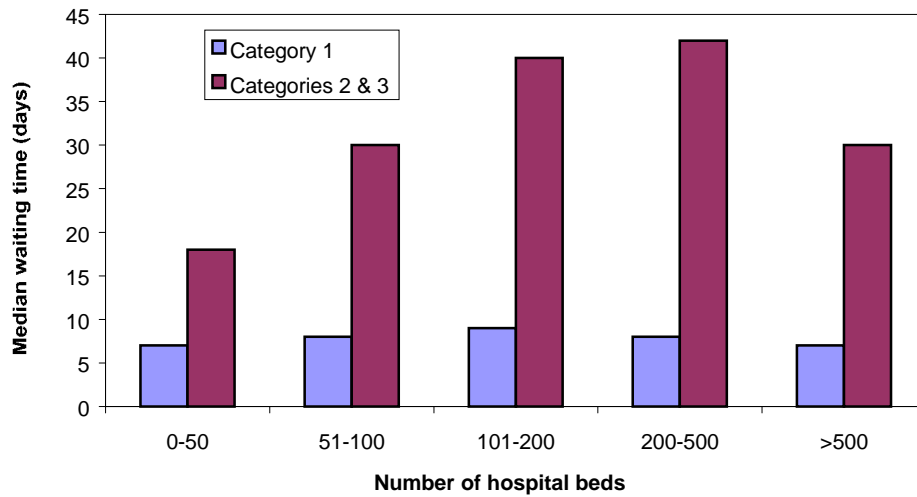


Figure 3.1: Median waiting time for elective surgery admission, by hospital size, 1995-96^(a)

- (a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provide by each State and Territory.
- (b) For patients admitted in New South Wales, South Australia and the Northern Territory.

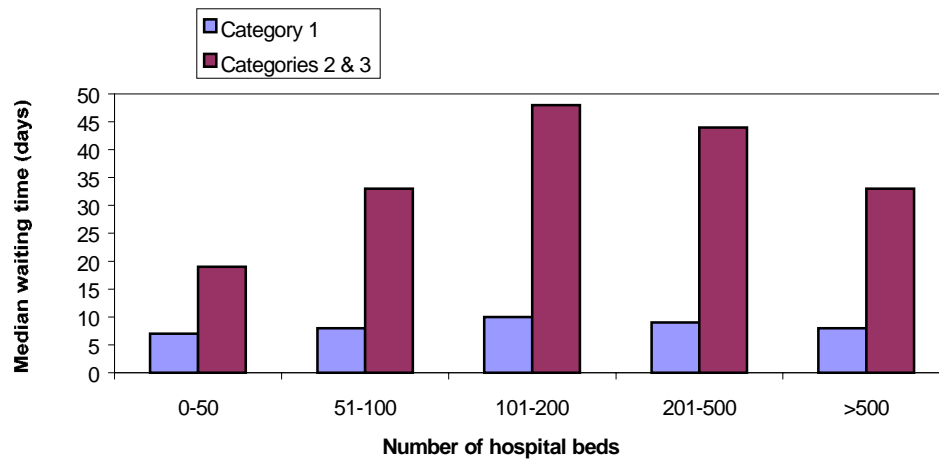


Figure 3.2: Median waiting time for elective surgery admission, by hospital size, 1996-97^{(a)(b)}

- (a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provide by each State and Territory.
- (b) For patients admitted in New South Wales, South Australia and the Northern Territory.

Distribution of waiting times

The data on the distribution of waiting times has been derived from the patient-level waiting times data provided by New South Wales, South Australia and the Northern Territory. As for the data on median waiting times, these data may be a reasonable indicator of national elective surgery waiting times, as information was supplied by one large, one medium and one small jurisdiction. Nevertheless, these data should be interpreted with caution and considered to be only indicative of national waiting times in these two data collection periods. Comparisons between the two years would be affected by the possible increase in coverage of the data collection in South Australia between those two years.

Tables 3.12 and 3.13 show the proportion of patients admitted following waiting times of various lengths for 1995–96 and 1996–97. The shaded areas indicate those patients with extended waits prior to admission for elective surgery. The different groups of patients within the combined clinical urgency category 2 and 3 and all patients categories would have different lengths of time waited defined as ‘extended waits’.

Table 3.12: Waiting times for elective surgery admission by clinical urgency category, 1995–96^{(a)(b)}

Waiting time	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(per cent)				
1–7 days	49.7	11.6	11.5	15.9	28.1
8–14 days	18.0	9.3	8.2	10.3	13.1
15–21 days	11.3	8.6	7.1	8.6	9.6
22–30 days	9.1	10.8	9.7	9.9	9.6
31–60 days	8.4	28.6	18.9	22.3	17.3
61–90 days	1.8	14.6	10.8	11.2	7.8
>3–6 months	1.3	11.5	17.4	13.5	9.1
>6–12 months	0.4	3.8	11.0	6.3	4.2
>12 months	0.1	1.2	5.5	1.9	1.3
All patients	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

(c) For South Australia and the Northern Territory only.

In 1995–96 and 1996–97, almost half of clinical urgency category 1 patients waited seven days or less for admission. This result is likely to have been influenced by the extra division of clinical urgency category 1 patients in New South Wales, where patients were categorised as requiring admission either within seven days or within eight to 30 days. In both 1995–96 and 1996–97, 16% of patients classified into clinical urgency categories 2 or 3 were also admitted within seven days. A large proportion of clinical urgency categories 2 and 3 patients were admitted in the 31 to 60 day period compared with the 61 to 90 day period. Fewer than 2% of patients waited more than 12 months in both collection periods.

Table 3.13: Waiting times for elective surgery admission by clinical urgency category, 1996–97^{(a)(b)}

Waiting time	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(per cent)				
1–7 days	46.8	10.5	14.4	15.9	26.5
8–14 days	17.1	8.8	8.1	10.0	12.3
15–21 days	11.0	8.6	6.9	8.2	9.1
22–30 days	9.5	11.7	7.6	9.1	9.2
31–60 days	10.0	29.0	19.0	21.4	17.4
61–90 days	2.7	14.9	10.7	11.4	8.4
>3–6 months	2.1	10.3	17.1	15.4	10.6
>6–12 months	0.7	4.1	10.5	7.3	5.2
>12 months	0.1	2.2	5.7	1.3	1.4
All patients	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

(c) For South Australia and the Northern Territory only.

Table 3.14: Waiting times for elective surgery admission by specialty of surgeon, 1995–96^{(a)(b)}

Waiting time	Specialty of surgeon										
	Cardio-thoracic	Ear, nose and throat	General	Gynaecology	Neuro-surgery	Ophthalmology	Orthopaedic	Plastic	Urology	Vascular	Other
	(per cent)										
1–7 days	37.8	19.3	30.5	29.0	41.9	14.7	23.2	27.1	23.4	42.6	66.2
8–14 days	16.0	10.0	15.4	14.1	18.2	8.9	9.2	11.8	14.7	15.3	10.6
15–21 days	8.7	7.3	10.9	10.8	12.3	7.6	7.1	8.8	11.8	8.7	6.4
22–30 days	7.8	9.0	10.0	11.2	9.5	8.1	7.9	10.7	11.3	8.2	5.4
31–60 days	15.1	17.5	16.3	19.1	12.0	19.6	17.6	20	19.3	13.3	7.2
61–90 days	6.9	9.6	6.8	7.1	2.7	12.6	9.6	8.5	7.8	4.4	2.3
>3–6 months	6.2	14.2	7.2	6.3	2.5	17.7	14.2	8.7	7.4	3.7	1.5
>6–12 months	1.4	9.3	2.3	2.2	0.7	9.1	8.6	3.3	3.0	2.6	0.3
>12 months	0.1	3.7	0.7	0.4	0.3	1.7	2.6	1.2	1.3	1.4	0.2
All patients	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

Table 3.15: Waiting times for elective surgery admission by specialty of surgeon, 1996–97^{(a)(b)}

Waiting time	Specialty of surgeon										
	Cardio-thoracic	Ear, nose and throat	General	Gynaecology	Neuro-surgery	Ophthalmology	Orthopaedic	Plastic	Urology	Vascular	Other
	(per cent)										
1–7 days	39.7	19.4	28.4	28.0	40.5	14.5	21.6	25.6	23.4	37.4	53.8
8–14 days	15.4	9.7	14.0	13.4	17.4	8.4	8.1	11.3	13.4	15.7	12.5
15–21 days	8.9	7.0	10.1	10.2	11.5	6.9	6.1	9.1	11.3	9.9	8.0
22–30 days	7.6	7.8	9.7	10.0	9.7	8.0	6.8	10.1	11.7	8.9	7.0
31–60 days	13.3	16.1	17.0	18.6	13.9	18.0	17.1	20.6	20.6	14.9	11.0
61–90 days	7.0	9.8	7.4	8.4	4.1	12.1	10.3	8.4	7.7	4.6	4.3
>3–6 months	7.3	15.1	8.9	8.5	2.4	21.1	15.3	9.8	7.8	5.1	2.3
>6–12 months	0.8	11.2	3.4	2.6	0.6	10.0	11.4	3.6	3.2	2.8	0.7
>12 months	0.0	4.0	1.0	0.4	0.0	1.0	3.4	1.5	0.9	0.7	0.4
All patients	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

Table 3.16 provides details of the proportion of patients admitted after varying waiting times by indicator procedure for 1996–97. Coronary artery bypass graft and cystoscopy had the largest proportion of patients admitted within seven days. Of the remaining procedures, most had a large proportion of patients admitted after waiting 31 to 60 days, however, larger proportions of patients waited more than 90 days for cataract extraction, total hip replacement and total knee replacement.

Table 3.16: Waiting times for elective surgery admission by indicator procedure, 1996–97^{(a)(b)}

Waiting time	Indicator procedure							
	Cataract extraction	Cholecystectomy	Coronary artery bypass graft	Cystoscopy	Haemorrhoidectomy	Hysterectomy	Inguinal herniorrhaphy	Myringoplasty
	(per cent)							
1–7 days	7.5	12.8	37.6	21.8	16.3	13.1	15.6	9.4
8–14 days	6.4	10.9	14.2	13.5	10.4	10.7	11.9	6.3
15–21 days	5.7	9.0	8.7	11.8	9.5	9.6	10.1	5.6
22–30 days	6.9	11.5	7.4	12.2	10.3	10.5	10.6	4.3
31–60 days	18.0	22.6	14.2	20.9	21.0	23.0	20.8	10.7
61–90 days	14.1	11.3	8.6	8.1	11.1	13.2	10.8	9.4
>3–6 months	26.5	15.1	8.8	7.8	12.8	14.9	13.5	19.2
>6–12 months	13.6	5.5	0.7	2.7	6.1	4.6	5.3	19.0
>12 months	1.4	1.4	0.0	1.1	2.5	0.5	1.3	16.2
All patients	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Waiting time	Indicator procedure							
	Myringotomy	Prostatectomy	Septoplasty	Tonsillectomy	Total hip replacement	Total knee replacement	Varicose veins stripping & ligation	Other procedures
	(per cent)							
1–7 days	15.3	20.0	15.2	11.5	4.7	4.7	11.1	31.7
8–14 days	10.8	13.8	8.8	7.7	4.4	3.5	7.8	13.3
15–21 days	6.8	11.8	7.9	6.4	4.1	3.6	6.9	9.4
22–30 days	8.6	11.4	8.8	7.0	5.6	5.9	8.5	9.1
31–60 days	20.6	21.2	19.6	16.9	23.3	19.9	19.5	16.3
61–90 days	12.0	7.1	8.7	10.5	13.0	13.4	11.2	7.2
>3–6 months	17.4	8.1	14.2	18.9	24.0	23.4	18.8	8.2
>6–12 months	7.2	4.8	12.0	16.9	16.1	19.1	11.3	3.7
>12 months	1.2	1.7	5.0	4.3	4.8	6.5	4.8	1.0
All patients	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) For patients admitted in New South Wales, South Australia and the Northern Territory.

Patients with extended waits on waiting lists on census dates

As discussed in Chapter 2, two types of data have been used in this paper, throughput and census data. From the throughput data, the proportion of clinical urgency category 1 and clinical urgency category 2 patients who were admitted following extended waits and the proportion of clinical urgency category 3 patients who had waited over 12 months were calculated, and presented in Tables 3.4 to 3.8. From the census data, the proportion of patients on waiting lists who had had extended waits, can be determined (Tables 3.17 to 3.22).

The proportion of patients with extended waits is expected to be found to be higher in census data than in throughput data because the chance of being counted in census data increases as the length of time spent on waiting lists increases (Nicholl 1988; see also Chapter 2).

Tables 3.17 and 3.18 show the proportion of patients on waiting lists at 30 June 1996 and 30 June 1997 who already had experienced extended waits, by clinical urgency category and jurisdiction. Victorian data were not included because extended wait data were only available for 'unbooked' patients (see Chapter 2) and not those on waiting lists who had been 'booked' for admission.

As for the data on the proportion of patients admitted after extended waits, these data are not properly comparable between 1995–96 and 1996–97 because of the changes in coverage of the data collections, especially in Western Australia, but also possibly in Queensland and South Australia. In addition, variation in the use of definitions and in the fine detail of calculating waiting times means that comparisons between jurisdictions are not possible. In particular, the use of a two-tier clinical urgency categorisation in New South Wales means that the data for that jurisdiction for clinical urgency category 1 is probably not comparable with data from other jurisdictions. It may be that clinical urgency category 1 was used more in New South Wales and this may have led to greater proportions of patients in that category experiencing extended waits than in other jurisdictions.

Table 3.17: Proportion of patients on waiting lists with extended waits, by State and Territory and clinical urgency, 30 June 1996^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(per cent)				
New South Wales	35.2	n.a.	n.a.	1.7	n.a.
Victoria	n.a.	n.a.	n.a.	..	n.a.
Queensland	49.1	42.6	27.7	..	31.6
Western Australia	35.7	45.8	20.9	..	23.0
South Australia	26.9	16.1	n.a.	..	n.a.
Tasmania	n.p.	n.p.	n.p.	..	n.p.
Australian Capital Territory	27.0	47.4	n.a.	..	n.a.
Northern Territory	80.2	60.6	47.6	..	52.3
Total	38.2	43.2	26.4	1.7	30.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Table 3.18: Proportion of patients on waiting lists with extended waits, by State and Territory and clinical urgency, 30 June 1997^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(per cent)				
New South Wales	38.6	n.a.	n.a.	7.5	n.a.
Victoria	n.a.	n.a.	n.a.	..	n.a.
Queensland	2.3	44.1	30.8	..	34.3
Western Australia	18.1	26.0	22.9	..	23.0
South Australia	26.7	19.6	10.7	..	13.0
Tasmania	n.p.	n.p.	n.p.	..	n.p.
Australian Capital Territory	4.8	42.5	27.5	..	32.5
Northern Territory	50.0	39.4	17.4	..	26.7
Total	33.4	41.7	25.1	7.5	29.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Tables 3.19 and 3.20 show the proportion of patients on waiting lists at 30 June 1996 and 30 June 1997 with extended waits by specialty of the surgeon and clinical urgency category. The data should be interpreted using the notes above on variation in definition use and coverage. However, the variations may not have had different effects on the different surgical specialties, except that some specialties are more common in some jurisdictions than others. For clinical urgency category 1 patients on waiting lists on 30 June 1996 the data indicate that the specialties with highest proportions of patients with extended waits were ophthalmology and orthopaedic surgery. On 30 June 1997, the largest proportions were for ear, nose and throat and orthopaedic surgery.

Table 3.19: Proportion of patients on waiting lists with extended waits, by specialty of surgeon and clinical urgency, 30 June 1996^{(a)(b)}

Specialty of surgeon	Clinical urgency			All patients ^{(c)(d)}
	Category 1	Category 2 ^(c)	Category 3 ^{(c)(d)}	
	(per cent)			
Cardio-thoracic	19.3	34.0	8.1	19.8
Ear, nose and throat	47.4	47.7	41.8	43.8
General	32.5	36.1	23.2	27.4
Gynaecology	31.3	30.3	16.5	20.4
Neurosurgery	31.2	31.5	17.6	23.5
Ophthalmology	51.5	24.8	13.9	16.9
Orthopaedic	50.6	50.8	24.2	29.9
Plastic	49.4	54.1	39.1	43.2
Urology	36.6	50.6	29.3	34.9
Vascular	28.2	33.8	26.9	28.7
Other	21.1	23.4	13.5	15.6
Total	38.2	43.2	26.4	30.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Excludes Victoria.

(c) Excludes New South Wales.

(d) Excludes the Australian Capital Territory and South Australia.

Table 3.20: Proportion of patients on waiting lists with extended waits, by specialty of surgeon and clinical urgency, 30 June 1997^{(a)(b)}

Specialty of surgeon	Clinical urgency			All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	
	(per cent)			
Cardio-thoracic	37.7	32.4	14.0	22.9
Ear, nose and throat	43.9	47.1	33.1	34.9
General	27.0	34.4	19.9	23.3
Gynaecology	28.8	16.6	10.7	12.7
Neurosurgery	29.3	40.8	8.0	21.9
Ophthalmology	24.6	19.3	13.4	14.2
Orthopaedic	48.0	55.2	25.7	35.5
Plastic	42.7	38.5	38.1	37.6
Urology	28.8	43.9	26.6	30.3
Vascular	22.9	33.8	35.2	33.7
Other	18.5	27.2	25.7	25.4
Total	33.4	41.7	25.1	29.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Excludes Victoria.

(c) Excludes New South Wales.

Table 3.21: Proportion of patients on waiting lists with extended waits, by indicator procedure and clinical urgency, 30 June 1997^{(a)(b)}

Indicator procedure	Clinical urgency			All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	
	(per cent)			
Cataract extraction	32.4	16.8	11.5	12.1
Cholecystectomy	39.0	26.7	23.4	23.8
Coronary artery bypass graft	43.8	31.0	11.3	24.0
Cystoscopy	30.5	29.0	13.6	16.6
Haemorrhoidectomy	46.7	41.1	24.5	27.6
Hysterectomy	34.0	12.9	8.4	9.8
Inguinal herniorrhaphy	31.4	35.5	18.5	21.8
Myringoplasty	36.4	60.7	38.8	40.7
Myringotomy	52.8	33.3	16.9	22.6
Prostatectomy	38.8	64.0	31.9	40.2
Septoplasty	48.5	60.7	39.6	41.1
Tonsillectomy	47.4	38.2	30.5	31.5
Total hip replacement	63.6	52.3	22.1	32.0
Total knee replacement	68.9	57.8	32.2	39.1
Varicose veins stripping and ligation	20.9	44.8	36.6	37.2
Other procedures	30.7	39.9	24.0	27.7
All patients	33.5	39.4	24.2	27.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Excludes Victoria, Tasmania and the Australian Capital Territory.

(c) Excludes New South Wales.

Table 3.22: Proportion of patients on waiting lists with extended waits, by specialty of surgeon, quarterly census dates, 1996–97^{(a)(b)}

Specialty of surgeon	30 September 1996	31 December 1996	31 March 1997	30 June 1997
	(per cent)			
Cardio-thoracic	23.1	22.6	25.8	24.9
Ear, nose and throat	40.8	34.3	34.2	41.4
General	22.8	22.0	22.5	28.2
Gynaecology	18.0	14.0	15.0	14.8
Neurosurgery	29.6	26.7	19.3	23.5
Ophthalmology	16.5	14.7	14.2	16.1
Orthopaedic	31.7	31.7	31.3	41.2
Plastic	41.3	39.1	40.7	46.9
Urology	34.8	30.7	30.5	34.5
Vascular	36.0	31.9	31.3	37.6
Other	24.8	22.8	26.2	26.4
All patients	30.4	28.1	28.2	34.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) New South Wales, Victoria and the Northern Territory not included.

Table 3.21 shows the proportion of patients on waiting lists on 30 June 1997 with extended waits by urgency category and indicator procedure. The data indicate that the indicator procedures with the highest proportions of extended waits for clinical urgency category 1 patients were total hip replacement and total knee replacement.

Table 3.22 shows the proportion of patients on waiting lists with extended waits by quarter for 1996–97. Victorian data were not included, because of the unavailability of data on extended waits for those patients who had been ‘booked’ but had not been admitted by the end of the year. The Northern Territory was also not included because data for the first three quarters of the year were unavailable. New South Wales data were not included due to the unavailability of extended wait data for patients in clinical urgency categories 2 and 3.

This is the first time that quarterly data have been available for most jurisdictions. For each surgical specialty and overall, there was no apparent seasonal pattern in the proportions of patients who were on waiting lists with extended waits.

4. Waiting lists

Introduction

This chapter summarises the data reported on waiting lists for the 1995–96 and 1996–97 National Elective Surgery Waiting Times Data Collection. Information is presented as

- the distribution of patients on waiting lists and admitted from waiting lists by clinical urgency, surgical specialty, indicator procedure and hospital size, with separate information presented for clinical urgency category 1 patients, and
- a comparison of the additions to and removals from waiting lists during the two data collection periods.

The data presented in this Chapter should be interpreted using the comments provided in the text and the information included in Chapter 2 on the coverage of the data collections, the definitions used, and the data supplied by each State and Territory.

Victorian ‘booked’ patients have been included in data on patients admitted from waiting lists during the data collection periods in this Chapter (although some would not have been admitted by the end of the data collection period). However, to enable better comparison with the other jurisdictions, patients on ‘booked’ lists on census dates have also been included with the patients on waiting lists on the census dates where possible (when clinical urgency category was not being considered). This means that Victorian patients who were ‘booked’, but had not been admitted by the end of each reporting period are counted both as an admission (throughput data) and as on a waiting list (census data). In addition, as noted in Chapter 2, additions to and removals and admissions from waiting lists were not included in the Victorian data if the patient was registered for elective surgery and then admitted or cancelled within a single calendar month.

Waiting list characteristics

This section describes the characteristics of waiting lists, for example, the proportions of patients waiting for surgery within each clinical urgency category and surgical specialty, for each indicator procedure and by hospital size. Information is presented for patients admitted from waiting lists during each data collection year and for patients on waiting lists on the 30 June census dates. Note that patients who wait for long periods are more likely to be counted at census points (see Chapter 2).

The data for 1995–96 and 1996–97 are also not easily compared, because of the increased coverage of the data collection between the two years in Western Australia, in particular, but also in Queensland and possibly South Australia (see page 9 in Chapter 2).

Clinical urgency

Table 4.1 shows that the majority of patients reported as admitted from a waiting list were in clinical urgency categories 2 and 3 (65% in 1995–96 and 68% in 1996–97). Clinical urgency categories 2 and 3 also accounted for the largest proportion of patients on waiting lists on 30 June (93% in both 1995–96 and 1996–97).

Clinical urgency category 1 patients

As shown in Table 4.1, 35% of patients reported as admitted during 1995–96 and 32% of patients reported as admitted during 1996–97 were classified as clinical urgency category 1. The surgical specialties with the highest proportions of these patients were cardio-thoracic surgery, vascular surgery and neurosurgery (Table 4.2). Possible reasons for some specialties having higher proportions of clinical urgency category 1 patients include:

- patients were more often categorised as requiring surgery within 30 days;
- for patients admitted from waiting lists, clinical urgency category 1 patients in these groups may have been admitted at a much faster rate than other patients, potentially creating a backlog of category 2 and 3 patients; and
- clinical urgency category 2 and 3 patients in these groups may be removed from the lists for reasons other than admission more often than category 1 patients (for treatment elsewhere or for other reasons).

Table 4.1: Waiting list patients by clinical urgency, 1995–96 and 1996–97^{(a)(b)}

Clinical urgency	1995–96		1996–97	
	Patients admitted from waiting lists ^(c)	Patients on waiting lists on 30 June	Patients admitted from waiting lists	Patients on waiting lists on 30 June
	(per cent)			
Category 1	34.7	7.2	32.0	7.1
Categories 2 & 3	65.3	92.8	68.0	92.9
Category 2 ^(d)	4.9	9.8	12.4	12.9
Category 3 ^(d)	16.4	46.0	20.7	37.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Excludes Victoria.

(c) Excludes Queensland.

(d) Excludes New South Wales.

Figure 4.1 shows clinical urgency category 1 patients as a proportion of total patients by State and Territory for 1995–96. Tables 4.3 and 4.4 show similar data for 1996–97 by State and Territory and specialty of surgeon.

There was variation among the jurisdictions. For example, New South Wales and the Australian Capital Territory reported nearly 40% of patients admitted from waiting lists in 1995–1996 as clinical urgency category 1, whereas the Northern Territory reported about 20%. On 30 June 1996 about 11% of patients on waiting lists in New South Wales were in clinical urgency category 1 compared with fewer than 5% in several other States. For New South Wales, the high proportions of clinical urgency category 1 patients may reflect the non-availability of an equivalent of the national clinical urgency category 2 (see Chapter 2).

The data for 1996–97 on the proportions of clinical urgency category 1 patients by surgical specialty suggest that the variations are not completely attributable to different types of surgery being performed in the different jurisdictions.

There was wide variation among the jurisdictions in the proportion of patients who were reported as clinical urgency category 1 for every surgical specialty. This variation could have been due to a range of factors, including variation in the use of definitions and differing coverage (as outlined in Chapter 2), differing policies for management of waiting lists, or different types of surgery being available within the specialties in the different jurisdictions. It could also have been related to inconsistent application of the clinical urgency categories by the different jurisdictions and/or surgical specialties.

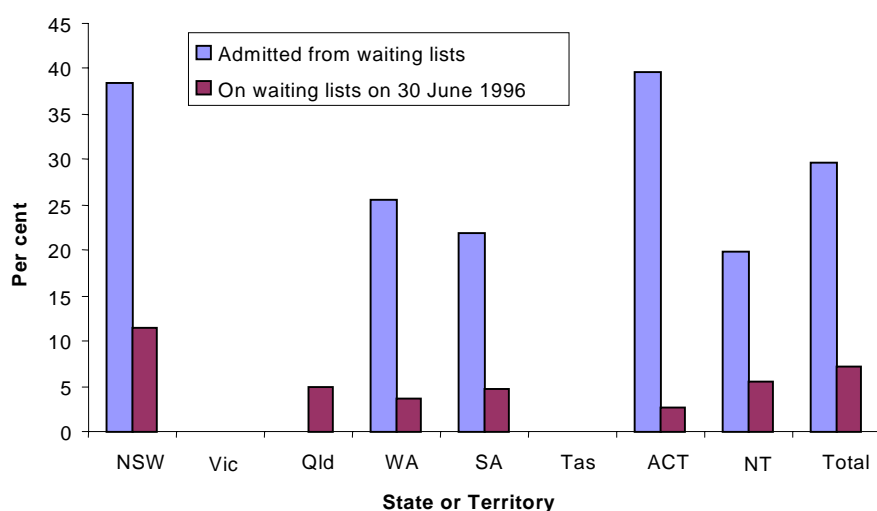


Figure 4.1: Clinical urgency category 1 patients as a proportion of total waiting list patients, by State and Territory, 1995-96

Note: Victorian data are not available and Tasmanian data are not published.

These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Table 4.2: Clinical urgency category 1 patients as a proportion of total patients, by specialty of surgeon, 1995-96 and 1996-97^{(a)(b)}

Specialty of surgeon	1995-96		1996-97	
	Patients admitted from waiting lists ^(c)	Patients on waiting lists on 30 June	Patients admitted from waiting lists	Patients on waiting lists on 30 June
	(per cent)			
Cardio-thoracic	49.0	14.9	46.9	21.0
Ear, nose and throat	24.5	4.6	22.8	3.8
General	38.2	10.3	37.4	9.5
Gynaecology	35.3	9.2	33.8	12.0
Neurosurgery	50.2	18.1	46.8	16.4
Ophthalmology	18.6	3.2	16.3	2.5
Orthopaedic	28.7	4.5	26.3	4.4
Plastic	39.6	9.9	32.8	8.7
Urology	34.3	9.3	31.9	10.9
Vascular	51.6	12.4	41.6	10.0
Other	48.4	7.1	31.7	8.4
Total	34.7	7.2	32.0	7.1

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Excludes Victoria.

(c) Excludes Queensland.

Table 4.3: Clinical urgency category 1 patients as a proportion of total patients on waiting lists, by specialty of surgeon and State and Territory, 1996–97^(a)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Specialty of surgeon	(per cent)								
Cardio-thoracic	37.6	n.a.	11.0	14.3	6.8	n.p.	40.0	..	21.0
Ear, nose and throat	5.8	n.a.	1.2	0.4	5.3	n.p.	0.8	12.7	3.8
General	13.2	n.a.	4.7	2.0	6.0	n.p.	6.5	8.1	9.5
Gynaecology	15.0	n.a.	6.3	1.0	8.0	n.p.	5.5	12.6	12.0
Neurosurgery	33.3	n.a.	9.5	4.7	22.2	n.p.	5.0	..	16.4
Ophthalmology	3.5	n.a.	1.0	0.8	2.4	n.p.	0.0	1.9	2.5
Orthopaedic	7.7	n.a.	1.8	0.8	3.2	n.p.	1.1	4.7	4.4
Plastic	22.8	n.a.	2.5	2.0	4.2	n.p.	3.6	9.1	8.7
Urology	16.9	n.a.	4.0	8.2	12.1	n.p.	7.1	0.0	10.9
Vascular	15.9	n.a.	7.1	2.5	15.1	n.p.	3.6	..	10.0
Other	28.7	n.a.	4.4	2.6	0.0	n.p.	4.1	3.0	8.4
Total	11.0	n.a.	3.2	1.7	5.6	n.p.	3.5	8.0	7.1

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Data not shown on the proportion of clinical urgency category 1 patients as a proportion of total patients, by jurisdiction, also indicates that there was inconsistent application of the clinical urgency categories among the jurisdictions. For example, the proportion of patients awaiting hysterectomy on 30 June 1997 who were category 1 patients ranged from 1.0% to 11.4%. The proportion of patients admitted during 1996–97 for cataract extraction who were

Table 4.4: Clinical urgency category 1 patients as a proportion of total admissions from waiting lists, by specialty of surgeon and State and Territory, 1996–97^(a)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Specialty of surgeon	(per cent)								
Cardio-thoracic	57.7	n.a.	45.3	32.1	33.4	n.p.	64.4	..	46.9
Ear, nose and throat	29.0	n.a.	23.2	13.4	12.5	n.p.	12.3	29.8	22.8
General	41.8	n.a.	31.2	28.3	25.8	n.p.	28.8	26.4	37.4
Gynaecology	38.8	n.a.	21.4	5.0	27.9	n.p.	30.0	42.7	33.8
Neurosurgery	53.6	n.a.	28.9	37.5	55.9	n.p.	28.4	..	46.8
Ophthalmology	21.1	n.a.	7.3	14.8	11.2	n.p.	3.5	5.4	16.3
Orthopaedic	33.2	n.a.	21.8	15.5	12.1	n.p.	24.2	28.2	26.3
Plastic	42.4	n.a.	24.9	23.1	27.2	n.p.	51.7	41.1	32.8
Urology	39.8	n.a.	20.4	16.9	25.6	n.p.	47.9	2.0	31.9
Vascular	55.2	n.a.	26.4	24.1	31.7	n.p.	63.8	..	41.6
Other	49.4	n.a.	16.9	23.8	28.2	n.p.	40.8	11.7	31.7
Total	38.5	n.a.	23.6	19.5	22.2	n.p.	29.8	29.3	32.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

category 1 ranged from 2.3% to 10.4%. For most procedures, the proportion of patients who were category 1 who were either admitted during 1996–97 or waiting for admission on 30 June 1997 in New South Wales was higher than in the four other jurisdictions that provided indicator procedure data. This is likely to reflect the fact that New South Wales did not have an equivalent of category 2 for 1996–97 and patients who may have been allocated to that

category if it had been available, were instead allocated to clinical urgency category 1 (see Chapter 2 for more details on the categories used by New South Wales and other jurisdictions).

Comparability of clinical urgency categories remains an area of uncertainty with waiting times data.

Specialty of surgeon

Table 4.5 shows the proportion of patients who were admitted from waiting lists during 1995–96 and 1996–97 and the proportion on waiting lists at the end of each year, by specialty of surgeon. General surgery accounted for the largest proportion of admissions in both years (28% and 27% respectively) and for the second largest proportion of patients on waiting lists at the end of both years (21% and 20% respectively). Orthopaedic surgery accounted for the greatest number of patients on waiting lists at the end of both years (22% and 24%, respectively).

Tables 4.6 and 4.7 present data on admissions from waiting lists by specialty of surgeon for each State and Territory. The smaller jurisdictions had distributions that were markedly different from the overall distribution, with the Northern Territory, for example, reporting around a third of its admissions for gynaecology; the national average was 17% in 1995–96 and 16% in 1996–97. Western Australia reported larger proportions of admissions for plastic

Table 4.5: Waiting list patients by specialty of surgeon, 1995–96 and 1996–97^{(a)(b)}

Specialty of surgeon	1995–96		1996–97	
	Patients admitted from waiting lists ^(c)	Patients on waiting lists on 30 June	Patients admitted from waiting lists	Patients on waiting lists on 30 June
	(per cent)			
Cardio-thoracic	2.4	1.2	2.9	1.5
Ear, nose and throat	9.9	14.8	9.4	15.8
General	28.3	21.0	26.8	19.9
Gynaecology	17.2	10.9	15.5	8.5
Neurosurgery	1.9	1.0	1.8	1.0
Ophthalmology	8.0	9.6	8.2	9.9
Orthopaedic	13.2	21.9	14.2	24.3
Plastic	5.0	6.5	5.6	6.7
Urology	8.7	8.5	8.9	7.7
Vascular	2.3	2.0	2.6	2.4
Other	3.2	2.6	4.1	2.3
Total	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Includes 'booked' patients for Victoria but not all admissions (see Chapter 2).

(c) Excludes Queensland.

Table 4.6: Admissions from waiting lists by specialty of surgeon and State and Territory, 1995–96^(a)

	NSW	Vic ^(b)	Qld	WA	SA	Tas	ACT	NT	Total
Specialty of surgeon	(per cent)								
Cardio-thoracic	2.4	1.5	n.a.	3.3	3.3	n.p.	1.7	0.0	2.4
Ear, nose and throat	7.9	13.4	n.a.	10.5	14.8	n.p.	15.5	9.5	9.9
General	31.0	26.4	n.a.	20.2	23.5	n.p.	14.5	35.4	28.3
Gynaecology	19.1	13.1	n.a.	11.5	13.1	n.p.	24.3	34.7	17.2
Neurosurgery	1.7	1.5	n.a.	3.4	2.1	n.p.	4.1	0.0	1.9
Ophthalmology	8.0	9.9	n.a.	7.3	8.1	n.p.	3.8	6.5	8.0
Orthopaedic	12.6	16.0	n.a.	11.8	13.3	n.p.	7.3	9.4	13.2
Plastic	3.5	6.2	n.a.	9.4	7.9	n.p.	5.5	3.9	5.0
Urology	8.1	8.0	n.a.	12.0	10.7	n.p.	7.9	0.5	8.7
Vascular	2.2	1.6	n.a.	4.4	3.2	n.p.	4.2	0.0	2.3
Other	3.5	2.2	n.a.	6.3	0.0	n.p.	11.2	0.0	3.2
Total	100.0	100.0	n.a.	100.0	100.0	n.p.	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) 'Booked' patients are included but not all admissions (see Chapter 2).

surgery (9% in each case) than the average for both years (5% and 6% respectively). The distribution of admissions may be affected by a number of factors, including the varying coverage of the data collections, the availability of surgeons and the relative amounts of surgery performed in the public and private sectors for each specialty.

Table 4.7: Admissions from waiting lists by specialty of surgeon and State and Territory, 1996–97^(a)

	NSW	Vic ^(b)	Qld	WA	SA	Tas	ACT	NT	Total
Specialty of surgeon	(per cent)								
Cardio-thoracic	2.4	1.9	6.2	3.2	2.9	3.8	1.7	0.0	2.9
Ear, nose and throat	7.7	12.6	7.8	11.3	12.8	7.2	19.5	6.9	9.4
General	31.5	26.8	17.8	18.4	23.3	27.6	16.4	29.6	26.8
Gynaecology	19.2	11.5	9.4	11.0	11.5	20.8	23.0	32.0	15.5
Neurosurgery	1.6	1.2	1.8	3.7	2.0	2.0	4.5	0.0	1.8
Ophthalmology	8.0	9.8	8.6	7.7	9.1	2.1	3.8	7.4	8.2
Orthopaedic	11.9	17.9	18.6	12.6	14.3	14.1	7.7	11.0	14.2
Plastic	3.8	6.8	6.9	8.9	8.6	6.5	4.8	2.8	5.6
Urology	8.5	7.5	8.5	12.5	11.4	14.0	8.5	0.8	8.9
Vascular	2.3	1.8	3.5	4.2	4.1	1.2	3.4	0.0	2.6
Other	3.2	2.3	10.8	6.4	0.1	0.5	6.6	9.4	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) 'Booked' patients are included but not all admissions (see Chapter 2).

Indicator procedures

Five jurisdictions were able to supply data on waiting list patients by indicator procedure for 1996–97. Information on the proportion of patients on waiting lists and admitted from waiting lists in 1996–97 is presented in Table 4.8 for these jurisdictions combined. Admissions data are presented for the five jurisdictions separately in Table 4.9.

Table 4.8: Waiting list patients by indicator procedure, 1996–97^{(a)(b)}

Indicator procedure	Patients admitted from waiting lists	Patients on waiting lists on 30 June
	(per cent)	
Cataract extraction	5.1	8.5
Cholecystectomy	2.8	3.5
Coronary artery bypass graft	1.4	0.9
Cystoscopy	4.7	3.8
Haemorrhoidectomy	0.6	0.8
Hysterectomy	2.3	1.7
Inguinal herniorrhaphy	2.5	2.6
Myringoplasty	0.3	0.9
Myringotomy	0.9	0.8
Prostatectomy	1.0	0.9
Septoplasty	0.6	2.8
Tonsillectomy	2.1	5.0
Total hip replacement	1.0	2.2
Total knee replacement	1.1	3.2
Varicose veins stripping and ligation	1.0	2.6
Other procedures	72.6	59.8
All patients	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Data not available for Victoria, Tasmania and the Australian Capital Territory.

In total, over one quarter of patients admitted from waiting lists in these jurisdictions during 1996–97 were waiting for one of the indicator procedures, and nearly 40% of patients on waiting lists on 30 June 1997 were waiting for one of these procedures. The most commonly awaited of these procedures was cataract extraction. This procedure was reported for over 5% of admissions from waiting lists and nearly 8% of patients on waiting lists on 30 June.

Table 4.9: Admissions from waiting lists by indicator procedure and State or Territory, 1996–97^(a)

Indicator procedure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	(per cent)								
Cataract extraction	5.2	n.a.	5.1	3.5	5.7	n.a.	n.a.	3.9	5.1
Cholecystectomy	3.2	n.a.	2.3	1.3	2.9	n.a.	n.a.	2.2	2.8
Coronary artery bypass graft	1.2	n.a.	2.4	1.0	1.8	n.a.	n.a.	0.0	1.4
Cystoscopy	5.2	n.a.	4.4	3.9	4.1	n.a.	n.a.	1.8	4.7
Haemorrhoidectomy	0.7	n.a.	0.6	0.2	0.7	n.a.	n.a.	0.5	0.6
Hysterectomy	2.9	n.a.	1.2	1.2	2.1	n.a.	n.a.	1.2	2.3
Inguinal herniorrhaphy	2.8	n.a.	1.9	1.6	2.4	n.a.	n.a.	1.8	2.5
Myringoplasty	0.2	n.a.	0.3	0.6	0.4	n.a.	n.a.	0.7	0.3
Myringotomy	0.8	n.a.	0.6	2.3	0.7	n.a.	n.a.	1.2	0.9
Prostatectomy	1.1	n.a.	0.5	0.2	1.8	n.a.	n.a.	0.4	1.0
Septoplasty	0.6	n.a.	0.6	0.4	1.0	n.a.	n.a.	0.2	0.6
Tonsillectomy	2.2	n.a.	1.6	2.2	2.6	n.a.	n.a.	1.3	2.1
Total hip replacement	0.9	n.a.	0.9	1.1	1.4	n.a.	n.a.	0.2	1.0
Total knee replacement	1.1	n.a.	0.9	1.0	1.5	n.a.	n.a.	0.2	1.1
Varicose veins stripping and ligation	1.1	n.a.	0.9	0.3	1.0	n.a.	n.a.	0.5	1.0
Other procedures	70.8	n.a.	75.9	79.1	69.8	n.a.	n.a.	83.9	72.6
All patients	100.0	n.a.	100.0	100.0	100.0	n.a.	n.a.	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Among the States and Territories for which data were available, there was some variation in the proportion of admissions that were from the indicator procedure list. South Australia and New South Wales had the highest proportion of admissions for the indicator procedures as a group (30% and 29% respectively). The Northern Territory had the lowest proportion, at 16%. Cataract extraction was the highest volume indicator procedure in all of these jurisdictions except Western Australia, where cystoscopy ranked highest.

For patients admitted from waiting lists, the highest proportion of patients classified as clinical urgency category 1 were for coronary artery bypass grafts (46%) and prostatectomies (37%) (Table 4.10). For patients on waiting lists on 30 June 1997 the indicator procedures with the highest proportion of clinical urgency category 1 patients were coronary artery bypass grafts and cystoscopies.

Table 4.10: Clinical urgency category 1 patients by indicator procedure, 1996–97^{(a)(b)}

Indicator procedure	Patients admitted	Patients on waiting
	from waiting lists	lists on 30 June
	(per cent)	
Cataract extraction	7.9	1.6
Cholecystectomy	28.7	8.1
Coronary artery bypass graft	46.1	22.6
Cystoscopy	31.8	12.7
Haemorrhoidectomy	21.2	3.9
Hysterectomy	25.6	9.6
Inguinal herniorrhaphy	23.1	6.7
Myringoplasty	8.2	1.2
Myringotomy	22.0	10.5
Prostatectomy	35.9	10.4
Septoplasty	21.6	1.2
Tonsillectomy	14.0	3.1
Total hip replacement	17.2	5.6
Total knee replacement	11.9	4.2
Varicose veins stripping and ligation	12.1	1.7
Other procedures	36.1	8.7
All patients	32.2	7.4

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Data not available for Victoria, Tasmania and the Australian Capital Territory.

Hospital size

Table 4.11 shows that the majority of waiting list patients were reported for larger hospitals. In 1995–96, only 12% of admissions from waiting lists were to hospitals with 100 or fewer beds, and only 11% in 1996–97. These data would have been affected, however, by the lack of coverage of some hospitals in the waiting list data collections of some jurisdictions (see Chapter 2).

There were some changes in the proportions of waiting list patients by hospital size between 1995–96 and 1996–97. For example, there was a decrease in the proportion of patients on waiting lists at hospitals with between 201 and 500 beds. These changes need to be interpreted with caution, however, as they may have been affected by the change in coverage of the waiting times data collections between the two years, as described in Chapter 2.

Table 4.11: Waiting list patients by hospital size, 1995–96 and 1996–97^{(a)(b)}

Hospital size	1995–96		1996–97	
	Patients admitted from waiting lists ^(c)	Patients on waiting lists on 30 June	Patients admitted from waiting lists	Patients on waiting lists on 30 June
	(per cent)			
0–50 beds	2.7	1.0	2.3	6.1
51–100 beds	9.1	4.5	8.2	8.3
101–200 beds	20.7	12.4	17.2	13.7
201–500 beds	38.8	46.9	38.1	37.7
> 500 beds	28.6	35.2	34.2	34.2
Total	100.0	100.0	100.0	100.0

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Includes 'booked' patients for Victoria but not all admissions (see Chapter 2).

(c) Excludes Queensland.

Waiting list additions and removals

This section summarises the movement of patients onto and off waiting lists in 1995–96 and 1996–97. Patients are removed from waiting lists either when they are electively admitted for the surgery for which they were waiting or for a range of other reasons for which the data are mainly presented in combination here. These other reasons are admission as an emergency patient for the surgery for which the patient was waiting, the surgery not being required, or the patient not being able to be contacted by the hospital, having died, having the surgery elsewhere or declining the surgery.

A comparison of the numbers of additions to waiting lists and the numbers of removals from waiting lists allows an assessment of change in the size of waiting lists over the data collection periods. The data on admissions and other removals are presented here as proportions of the number of additions to the waiting lists in the data collection periods. If the admissions and other removals together represent more than 100% of the additions, then the waiting list will have decreased in size during the data collection period.

Figures 4.2 and 4.3 show admissions and other removals as a proportion of additions to the waiting lists by State and Territory for 1995–96 and 1996–97 respectively. Data on 'booked' patients are presented separately for Victoria, as not all of them would have been admitted by 30 June. As explained in Chapter 2, not all additions and removals are included in the Victorian data.

For all States and Territories the number of admissions and other removals represented about 100% of the additions for the year, indicating that the size of the waiting lists remained relatively stable. For 1996–97, the data indicate growth in waiting lists mainly in New South Wales and Western Australia, as also indicated in Table C.1. The data here for Queensland indicate a reduction in waiting list size whereas Table C.1 shows that there were more patients reported on waiting lists on 30 June 1997 than on 30 June 1996, probably reflecting the increased coverage of the collection in Queensland.

Of total removals (admissions and other), admissions accounted for the greatest proportions in 1996–97 in New South Wales and South Australia. Other jurisdictions reported relatively more removals from waiting lists for other reasons (including Victoria's 'booked' patients).

These data also indicate that, overall, in 1996–97, 80.5% of patients who were added to the waiting lists were admitted on an elective basis (or 'booked' in Victoria) for their surgery.

Data on other reasons for removal were available for New South Wales, Western Australia, South Australia and the Northern Territory. For those four jurisdictions combined, patients representing 83.7% of the number added to the waiting lists in 1996–97 were admitted on an elective basis for the surgery for which they were waiting. A further 5.0% declined the surgery, 1.2% were admitted on an emergency basis for the surgery for which they were waiting, 2.6% had been treated elsewhere and 1.1% could not be contacted or had died.

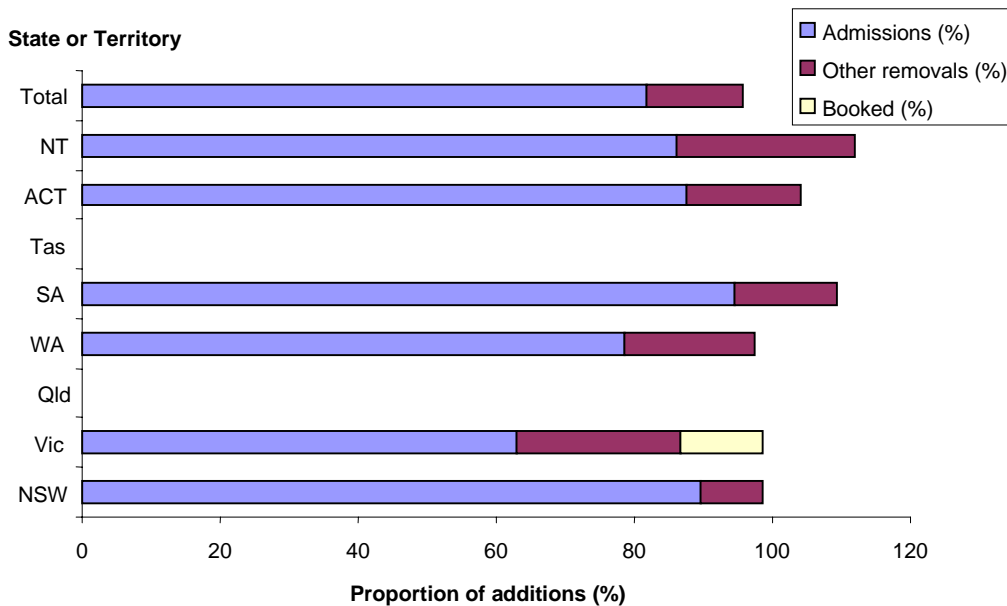


Figure 4.2. Admissions and other removals from waiting lists as a proportion of additions to waiting lists, 1995-96

Note: Data for Queensland are not available and data for Tasmania are not published.

These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

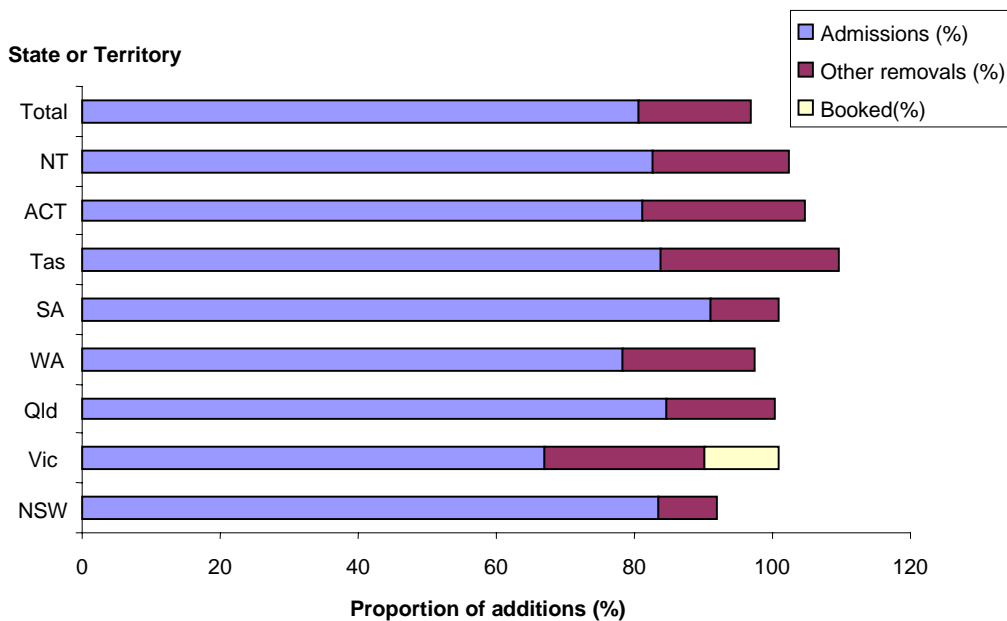


Figure 4.3. Admissions and other removals from waiting lists as a proportion of additions to waiting lists, 1996-97

These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

5. Future directions

Introduction

The National Elective Surgery Waiting Times Data Collection has been compiled since 1994 but is not yet a comprehensive national data set based on uniformly applied data definitions. The 1996–97 collection is the most comprehensive to date, with the most detail yet provided on waiting times, but there are still gaps in data supply and variation in the use of associated definitions, as discussed in Chapter 2. These inconsistencies limited the analysis that could be undertaken and the extent to which data from the different States and Territories and from the two years are comparable.

As also discussed in Chapter 2, there is variation in the format in which the data are supplied to the Institute by the States and Territories, with most supplying data at the establishment level and some supplying some or all the data at the patient level. Patient - level data enable more detailed analysis to be undertaken, for example, the distributions of waiting times presented in Chapter 3.

South Australia was able to supply patient-level waiting times data linked to the hospital morbidity record of those patients who were admitted at the end of their wait. When more States and Territories are able to supply data in this format it will enable even more detailed analysis of waiting times data. For example, the possible effects on waiting times of age, sex, diagnosis, diagnosis related group, and length of stay will be able to be analysed in conjunction with the clinical urgency category, surgical specialty and indicator procedures.

The gaps in and format of data supply and the use and development of data definitions are being addressed at both the national and jurisdiction levels and will result in improved national elective surgery waiting times data collections and reports in the future. The proposed developments are briefly described in this chapter.

State and Territory data collections

New South Wales

The New South Wales Health Department supplied admission data at the patient-level for 1995–96 and 1996–97, although not linked to patient hospital morbidity records. The Department expects to be able to supply linked patient-level data some time after 1997–98.

For 1996–97 and previous years, New South Wales used the two-tier clinical urgency classification, rather than the three tiered classification used by other jurisdictions. However, in 1997–98, New South Wales implemented the *National Health Data Dictionary* three-level clinical urgency classification. This change will make a substantial contribution to uniformity in national waiting times data.

Victoria

Much of the Victorian data were not directly compatible with data from other jurisdictions due to the use of a 'booked' category and the absence of clinical urgency category

information on 'booked' patients and extended wait data for admitted patients and 'booked' patients. The Victorian Department of Human Services has reported that the elective surgery waiting times data collection was redeveloped during 1997–98 and that extended wait and clinical urgency information will be available for all patients from 1 July 1998. Admissions data including the length of time waited is also expected to be available from July 1998. Indicator procedure data will be available from 1 January 1998. These changes will make substantial contributions to uniformity in national waiting times data.

For 1995–96 and 1996–97 Victoria supplied data at the establishment level and data for 1997–98 was also in this format. From July 1998 Victorian data will be available at patient level, and potentially able to be linked to patient hospital morbidity records.

Queensland

Queensland Health has made significant advances in its waiting times data collection over recent years. Since 1 July 1997, elective surgery admissions in Queensland have been linked to patient hospital morbidity records. Information relating to a patient's wait on the list prior to admission will continue to be collected at the establishment level.

As part of a major initiative to reduce waiting times for elective surgery, Queensland Health now collects monthly waiting list information from 32 hospitals that perform more than 95% of elective surgery undertaken in public hospitals.

Queensland Health is also developing reporting systems for other factors that have been identified as affecting waiting times, such as outpatient clinics, theatre utilisation and day surgery rates. It is expected that data collected on these topics will provide further insight into waiting times.

Western Australia

The Health Department of Western Australia plans to increase the coverage of public hospitals included in its collection of waiting times data in future years. Admissions data reporting the amount of time waited should also be available in the future. Patient-level data are being collected but were not of a satisfactory standard to allow submission of data in that format for 1995–96 and 1996–97.

South Australia

For 1995–96 and 1996–97 South Australia supplied patient-level admissions data linked to patient hospital morbidity records and complete census data. An extra metropolitan hospital was added to the State's waiting list collection on 1 July 1996.

Tasmania

Tasmania is currently implemented an enhanced waiting times information system which will meet needs at hospital, State and national levels. Implementation is planned for 1999–2000, with census data this year expected to be available at patient-level.

Australian Capital Territory

The Australian Capital Territory Department of Health and Community Care supplied waiting times data at the establishment level for 1995–96 and 1996–97. Full coverage of public hospitals for throughput data was expected for 1997–98.

The Department has indicated that waiting times data will become available at the patient-level in the future and these data will be able to be linked to hospital morbidity data for those patients admitted from the waiting lists. Some data will also be available by indicator procedure for 1997–98.

Northern Territory

Waiting list data were supplied for all Northern Territory public hospitals in 1995–96 and 1996–97. Data on patients admitted from waiting lists were supplied at the patient-level but not linked to patient hospital morbidity records. Territory Health Services has reported that moves are being made to enable linkage of waiting list and patient hospital morbidity data, but implementation may not be until 1999–2000.

Summary

In summary, it is anticipated that over the next few years, extended wait data will be available from all jurisdictions for both patients admitted from waiting lists and patients on waiting lists on census dates. From the 1997–98 reference year, the three level clinical urgency categorisation will be used by all States and Territories, and data on indicator procedures will be able to be supplied by all jurisdictions except Tasmania and Victoria (for the first half of the year). In addition, it is expected that over the next few years, the number of jurisdictions supplying patient-level data will increase from the current three.

National data development and analysis

Chapter 2 outlined some of the variations in the use of definitions relating to elective surgery waiting times data collections. These and others are being addressed by the Institute, the States and Territories and the Commonwealth Department of Health and Aged Care through the National Health Data Committee, the National Health Information Management Group (NHIMG) and the data reporting arrangements for the Australian Health Care Agreements. In 1999–2000, the Institute's elective surgery waiting times data development work is being assisted by funding provided by the Australian Health Ministers' Advisory Council, and allocated to this area with the advice of NHIMG.

Some of the matters that have been identified for consideration, have recently been considered or could be considered in the future are outlined below.

- The method of calculation of waiting times (and therefore the definition of 'overdue' patients and 'extended wait' patients) when a patient's clinical urgency is reclassified was in need of standardisation. Previously, some States and Territories counted only days waited in the most recent clinical urgency category whereas others counted those days and days waited in higher urgency categories (Table 2.1). There has been recent national agreement to use the latter method from 1 July 1999.
- This paper informally uses a definition of 'extended wait patient' for clinical urgency category 3 patient who waited over 12 months. This definition has recently been approved nationally so it is expected that all jurisdictions will use it from 1 July 1999.
- A nationally agreed method is required for calculation of waiting times in the case of cancelled surgery and when patients are transferred between hospitals.
- The list of procedures that are excluded from the definition of elective surgery (see Glossary) was compiled several years ago and is currently being reviewed. Suggestions have been made, for example, to include data collection on waiting times for endoscopies and some currently excluded cardiac procedures.

- The list of indicator procedures was also compiled several years ago and is currently being reviewed to better reflect current high volume elective procedures. It may be useful to have separate lists for patients for whom a day only hospitalisation is intended and patients for whom an overnight (or longer) stay is intended.
- The consistency of application of the clinical urgency categorisation has also been proposed for review. The data in Tables 4.3 and 4.4 support a need for such a review, which would aim to standardise the use of the categories among the jurisdictions and among the surgical specialties.
- Better enumeration is required of the total elective surgery activity for the jurisdictions which were unable to accurately report the proportion of elective surgery activity that was covered by their waiting times data collections. If elective surgery admissions could be flagged in the data provided by the States and Territories to the Institute for the National Hospital Morbidity Database, it would enable the Institute to derive information on the number of elective surgery admissions directly.
- There could be wider inclusion of services purchased in private hospitals by the public sector. Private hospital separations for public patients are being increasingly reported and were included in the National Hospital Morbidity Database for all six States in 1997–98 (Australian Institute of Health and Welfare 1999). It may be appropriate to extend waiting times data collection to more of these admissions if they are for elective procedures, associated with waits and not included in public hospital waiting lists.
- There may be a need to separately identify private waiting list patients. Waiting times for private patients may be different from waiting times for public patients and be influenced by different factors, as suggested by the data collected on public and private patients in 1995 (Moon 1996). In 1996–97, about 11% of patients admitted (for elective surgery or other reasons) to the hospitals included in the National Elective Surgery Waiting Times Data Collection were private patients, 84% were public patients and the remaining 5% were Department of Veterans' Affairs or other patients.
- Analysis could be undertaken of data on waiting times for intended day only patients. These data were supplied by some jurisdictions for 1995–96 and 1996–97 but not included in this paper.
- More generally, data on whether the patient was public or private, had insurance and other demographic and clinical characteristics could be better analysed in the future when waiting times data are more available linked to the patients' hospital morbidity data records.
- Last, the waiting times information could be collected on all patients removed from waiting lists, not just on those admitted at the end of their wait. If waiting times data (or at least extended wait data) were collected on all patients removed from waiting lists, census data collections may not be required. (At present, census data collections are undertaken mainly because they include waiting information on patients who have not been admitted and will never be admitted. They are also the source of the data on the size of waiting lists, but this information is not necessarily a reliable indicator of performance.)

Appendix A: Data supplied

This Appendix details the level (establishment or patient) at which most of the data was provided by each State and Territory to the National Elective Surgery Waiting Times Data Collection in 1995–96 and 1996–97 (Tables A.1 and A.2). Some information in gaps in the data supply and use of definitions are also included. Further information on data supplied and definitions used, and data on the proportion of elective surgery admissions that were covered is included in Chapter 2.

Table A.1: Data supplied for the National Elective Surgery Waiting Times Data Collection, 1995–96

State or Territory	Census data	Throughput data		Clinical urgency categories
		Additions	Admissions and other removals	
New South Wales	patient level	patient level	patient level	2
Victoria ^(a)	establishment level	establishment level	establishment level	3
Queensland ^(b)	establishment level	establishment level	establishment level	3
Western Australia	establishment level	establishment level	establishment level	3
South Australia	establishment level	establishment level	Admissions: establishment and patient level Other removals: establishment level	3
Tasmania	establishment level	establishment level	establishment level	3
Australian Capital Territory ^(c)	establishment level	establishment level	establishment level	3
Northern Territory	establishment level	patient level	establishment level	3

(a) Victorian census data on 'booked' patients did not include clinical urgency category or extended wait information. Admissions data included data on patients removed from the waiting lists on booking. These data did not include extended wait or clinical urgency category information.

(b) Throughput data were supplied for June 1996 only.

(c) Extended wait data were not available for patients admitted from waiting lists.

Table A.2: Data supplied for the National Elective Surgery Waiting Times Data Collection, 1996–97

State or Territory	Census data	Throughput data		Clinical urgency categories
		Additions	Admissions and other removals	
New South Wales	patient level	patient level	patient level	2
Victoria ^(a)	establishment level	establishment level	establishment level	3
Queensland	establishment level	establishment level	establishment level	3
Western Australia	establishment level	establishment level	establishment level	3
South Australia	establishment level	establishment level	Admissions: establishment and patient level Other removals: establishment level	3
Tasmania ^(b)	establishment level	establishment level	establishment level	3
Australian Capital Territory ^(c)	establishment level	establishment level	establishment level	3
Northern Territory	patient level	patient level	patient level	3

(a) Victorian census data on 'booked' patients did not include clinical urgency category or extended wait information. Admissions data included data on patients removed from the waiting lists on booking. These data did not include extended wait or clinical urgency category information. Indicator procedure data were not available.

(b) Indicator procedure data were not available.

(c) Indicator procedure data were not available and extended wait data were not available for patients admitted from waiting lists.

Appendix B: Clearance times

The clearance time is the theoretical time it would take to clear all patients from the waiting lists at a census date, and represents the maximum time a patient on a list could expect to wait. It is expressed in months, and defined as the number of patients on the waiting list at a particular time (the census date) divided by the number of patients cleared (admitted and removed) from the waiting list per month. Several assumptions are made in the calculation of these measures. It is assumed that the clearance rate remains constant, that no patients are added to the lists and that waiting lists are pooled so that patients can be treated at any hospital (which is not usually the case).

Because these conditions do not hold in practice, measures presented earlier in this paper are likely to provide better indications of actual waiting times. Clearance time statistics have, however, been included in this paper to allow comparisons with the 1995 report (Moon 1996). Care needs to be taken when comparing 1995 data with these data, however, as Victorian data were included in the 1995 report but are not included in this appendix. Victoria has not been included because counts of patients on waiting lists on census dates include 'booked' patients in this paper, and counts of patients cleared also include 'booked' patients. Thus clearance time calculations would be less meaningful than for other jurisdictions. In addition, no data on clinical urgency was available for the 'booked' patients. Queensland data were not included in the 1995 report, are included on the basis of data on only one month of removals for 1995–96, but are included fully in the 1996–97 tables. Further details on the interpretation of clearance times can be found in the 1995 report on waiting times for elective surgery (Moon 1996).

The data in this Appendix should be interpreted using the comments in the text and the information in Chapter 2 on the coverage of the data collections, the definitions used, and the data supplied by each State and Territory. In particular, the coverage of the data collections improved between 1995–96 and 1996–97, so comparisons between these two years are problematic. Comparisons between New South Wales and the other jurisdictions should be made noting that New South Wales did not have an equivalent of clinical urgency category 2 in 1995–96 or 1996–97. The clearance times presented for the different surgical specialties and indicator procedures would also have been affected by the varied use of definitions and the coverage of data collections. However, there may not have been large differences in the effects on the different surgical specialties and indicator procedures (except that some specialties and indicator procedures are more common in some jurisdictions than others), so comparisons between surgical specialties (but not between years) could be made cautiously.

The clearance time for clinical urgency category 1 patients was less than one month for all surgical specialties in both 1995–96 and 1996–97, except for ear, nose and throat surgery and orthopaedic surgery in 1996–97 (Tables B.1 and B.2). Clinical urgency category 2 clearance times ranged from 1.8 to 7.6 months in 1995–96, and from 2.3 to 6.3 months in 1996–97, with orthopaedic surgery recording the longest clearance times in both periods. The range of clearance times for clinical urgency category 3 patients was 1.8 to 8.5 months in 1995–96 and between 2.1 and 7.8 months in 1996–97, with the longest clearance times reported for orthopaedic, and ear, nose and throat surgery, respectively.

Table B.1: Clearance time (months) by specialty of surgeon and clinical urgency, 1995–96^{(a)(b)}

Specialty of surgeon	Clinical urgency				All patients ^(c)
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(months)				

Cardio-thoracic	0.4	1.8	1.8	1.7	1.1
Ear, nose and throat	0.9	2.3	6.5	5.0	4.1
General	0.6	3.0	4.6	2.7	1.9
Gynaecology	0.5	2.2	2.5	2.1	1.6
Neurosurgery	0.5	2.8	1.9	1.4	1.0
Ophthalmology	0.5	3.1	4.7	3.6	3.1
Orthopaedic	0.8	7.6	8.5	5.6	4.4
Plastic	0.9	3.6	6.1	4.3	3.0
Urology	0.8	3.6	3.7	3.1	2.4
Vascular	0.5	2.3	4.4	2.9	1.7
Other	0.2	3.5	2.8	1.7	1.0
All patients	0.6	3.4	5.0	3.4	2.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) All States and Territories except Victoria and Queensland.

(c) All States and Territories except New South Wales, Victoria and Queensland.

Table B.2: Clearance time by specialty of surgeon and clinical urgency, 1996–97^{(a)(b)}

Specialty of surgeon	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(months)				
Cardio-thoracic	0.8	2.8	2.3	2.4	1.7
Ear, nose and throat	1.1	2.8	7.8	6.8	5.6
General	0.6	2.5	4.8	3.3	2.4
Gynaecology	0.7	2.3	2.1	2.2	1.7
Neurosurgery	0.6	2.8	2.6	2.2	1.5
Ophthalmology	0.7	2.4	5.1	4.8	4.2
Orthopaedic	1.1	6.3	7.1	6.7	5.5
Plastic	0.9	3.0	6.5	4.4	3.3
Urology	0.9	3.1	3.4	3.2	2.5
Vascular	0.7	2.0	5.1	3.9	2.6
Other	0.5	2.3	3.7	2.6	1.9
All patients	0.8	3.3	5.0	4.2	3.2

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) All States and Territories except Victoria.

(c) All States and Territories except Victoria and New South Wales.

Table B.3 presents clearance times by clinical urgency category and indicator procedure for 1996–97. Total knee replacement had the longest clearance time in both clinical urgency category 1 (2.6 months) and clinical urgency category 2 (8.8 months). Myringoplasty recorded the longest clearance time in clinical urgency category 3 (6.5 months).

Table B.3: Clearance time by indicator procedure and clinical urgency, 1996–97^{(a)(b)}

Specialty of surgeon	Clinical urgency				All patients
	Category 1	Category 2 ^(c)	Category 3 ^(c)	Categories 2 & 3	
	(months)				
Cataract extraction	0.7	2.2	1.8	2.7	4.2
Cholecystectomy	1.1	3.1	1.6	1.8	2.4
Coronary artery bypass graft	0.7	3.0	0.9	0.6	0.8
Cystoscopy	0.7	2.1	1.3	1.4	1.9
Haemorrhoidectomy	1.3	2.9	2.2	1.7	2.7
Hysterectomy	0.7	1.8	0.5	1.8	1.8
Inguinal herniorrhaphy	0.8	2.4	1.5	1.7	1.8
Myringoplasty	0.7	4.7	6.5	2.8	3.0
Myringotomy	1.0	1.7	1.7	2.0	1.9
Prostatectomy	0.8	2.5	1.5	2.0	2.2
Septoplasty	1.2	4.3	6.2	4.6	7.8
Tonsillectomy	1.6	2.4	2.7	3.7	1.5
Total hip replacement	1.9	7.0	2.8	2.8	5.7
Total knee replacement	2.6	8.8	3.8	3.4	7.4
Varicose veins stripping and ligation	0.8	3.3	4.5	2.8	6.5
Not applicable	0.6	3.0	1.7	1.3	2.3
All patients	0.6	3.0	1.8	1.6	2.4

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only.

(c) Queensland, Western Australia, South Australia and the Northern Territory only.

Table B.4: Clearance time by State and Territory and clinical urgency, 1995–96^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(months)				
New South Wales	0.6	n.a.	n.a.	2.8	2.0
Victoria	n.a.	n.a.	n.a.	n.a.	n.a.
Queensland ^(b)	1.3	3.3	7.1	5.7	4.9
Western Australia	0.6	2.5	5.1	4.8	3.8
South Australia	0.6	2.0	3.2	2.9	2.5
Tasmania	n.p.	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory	0.4	3.9	9.0	6.2	4.2
Northern Territory	1.2	2.9	4.9	4.2	3.7
Total^(c)	0.6	2.9	4.8	3.3	2.5

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

(b) Based on removals data for June 1996 only.

(c) Queensland not included.

Table B.5: Clearance time by State and Territory and clinical urgency, 1996–97^(a)

State or Territory	Clinical urgency				All patients
	Category 1	Category 2	Category 3	Categories 2 & 3	
	(months)				

New South Wales	0.8	n.a	n.a	4.0	2.8
Victoria	n.a	n.a	n.a	n.a	n.a.
Queensland	0.6	3.5	6.6	5.1	4.1
Western Australia	0.4	2.0	5.5	4.8	4.0
South Australia	0.6	1.9	2.8	2.6	2.2
Tasmania	n.p.	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory	0.5	2.7	8.0	5.0	3.8
Northern Territory	0.8	3.3	2.9	3.0	2.5
Total	0.8	3.1	5.0	3.0	3.1

(a) These data should be interpreted using the information in Chapter 2 on the coverage, definitions and data provided by each State and Territory.

Tables B.4 and B.5 show the clearance times by State and Territory for those jurisdictions with data available in 1995–96 and 1996–97, respectively. For clinical urgency category 1 patients in 1995–96 clearance times were all about one month. In 1996–97, they were all less than one month.

Appendix C: Patient numbers

This Appendix presents State and Territory data reported on the numbers of patients on waiting lists on 30 June 1996 and 30 June 1997, and the number of patients admitted from waiting lists during 1995–96 and 1996–97. It also includes data on the number of patients on waiting lists at the end of each quarter in 1996–97, by specialty of surgeon.

The data presented in this Appendix should be interpreted using the comments provided in the text and the information included in Chapter 2 on the coverage of the data collections, the definitions used, and the data supplied by each State and Territory. Table 2.3 details the coverage of the waiting times data collections for each jurisdiction for each of the data collection periods.

Table C.1 shows that there were about 138,000 patients reported on waiting lists throughout Australia on 30 June 1996 and about 149,000 on 30 June 1997. ‘Booked’ patients (who had not been admitted on 30 June) are included in the counts for Victoria, to make data for that State more comparable with data from the other jurisdictions. New South Wales, Queensland and Western Australia reported an increase in the size of the waiting lists during 1996–97. For Queensland and Western Australia, this may have been affected by changing coverage (Table 2.3).

Table C.1: Waiting list patients, 1995–96 and 1996–1997, by State and Territory

State or Territory	1995–96		1996–97	
	Patients admitted from waiting lists	Patients on waiting lists on 30 June	Patients admitted from waiting lists	Patients on waiting lists on 30 June
New South Wales	222,527	40,198	205,106	52,844
Victoria ^(a)	73,191	41,311	79,988	39,659
Queensland	n.a.	23,208	61,368	24,884
Western Australia	29,679	11,745	30,051	12,557
South Australia	33,494	7,987	37,869	7,889
Tasmania	13,016	7,278	14,250	6,104
Australian Capital Territory	6,780	3,860	6,004	3,586
Northern Territory	5,240	2,107	6,440	1,634
Total	383,927	137,694	441,076	149,157
Total admitted per month	31,994	..	36,756	..

(a) Includes ‘booked’ patients but not all admissions.

Table C.1 also shows that there were about 384,000 patients reported as admitted from waiting lists during 1995–96 and about 441,000 in 1996–97. The inclusion of Queensland data for 1996–97 contributed to this increase, as did increases in admissions reported by Victoria, Western Australia, South Australia, Tasmania and the Northern Territory.

'Booked' patients are included in the Victorian data in this table, as most of these patients would have been both 'booked' and admitted during the reporting periods. However, their inclusion in the Victorian admissions data means that patients who were booked but not admitted on 30 June in each year are in both the counts of admissions and the counts patients on the waiting lists.

Table C.2 provides data on the number of patients admitted from waiting lists by State or Territory and specialty of surgeon in 1996–97. Victorian 'booked' patients are included, as in Table C.1.

Table C.2: Patients admitted from waiting lists by State and Territory and specialty of surgeon, 1996–97

Specialty of surgeon	NSW	Vic ^(a)	Qld	WA	SA	Tas	ACT	NT	Total
Cardio-thoracic	4,911	1,509	3,821	959	1,101	540	101	0	12,942
Ear, nose and throat	15,830	10,112	4,817	3,397	4,848	1,033	1,172	447	41,656
General	64,589	21,426	10,944	5,521	8,807	3,935	984	1,907	118,113
Gynaecology	39,361	9,186	5,775	3,298	4,361	2,971	1,382	2,062	68,396
Neurosurgery	3,270	983	1,115	1,121	744	284	271	0	7,788
Ophthalmology	16,333	7,826	5,268	2,325	3,449	306	228	479	36,214
Orthopaedic	24,414	14,291	11,425	3,794	5,399	2,016	462	708	62,509
Plastic	7,713	5,403	4,236	2,670	3,241	927	288	180	24,658
Urology	17,355	5,967	5,228	3,769	4,312	1,992	512	50	39,185
Vascular	4,688	1,479	2,132	1,275	1,568	169	207	0	11,518
Other	6,642	1,806	6,607	1,922	39	77	397	607	18,097
Total	205,106	79,988	61,368	30,051	37,869	14,250	6,004	6,440	441,076

(a) Includes 'booked' patients.

For 1996–97, census data were received from most jurisdictions on a quarterly basis. This has enabled the presentation of data on the number of patients on waiting lists by quarter, by surgical specialty (Table C.3). Patients on Northern Territory waiting lists were not included because relevant data were not available for the first three quarterly census dates. Victorian 'booked' patients (who had not been admitted on the census dates) were included.

Whilst there was some variation from quarter to quarter, the series was not long enough to allow accurate analysis of seasonal influences on waiting lists. The numbers of patients on waiting lists rose overall throughout the year and for most surgical specialties.

Table C.3: Patients on waiting lists on quarterly census dates, by specialty of surgeon, 1996–97^(a)

Specialty of surgeon	Number				Proportion of number on 30 June (%)			
	30 Sept	31 Dec	31 March	30 June	30 Sept	31 Dec	31 March	30 June
Cardio-thoracic	1,950	2,124	2,095	2,215	88.0	95.9	94.6	100.0
Ear, nose and throat	21,554	22,106	23,286	23,305	92.5	94.9	99.9	100.0
General	26,833	25,890	29,909	29,234	91.8	88.6	102.3	100.0
Gynaecology	12,772	11,366	12,961	12,360	103.3	92.0	104.9	100.0
Neurosurgery	1,386	1,298	1,457	1,460	94.9	88.9	99.8	100.0
Ophthalmology	12,823	13,043	14,522	14,652	87.5	89.0	99.1	100.0
Orthopaedic	31,694	33,270	35,208	35,978	88.1	92.5	97.9	100.0
Plastic	9,556	9,322	9,884	9,888	96.6	94.3	100.0	100.0
Urology	11,017	10,625	11,807	11,536	95.5	92.1	102.3	100.0
Vascular	3,145	3,245	3,704	3,624	86.8	89.5	102.2	100.0
Other	2,818	2,768	3,090	3,271	86.2	84.6	94.5	100.0
All patients	135,548	135,057	147,923	147,523	91.9	91.5	100.3	100.0

(a) Includes Victorian 'booked' patients. The Northern Territory is not included because data were not available for the first three quarterly census dates.

Appendix D: Population estimates

This Appendix presents data on the estimated resident population of Australia and the States and Territories on 31 December 1995 and 31 December 1996 (Table D.1). They are Australian Bureau of Statistics unpublished data.

Table D.1: Estimated resident population at 31 December 1995 and 1996, by State and Territory

State or Territory	31 December 1995	31 December 1996
New South Wales	6,152,031	6,240,873
Victoria	4,520,818	4,581,251
Queensland	3,316,139	3,371,447
Western Australia	1,746,391	1,781,932
South Australia	1,475,521	1,476,202
Tasmania	473,168	474,072
Australian Capital Territory	304,886	308,514
Northern Territory	176,865	185,284
Total	18,165,819	18,422,695

Glossary

For further information on the terms used in this paper, refer to the definitions in use in 1995–96 and 1996–97 in the *National Health Data Dictionary Version 5.0* (National Health Data Committee 1996).

Available beds: average available beds is used as a measure of hospital size. Available beds are beds immediately available for use by admitted patients as required.

Booked patients: Victoria's Department of Human Services partitions the register of patients waiting for elective surgery into two, the 'booked' and 'unbooked' patient registers. 'Booked' patients have been given a definite admission date (within six weeks) and 'unbooked' patients are still waiting for an admission date. All other State and Territory waiting lists and waiting list data do not distinguish between patients with and without an admission date.

Census data: include the numbers of patients on waiting lists on a census date and the lengths of time patients have waited until that date.

Clearance time: the theoretical time it would take to clear the waiting lists of all patients at a census date, if the rate of clearance remained constant. It represents the maximum time a patient on a list could expect to wait and is calculated as the number of patients waiting at the census date (the census count) divided by the mean number cleared (admitted and removed for other reasons) from the waiting list per month during the preceding data collection period.

Clinical urgency category: a clinical assessment of the urgency with which a patient requires elective hospital care. The classification employs a system of urgency categorisation based on factors such as the degree of pain, dysfunction and disability caused by the condition and its potential to deteriorate quickly into an emergency. All patients ready for care must be assigned to one of the clinical urgency categories, regardless of how long it is estimated they will need to wait for surgery.

The categories used in this paper are defined as follows:

- clinical urgency 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.
- clinical urgency 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.
- clinical urgency 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.

There is no time limit placed on the clinical urgency category 3 patients in this classification.

These definitions have been adopted as the national standard since 1 July 1997. Prior to that the *National Health Data Dictionary* standard (and the categorisation used by New South Wales for this paper) was:

- clinical urgency category 1—admission desirable within 30 days;
- clinical urgency category 2—admission desirable within 31 days or over.

There is no time limit placed on the clinical urgency category 2 patients in this classification.

Elective care: care that, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least 24 hours.

Elective surgery: elective care in which the procedures required by patients are listed in the surgical operations section of the *Medicare Benefits Schedule Book*, 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. The procedures that are excluded are:

- organ or tissue transplant procedures
- procedures associated with obstetrics (for example elective caesarean section, cervical suture)
- cosmetic surgery (defined as the relevant procedures that do not attract a Medicare rebate)
- biopsy of kidney (needle only)
- biopsy of lung (needle only)
- bronchoscopy (including fibre-optic bronchoscopy)
- colonoscopy
- dental procedures
- endoscopic retrograde cholangio-pancreatography
- endoscopy of biliary tract, oesophagus, small intestine or stomach
- endovascular interventional procedures (p. 136 of MBS book effective 1 November 1995)
- gastroscopy
- miscellaneous cardiac procedures (pp. 152–3 of MBS book effective 1 November 1995)
- oesophagoscopy
- panendoscopy (except when involving the bladder)
- proctosigmoidoscopy
- sigmoidoscopy.

Extended wait: occurs when a patient waits longer for admission than is desirable (see 'Clinical urgency category'). Clinical urgency category 1 patients with extended waits are those patients who waited over 30 days. Clinical urgency category 2 patients have extended waits if they waited over 90 days for admission. Although there is no upper limit on the time clinical urgency category 3 patients might wait, in this paper those patients who waited over 12 months are classed as having an extended wait.

Indicator procedure: a surgical procedure that is of high volume and is often associated with long waiting periods. The 15 indicator procedures identified for national data collection are listed in the relevant tables in Chapters 3 and 4. In those tables, the 'Other' row refers to patients who were waiting for procedures other than the 15 indicator procedures or for unspecified procedures.

Overdue patient: a patient whose wait has exceeded the time that has been determined as clinically desirable in relation to the clinical urgency category to which they have been assigned. Overdue patients are clinical urgency category 1 patients who waited over 30 days and clinical urgency category 2 patients who waited over 90 days.

Ready for care patients: patients who are prepared to be admitted to hospital (or to begin the process leading directly to being admitted to hospital).

Patients who are not ready for care are those not in a position to be admitted to hospital. These patients are either:

- staged patients whose medical condition will not require or be amenable to surgery until some future date, or
- deferred patients who for personal reasons are not yet prepared to be admitted to hospital.

Removal: a patient can be removed from a waiting list for admission on an elective basis for the surgery for which they were waiting, or for a range of other reasons. The other reasons include admission on an emergency basis for the surgery for which they were waiting, having been treated elsewhere, declining the surgery, death or being unable to be contacted.

Separation: the term used to refer to the episode of care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). 'Separation' also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care.

Surgical specialty: the area of clinical expertise of the surgeon who will perform or has performed the elective surgery. The 'Other' classification used in the tables refers to patients who were waiting or had waited for elective surgery not included in one of the 10 categories.

Throughput data: data that relate to a specified period, and includes the numbers of patients added to and removed from waiting lists and the lengths of time waited.

Waiting list: a register that contains essential details about patients who have been assessed as needing elective hospital care. Elective surgery waiting lists are registers of patients who have been assessed as needing elective surgery in a hospital. A waiting list therefore includes patients who have been allocated an admission date (and may be referred to as 'booked' patients) as well as those who have not been allocated an admission date.

Waiting time: the length of time spent on the waiting list, between the date of listing and the date of removal or the census date. Days spent as 'not ready for care' are excluded. In the situation in which a patient's clinical urgency category changes during their wait, there is variation among the States and Territories in the way in which the waiting time is calculated (see Chapter 2).

References

- Australian Institute of Health and Welfare 1998. Australia's health 1998; the sixth biennial report of the Australian Institute of Health and Welfare. Canberra: AIHW.
- Australian Institute of Health and Welfare 1999. Australian Hospital Statistics 1997–98. Australian Institute of Health and Welfare. Canberra: AIHW.
- Clover KA, Dobbins TA, Smyth TJ, Sanson-Fisher RW 1998. Factors associated with waiting time for surgery. *Med J Aust* 169: 464–468.
- Mays L 1995. National report on elective surgery waiting lists for public hospitals 1994. Canberra: Australian Institute of Health and Welfare.
- Moon L 1996. Waiting for elective surgery in Australian public hospitals, 1995. Canberra: Australian Institute of Health and Welfare (Health Services Series no. 7).
- National Health Data Committee 1996. National health data dictionary version 5.0. Canberra: Australian Institute of Health and Welfare.
- National Health Data Committee 1997. National health data dictionary version 6.0. Canberra: Australian Institute of Health and Welfare.
- Nicholl J 1988. Comparison of two measures of waiting times. *BMJ* 296:65.