

# **Waiting times for elective surgery in Australia 1997–98**

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# **Waiting times for elective surgery in Australia 1997–98**

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# Foreword

Data on elective surgery waiting times have undergone considerable improvement over recent years. Previously, variation in the use of definitions and in the coverage of elective surgery activity has meant that meaningful national statistics could not be compiled. Some important definitions were standardised for 1997-98 so, although further standardisation is still required, some statistics have been able to be compiled cautiously.

The elective surgery waiting times data definitions and collection systems are still evolving. Since the 1997-98 data were collected, there has been national agreement to standardise, from July 1999, the method of calculating waiting times for patients who change clinical urgency category while waiting. At present, the Institute is undertaking a review of other national elective surgery waiting times data definitions, with funding provided by the Australian Health Ministers' Advisory Council. This review is likely to lead to further standardisation and improvements in data definitions from July 2001, although concerns will still remain about the consistency with which the clinical urgency categories are assigned.

This evolution means that it is anticipated that the basic statistics presented in this report will form the basis of future, more comprehensive reports, based on more comparable data, and more useful for those interested in waiting times for elective surgery patients.

Richard Madden  
Director  
June 2000



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# Introduction

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. The States and Territories have been developing waiting times data for some years, and since 1995 have agreed to provide these data to the Australian Institute of Health and Welfare as part of the Elective Surgery Waiting Times National Minimum Data Set. The States and Territories also provide waiting times data for reporting against elective surgery waiting times performance indicators, in association with the Australian Health Care Agreements.

This report presents summary 1997-98 elective surgery waiting times data collected by State and Territory health authorities and provided to the National Elective Surgery Waiting Times Data Collection at the Australian Institute of Health and Welfare. Earlier data on elective surgery waiting times have been reported for the January to June period in 1995 (Moon 1996) and for the two years 1995-96 and 1996-97 (AIHW 2000).

The data on elective surgery waiting times have undergone considerable improvement over recent years so that, although the quality and comparability of the data could be further improved, the statistics presented in this report have been able to be compiled cautiously. There remain, however, differences among the States and Territories in collection arrangements and in the hospitals included among the States and Territories. Hence, comparisons between the jurisdictions and between 1997-98 and other reporting periods should be made with reference to the notes on the variations in scope and use of definitions.

# Data sources and methods

## Measures of waiting times

The focus of this report 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 summary measures are presented:

- the proportion of patients admitted for elective surgery during 1997-98 after extended waits on waiting lists (throughput data);
- the proportion of patients on waiting lists on 30 June 1998 who had already had an extended wait (census data).

Waiting times for patients admitted during a period of time are generally used as the main summary measure of elective surgery waiting times, although they provide 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, they were admitted as an emergency patient for the awaited procedure; or they were not contactable, had died, had been treated elsewhere, or had declined the surgery). In contrast, 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.

## Definitions

*National Health Data Dictionary* definitions (National Health Data Committee 1997) are the basis of the National Elective Surgery Waiting Times Data Collection. However, the definitions used varied slightly among the States and Territories in 1997-98 and compared with previous reporting periods. Comparisons between the jurisdictions and between 1997-98 and previous reporting periods should therefore be made with reference to the notes on the definitions used and the coverage of the data.

A new elective surgery waiting times information system was introduced in Victoria on 1 January 1998. Unlike the previous information system, definitions in the new system conform to those in the *National Health Data Dictionary*. Thus, with the limitation described below (including that data relating to only six months were available for this report), the Victorian definitions used were consistent with those used in other jurisdictions.

### Clinical urgency category

The patients waiting for elective surgery are classified according to their clinical urgency into three categories. '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. Patients in clinical urgency categories 1 and 2 who have extended waits are referred to as 'overdue'.

All jurisdictions except New South Wales implemented the three-tiered clinical urgency categorisation prior to 1997–98. New South Wales implemented this categorisation from 1 July 1997 and it is possible that there were some associated data quality problems in the early implementation period.

### **Calculation of waiting times**

Waiting times are generally calculated by comparing the date on which a patient was added to a waiting list, with the date that they were admitted (for throughput data) or the census date (for census data). Days on which the patient was 'not ready for care' are excluded.

There was some variation in the method by which waiting times were calculated by the States and Territories for patients who changed clinical urgency category while they were on the waiting list, and this would have affected the proportions of patients who were reported as having extended waits. Western Australia, the Northern Territory and South Australia counted only the time waited in the most recent urgency category. New South Wales, Victoria and Tasmania 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. Queensland used the second method for their census data, and counted total waiting time in all urgency categories in their throughput data. The Australian Capital Territory counted total time waited in all clinical urgency categories in one hospital, and time waited in the most recent category in the other hospital. There has been recent national agreement to use the method used in New South Wales, Victoria and Tasmania from 1 July 1999.

This variation may have had the effect, for example, of increasing the reported waiting times (and thus the proportions of patients with extended waits) in New South Wales, Victoria and Tasmania relative to Western Australia, South Australia and the Northern Territory.

### **Emergency admissions**

There was some variation in the 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, only the data on elective admissions have been included in this report, because patients who were admitted as emergency patients for the awaited procedure can no longer be regarded as having had 'elective surgery'.

However, small numbers of records for emergency admissions could not be excluded from the patient level admissions data supplied to the Institute by Western Australia, Tasmania and the Australian Capital Territory. This may have had the effect of lowering the reported waiting times and proportion of extended wait patients for these jurisdictions relative to others.

## **State and Territory data coverage and supply**

The data collected for this paper are for public acute care hospitals. Private hospitals were not included, except for two hospitals in New South Wales that are funded by the New South Wales Health Department to provide services for public patients. Some public patients treated under contract in private hospitals in Victoria were also included.

In New South Wales, the Australian Capital Territory and the Northern Territory, all public acute care hospitals were included in the data collection. In other States and

Territories, all public hospitals that undertake elective surgery were generally included, although data were not collected for some smaller public hospitals. The proportion of elective surgery admissions that was covered provides a measure of the coverage of the waiting times data collection (see Tables 1 and 2). However, hospitals that were not included may have had different waiting list characteristics compared with reporting hospitals and in some cases may not have had waiting lists at all. The States and Territories provided data on coverage. For Western Australia, South Australia and Victoria, the coverage reported was the proportion of all elective surgery undertaken in those States. For Queensland and Tasmania, an estimate was made based on the proportion of all admissions that were in the hospitals included in the waiting times data collection.

All jurisdictions except Victoria provided throughput data for the 12-month period 1 July 1997 to 30 June 1998. Data for Victoria have not been included. Victorian throughput data for the period June to December 1997 were not comparable with data from other jurisdictions. They did not include data on admissions that occurred in the same calendar month that the patient was placed on the waiting list, nor data on the clinical urgency category for 'booked' patients (patients who had had a definite admission date allocated whilst waiting for their surgery).

Victoria introduced a new elective surgery information system on 1 January 1998 that allowed calculation of waiting list statistics in accordance with national data definitions. Transferring data from the previous system, which reported monthly census data, to the new system, which reports the entire waiting episode for each patient, was problematic. Not all of the information needed to calculate accurate waiting times for each patient was available from the historical records. This limited the Victorian data that could be provided for the January to June 1998 period; data on the proportions of patients admitted with extended waits during this period were unavailable.

Most of the States and Territories provided census data for 30 June 1998; however, Queensland provided census data for 1 June 1998. Victorian data on extended wait clinical urgency category 3 patients on 30 June 1998 were not available due to the incompleteness of historical data on the length of time waited for category 3 patients. Data on clinical urgency category were unavailable for 124 patients on Victorian waiting lists on 30 June 1998.

South Australian admissions data were derived from a database that had been merged with the South Australian hospital morbidity database. A total of 97% of waiting list admission records were linked in this database, so about 3% of records were not included in the data.

## **Data validation by the Australian Institute of Health and Welfare**

The States and Territories provide the Institute with elective surgery waiting times data at either the patient level or at the hospital level. The patient level data are generally individual records of the amount of time waited by each patient admitted from a waiting list during the year or on a waiting list on a census date, and their clinical urgency category, with other details, not reported here, such as the specialty of the surgeon who was to perform the surgery, and whether the patient was waiting for a particular 'indicator' procedure. The hospital level data are records of the total number of patients on, or admitted from, waiting lists in each clinical urgency category, and the numbers who had extended waits, for each of the surgical specialties and indicator procedures.

The Institute undertakes detailed checking of the data, including ensuring that the data provided are internally consistent. Any apparently anomalous data are queried with the providing State or Territory and are not considered final until all anomalies are resolved. As only jurisdiction-level summary data are generally provided by the States and Territories to agencies such as the Steering Committee for the Review of Commonwealth/State Service Provision, a similar validation process is not generally undertaken for other publications which include these data. Differences between the data reported here and elsewhere may reflect differences in these processes.

# Patients admitted after extended waits

Table 1 shows the proportion of patients admitted for elective surgery during 1997–98 after extended waits on waiting lists (throughput data). Nationally, 12–14 per cent of patients admitted for elective surgery from the two most urgent groups (clinical urgency categories 1 and 2) were reported to have had extended waits. Five per cent of patients in clinical urgency category 3 had extended waits.

The proportion of patients in clinical urgency category 1 reported to have been admitted with extended waits varied among the jurisdictions, from 6% in Queensland hospitals to 15% in Tasmanian hospitals. There was more variation in the proportion with extended waits in the other urgency categories, from 9% to 35% in clinical urgency category 2, and from 0% to 13% in clinical urgency category 3. Some of this variation could be due to the variation in coverage and use of definitions, or to variation in the types of elective surgery performed in each jurisdiction.

**Table 1: Proportion of patients admitted with extended waits, by State and Territory and clinical urgency, 1997–98**

State or Territory	Coverage (per cent)	Clinical urgency			All patients
		Category 1	Category 2	Category 3	
New South Wales	100	14.3	8.5	5.6	9.6
Victoria	76	n.a.	n.a.	n.a.	n.a.
Queensland	95	6.4	15.5	0.0	8.3
Western Australia	68	10.0	12.0	9.0	9.9
South Australia	73	8.6	8.9	2.7	5.2
Tasmania	88	15.3	35.3	13.2	20.4
Australian Capital Territory	100	7.7	25.7	10.7	16.9
Northern Territory	100	10.3	19.0	3.7	9.8
<b>Total<sup>(a)</sup></b>		<b>12.0</b>	<b>14.0</b>	<b>4.6</b>	<b>9.4</b>

n.a. not available.

(a) Victoria not included.

# Patients with extended waits on waiting lists on 30 June 1998

As outlined above, the proportion of patients on waiting lists on a census date who have experienced extended waits is also a useful measure of elective surgery waiting times. Data were provided by most jurisdictions for census dates at the end of each quarter in 1997–98; data for 30 June 1998 are reported here.

Overall, about 20% of patients on elective surgery waiting lists on 30 June 1998 were reported to have had extended waits: 19% in clinical urgency category 1, 21% in clinical urgency category 2 and 16% in clinical urgency category 3 (Table 2). Variation in the proportion of patients reported with extended waits was marked among the jurisdictions. In clinical urgency category 1, the proportion of patients on waiting lists with extended waits ranged from 0% in Victoria to 41% in hospitals in the Western Australian data collection. In clinical urgency category 2, the proportion with extended waits ranged between 13% and 47%, and for clinical urgency category 3, it ranged up to 36%. As with the admissions data above, the variation among the jurisdictions may reflect variation in data collection methods, and variation in the type of elective surgery undertaken.

**Table 2: Proportion of patients on waiting lists with extended waits, by State and Territory and clinical urgency, 30 June 1998**

State or Territory	Coverage (per cent)	Clinical urgency			All patients
		Category 1	Category 2	Category 3	
		(per cent)			
New South Wales	100	22.9	18.8	7.5	10.8
Victoria	76	0.0	19.1	n.a.	17.9 <sup>(a)</sup>
Queensland	95	1.5	16.1	29.5	25.1
Western Australia	68	41.2	38.7	36.4	36.8
South Australia	73	14.8	13.3	7.8	9.0
Tasmania	88	32.7	46.8	34.6	37.4
Australian Capital Territory	100	34.9	44.9	22.9	32.0
Northern Territory	100	39.8	36.0	14.1	21.3
<b>Total</b>		<b>19.2</b>	<b>21.3</b>	<b>15.7<sup>(a)</sup></b>	<b>20.3<sup>(a)</sup></b>

n.a. not available.

(a) Category 3 for Victoria not included.

Census data should be interpreted with care. Longer wait patients are generally over-represented in census counts, and the data therefore show higher proportions of patients with long waits compared with throughput data for a period until the census point. In addition, census data provide no information on how long patients actually do wait before admission.

# Glossary

For further information on the terms used in this report, refer to the *National Health Data Dictionary Version 6.0* (National Health Data Committee 1997).

**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.

**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 report 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.

**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 report those patients who waited over 12 months are classed as having an extended wait.

**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 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.

**Throughput data:** data that relate to a specified period, and includes the numbers of patients added to waiting lists, admitted from waiting lists and removed from waiting lists for reasons other than admission, 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 admission or other removal from the waiting list) 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.

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