# Appendix 4: Hospitals contributing to this report and public hospital peer groups

#### Introduction

This appendix includes information on the public and private hospitals contributing to the National Hospital Morbidity Database, the National Public Hospital Establishments Database, the National Elective Surgery Waiting Times Data Collection and the Emergency Department Waiting Times Data Collection. Also included is information on the coverage of private hospitals in the National Hospital Morbidity Database that can assist interpretation of the data on private hospital activity.

The entities that are reported as hospitals in the databases and in this report vary, depending on the type of information being reported. Explanatory information is therefore included on this variation, with a summary table on the counts of public hospitals presented for different analyses.

Information on the public hospital peer group classification used in Chapters 2, 4 and 5 is also included.

Throughout this report, unless otherwise specified:

- Public acute hospitals and public psychiatric hospitals are included in the public hospital (public sector) category.
- All public hospitals other than public psychiatric hospitals are included in the public acute hospital category.
- Private psychiatric hospitals, private free-standing day hospital facilities and other private hospitals are included in the private hospital (private sector) category.
- All private hospitals other than private free-standing day hospital facilities are included in the other private hospitals category.

#### The National Hospital Morbidity Database

The National Hospital Morbidity Database includes data relating to admitted patients from almost all hospitals: public acute hospitals, public psychiatric hospitals, private acute hospitals, private psychiatric hospitals and private free-standing day hospital facilities.

Public sector hospitals that are not included are those not within the jurisdiction of a state or territory health authority (hospitals operated by the Department of Defence or correctional authorities, for example, and hospitals located in offshore territories). In addition, for 2002–03, data were not supplied for a mothercraft hospital in the Australian Capital Territory (for which 1,605 separations were reported as an aggregate count), one small rural hospital in New South Wales (for which 18 separations were reported in 2001–02) and one dental

hospital in Victoria (for which 3,264 separations were reported in 2001–02). These hospitals were however included in the National Public Hospital Establishments Database.

Within the private sector, data were not provided for 2002–03 for all private free-standing day hospital facilities in the Australian Capital Territory and for the single day hospital facility in the Northern Territory. For Victoria, data were not provided for 3 free-standing day hospital facilities and 3 other hospitals and some other hospitals did not supply data for the whole year. For 2001–02, data were not provided by 14 free-standing day hospital facilities and 3 other hospitals in Victoria, and data were incomplete for 14 other free-standing day hospital facilities hospitals. Victoria estimated that separations were underenumerated by up to 9% for 2001–02 and by about 1.0% in 2002–03. For South Australia, data were not available for one small non-free standing day hospital facility for one month. South Australia estimated that data were essentially complete for 2002–03 and were underenumerated by 1.4% for 2001–02. For Tasmania, data were not available for one small non-free-standing day hospital facility.

Table A4.1: Coverage of hospitals in the National Hospital Morbidity Database, by hospital sector, states and territories, 2002–03

	Public acute hospitals	Public psychiatric hospitals	Private free-standing day hospital facilities	Other private hospitals
NSW	Complete	Complete	Complete	Complete
Vic	Incomplete	Complete	Incomplete	Incomplete
Qld	Complete	Complete	Complete	Complete
WA	Complete	Complete	Complete	Complete
SA	Complete	Complete	Complete	Complete
Tas	Complete	Complete	Complete	Incomplete
ACT	Incomplete	Not applicable	Not included	Complete
NT	Complete	Not applicable	Not included	Complete

Note: Complete—all facilities reported data to the National Hospital Morbidity Database. Incomplete—some facilities did not provide data to the National Hospital Morbidity Database; see text for more details. Not included—there are facilities in this sector for this state or territory, however, no data were provided. Not applicable—there are no facilities in this sector for this state or territory.

Table A4.1 summarises this coverage information by state and territory and by hospital sector, and tables accompanying this report on the website at http://www.aihw.gov.au list the public and private hospitals that contributed to the National Hospital Morbidity Database for 2002–03 (Tables A4.2 and A4.3). For public hospitals, also included in the website tables is information on their average available beds, their peer group (see below) and the Statistical Local Area and Remoteness Area of their location. With the list of private hospitals is information on whether each was a private free-standing day hospital facility.

#### Coverage estimates for private hospital separations

As not all private hospital separations are included in the National Hospital Morbidity Database, the counts of private hospital separations presented in this report are likely to be underestimates of the actual counts. Over recent years, at the total level there have been slightly fewer separations reported to the National Hospital Morbidity Database (particularly for private free-standing day hospital facilities) than to the Australian Bureau of Statistics' (ABS) Private Health Establishments Collection (ABS 2003) (Table A4.4). The latter

collection includes all private acute and psychiatric hospitals licensed by state and territory health authorities and all private free-standing day hospital facilities approved by the Department of Health and Ageing. In 2001–02, the difference was 118,064 separations (4.6%).

Table A4.4: Differences between private hospital separations on the National Hospital Morbidity Database and reported to the ABS's Private Health Establishments Collection, 1993–94 to 2001–02

	Private free-standing day hospital facilities		Other private	hospitals	Total		
Year	Separations	Per cent	Separations	Per cent	Separations	Per cent	
1993–94	n.a.	n.a.	n.a.	n.a.	119,554	8.3	
1994–95	n.a.	n.a.	n.a.	n.a.	76,274	5.0	
1995–96	n.a.	n.a.	n.a.	n.a.	83,619	5.0	
1996–97	4,868	2.2	75,850	4.9	80,718	4.6	
1997–98	23,662	8.7	40,369	2.5	64,031	3.4	
1998–99	40,980	13.6	69,961	4.2	110,941	5.6	
1999–00	68,907	19.7	53,247	3.0	122,154	5.7	
2000–01 <sup>(a)</sup>	56,816	14.6	21,649	1.1	80,655	3.4	
2001-02 <sup>(b)</sup>	41,002	9.8	52,727	2.6	118,064	4.6	

<sup>(</sup>a) The type of private hospital establishment was unspecified for Tasmanian private hospitals reporting to the National Hospital Morbidity Database. The differences for private free standing day hospital facilities and other private hospitals exclude Tasmania.

n.a. Not available.

Source: ABS, unpublished Private Health Establishments Collection data, for private hospital data.

For individual states (website appendix tables A4.7a to A4.7j), the patterns of differences between number of separations reported to the National Hospital Morbidity Database compared to the ABS's Private Health Establishments Collection varied. For example, for 2001–02, more separations were reported to the National Hospital Morbidity Database than to the ABS for private freestanding day hospital facilities in Western Australia and for other private hospitals in South Australia.

These discrepancies may have been due to the use of differing definitions or different interpretations of definitions, or differences in the quality of the data provided for different purposes. It is also likely to reflect the omission of some private hospitals from the National Hospital Morbidity Database and also some separations for some private hospitals that were otherwise included in the database.

At the time of publication of this report, Private Health Establishments Collection data for 2002–03 were not available. When they become available, an estimate will be made of underenumeration of separations in the National Hospital Morbidity Database for 2002–03, by comparing it with the 2002–03 Private Health Establishments Collection data. This estimate will be included with *Australian Hospital Statistics* 2002–03 on the website.

<sup>(</sup>b) The type of private hospital establishment was unspecified for Tasmanian private hospitals reporting to the National Hospital Morbidity Database and ABS suppressed data for the Australian Capital Territory, the Northern Territory and Tasmania. The differences for private free standing day hospital facilities and other private hospitals exclude Australian Capital Territory, the Northern Territory and Tasmania.

### The National Public Hospital Establishments Database

The National Public Hospital Establishments Database holds establishment-level data for each public hospital in Australia, including public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all states and territories. The collection only covers hospitals within the jurisdiction of the state and territory health authorities. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by the Department of Defence or correctional authorities, for example, and hospitals located in offshore territories) are not included. Corrections Health in New South Wales was not included for 2002–03, although it had been included in 2000–01 and earlier years and is included in the National Hospital Morbidity Database. Financial and staffing data was not provided for two small hospitals in South Australia. Tasmanian data was incomplete for a number of small hospitals, as noted in relevant tables. Data were not available for revenue or staffing for New South Wales and were preliminary for expenditure and outpatient occasions of service. These data will be updated on the AIHW website when these data are available.

Public hospitals are categorised by the Institute into peer groups, as described below. Table A4.2 accompanying this report on the website at http://www.aihw.gov.au lists the public hospitals that contributed to the National Public Hospital Establishments Database for 2002–03. Also included is information on their average available bed numbers, their peer group and the Statistical Local Area and Remoteness Area of their location.

## The National Elective Surgery Waiting Times Data Collection

The National Elective Surgery Waiting Times Data Collection covers public acute hospitals and two private hospitals in New South Wales that were 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 and Tasmania are also included.

All public hospitals that undertake elective surgery are generally included, however, some are not. Based on the proportions of elective surgery admissions that were covered by the National Elective Surgery Waiting Times Data Collection, national coverage was about 85%, and ranged from 100% in New South Wales, Tasmania, the Australian Capital Territory and the Northern Territory, to about 64% in South Australia (Table 5.2). Coverage was highest for the *Principal referral and specialist women's and children's* peer group hospitals at 99%, and progressively lower for the *Large hospitals* and *Medium hospitals* groups. Coverage information was not available for New South Wales.

Tables 5.1 and 5.2 provide further information on the coverage by public hospital peer group. The list of public hospitals that contributed to the National Public Hospital Establishments Database (Table A4.2 accompanying this report on the website at http://www.aihw.gov.au) includes information on which hospitals were also included in the National Elective Surgery Waiting Times Data Collection for 2002–03.

# The Emergency Department Waiting Times Data Collection

The Emergency Department Waiting Times Data Collection covers public acute hospitals and one private hospital in Tasmania and two in New South Wales that provide services to public patients under contract arrangements.

Based on a comparison with the number of non-admitted patient occasions of service for accident and emergency reported to the National Public Hospital Establishments Database, coverage varied among the states and territories (Table 4.13). Coverage was highest for the *Principal referral and specialist women's and children's* peer group hospitals at about 97%, and progressively lower for the *Large hospitals* and *Medium hospitals* groups.

The list of public hospitals that contributed to the National Public Hospital Establishments Database (Table A4.2 accompanying this report on the website at http://www.aihw.gov.au) includes information on which hospitals were also included in the Emergency Department Waiting Times Data Collection for 2002–03.

## **Counting public hospitals**

Different counts of hospitals are used this report, depending on the type of information being presented and the way in which the hospitals were reported to the National Hospital Morbidity Database, the National Public Hospital Establishments Database, the National Elective Surgery Waiting Times Data Collection and the Emergency Department Waiting Times Data Collection. In summary, three counts of hospitals are used (Table A4.5):

- In Chapter 2 and Chapter 3, and in the table on emergency department waiting times in Chapter 4 (Table 4.13), hospitals are counted generally as they were reported to the National Public Hospital Establishments Database. These entities are generally 'physical hospitals' (buildings or campuses) but may encompass some outposted locations such as dialysis units. Conversely, however, hospitals on the one 'campus' can be reported as separate entities to this Database if, for example, they are managed separately and have separate purposes, such as specialist women's services, and specialist children's services. Although most of the hospitals counted in this way report separations to the National Hospital Morbidity Database, some small hospitals do not have separations every year.
- In the cost per casemix-adjusted separation analysis (Tables 4.2 and 4.3), entities for which there was expenditure information were reported as hospitals. The small numbers of hospitals in the National Public Hospital Establishments Database with incomplete expenditure information were omitted. In some jurisdictions, hospitals exist in networks, and expenditure data were only available for these networks, so the networks are the entities counted as hospitals for those jurisdictions for these tables.
- In Chapter 5 (on elective surgery waiting times), hospitals are counted generally if they report as separate entities to the National Elective Surgery Waiting Times Data Collection and/or the National Hospital Morbidity Database. Almost all public hospitals are reported in the same way to these two databases and, since the coverage estimates are based on data from the National Hospital Morbidity Database, some very minor adjustment is made to ensure that the counts of hospitals align completely. In these databases, reporting entities are more likely to represent physical campuses than in the National Public Hospital Establishments Database (with, for example, some outposted

units being separately identifiable). Hospitals are not included if they did not report separations for 2002–03.

Data on numbers of hospitals should therefore be interpreted taking these notes into consideration. Changes in the numbers of hospitals over time can be due to changes in administrative or reporting arrangements rather than changes in the number of hospital campuses or buildings.

Table A4.5: Numbers of public hospitals reported in this publication, states and territories, 2002–03

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Chapter 2, Chapter 3 and Table 4.13	218	144	179	94	80	25	3	5	748
Tables 4.2 and 4.3 (with expenditure data)	216	93	179	93	74	19	3	5	682
Table 5.1 (reporting hospital morbidity/elective surgery waiting times data)	221	145	156	94	79	24	2	5	726

Counts of private hospitals can also vary, depending on the source of the information. Thus, there may be discrepancies between counts of private hospitals from the ABS's Private Health Establishments Collection presented in Table 2.1 and the lists of private hospitals contributing to the National Hospital Morbidity Database. The states and territories provided the latter information, which may not correspond with the way in which private hospitals report to the Private Health Establishments Collection.

#### Public hospital peer groups

The Australian Institute of Health and Welfare worked with the National Health Ministers' Benchmarking Working Group (NHMBWG) and the National Health Performance Committee (NHPC) to develop a national public hospital peer group classification for use in presenting data on costs per casemix-adjusted separation. The aim was to allow more meaningful comparison of the data than comparison at the jurisdiction level would allow.

The peer groups were designed to explain variability in average cost per casemix-adjusted separation. They also group hospitals into broadly similar groups in terms of their range of admitted patient activities, and their geographical location, with the peer groups allocated names that are broadly descriptive of the types of hospitals included in each category.

The peer group classification is summarised in Table A4.6, and the method used to assign the categories is summarised in Figure A4.1. Details of the derivation of the peer groups are in Appendix 11 of *Australian Hospital Statistics* 1998–99 (AIHW 2000). From 2001–02, the method was adjusted slightly, by replacing the RRMA classification with the Remoteness Area classification for the geographical component of the peer grouping. In short, the Remoteness Area category Major Cities of Australia replaced the RRMA metropolitan zone, the Remoteness Area categories Inner regional and Outer regional replaced the RRMA Rural zone, and the Remoteness Area Remote and Very remote categories replaced the RRMA Remote zone.

The flow chart (Figure A4.1) is used for assignment of peer groups for almost all hospitals. However, a very small number are assigned without using this logic, usually in special

circumstances such as the opening or closing of a hospital during the year. These 'manual' assignments of peer groups for 2002–03 are noted in Table A4.2. Selected characteristics of the hospitals assigned to each peer group for 2002–03 are presented in Table 4.2 (at a national level) and in Table 4.3 (for each state and territory).

Although not specifically designed for purposes other than the cost per casemix-adjusted separation analysis, the peer group classification is recognised as a useful way to categorise hospitals for other purposes. For example, the classification has been used to present data from the National Hospital Cost Data Collection (see Appendix 6), emergency department waiting times data in Chapter 4 and elective surgery waiting times data in Chapter 5.

The peer group to which each public hospital was assigned for 2002–03 is included in Table A4.2. In some cases, the establishments defined as hospitals for the cost per casemix-adjusted separation analysis differ from those defined as hospitals for the elective surgery waiting times data or those defined for counts of hospitals presented in Chapters 2 and 3. In these cases, their peer groups may also differ, and differences are indicated in Table A4.2.

Table A4.6: Public hospital peer group classification

Peer group	Sub-group	Definition			
Principal referral and specialist women's & children's	Principal referral	Major city hospitals with >20,000 acute casemix-adjusted separations and Regional hospitals with >16,000 acute casemix-adjusted separations per annum.			
	Specialist women's and children's	Specialised acute women's and children's hospitals with >10,000 acute casemix-adjusted separations per annum.			
Large hospitals	Major city	Major city acute hospitals treating more than 10,000 acute casemix-adjusted separations per annum.			
	Regional and remote	Regional acute hospitals treating >8,000 acute casemix-adjusted separations per annum, and remote hospitals with >5,000 casemix-adjusted separations.			
Medium hospitals	Group 1	Medium acute hospitals in Regional and Major city areas treating between 5,000 and 10,000 acute casemix-adjusted separations per annum.			
	Group 2	Medium acute hospitals in Regional and Major city areas treating between 2,000 and 5,000 acute casemix-adjusted separations per annum, and acute hospitals treating <2,000 casemix-adjusted separations per annum but with >2,000 separations per annum.			
Small acute hospitals	Regional	Small Regional acute hospitals (mainly small country town hospitals), acute hospitals treating <2,000 separations per annum, and with less than 40% non-acute and outlier patient days of total patient days.			
	Remote	Small remote hospitals (<5,000 acute casemix-adjusted separations but not 'Multi- purpose services' and not 'Small non-acute'). Most are <2,000 separations.			
Sub-acute and non- acute hospitals	Small non- acute	Small non-acute hospitals, treating <2,000 separations per annum, and with more than 40% non-acute and outlier patient days of total patient days.			
	Multi-purpose services				
	Hospices				
	Rehabilitation				
	Mothercraft				
	Other non- acute	For example, geriatric treatment centres combining rehabilitation and palliative care with a small number of acute patients			
Un-peered and other hospitals		Prison medical services, special circumstance hospitals, Major city hospitals with <2,000 acute casemix-adjusted separations, hospitals with <200 separations, etc.			
Psychiatric hospitals					

<sup>(</sup>a) Only the peer groups above the dashed line are included in the cost per casemix-adjusted separation analyses presented in Chapter 4.

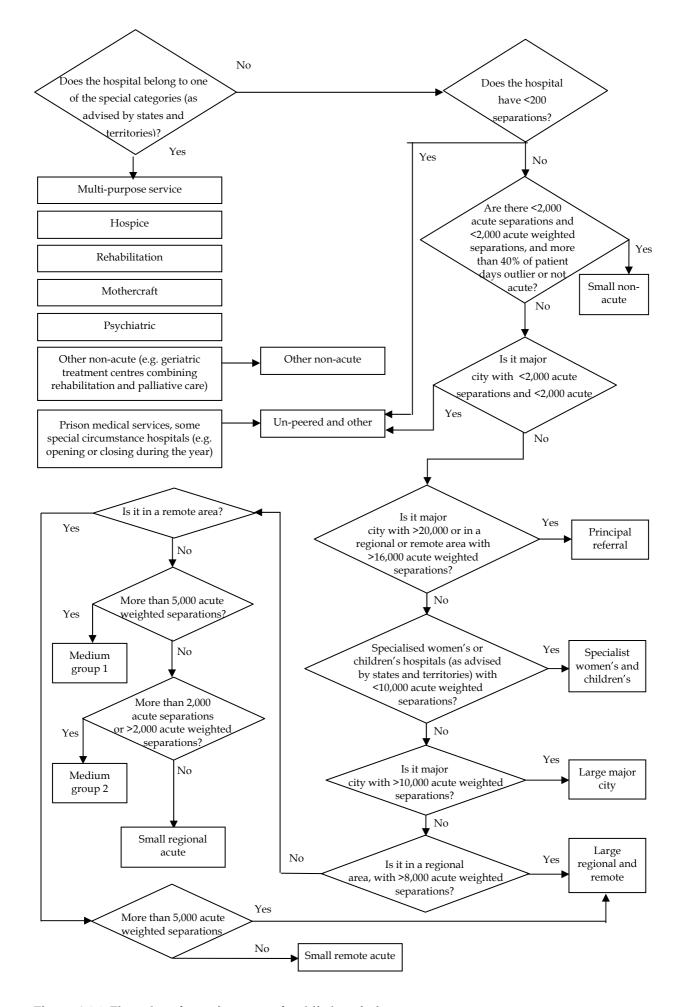


Figure A4.1: Flow chart for assignment of public hospital peer groups